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**Regular Article**

## Evaluation of the impact of MOOCs in supporting knowledge society by virtual learning environments

Hala AbdElkader S. El-Senousy

Dept. of Curriculum and Methodology, Faculty of Education, Beni-Suef University (Beni-Suef, Egypt)

**Email:** [hala.said@edu.bsu.edu.eg](mailto:hala.said@edu.bsu.edu.eg)

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### Abstract:

*Societies are faced with many challenges borne from the information technological explosion that has changed their nature into “knowledge society”, thus, resulting in the Massive Open Online Courses (hereafter MOOCs). MOOCs are free academic courses on a range of disciplines, offered as informal self-organized learning and are provided by platforms in virtual learning environments. This study seeks to assess the impact of MOOCs in virtual learning environments, namely “Rwaq” platform, in supporting the knowledge society. A questionnaire was developed and administered to 1112 participants to examine the courses learners' types, their motivations for studying, the challenges of not completing MOOCs, and the encouragements of completing MOOCs currently or in the future. The results of the analysis reveal some important challenges and encouragements that are offered as recommendations for educational institutions to take into consideration, especially during such emergencies as COVID-19.*

**Keywords:** *Massively Open Online Courses (MOOCs); virtual learning environments; communicative theory; knowledge society; platforms.*

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## 1. Introduction

The modern revolution in information and communication technologies (ICT) contributes to the emergence of “knowledge society”, which is concerned with the dissemination, production, expansion and application of knowledge (Al Marey, 2009). This revolution poses challenges to the knowledge society in this digital age, which contributes to change in the nature of life and shape of various institutions, including educational ones, to adopt advanced learning patterns and systems. The knowledge society needs to use advanced skills to access innovative knowledge and apply it to become a factor of economic prosperity (Jamieson, 2008).

Hence, educational theories have strived to introduce innovations to reform education systems, including the communicative theory, as a theory of E-learning in the digital age. Siemens (2004) believes that the rapid growth of human knowledge has helped educational institutions to modify their educational methods, which has resulted in new trends in education, including: viewing learning as a continuous process for life, looking at informal learning as a prominent component of learning, the importance of learners' interaction with a variety of cognitive areas that may not have been studied throughout the formal learning period, and the possibility of supporting and developing many processes of cognitive processing of information by new technology.

Jlobeanu (2003) highlights the role of online learning, e-education, as it is possible to attend lectures and give lessons through modern technologies. Therefore, thousands of virtual institutions were created on the internet to offer classes and provide e-learning materials, worksheets and examinations, and virtual training that includes training materials and exams in the field of education and training, as well as awarding university degrees via the Internet.

Education in the virtual university environments is one of the manifestations of open and distance education; Education depends on the use of the Internet and multimedia in education, while avoiding temporal, spatial and geographic restrictions. Among the reasons for the development of the virtual university: the inability of traditional universities to meet the challenges of the knowledge society, in addition to changes in the needs and demands of learners, and the need to provide education to large numbers of people with lower costs and better efficiency (Talaba, 2010). Virtual universities can provide wide services for university education, perhaps the most important of which are: providing wide-ranging opportunities for mass education, equalizing educational opportunities for students at any time and from anywhere, addressing costs and governmental and private funding sources, and free university education. Investing in the potential of communication and information technology provides a way out of the dilemma of traditional education (Al-Hayek, 2013).

Virtual universities have produced MOOCs as a model of open online course learning that provides self-organized, informal learning that makes classrooms of top universities freely available to anyone with an Internet connection. MOOCs provide learners with a variety of options that suit the diversity of their needs and the possibilities to access material through their mobile devices, to interact with experts, trainers, and colleagues from all over the world. Unlike staying in traditional closed classrooms, MOOCs can support self-learning (Chang, Hung & Lin, 2015).

Mulder & Jansen (2015) define MOOCs as completely free -or for a few fee- electronic courses, designed to accommodate large numbers of participants who can gain access from anywhere as long as they have an Internet connection. It is characterized by the fact that registration is open to everyone without specific qualifications. MOOCs have been described by the British Quality Assurance Agency in Higher Education as an innovation characterized by its ability to broaden and encourage participation in lifelong learning (Hayes, 2015), which is consistent with the characteristics and requirements of a knowledge society and enhances its role in higher learning. North & North (2014) indicate that the adoption of widespread open electronic courses MOOCs is no longer an open question, especially with the increasing number of higher education institutions in many countries adopting and offering them.

