Open Educational Resources (OERS) Attitude Among Teacher Educators

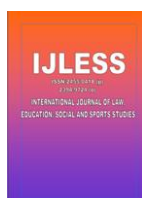**Balachandra Madiwal[1], Patil S S[2]**

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ABSTRACT

Over the past decade, teachers worldwide are increasingly adopting Open Educational Resources (OER) in their instructional practices. OER are technology-enabled educational resources that are openly available for users to access and adapt for non-commercial purposes. Unlike open or resource-based learning, OER utilizes new technologies and various media formats.

According to Butcher (2011, p. 6), OER includes materials meant for teaching and learning, such as scholarly articles. The Paris OER Declaration (UNESCO, 2012) defines OER as materials available in any medium that reside in the public domain or are released under an open license, allowing no-cost access, use, adaptation, and redistribution.

OER are relevant for undergraduate, postgraduate, and advanced research programmes in higher education. The role of Information and Communication Technology (ICT) is significant as the digital world reshapes traditional education. Open Educational Resources allow access to knowledge at little or no cost.

UNESCO's 2019 recommendations emphasized building the capacity of stakeholders to create, access, reuse, and adapt OER. Member states, including India, are encouraged to promote OER through teacher education institutions. Some resources may have copyright or open licensing protections via Creative Commons (CC), fostering continuous professional development. Stakeholder awareness and a positive attitude toward OER are key to maximizing its benefits, allowing access from anywhere at a minimal cost. This paper focuses on studying the attitude of utilizing the OERs by the teacher educators of secondary educational institutions (B.Ed. Colleges) located at the urban level under the Kuvempu University & Davangere University jurisdictions of Karnataka.

The sample consisted of 23 teacher educators at the urban level, and the survey method was used to collect the data. It was found that the level of attitude towards open educational resources is found to be significantly

moderate among secondary education teacher educators' attitude in most streams.

KEYWORDS: Open Educational Resources (OERs), Attitude, Secondary Teacher Educators.

INTRODUCTION:

"Open Educational Resources (OERs) are digital teaching, learning, and research materials that are available for free. They can be accessed, utilized, and distributed without any limitations. It consists of various digital assets, including text, media, and other useful resources for educational purposes such as teaching, learning, assessing, and research. These resources are readily available online to every accessor, be it an instructor, student, or self-learner. Although OERs come in different file formats, they offer an excellent way to access educational materials for free**.**

E-learning is not just about technology. It involves various instructional and pedagogical approaches that create a complete learning ecosystem based on the Internet. In higher education, e-learning is widely used to facilitate learning in academic programs. Open Educational Resources (OERs) are a valuable alternative to enhance access to high-quality educational content. Distinguished Universities across the globe offer these resources under open licenses. Combining both these concepts can be a powerful strategy to improve the quality of curricula in higher education institutions, especially in developing nations like India. It can aid in standardising the learning outcomes of international academic programs and reducing the cost associated with educational content development. This research aims to investigate the potential of making OERs available in e-learning environments.

"Open Educational Resources (OERs) are free digital materials for teaching, learning, and research. They include text, media, and other educational resources that can be accessed and shared online." OERs are available to everyone and come in various file formats.

E-learning involves more than just technology. It encompasses various instructional and pedagogical approaches that establish a comprehensive learning environment on the Internet. In higher education, e-learning is widely utilized to support academic programs. Open Educational Resources (OERs) offer a valuable alternative for improving access to high-quality educational content. Renowned universities worldwide provide these resources under open licenses. Combining these concepts can be a potent strategy for enhancing the quality of curricula in higher education institutions, particularly in developing nations like India. It can help standardize the learning outcomes of international academic programmes and reduce the costs associated with educational content development. This research aims to explore the potential of integrating OERs into e-learning environments.

