

## THE IMPORTANCE OF OPEN EDUCATIONAL RESOURCES IN THE DIGITAL AGE

Oğuz COŞAN

oguzcosan5@gmail.com

<https://orcid.org/0000-0002-7861-8279>

TRNC Ministry of National Education, Department of Secondary Education, Teacher

### ABSTRACT

Technology plays a much larger role in the digital age than in previous generations, and it has become important today that education adapts to this digitalization. Sharing educational resources was traditionally limited in the competitive world of higher education. Educational institutions keep their educational materials and resources private. Today, an increasing number of institutions and individuals have made such digital resources available for distribution on the Internet by removing legal, financial, and technical hurdles. Open Educational Resources (OER) creates the right way to provide free and accessible education to all and access information for the public good. It is important that OER is inexpensive and freely adaptable. The ability to adapt and modify content provides a significant advantage, especially when targeting specific populations such as the disabled or those with special needs. This research aimed to reveal the importance of open educational resources (OER) in the digital age. The research was carried out with the compilation study method, one of the qualitative research methods, and the researches made for the purpose of the research were examined.

**Keywords:** Digital age, Open Educational Resources, OER, Education

### INTRODUCTION

Technology is the name of tools and devices that make life easier in all areas of life. The possibilities of technology are used in every conceivable field, from agriculture, industry, trade, banking, health, defense, education, science, sports and entertainment. Today, there is not a single area where technology is not used and technology products are not used. The first programmable computer produced in 1936 can be considered as the beginning of digitalization in the current sense (Sahinaslan, 2020). While technological innovation is effective in many areas, it also causes innovations in education. Due to these innovations, the field of education is changing rapidly. These innovations have the potential to renew the tools and equipment used in education to meet today's needs. In this changing environment, it is necessary to bring a digital dimension to education. Today, not being able to benefit from technological opportunities in education cannot meet the needs and expectations of the age (Karasar, 2004). The introduction of the Internet into our lives has made it easier to access information. Access to e-books, public and private digital libraries, digital encyclopedias, articles, blogs, websites and discussion forums where you can exchange information with one click has become easier. This digital transformation fundamentally changes the access and sharing of information. While digital transformation is developing rapidly around the world, schools are struggling to keep up with this speed. Almost all research shows that education has remained the same for centuries, the classroom environment and its components have remained the same, the location, teacher-student relations and teacher participation have not changed.

However, rapid digital changes in the world have moved the learning environment to a different place in terms of space. The traditional teacher-student hierarchy began to disappear. Students' ability to access information quickly eliminates the teacher's role of knowledge transfer. The wealth of information and publicly available information make teachers comparable to other teachers and educational resources (Taşkıran, 2017). As in all disciplines, rapid access to information is critical for society and individuals. Distance education applications that support education in the digital environment are gaining importance due to the ease of access to information (Çallı, Torkul, & İşman, 2014). The development of information technologies in the field of education has made it necessary to use more effectively. Those who cannot adapt to development face many problems. The situation in this area shows that it is almost impossible to provide education without the use of pedagogical techniques in today's education system (Sarsıcı, Çelik, 2019).

Access to information is the fundamental right of every human being, but this does not mean that there are no limitations. Teaching and learning tools were frequently seen as crucial intellectual property accessible to their students and staff in the competitive world of higher education. Today, a growing number of institutions and individuals distribute such digital resources through the internet without any legal, financial, or technical restrictions. Education becomes more accessible thanks to Open Educational Resources (OER). The Massachusetts Institute of Technology (MIT) Open Course Ware (OCW) program, which uploaded most of the course materials on the Web and made them available globally and free of charge, marked the beginning of open access in education in 2001. Many world-renowned universities followed their lead, increasing their impact in the academic area as well as among people seeking knowledge. The notion of Open Educational Resources was

initially mentioned at the UNESCO Open Courseware Forum for Higher Education in 2002, highlighting the idea of open sharing of knowledge and digital teaching, learning, and research materials (Butcher, 2011; Poposki, 2010).