And the most famous universities that offer MOOCs (2019):

- Berkley College of Music
- Brown University
- California Institute of Technology
- Columbia University
- Ohio State University
- Princeton University
- Stanford University
- The Hong Kong University of Science and

-Duke University	Technology
-Georgia Institute of Technology	-The University of British Columbia
-Johns Hopkins University	-University of California, Irvine
-Mount Sinai School of Medicine	-University of California, San Francisco
University of London International Programs	-University of Edinburgh
-University of Maryland, College Park	-University of Florida
-University of Melbourne	-University of Illinois at Urbana-Champaign
-University of Michigan	-University of Toronto
-University of Pennsylvania	-University of Virginia
-University of Pittsburgh	-University of Washington
-Vanderbilt University	-King Khaled University
-Wesleyan University	

From a review of the previous examples, it is noted the lack of Arab universities in providing MOOCs despite its importance and role in facing challenges in Arab societies recently, hence the urgent need to evaluate the role of MOOCs in supporting the knowledge society through the virtual learning environments offered by educational platforms.

On the other hand, the year 2013 has witnessed the launch of a number of non-formal Arab MOOCs such as Edraak in Jordan, Mena Versity in Lebanon, Skill Academy in Egypt, and Rwaq in Saudi Arabia as a platform that provides free courses in social media, arts, psychology, medicine, engineering, and religion through an attractive and simple interface. The name "Rwaq" refers to the corridors of mosques in the Islamic world, where learners used to gather around teachers to study various sciences. Rwaq tries to provide high quality academic content through qualified professors and professionals with scientific experience. It seeks to become a regional center for e-learning in the Middle East (Adham & Lundqvist, 2015; Rwaq, 2016) (Al-Juhani, 2017) (Ahmed, R.; Al-Kadi, A., 2021).

This is what made the study concerned with evaluating the role of the Rawaq platform in supporting the knowledge society through virtual learning environments.

## 2. Objectives, Questions & Hypotheses

No doubt that there are knowledge-producing societies and other knowledge-consuming societies, and most Arab countries are described as knowledge-consuming, although that was accepted in the recent past, it should be changed today, especially in light of the "knowledge society" which produces and disseminates knowledge. The quality of higher education in several Arab countries still submerged in locality and closed on itself; as each university offers courses and local certificates, while, the challenges of the knowledge society require to provide open-courses like MOOCs through own platforms. Some informal platforms -like Rwaq- take that essential role instead of the formal universities. According to some studies, MOOCs differ from traditional E-courses in their scope breadth, attract diverse segments of learners with different scientific backgrounds and motivations to join them, which reduces learner orientating to take greater part of the responsibility for their learning (Hood, Littlejohn& Milligan, 2015). The study aims to evaluate the role of "MOOCs" platforms in supporting the knowledge society, that

evaluation should investigate the learners' status, reasons for not completing MOOCs, motivations of learners for joining MOOCs courses, as well as the encouragements for completing them by answering the main question:

### **How is the impact of MOOCs in supporting knowledge Society by virtual learning environments?**

Some following sub-questions come from it:

- 1- What is the nature of learners joining MOOCs by virtual learning environments?
  - a) What types of students are taking MOOCs courses through Rwaq?
  - b) What is the educational status of MOOCs learners through Rwaq?
  - c) How many times have the learners completed MOOCs through Rwaq?
- 2- What are the reasons for not completing MOOCs through virtual learning environments?
- 3- What are the learners' motivations for joining MOOCs by virtual learning environments?
- 4- What are the encouragements for completing MOOCs by virtual learning environments?

### **3. Research Method, Design & Participants**

A descriptive and analytical approach to examine the educational platforms that offer MOOCs and examines the responses of the learners.

**Participants:** A random sample of (1112) learners of MOOCs courses through Rwaq platform.

**Tools:** A questionnaire consists of (3 Open questions and 29 closed questions) as follow:

- 3 open questions to check basic data such as: (gender/education status / times of courses completing)
- 6 closed questions to examine the reasons for not completing MOOCs.
- 13 closed questions: to examine Learners' motivations for enrolling in MOOCs.
- 10 closed questions to examine the encouragements for completing MOOCs.

### **4. Literature Review**

The important features of the "knowledge society" are: -The importance of knowledge, although it is not new, the huge amount of knowledge and information that is produced and published demands attention to its pursuit, production and management -The massive use of advanced information and communications technology and its integration and investment in various institutions, including educational (Mousa& Al Marey, 2013). Also, the necessity of spreading a knowledge culture that encourages the production and dissemination of knowledge and not the consumption, withholding or even the monopoly of knowledge. Therefore, there was a need for self-learning, continuous and participatory learning...etc (Al-Hayek, 2013). Whereas, that features mostly in devolved counties Ndibuuza, Langa& Bisaso, (2021) certain that there is a big gap between Higher Education and the Knowledge Society in Uganda and many other Societies.