NEED AND SIGNIFICANCE OF THE STUDY:

The focus of this study is on the use and importance of Open Educational Resources (OER) by Teacher Educators in their professional development to train future teachers. Teachers need to constantly update their knowledge, and Teacher Educators have a vital responsibility to prepare individuals who will shape and mould the future of our society. In the past, the only way to access knowledge was through written materials like books, magazines, and newspapers. However, with the advent of digital content, one can gain access to information from anywhere in the world at a low cost. In the twenty-first century, education, learning, and research are more closely linked to ICT and other networking technologies. The internet has become a dynamic and powerful medium for channelizing educational resources. The role of teachers, educators, and researchers is constantly evolving, and this has led to changes in the ways and means of accessing and communicating information and knowledge.

The National Policy on Education 2020 emphasises the significance of technology-oriented education. Open Educational Resources (OER) play a vital role in creating and sharing knowledge, aligning with

the needs of different learning groups. To effectively harness these resources, teachers need to be actively involved in producing and sharing educational materials. Teacher educators should have a strong grasp of accessing open content, which encompasses freely available, openly licensed text, media, and other digital assets that are beneficial for teaching, learning, and research purposes.

REVIEW OF RELATED LITERATURE:

This study observed the influence of e-learning on the cognitive, affective, and behavioural aspects of students **(Martin et. al,2022).** The results showed that e-learning has a greater impact on these areas when compared to face-to-face learning. Furthermore, the impact is more pronounced in higher education as compared to basic, mid-level, and upper-secondary education **Lizzeth Navarro-Ibarra et al (2023).**The study was conducted to explore the awareness and use of Open Educational Resources (OERs) among research scholars at Kurukshetra University, Haryana, India. The data was collected from 150 randomly selected research scholars through a questionnaire. The study found that while most of the research scholars were aware of OERs, they faced difficulty in customizing them to meet their individual needs. **(Singh, S; Sulekha; Mange, R,2022)**. A study was conducted on educators who use Open Educational Resources (OER) for teaching. The study focused on how access to high-quality educational resources through OER can help enhance and adapt teaching practices. The study involved 1,869 participants and identified a typology of OER users. Most of these users accessed OER to meet their own needs, rather than to upload, create, or publish content. **(Admiral W,2022).** The study revealed the usage and performance of open educational resources among State Universities of Tamil Nadu's research scholars. For the study, a sample of 300 research scholars from 22 state universities in Tamil Nadu was selected randomly. The survey method was used to conduct the study. The results showed that 30% of the research scholars of state universities had a high level of accessible educational opportunities. It was also discovered that there is a significant gap in the use of accessible educational services between male and female research scholars. **(Kumar, S. K., Fathurrochman et. al,2021).** The study focuses on using Open Educational Resources (OERs) among college students affiliated with Alagappa University in India. The researcher collected data from 121 students via Google Forms. The results show that 83.5% of students were aware of the free access to online learning materials. In addition, 82.6% of students received online-related materials and 68.6% of students utilized direct online learning. However, some barriers were also identified in the utilization of OERs, including content-related, internet-related, and environmental factors that impacted student access to these resources. **(Nagaiah, M. &Thanuskodi, S,2021)**.

OBJECTIVES OF THE PRESENT STUDY:

1) To study the level of Attitude among the Teacher Educators about Open Educational Resources.

Based on the main objective the following sub-objectives are framed:

    1.1 To evaluate the extent of attitude towards Open Educational Resources (OER) between male and female teacher educators.

    1.2 To evaluate the extent of attitude towards Open Educational Resources (OER) between arts and science teacher educators.

    1.3 To evaluate the extent of attitude towards Open Educational Resources (OER) between aided and unaided teacher educators.

    1.4 To evaluate the extent of attitude towards Open Educational Resources (OER) between Kuvempu University and Davangere University teacher educators.

