

# OER Challenges

تحديات الموارد التعليمية المفتوحة OER

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### **Abstract:**

This research paper revolves around the challenges of open educational resources. Due to globalization, the corona pandemic and the transition, the need has increased in developed countries for enrollment rates in education, especially higher education, in addition to the rehabilitation of human resources. In order to develop their skills, practitioners need to cope with the new characteristics and skills of the teaching profession. The Arab countries are in dire need to meet the requirements and improve educational outputs according to the new reality. They face a set of challenges, the most important of which is the Corona pandemic, and the high cost of educational content in its paper and digital patterns such as textbooks, which constitutes an obstacle to large segments of society with limited income, especially higher and middle education, and one of the most prominent challenges they face when using open educational resources is the lack of appropriate devices(laptop/mobile) to be able to receive course content and study using open educational resources, as most countries of the world face the problem of providing high-quality education, which leads to the development of the economy and the advancement of the learning process, and the qualification of resources humanity is able to serve it, and facilitate the life of the individual in light of modern changes, but there are opportunities that still exist to raise the level of education and advance it. Catching up with the global openness movement of educational resources on the International Information network (Internet) is a real opportunity to cope with the challenges and overcome those difficulties.

**Keywords:** OER, Educational Outcomes, Resources Selected.

**ملخص:**

هذه الورقة البحثية تدور حول تحديات الموارد التعليمية المفتوحة، ففي ظل العولمة وجائحة كورونا والتحول إلى اقتصاد المعرفة تزايدت الحاجة في الدول المتقدمة إلى نسب الالتحاق بالتعليم وخاصة التعليم العالي، إضافة إلى إعادة تأهيل الموارد البشرية، من أجل تطوير مهاراتهم بما ينسجم مع الخصائص الجديدة للمهن التي أدت إلى تطوير المهارات المطلوبة، ولكي تستطيع الدول العربية مواجهة متطلبات تجويد مخرجات التعليم وفقاً للواقع الجديد، فإنها تواجه مجموعة من التحديات ومن أهمها جائحة كورونا، وارتفاع تكلفة المحتوى التعليمي بأنماطه الورقي والرقمي مثل الكتب المدرسية، مما يشكل عائق أمام شرائح واسعة من المجتمع ذات الدخل المحدود وخاصة التعليم العالي والمتوسط، وإن من أبرز التحديات التي تواجههم عند استخدام الموارد التعليمية المفتوحة تمثلت في عدم توافر أجهزة مناسبة (لاب توب/ موبايل) للقدرة على تلقي محتوى المقرر الدراسي باستخدام الموارد التعليمية المفتوحة، حيث تواجه معظم دول العالم مشكلة توفير التعليم عالي الجودة، الذي يؤدي إلى النهوض بالعملية التعليمية، وتأهيل الموارد البشرية القادرة على خدمته، وتيسر حياة الفرد في ظل المتغيرات العصرية، إلا أن هناك أمامها فرصاً نادرة ما زالت قائمة للارتقاء بمستوى التعليم والنهوض به، إن للحاق بحركة الانفتاح (Openness) العالمية للموارد التعليمية على الشبكة الدولية للمعلومات (الإنترنت) تشكل فرصة حقيقية للوقوف أمام التحديات وتجاوز تلك الصعوبات.

**الكلمات المفتاحية:** الموارد التعليمية المفتوحة، مخرجات التعليم، تحديات الموارد.

## 1–Introduction and General Problem:

In the light of modern changes, developments and the transition to a knowledge economy, the need has increased in developed countries to raise the rates of enrollment in education, especially higher education, where educational and educational institutions are of paramount significance, and education enjoys a vital position in the educational system the advancement and progress of all countries of the world. Training and qualifying the human resources that are necessary to advance the economic, intellectual and cultural level is the basic ingredient in any country that seeks to improve its educational level globally and regionally. Where educational and educational institutions face a set of challenges whose severity and extent is difficult to predict.