The communicative theory is based on several basic principles Siemens, (2005) (Bell, 2010) Mazen, (2016): Education depends on the formation of a network of individuals to link meeting points or sources of information. Also, part of the learning can take place outside the learner through relying on non-human devices and tools. In addition, the ability to learn is more important than the content of the learning itself, so learning how to research for relevant information is more important than knowing the information itself. As well as building a network of contacts and interaction, this facilitates the process of continuous learning. Learning and knowledge also depends on a plurality of opinions and viewpoints, as well as the ability to understand the relationships between concepts and ideas and link them from the core

skills of learning.

Jobs that are expected to flourish in the knowledge society include: programming, service industry, data services, digital services, satellite repair, computer maintenance and repair, marine and ocean sciences, biotechnology, artificial organs technology, solar energy, web designers and informatics, satellite channels, and electronic armament. The digital economy, electronic commerce, tourism and transportation companies, electronic devices, electronic education, robotics, electronic medicine, electronic libraries, and electronic media (Abu Zaid, 2006).

From here, there are multiple factors that the knowledge society needs and are a reason for the emergence and spread of virtual universities, limiting them (Al-Dahshan, 2004) to two groups of factors:

- ❖ Social and economic factors: represented in the increase in relations, interactions, ideas and information between nations and societies. New technological changes, their rapid spread and cheapness have led to the adoption of a knowledge economy, which is based on information, and one of its features is that it is global in scope, investing in communication systems to exchange virtual knowledge and information, and is based on decentralization and specialization. Therefore, there is a need to review the modern knowledge society, its structure and tools, while providing new specializations for the future workforce, and upgrading the skills and knowledge possessed by the current human force to adapt to the new changes, which requires the provision of educational programs outside the university campuses. Thus, new specializations are created.
- ❖ Current traditional universities face challenges which prevent them from providing a distinguished education that meets the needs of students and the labor market, such as: the inability to absorb the increasing number of secondary school graduates, as the demand for higher education exceeds the supply by 21 times. Student overcrowding negatively affects the level of educational performance. -Limited educational opportunities are currently available for groups of students who cannot attend regularly or live in remote areas, resulting in unbalanced geographical distribution of higher education institutions. -Traditional sources of funding and the lack of alternative sources. -Rapid changes in the needs of the labor market as a result of modern technology. -As well as the reliance of education on abstracts through late university textbooks instead of benefiting from advanced technical sources (World Bank, 2003) (Nawfal, 2002).

Cornford (2002) believes that the “virtual university” is a university without the walls of an institution that is not bound by spatial boundaries that uses modern information and communication technologies to connect scholars, professors, researchers, alumni, research supporters and administrators in a flexible and advanced networked institution. While Whittington (2002) associated the virtual university with its traditional university origins; Whittington defines it as any institution that provides higher education to students through the Internet and grants degrees within the framework of traditional institutions. It is a lifelong learning network that provides educational opportunities and meets the new learning needs of the current century, Davies adds. One of the best opportunities offered by virtual university environments is the so-called MOOCs.

The term "Massive Open Online Courses" MOOCs is so called because some of these courses have a limited number of students, who can be from different countries, which led to their spread across large areas of the globe, so they are not restricted by the borders Geographical, political or cultural, but it

is available to those who wish to join it from anywhere, and at any time (Al-Juhani, 2017). This new type of education originated in 2008 in California, where the Coursera Network (<http://www.coursera.org>), which is the most advanced E-learning network; Which represents the latest stages of development of Open Resource learning resources, which are "virtual learning courses supervised by accredited universities and institutions". Despite the novelty of this concept, it has spread widely recently, providing educational content for free to learners all over the world, and sometimes for a low fees; Which helps to spread knowledge, develop skills and exchange experiences in various fields, moreover provide an open virtual global learning environment for people to support learning in it; Which achieves the triangle of knowledge society a) knowledge b) economy c) continuity of learning (Al-Harthy, 2016).

The idea of the MOOCs project is to use the Moodle Content Management System, which is one of the most effective learning systems that enhance interaction between learner-learner, learner-content and learner-professor. Its aim is to design courses that help individuals develop themselves and increase learning, and to achieve this, the focus during the course design process is to provide useful activities that help make the most of the content. Any of these courses is similar to electronic courses, except that it is free and open, and therefore will include a large number of participants, from different countries and have knowledge of different cultures, but they are similar in their desire to teach one subject (Ahmed, 2014).

Comparing MOOCs with traditional online courses, MOOCs offers to the large number of learners, spread through various networks and applications around the world, with the availability of registration for anyone who wishes without restriction or limitation. MOOCs also provide their learners with the opportunity to learn interesting or accurate content, making them an influencing factor on current online educational practices (Zheng et al., 2015). It consists of: videos to explain the course provided by experts, reading materials and tests, as well as forums for communication between students and professors and each other. The study in MOOCs is asynchronous it depends on the learners' self-learning and progresses in various disciplines: scientific, literary, medical, engineering, and economics (Al-Harthy, 2016). MOOCs are managed by open learning platforms that typically involve limited direct interaction between the teacher and learners; this places the responsibility of learners to design and lead their own learning journey. In order to do this they must self-organize their learning, which requires them to monitor and control their own behavior related to its context and procedures (Gillani & Eynon, 2014).