Open Educational Resources (OER) includes research resources like as all and parts of e-courses, curriculum maps, textbooks, course materials, learning materials, lesson plans, simulations, multimedia content, audio and video recordings, experiments, applications and games. It consists of other materials that are designed to be used in teaching and learning as well as research and are available for use without any payment (Butcher, 2011; Groom, 2013). The purpose of this research is to examine the importance of open educational resources in the digital age.

### **DIGITAL AGE IN EDUCATION**

Education has recently begun to undergo a complete transformation. This change continues to occur rapidly. Education is now everywhere, teaching mobile applications together what we need to know and what we need to know in the next step (Bates, 2016). Democratization of knowledge facilitates access to electronic encyclopedias, public and private digital libraries, dictionaries, digital books, articles and archives, social networks, blogs and websites, and exchanges information. This digital transformation completely changes the access and sharing of information. Digital transformation is happening rapidly around the world, but schools seem to have a hard time keeping up. Most studies show that education has not changed over the centuries, the classroom environment and its components are the same, the space, the lessons given at regular intervals, the teacher-student relationship and the central approach have never changed. As a result, rapid changes in the external environment pose a threat to the classroom. In traditional schools, where teachers are seen as the authority on knowledge, the hierarchy between teacher and student has begun to disappear. When students access information quickly, teachers lose their role in communicating information. The abundance, diversity, and accessibility of information have made teachers comparable to other teachers, learning resources, and other departments (Davidson & Goldberg, 2009).

In addition to the use of information technology in educational institutions, higher education institutions try to keep up with this change by offering online courses to break institutional boundaries in the digital age. Educational institutions have recently entered the process of transition to distance education, especially with the emergence of massive open online courses (Davidson & Goldberg, 2009). These lessons created a turning point. It has succeeded in combining two important long-term developments such as online learning and distance education (Bonk, Lee, Reeves, & Reynolds, 2015).

It is seen that the transformation caused by open education resources took place in three areas. In the field of digital assisted production, there are completely new lessons designed with a structure that combines not only audio-visual video recordings of lessons, but also various images, sounds, images, languages and graphics. Secondly, this online course transformation is done not only as a public course, but also in a structure that allows interaction between the student and the teacher. Finally, the modules of these lessons must have the certificate system enabled. It is stated that the industrialization of distance education is a new structure that takes full advantage of the potential of digital technology and forms the basis of the interaction between producers and consumers.

One of the important innovations brought by information technology is the development of open learning resources (OER). Under the slogan of education for all, UNESCO recognized the potential and created the concept of open learning resources. These supports are available to everyone free of charge and online. These materials may be reused, modified, combined and reproduced by the user as needed. Open learning materials and courses are members of the digital open family, rooted in the open software movement. Other members of the digital openness include open science, open data, open business, open policy, and open practices. There are two important statements that can be seen as a turning point in the international development of open education. These are the Cape Town Declaration on Open Education and the Paris Declaration on Open Learning Resources (Bonk, Lee, Reeves, & Reynolds, 2015).

### **OPEN EDUCATION RESOURCES**

Open Educational Resources refers to educational tools and resources that are prepared and presented so that anyone can access them without any charge, and can be developed and republished under certain conditions (UNESCO, 2019). It has an intellectual property license that can be easily accessed, used and developed by open educational resources that support the progress in education for all and the processes of improving living conditions in developing countries; It is emphasized that there are resources for learning, teaching and research purposes. All kinds of resources that will provide access to and facilitate information such as videos, course

materials, computer software, modules, textbooks, tests can be evaluated within the scope of OER (Pawlowski & Hoel, 2012). Open Educational Resources;

- To contribute to the lessons of the students who continue their education life and to support their preparation for the exams,
- To ensure that all individuals who want to follow their developments in the field of science and technology,
- To pave the way for educators to improve themselves and therefore their teaching methods with accessible course-related resources and sample course teaching methods,
- To meet these needs of educational institutions that are insufficient in terms of resources.
- To contribute to making conscious choices by ensuring that students who will enter higher education life have preliminary information about the departments and courses they want to choose,
- By providing a universal information sharing environment, especially at the university level, to ensure that students in any country benefit from the resources (library, film and video recordings, archaeological excavation data, all course materials...) offered by the university anywhere in the world,
- It can be used to serve purposes such as creating a developing discussion environment, especially for students and educators (Kurşun & Çağıltay, 2011; Smith & Casserly, 2006; Baysal, Çakır & Toptan, 2015).