Education is the first and direct responsibility in providing the individual with the various skills, abilities and competencies that help him to meet the requirements of future life, and to go out to the market to work with the word “learning” Dar. This will not be in light of the traditional system based on objectivity and realism but through the formation of new educational policies in education. It must be educational (Solomon, 2007).

The current era is characterized by scientific and technological progress in various areas of daily life, where the use and investment of computer capabilities today has become one of the forms of modern educational technology. Knowledge, and in light of globalization and the continuous developments in information and experiences that the individual goes through as the first building block in building society, the economy of any country depends on the development of the individual’s intellectual, cultural and cognitive level. Labor market needs (Al-Husseini, 2013).

Harem (2013) pointed out that the true revolution of any nation is not in the multiplicity of owning resources in it, but rather in building, qualifying and training the workforce, which is the active element in empowering competing countries because they are the ones who bring about a major change in any institution, especially the educational one, so no institution can develop and innovate, except through the ability of individuals to face challenges and overcome them to advance the institution and help it advance, excellence and development. This was confirmed by Al-Salami (2003) who argues that the modern administration is directed to the increasing interest in the human element, as it is the capital of the nation. Its major concern

should be to work on finding the best ways and solutions to invest and employ its mental energies and innovation.

The term open educational resources has become very popular in the past five years, as this term symbolizes any educational work or unit of study that is offered on the Internet for free and under an open license, and this project was considered a pioneering work in the history of human culture because of its ability to meet the requirements of developing education and facing challenges, In addition to the need to rehabilitate human resources in order to develop their skills in line with the new characteristics of the professions. Open educational resources also represent a strategic opportunity that enhances knowledge building, knowledge exchange, capacity building, and everyone's benefit from teaching and learning resources (Al-Khalifa, 2009).

Open educational resources are teaching, learning and research materials that are available by various means, digital or otherwise, that are in the public domain or are issued through an open license that allows others to freely use, use, adapt and redistribute them without restrictions or restrictions. Limited, and we find that the open licensing process builds on the intellectual property rights framework, as done by relevant international agreements to respect the author's rights to this work. (Hassan, 2018).

## **2–The Importance of the Research Paper:**

The importance of the research paper comes from the urgent need due to the scarcity of Arab and foreign studies on this subject, and that this paper helps those in charge of improving educational and research processes. It will provide knowledge of the pros and cons of using and strengthening its positive aspects and improving its negative aspects.

## **3–Objectives of the Research paper:**

The research paper aims to know the challenges of open educational resources, access to the best scientific results and ways to improve them, improve open educational resources, and improve educational outcomes.

#### 4–The Problem:

Perhaps one of the most important challenges facing educational institutions in the Arab world is how to form and develop a distinct and effective human structure capable of dealing with the needs of the labor market and their ability to confront the problems and demands of change. Language and the importance of using it and highlighting the obstacles facing its application in addition to the opportunities and challenges available to it to develop and improve the outcomes of the teaching and learning process. This research paper will seek to clarify what are the challenges that open educational resources face?

#### 5–Previous studies:

Through the research, it was found that there is a severe scarcity of studies concerned with the use of the challenges of open educational resources in Arab and foreign educational and educational institutions, and most of the available studies examined open educational resources in general with little focus on learning and teaching, e-learning, and the use of electronic resources - in general and digital libraries, and in these The paper I will mention some studies that partly intersect with its general framework.

The study Al Mubarak (2018) aimed to identify the reality of the use of open learning resources by faculty members at Princess Noura Bint Abdul Rahman University in teaching and the most important challenges they face using the descriptive approach. The study was applied to (358) faculty members. The results showed that the reality of faculty members' use At Princess Nourah bint Abdulrahman University for Open Learning Resources in teaching, it was weak, with an average of (3,25), but there is a tendency for teachers to encourage female students to use open learning resources, which may be due to their feeling of their importance. Scientific professionals who are available to assist in the process of communication and ongoing follow- up on the use of open learning resources as well as the pressures of academic work or administrative assignments.