Since 2012, the use of MOOCs has spread on a large scale, and has been developed under the umbrella of international collaborative companies, such as: Coursera, which represents a partnership between (62) prestigious universities around the world led by Stanford University in the United States; edX, which includes: Massachusetts Institute of Technology, École Polytechnique Fédérale de Lausanne, and The Hong Kong University of Science and Technology. Additionally, there are Udacity, P2P University, and Future learn sponsored by The Open University in the UK (Liyanagunawardena, Adams, & Williams, 2013; Chang, Hung, & Lin, 2015). (90%) of universities seek to offer MOOCs, or plan to present them in the coming years, and (83%) of those colleges seek to join the widespread open online course platforms such as edX, Coursera, or Udacity. In the year (2014), American universities made available nearly (1,000) widely distributed open electronic courses; European universities provided nearly (900) courses in a number of languages, in addition to English (Hayes, 2015).

MOOCs help in achieving equal educational opportunities and equality among learners and meet the increasing social demand for education, especially for those whose circumstances prevent attendance in the classroom due to personal, economic or social conditions, as well as the opportunity for graduates

to invest their spare time in educating themselves and increasing the effectiveness of education, reduces the cost of acquiring knowledge, preparing learners for continuing education and entering advanced academic degree programs (Carr, 2012; Duderstadt, 2012).

The benefits of MOOCs of using these courses (Zidane, 2013) (Gupta & Sambyal, 2013) that:

- It is global and is not bound by geographical, temporal, cultural or religious boundaries.
- It is available in several languages and it can also be translated into other languages.
- It is suitable for a large number of learners in different cultures.
- It helps to exchange experiences between specialists in different countries.
- It helps in the human development of employees and workers in various fields.
- It can be produced and published in a short period of time.
- It does not need long periods of time, and most of it does not exceed several days or hours of study.
- Suitable for students, graduates, and workers in different professions.
- Achieve the goal of self-learning and lifelong learning.
- The scientific gap between developed and developing societies is narrowing.
- They are often designed, produced and managed by world-renowned educational institutions.
- Spreading education democracy and equal opportunities for individuals in the world without regard to gender, race or language.

**There are more sites used for MOOCs over the Internet (Voss, 2013) such as:**

- Coursera website ([www.coursera.org](http://www.coursera.org)), which was founded by two Harvard University professors in the United States of America, Andr Wang and Daphne Koller, and contributes to the development of the scientific content of the courses on this website, more than 30 universities.
- The EDX website ([www.edx.org](http://www.edx.org)) started as a partnership between Harvard University and the Massachusetts Institute of Technology in the USA in December 2012, and it has expanded and included many American universities to it.
- Udacity ([www.udacity.com](http://www.udacity.com)) was founded by three professors from Stanford University and then joined by a professor from the University of Virginia in the USA.
- Udemy [www.udemy.com](http://www.udemy.com) was created by Ern Bali and Okti Kaklar, and through this website any user can submit their own educational material.

## 5. Results

To answer the first study question this states:

### 1- What is the nature of learners joining MOOCs by virtual learning environments?

The results of answering this question were divided into 3 parts as follows:

#### a) What types of students are taking MOOCs courses through Rwaq?

The results of the study sample responses to this question are presented in the following table:

**Table (1)**

*Type of learners for MOOCs courses*

<i>Gender</i>	<i>No.</i>	<i>%</i>
<i>Males</i>	۲۲۷	20.4
<i>Females</i>	۸۸۱	79.6
	1108	

It is noted from the results of Table (1) and that most of the learners who were included in the study and who completed the questionnaire are females by 79%, and this may be due to the MOOCs that suit the female category more. Perhaps the learners from the tops will find more facilities for the traditional study that are compensated by the studies through courses It is hypothetical, and perhaps due to females' keenness to occupy their free time with benefits, which may not be available to males as they tend to live work.

### **b) What is the status of education for of MOOCs learners through Rwaq?**

The results of the study sample responses to this question are presented in the following table:

**Table (2):**

*The status of learners' education for MOOCs courses*

<i>The status</i>	<i>No.</i>	<i>%</i>
<i>Student</i>	392	35.5
<i>graduated</i>	720	64.7

It is noted from the results of Table (2) that the status of learners' education in MOOCs courses through Rwaq was as follows: Most of the learners are graduates from higher education, at a rate of 64.7%, or nearly two-thirds, compared to learners who accept MOOCs, which is a logical percentage as it may be Graduates have more free time to study than learners during regular studies.