OER took its first steps with MIT (Massachusetts Institute of Technology)'s "OpenCourseWare" application, then distinguished universities such as Utah, California, Berkeley, Illinois, Brown, Michigan, Harvard, Yale openly use many educational resources with different applications at different times. They have contributed to the worldwide dissemination of OER by offering Many countries such as India, Australia, the Netherlands, South Africa, France and various international organizations and organizations, especially UNESCO, have used OER with different projects to contribute to educational activities and educational policies. In Turkey, the Turkish Academy of Sciences (TÜBA) and various universities are working on the use and dissemination of OER (Baysal, Çakır, & Koleksiyon, 2015).

### **ADVANTAGE AND IMPORTANCE OF OPEN EDUCATIONAL RESOURCES**

The use of Open Educational Resources provides various advantages to educational institutions, academics and learners. It is foreseen that the gap between different classes in the society and countries in the international arena will decrease with Open Education Resources, the quality of education will increase and access to information will accelerate. In addition, it is stated that the number of people receiving informal education and lifelong learning tendencies will increase with OER. From the OER definitions, it is stated that the provided training resources can be used without any limitations, edited, used repeatedly if necessary, mixed and recreated in line with the purposes. One of the core values of OER is the universal use of these resources, independently of the education system and national curriculum frameworks (Grodecka, Sliwowski, 2014). Explained by the European Commission the values of OER, Open Educational Resources and open applications as having more personal learning, good learning experience. In addition, they stated that by increasing the access of individuals to information, it allows more efficient and better use of resources that provide learning equality. Students can access different educational resources suitable for their learning styles through OER. They find the opportunity to easily access information by using any device without space, support and time limitations.

Students become more active participants in the education process in collaboration with other participants in virtual learning environments. Thanks to OER, teachers have the opportunity to compare their own teaching materials with the teaching materials of other teachers and to use them as a resource. They can learn to publish their work worldwide with an open license and how to improve the quality of their teaching practices and encourage pedagogical innovations. Finally, OER can reduce the cost of accessing educational materials (McGreal et al, 2013).

### **CONCLUSION AND RECOMMENDATIONS**

The initiative to grant free access to educational and scientific resources points to the direction of change in the education system. It enhances traditional education and learning systems with open education materials and online tools that can be used unlimitedly in standard and online education through objectives that enable collaborative and constructivist learning, critical thinking and exchange of ideas. and provides an opportunity to create new knowledge.

Certain digital skills, ICT resources, time and institutional resources should be provided for the widespread use of OER and its main purpose, which is to be easily accessible and used by everyone. In particular, where Open educational resources have limitations as most of them are in English, making resources available in local

languages aims to expand the use of the OER and make it accessible and usable for all cultural and educational integration needs.

In the education sector, where digitalization is being used more and more, teachers should be encouraged to share their resources and materials with their colleagues through OER. In this way, both students and teachers are provided with the opportunity to create a network with experts in this field by keeping the knowledge they need to have up-to-date.

Therefore, it is necessary to raise awareness of the advantages and possibilities of Open Educational Resources in general and to train teachers and academics. In addition, an organizational level OER policy and implementation plan needs to be adopted, as has been done by MIT, Yale, Berkeley, Stanford, Rice and many other world-renowned universities and recommended by the European Commission. The use of OER comes to the fore worldwide, and very serious investments and projects are carried out for the use of these resources. In order to increase such studies, seminars can be held for teacher candidates on the use of OER. The use of OER creates a very beneficial environment, especially for the development of teaching methods and practices.

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