Ermei, Yan, Jessica, & Wen- Hao, 2015 have conducted a study entitled Open Educational Resources (OER) Use and Constraints: A Study from Zhejiang University, China, this study was designed to examine the use of open learning resources in Chinese universities and the perceived obstacles that affect the dissemination of Open Educational Resources. They are (1239), and the results show that a large number of university students have used OER, but

there are challenges related to content and environmental factors that affected the rapid spread of OER.

Ali Ahmed (2010) also conducted a study on the obstacles to the application of educational media in public schools for principals and teachers from their point of view in Salfit, Palestine. The researcher used a questionnaire that includes the most important obstacles to teachers' use of educational media, and the most important results of this study are the absence of differences in the obstacles to using educational media from the point of view of principals and teachers due to the variables: gender, nature of the job, specialization, years of experience, marital status, educational stage, and the presence of differences in Obstacles to media use due to educational qualification variable.

## 6–The concept and origins of open educational resources:

Education contributes to providing the necessary skills for economic and social development as the first pillar in creating a knowledge-based society, and technology is a crucial tool in preparing and educating the individual with information that helps him achieve cultural and professional growth in an era of overcrowding in information and in light of the technological progress we live in today. A new set of educational materials, where in 1998 David Wiley announced the first "Open Content Project" (OSI) license and argued that educational content should be free and available to all (Yuan, MacNeil, & Kraam, 2008), he used the term "resources" Open Education" for the first time during the UNESCO Forum in 2002 on the impact of open curricula on higher education in developing countries, and UNESCO expanded the concept of open educational resources in its second forum in 2004, to include three important aspects in the educational process:

**Educational content:** such as curriculum materials, lesson plans, textbooks, articles, etc. that support teaching and learning.

**Tools:** such as programs that assist in the production and use of educational content, as well as open technologies that facilitate flexible collaborative learning and open sharing of teaching practices that enable teachers to benefit from and reuse their colleagues' best ideas and educational resources.

**Operational resources:** the resources needed to ensure the quality of education, educational practices, and the licensing of educational resources (Al-Tal, 2013).

Known (Browne, Holding, & howell, Dyer, 2010) defines open educational resources as “giving everyone the freedom to participate in various educational materials that make it possible to print and read them via the Internet without cost. Asiri (2014, 129) defined them as” the possibility of using them in research The scientific study aims to improve the education process and ensure its continuity.” (Muller, Harrison, Raju, Moodiey, 2011) and UNESCO defined OER: as “the resources of teaching, learning and research available through any means – whether digital or non-digital – that fall within the domain of public or released under an open license for free use, use, adaptation and redistribution by others without or with limited restrictions (2012).

## **7–Advantages of open educational resources:**

Open educational resources are distinguished from other educational resources by being subject to a system of licensing and property protection, and what is easy to use and adapt without the permission of the copyright owner. The advantages of open educational resources can be summarized as mentioned by Abu Khattwa (2014); Yang, Cotera, (2011); Williams (2010) is:

Advance knowledge and access to information freely and accurately, using a variety of digital forms and multimedia, its ability to attract learners and experienced people and encourage them for lifelong learning, and works to bridge the gap between formal and non-formal education, develop and improve education outcomes to advance and advance the educational process, and contribute In providing continuing education that works on reforming and developing the local economy in the community, engaging students in the academic content, constantly updating information and curricula to conform to scientific and academic developments, and benefiting from the educational resources provided by internationally reputable institutions, which were produced by world-renowned experts in various fields. fields, diversifying and enriching the sources, creating greater opportunities for comparative analysis, discussion and dialogue, saving time, effort and money due to the lack of access and development costs, because the materials are usually ready for immediate use, supporting and facilitating continuous training because of its role in professional and personal life, and benefiting from cultural and cognitive diversity To serve the goals of education.