### **c) How many times have the learners completed MOOCs through Rwaq?**

The results of the study sample responses to this question are presented in the following table:

**Table (3):**

*The times learners complete MOOCs courses*

<i>times</i>	<i>%</i>
<i>Once</i>	(60)
<i>Several times</i>	(12)
<i>I have not previously completed</i>	(28)

It is noted from the results of Table (3) that the percentage of learners who completed the study of MOOCs courses came in the following order: 60% concentrated in one time only, which may indicate that the spread of awareness of the platform is still relatively recent, which is supported by the percentage of newcomers Those who had not previously completed 28%, while the lowest percentage of those who completed the courses several times came to 12%.

### **2- What are the reasons for not completing MOOCs through virtual learning environments?**

The results of the study sample responses to this question are presented in the following table:



**Table (4):**

*The responses of learners' reasons of not completing of MOOCs courses through Rwaq.*

<i>Reasons for not completing MOOCs courses</i>	<i>Rank</i>	<i>Agree%</i>	<i>Somewhat%</i>	<i>Agree%</i>
<i>1. Preoccupation with the study</i>	<i>second</i>	58	25	17
<i>2. The difficulty of the science subject</i>	<i>sixth</i>	33	17	50
<i>3. The Professor</i>	<i>Third</i>	50	25	25
<i>4. unofficial certificate</i>	<i>first</i>	67	25	8
<i>5. Lack of seriousness in learning</i>	<i>fourth</i>	42	25	33
<i>6. I did not find enough time</i>	<i>fifth</i>	33	33	33

It is noted from the results of Table (4) that the reasons for the learners not completing the MOOCs courses varied in their effects and came in order as follows: As the learners' fears that the certificate is unofficial topped the reasons by 67%, which may be, while the study's preoccupation came by 58%, The role of the professor remains important even in virtual environments by 50%. As for the student's lack of seriousness in learning, it was 42%, then time was short by 33, and finally a few learners answered that the difficulty of Article 33, although disapproval was 50%, which indicates that the availability of Electronic sources of the material reduces its difficulty, and then the learners withdraw from studying it.

### **3-What are the learners' motivations for joining MOOCs by virtual learning environments?**

The results of the study sample responses to this question are presented in the following table

**Table (5)**

*learners' motivations for joining MOOCs.*

<i>Your most important motivations for enrolling in MOOCs courses through Rwaq</i>	<i>Rank</i>	<i>agree%</i>	<i>Neutral%</i>	<i>Do not agree%</i>
<i>Presenting the course at a well-known Arab institution</i>	<i>Fifth</i>	25	25	50
<i>To obtain certificates for passing courses</i>	<i>first</i>	67	17	17
<i>Self-education according to personal interests</i>	<i>second</i>	58	17	25
<i>To make good use of your spare time</i>	<i>third</i>	50	33	17
<i>Paying attention to the subject of the course being studied</i>	<i>third</i>	50	42	8
<i>Renewing knowledge and satisfying curiosity for innovations</i>	<i>fourth</i>	42	33	25
<i>Attractive and interactive courses</i>	<i>second</i>	58	17	25
<i>My personal motivation for self-learning</i>	<i>second</i>	58	25	17
<i>There are no specific requirements to study</i>	<i>third</i>	50	25	25
<i>Communicating and interacting with different learners</i>	<i>third</i>	50	33	17
<i>Self-challenging and the desire to continue learning</i>	<i>first</i>	67	25	8
<i>Inadequate information provided by my previous courses</i>	<i>Fifth</i>	33	33	33
<i>Desire to discover and try everything new</i>	<i>second</i>	58	17	25

It is noted from the results of Table (5) that the learners' motives to enroll in MOOCs were in order as follows: to obtain certificates by 67%, as well as to educate oneself by 58%, while the motives were to

occupy leisure time and interest in a subject at a rate of 50%, in When knowledge is renewed at 42%, and finally, the course is presented in a well-known Arab institution at 25%, since Rwaq is still an unofficial platform, while the motivation may be greater if the institution is a formal educational institution.

#### 4-What are the encouragements for completing MOOCs by virtual learning environments?

The results of the study sample responses to this question are presented in the following table:

**Table (6):**

*Motivations for learners' eagerness to complete MOOCs courses through a gallery*

<i>encouragements for completing MOOCs in the future</i>	<i>Rank</i>	<i>Agree%</i>	<i>Neutral%</i>	<i>Do not agree%</i>
<i>Supervising a prestigious international university on MOOCs</i>	<i>first</i>	75	17	17
<i>Obtaining recognized certificates or degrees</i>	<i>second</i>	67	17	17
<i>MOOCs . e-courses</i>	<i>second</i>	67	25	8
<i>Prepare for the demands of life in the future</i>	<i>third</i>	50	25	25
<i>Enrolling in a prestigious university is difficult to study at</i>	<i>second</i>	67	17	17
<i>Easy access to educational materials and resources</i>	<i>second</i>	67	8	25
<i>Professional development and qualification to perform the job</i>	<i>second</i>	67	17	17
<i>Flexibility to organize the study schedule according to life concerns</i>	<i>third</i>	50	25	25
<i>Providing specializations that are not offered by traditional learning</i>	<i>second</i>	67	17	17
<i>Increasing requirements to study in traditional universities</i>	<i>fourth</i>	25	25	50