HYPOTHESES OF THE STUDY:

The following hypotheses have been framed based on the following objectives:

1) There is no significant difference between the level of attitude among the Teacher Educators about Open Educational Resources.

   a. **There is no significant difference between the level of attitude of Open Educational Resources (OER) between male and female teacher educators.**

   b. **There is no significant difference between the level of attitude of Open Educational Resources (OER) between arts and science teacher educators.**

   c. **There is no significant difference between the level of attitude of Open Educational Resources (OER) between aided and unaided teacher educators.**

   d. **There is no significant difference between the level of attitude of Open Educational Resources (OER) among Kuvempu University and Davangere University teacher educators.**

Methodology: The researchers employed the descriptive survey method.

Population: The population of the study was the teacher educators working in secondary teacher education institutions belonging to aided & unaided colleges of Kuvempu University & Davangere University.

Sample: The study's representative sample included 23 teacher educators from two colleges of Kuvempu University & Davangere University respectively of Karnataka State, India. The researcher used the stratified random sampling technique.

Tool used: In the study, the researcher constructed and validated the following tool.

Open educational resource attitude inventory for the collection of data by Balachandra Madiwal & Patil S. S.

Statistical Technique: The data is analysed by using the statistical technique of percentageanalysis.

ANALYSIS OF DATA: The data has been analysed descriptively by using percentage analysis, objective-wise & hypothesis-wise.

Objective - 01 To evaluate the extent of attitude towards Open Educational Resources (OER) between male and female teacher educators.

Hypothesis- 01 There is no significant difference between the level of attitude of Open

Educational Resources (OER) among male and female teacher educators.

TABLE -01

Teacher educators' level of attitude about Open Educational Resources of Kuvempu University and Davangere University (Male & Female)

LEVEL OF ATTITUDE	Male (14)		Female (09)		Total (23)	
	N	**%**	**N**	**%**	**N**	**%**
High	03	**21**	02	**22**	05	**22**
Moderate	08	**58**	06	**67**	14	**61**
Low	03	**21**	01	**11**	04	**17**

Figure – 01

Open Educational Resources(OERs) Attitude of Male & Female of Kuvempu University & Davangere University
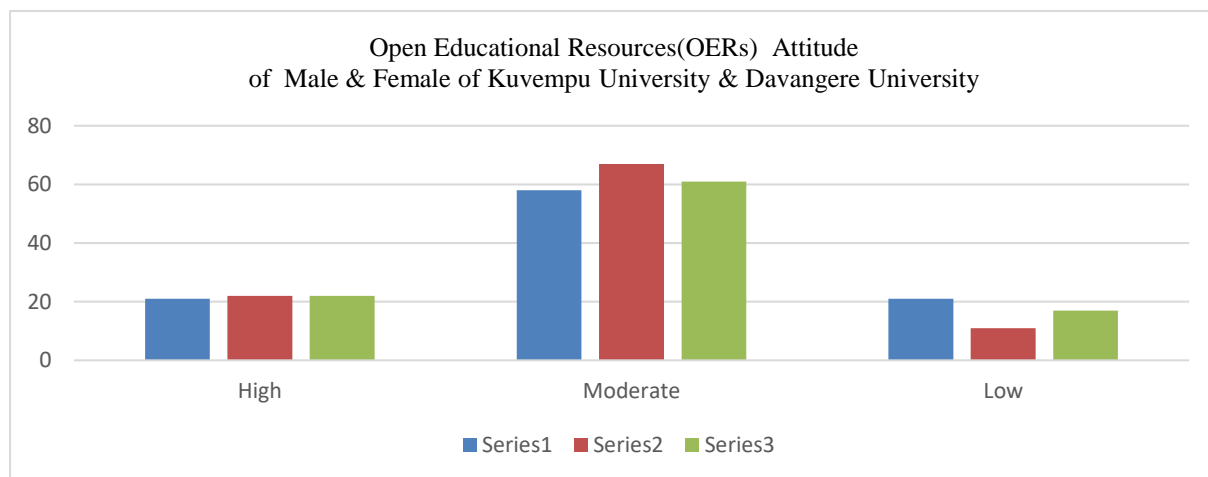
The data has been analysed by using percentage analysis. It has been found from Table -01 that there is moderate attitude about OER among teacher educators of both Universities. The table depicts overall moderate attitude (61 %) among teacher educators. Further, it was found that female teacher educators have higher levels of moderate attitude (67 %) compared to male teacher educators (58 %) followed by high & low attitude levels. It has been found that the male teacher educators have thesame level of attitude (21%) that is low& high. However, among female teacher educators have thehigh attitude (22 %) and the low attitude which is 11 %.