## 8–Challenges Facing Open Educational Resources:

Al-Tal (2013) sees that despite the benefits and advantages that open educational resources provide, there are a number of challenges and technical, economic, social and legal obstacles that limit its spread or adoption in organized education in a large way, and is the most prominent challenges that prevent the activation of open educational resources as mentioned by both (Hassan, 2018) (Annand, Jensen, 2017) (Browne... et. al, 2010) (Yuan... et. al, 2008) is:

- **Ease of access:** There are many challenges facing users in this context, represented by the multiplicity of places where resources are published on Internet sites and platforms, so it is difficult to search and retrieve them, and the most important challenge here is the lack of an accredited authority that provides an umbrella for these sources.
- **Quality:** Open educational resources are based on the freedom to publish and modify, so the quality of these sources has varied according to the number of authors and their scientific, educational and technical backgrounds, and the absence of clear or approved standards requires the evaluation of these sources when they are used and their conformity.
- **Publication licenses and property rights:** It requires authors and users of resources to have a good understanding of what open copyright licenses and intellectual property rights are.
- **Language and multiculturalism:** Despite the importance of multiculturalism, which results in cognitive diversity, there are still some challenges related to the fears of accepting other cultures for some, and the multilingualism of sources is one of the most important obstacles facing users and practitioners. Resources are transferable, applicable, and integrative in multiple contexts and cultures.
- **Technological infrastructure:** The availability of high-efficiency means of communication, technology and the Internet in schools, universities and homes is one of the most important factors for the success of the development, dissemination and reuse of open educational resources and the promotion of good practices.
- **Policies and Strategies:** There are many efforts undertaken by many international institutions to develop strategies and general policies for open educational resources

and their adoption in education, one of which was the "Paris Declaration" of UNESCO, but the response to these efforts differs from one country to another, and the need for national policies and strategies and operational plans of action in line with international efforts.

- **Sustainability and continuity:** The concept of sustainability is linked with the creation of supporting national policies and strategies. The first responsibility lies with the state in establishing the incubator for these works, and the continuity of its support from the material side and from the awareness and cultural side, which is to spread sufficient awareness about the importance of open educational resources and their participation, in addition to sponsoring Enhancing individual initiatives on which students, teachers and researchers are based.
- **Knowledge Economy:** Knowledge is the main driver of economic growth, qualified and highly skilled human resources, or human capital. The availability of open educational resources in their concept and application of their good practices provides a unique opportunity for continuous professional development for human resources, and it is important that many technical challenges have been overcome. Cultural, social and at the level of policies and strategies to reach a knowledge economy based on information, creativity and intelligence.
- Lack of awareness of the methods and methods of dissemination of open educational resources due to the huge diversity in computer systems and software. And the lack of awareness of teachers and students of ways to obtain open educational resources and how to use, configure and benefit from them properly.
- Cultural domination and globalization where OER is produced primarily by educational institutions affiliated with industrial economic systems.
- **Raising awareness and progress.**

However, the biggest challenge is accepting openness: "different external cultures", which require a change in policies and mechanisms for managing the educational institution, by allowing the participation of faculty members in the production of open educational resources as one of the foundations for scientific promotion, and there are many materials and activities available on the Internet, but it is rarely organized in a way that can be used in the development of educational curricula at various stages of education in general, which prompted some

countries recently to use open educational resources, for several reasons, as mentioned by (Yuan.. et. al, 2008) and (Falconer, Littejohn, McGill, & Beetham, 2016) which are as follows.

The absence of policies that emphasize the field of educational and pedagogical innovations in the organizational change of educational institutions, the difficulty in finding a balanced approach capable of effective communication across different cultures, the lack of communication and cooperation between institutions and developers of teachers and students, and the encouragement of international institutions to finance new projects capable of producing learning resources, Creation of a permanent, multilingual, multi-media digital repository.

## **9–Recommendations:**

Through this presented research paper, a number of important recommendations can be reached to achieve quality performance:

1. Allow the local community institutions to support the open educational resources, whether by providing material support or providing its requirements, such as devices, media, and others.
2. If there is a tendency to use the Internet as a primary means of open educational resources, the infrastructure must be equipped with all its resources to deal with the Internet in the events of its conditions and developments, and from here it is imperative that we develop an effective strategy to access educational resources at this target level.

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