It can be seen from the results of Table (6) that the encouragements to complete the MOOCs courses in the future are, in order, as follows: According to the consensus of the scholars, a prestigious international university supervised MOOCs at 75%, while many incentives were equal in the order and percentage, such as: Obtaining recognized certificates Or a scientific degree, free e-courses MOOCs, at an ancient university where it is difficult to study, access to materials and resources, qualifying me to perform the job, providing specializations by 67%, while preparing for the requirements of life in the future, and scheduling the study according to the concerns of life together by 50%, and in the latter an increase The requirements for studying in traditional universities are 25%.

## 6. Discussion:

The results of this study are limited to the scope that has been indicated, and may change or vary due to the change in time, human or qualitative limits, and the study concluded that MOOCs have agreed with the characteristics of the knowledge society, as they supported: the importance of knowledge, and used ICT in a sophisticated manner, striving for advanced qualification. For scholars, especially marginalized groups globally, and most importantly, it worked to spread a culture that encourages the production and dissemination of knowledge, which is supported by the results of the applied study as follows:

### - Regarding the reality of learners joining MOOCs courses through virtual learning environments:

1. Most of the learners who were included in the study and who completed the questionnaire are female,

with a rate of 79%.

2. Most of the learners are graduates of higher education, with a percentage of 64.5%.
3. 60%.Learners who were completed MOOCs only once
4. Reasons for learners not completing MOOCs courses centered on learners' fears that the certificate is unofficial topped the reasons by 67%, while the difficulty of the subject was disapproval by 50%, which indicates that the availability of electronic resources.

#### **As for the learners' motivation for enrolling in MOOCs:**

1. Obtaining 67% certificates Self-education by 58%.
2. The two motives came to occupy leisure time, and interest in the subject of Kanna by 50%.
3. Renewal of knowledge by 42%, and finally the presentation of the course by a well-known Arab institution at 25%.

As for the incentives for learners to complete MOOCs:

4. Consensus of scholars' opinions, 75% of which is supervised by a reputable international university on MOOCs.
5. Obtaining recognized degrees, with "free MOOCs", "difficult university to study", "access to resources", "qualification for a job", and "providing rare specialties" was equal by 67%.
6. Prepare for life in the future, and schedule the study according to the concerns of life together by 50%.
7. Finally, the requirements for studying in traditional universities increased by 25%.

## **7. Conclusion:**

According to the findings of this study, the researcher recommends that:

- universities should seek to provide MOOCs through its platform and grant certificates or degrees for the courses they offer to learners to increase credibility and seriousness for their studies.
- university should forge productive partnerships with world-renowned institutions such as Coursera or international universities to design MOOCs and supervise some courses of a global nature for foreign Arabic speakers.
- universities should forge productive partnerships with Arab platforms that offer or supervise MOOCs to provide some of their various scientific departments' courses such as university and college requirements.
- more attention should be paid to platforms that offer MOOCs such as Rwaq to study the motives and reasons for learners to complete the courses; So that those courses can be developed in line with their needs.

## **8. Implications:**

During the COVID-19 crisis, a great deal of light was shed on E-learning and distance education, especially MOOCs, which provided ideal solutions to the problems of social distancing imposed by the crisis, so This study, therefore, highly recommends an impact assessment study of MOOCs before and after the crisis, which will be presented in a subsequent study, the results of which were collected after writing this research report.

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## References:

- Abu Akl, W., (2013). "Attitudes of students at Al-Quds Open University towards E-learning", *The Palestinian Journal of Open Education - Palestine*, 4 (7), 49-86.
- Abu Zaid, A., Abdel-Moneim (2006). The impact of communication technology on the quality of education and fields of work in the third millennium and the educational requirements for preparation for it, "A field study" - a research presented to the first E-learning conference at the University of Bahrain - April.
- Ahmed, Hala Ibrahim Hassan (2014). Evaluation of electronic courses at the Open University of Sudan in light of the quality standards of Electronic courses, *the Palestinian Journal of Open Education - Palestine*, 4 (8), 87-126.
- Ahmed, R.; Al-Kadi, A. (2021) "Online and face-to-face peer review in academic writing: frequency and preferences," *Eurasian Journal of Applied Linguistics*, 1(7), 169–201.
- Al-Dahshan, Jamal Ali (2004). *Renewal in University Education*. Dar Al-Zahraa for printing and publishing - Riyadh.
- Aldini, Lindsay (2019). MOOCS Courses: Massive Open Online Courses, <https://www.mydegreeguide.com/open-courses>.
- Al-Harthy, Iman Bint Awadah (2016). "The requirements for activating the widespread open courses (MOOCs') via the Internet and the degree of their importance, availability, and trends towards them in Saudi universities", *Journal of the College of Education (Banha University) - Egypt*, 27 (10), 142 - 99.
- Al-Mahdi, Magdi Salah Taha (2008). *Virtual education, its philosophy - its components - the opportunities for its application*. Alexandria: The New University House.
- Al-Turki, Osman Turki (2016). "Factors Affecting the Use of Open Source Electronic Courses MOOCs from the Perspective of Learners in...", *Journal of Educational and Psychological Sciences - Bahrain*, 17(4), 77-111.
- Billgates (٢٠١٦). *Informatics after the Internet*: Translated by: Abdul Salam Radwan - *The World of Knowledge - Issue 231 - The National Council for Culture, Arts and Letters - Kuwait - March 1998*. Pg. 303
- Blom, J., Verma, H. Li, N., Skevi, A. & Dillenbourg, P. (2014). MOOCs are More Social than You Believe. *E-learning Papers*, 22(May), 0–2.
- Breslow, L., Pritchard, D. E., DeBoer, J., Stump, G. S., Ho, A. D., & Seaton, D. T. (2013). Studying learning in the worldwide classroom: Research into edX's first MOOC. *Journal of Research & Practice in Assessment*, 8, 13–25.
- Chang, R. I., Hung, Y. H., & Lin, C. F. (2015). Survey of learning experiences and influence of learning style preferences on user intentions regarding MOOCs. *British Journal of Educational Technology*, 46(3), 528-541.
- Conole, G. G. (2015). MOOCs as disruptive technologies: strategies for enhancing the learner experience and quality of MOOCs. *Revista de Educación a Distancia*, (39), 22-35.
- El-Hayek, Hiam (2013). The knowledge society in the virtual environment: reading applications and learning experiences in the second life. *The Nineteenth Conference of the Specialized Libraries Association - Arabian Gulf Chapter: The Future of the Profession: Breaking the Traditional Barriers of the Libraries and Information Profession and Transforming towards the Future of the Digital Professional Environment - UAE*,. 412-445.

- European Commission (2014). Report on Web Skills Survey: Support services to foster Web Talent in Europe by encouraging the use of MOOCs focused on web talent, D1.1 – First Interim Report, May 2014. Retrieved 29 November 2016 from: <https://www.openeducationeuropa.eu/sites/default/files/news/MOOCs-for-web-skills-survey-report.pdf>
- Freihat, N. & Al Zamil, A. (2014). THE Effect of Integrating MOOC'S on Saudi Female Students' Listening Achievement. *European Scientific Journal*, 10(34), 127 – 142.
- Gašević, D. Kovanović, V., Joksimović, S., & Siemens, G. (2014). Where is research on massive open online courses headed? A data analysis of the MOOCS research initiative. *International Review of Research in Open and Distance learning*, 15(5), 134-176.
- Guo, P. J., & Reinecke, K. (2014, March). Demographic differences in how students navigate through MOOCs. In *Proceedings of the first ACM conference on Learning@ scale conference*, 21-30. ACM.
- Gupta, R., & Sambyal, N. (2013). An understanding approach towards MOOCs. *International Journal of Emerging Technology and Advanced Engineering*, 3(6), 312-315.
- Hayes, S. (2015). MOOCs and Quality: A review of the recent literature. The Quality Assurance Agency for Higher Education. Southgate House, Southgate Street, Gloucester GL1 1UB. MOOCs Network. Retrieved 29 November 2016 from: [http://eprints.aston.ac.uk/26604/1/MOOCs and quality a review of the recent literature.pdf](http://eprints.aston.ac.uk/26604/1/MOOCs%20and%20quality%20a%20review%20of%20the%20recent%20literature.pdf)
- Hinnawi, Magdi Muhammad Rashid Helmy (2015). "The Effectiveness of E-learning Services Provided Through the Electronic Curriculum Pages", *Journal of the Association of Arab Universities for Research in Higher Education - General Secretariat of the Association of Arab Universities - Jordan*, 35(2), 159-174.
- Littlejohn, A., Hood, N., Milligan, C., & Mustain, P. (2016). Learning in MOOCs: Motivations and self-regulated learning in MOOCs. *The Internet and Higher Education*, 29, 40-48.
- Liyanagunawardena, T., Adams, A., & Williams, S. (2013). MOOCs: A systematic study of the published literature 2008–2012. *The International Review of Research in Open and Distance Learning*, 14(3), 202–227.
- Liyanagunawardena, T., Williams, S. and Adams, A., (2013). *The impact and reach of MOOCs: a developing countries' perspective*. eLearning Papers (33). ISSN 1887-1542
- Mackness, J., Mak, S., & Williams, R. (2010). The ideals and reality of participating in a MOOC. *Proceedings of the 7th International Conference on Networked Learning 2010*, Edited by: Dirckinck-Holmfeld L, Hodgson V, Jones C·de Laat M, McConnell D & Ryberg T. 266-274.
- Milligan, C., Littlejohn, A., & Margaryan, A. (2013). Patterns of engagement in connectivist MOOCs. *Journal of Online Learning and Teaching*, 9(2), 149.
- Mulder, F., & Jansen, D. (2015). MOOCs for opening up education and the OpenUpEd initiative. In C. J. Bonk, M. M. Lee, T. C. Reeves, & T. H. Reynolds (Eds.), *MOOCs and open education around the world*. New York, NY: Routledge. Retrieved 29 November 2016 from: [http://www.eadtu.eu/documents/Publications/OEenM/OpenupEd\\_-\\_MOOCs\\_](http://www.eadtu.eu/documents/Publications/OEenM/OpenupEd_-_MOOCs_)
- Musa, Muhammad Fathi Ali; Al Marey, Mohammed Abdullah. (2013) Developing scientific research in Saudi universities in light of the knowledge society. *Journal of the Faculty of Education in Assiut - Egypt*, volume 29, p. 4, pp. 226-299.
- Ndibuza, F.; Langa, P.; Bisaso, R.; (2021). Higher Education and the Knowledge Society Agenda in