Objective - 02 To evaluate the extent of attitude towards Open Educational Resources (OER)between arts and science teacher educators.

Hypothesis- 02 There is no significant difference between the level of attitude of Open

 Educational Resources (OER) among arts and science teacher educators
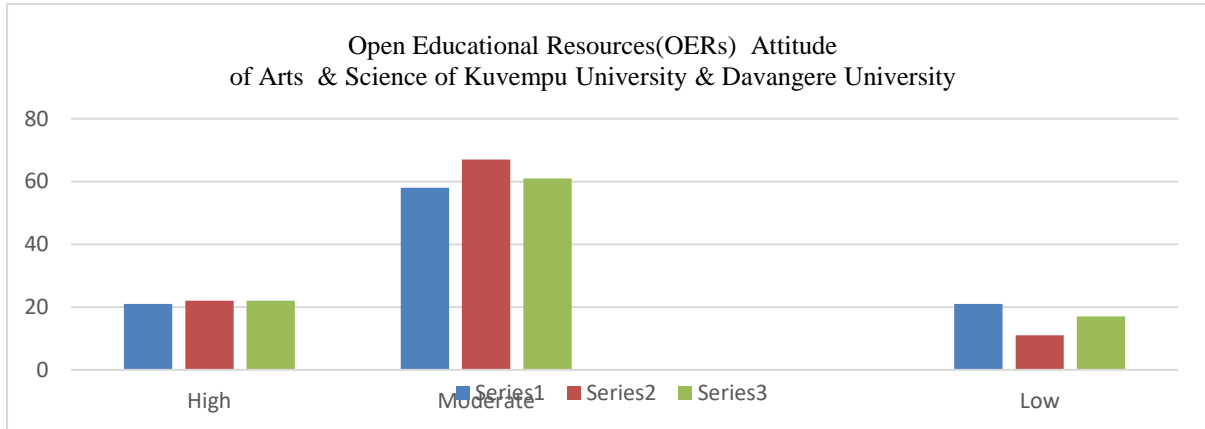
TABLE -02

Teacher educators' level of attitude about Open Educational Resources of Kuvempu University and Davangere University (Arts & Science)

LEVEL OF ATTITUDE	Arts (14)		Science (09)		Total (23)	
	N	**%**	**N**	**%**	**N**	**%**
High	03	**21**	02	**22**	05	**22**
Moderate	08	**58**	06	**67**	14	**61**
Low	03	**21**	01	**11**	04	**17**

It has been found from Table -02 that there is moderate attitude about OER among teacher educators of both universities. The table depicts overall moderate attitude (61 %) among teacher educators. Further, it was found that science teacher educators have higher levels of moderate attitude (67%) compared to arts teacher educators (58 %) followed by high & low attitude levels. It has been found that the arts teacher educators havethe same level of attitude (21%) that is low & high.But among science teacher educators have a high attitude (22 %) compared to the low attitude which is 11 %.

Figure – 02

Open Educational Resources(OERs) Attitude
of Arts & Science of Kuvempu University & Davangere University

Objective – 03 To evaluate the extent of attitude towards Open Educational Resources (OER) between aided and unaided teacher educators.

Hypothesis- 03 There is no significant difference between the level of attitude of Open Educational Resources (OER) among aided and unaided teacher educators.