- Uganda, Book Chapter “Universities in the Knowledge Society”, DOI: 10.1007/978-3-030-76579-8\_5 67-82.
- Nodoushan, M. A. S. (2012). Self-regulated learning (SRL): Emergence of the RSRLM model. *International Journal of Language Studies*, 6(3), 1-16.
- Nofal, Muhammad Nabil, (2002) The University and Society in the Twenty-first Century - The Arab Journal of Education - Volume 22 - Number One - The Arab Organization for Education, Culture and Science - Tunisia.
- Noi, Taha Hussein. (2013). The Continuing Education Strategy and its Role in Building an Organization and a Knowledge Society. *Journal of Law and Human Sciences - Ziane Ashour University in Djelfa - Algeria*, p. 13, p. 110 - 123..
- North, S. M., Richardson, R., & North, M. M. (2014). To adapt MOOCs, or not? That is no longer the question. *Universal Journal of Educational Research*, 2(1), 69-72.
- Pollock, N., Cornford, J. The Theory and Practice of the Virtual University: Working Through the Work of Making Work Mobile. *Minerva* 40, 359–373 (2002). <https://doi.org/10.1023/A:1020977705523>
- Rabaa'a, Omar Abdel-Rahim; Al-Salem, Rebekah Khalif. (2013) The ability of continuing education centers programs to meet the requirements of a knowledge society: Yarmouk University Center as a model. *Journal of the College of Education - Ain Shams - Egypt*, p. 37, vol. 1, p. 627-677.
- Salem, Ahmed Mohamed (2004). *Education Technology and E-learning*. Riyadh: Al-Rushd Library.
- Vadivu, S. V. ; Chupradit,S. (2020). “Psychosocial and occupational impact assessment due to internet addiction: a critical review,” *Systematic Reviews in Pharmacy*, 7( 11), 152–155.
- Suleiman Abd Rabbo Muhammad, Azza Ahmad Muhammad al-Husseini (2002) “A proposed conception of distance university education in the Arab world in the light of some foreign experiences”, the ninth annual national conference (the first Arab) of the University Education Development Center “Arab distance university education: A future vision”, December 17-18, Ain Shams University.
- Tariq, Amer Abdel Raouf (2013), *Foundations and Methods of Self-Learning*, International House for Publishing and Distribution.
- Tolba, Abdel Aziz (2010). *E-learning and educational technology innovations*. Mansoura: Modern Library for Publishing and Distribution.
- White, S., Davis, H., Dickens, K., León, M., & Sánchez-Vera, M. M. (2014, April). MOOCs: What Motivates the Producers and Participants?. In *International Conference on Computer Supported Education*, 99-114. Springer International Publishing.
- Whittington, D. (2000). Evaluating three years' use of virtual university. *Quality Assurance in Education*, 8(1), 48-52.
- World Bank (2003). *Building Knowledge Societies, New Challenges Facing Higher Education*, Middle East Readers Information Center, Cairo.
- Zamel, Magdy Ali Saad (2013). The role of electronic courses (electronic activities) in developing academic creativity among Al-Quds University students, *Journal of Palestinian Research and Human Studies - Palestine* (20), 186-219.