TABLE -03

Teacher educators' level of attitude about Open Educational Resources of Kuvempu University and Davangere University (Aided & Unaided)

LEVEL OF ATTITUDE	Aided (13)		Unaided (10)		Total (23)	
	N	**%**	**N**	**%**	**N**	**%**
High	04	**31**	02	**20**	06	**26**
Moderate	06	**46**	07	**70**	13	**57**
Low	03	**23**	01	**10**	04	**17**

Figure – 03

Open Educational Resources(OERs) Attitude
of Aided & Unaided of Kuvempu University & Davangere University
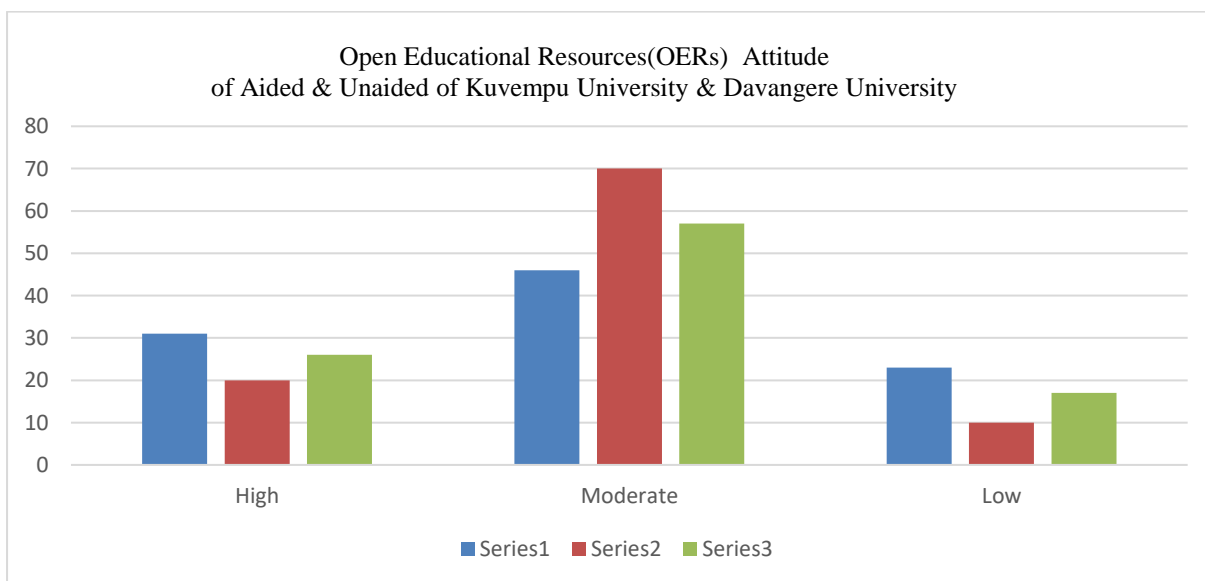
It has been found from Table -03 that there is moderate attitude about OER among teacher educators of both universities. The table depicts overall moderate attitude (57 %) among teacher educators. Further, it was found that aided college teacher educators have low levels of moderate attitude (46%) compared to unaided college teacher educators (70%) followed by high & low attitude levels. It has been found that the aided college teacher educators have low attitude(23 %) & high level of attitude31 %. But among unaided college teacher educators have a low attitude (10%) compared to the high level that is 20%.

Objective – 04 To evaluate the extent of attitude towards Open Educational Resources (OER) between Kuvempu University and Davangere University teacher educators.

Hypothesis- 04 There is no significant difference between the level of attitudeof Open Educational Resources (OER) among Kuvempu University and Davangere University teacher educators.

TABLE -04

Teacher educators' level of attitude about Open Educational Resources of Kuvempu University and Davangere University

LEVEL OF ATTITUDE	Kuvempu University		Davangere University		Total	
	N (12)	%	**N** (11)	%	**N** (23)	%
High	02	**17**	01	**09**	03	**13**
Moderate	09	**75**	10	**91**	19	**83**
Low	01	**08**	00	**00**	01	**04**

Figure – 04
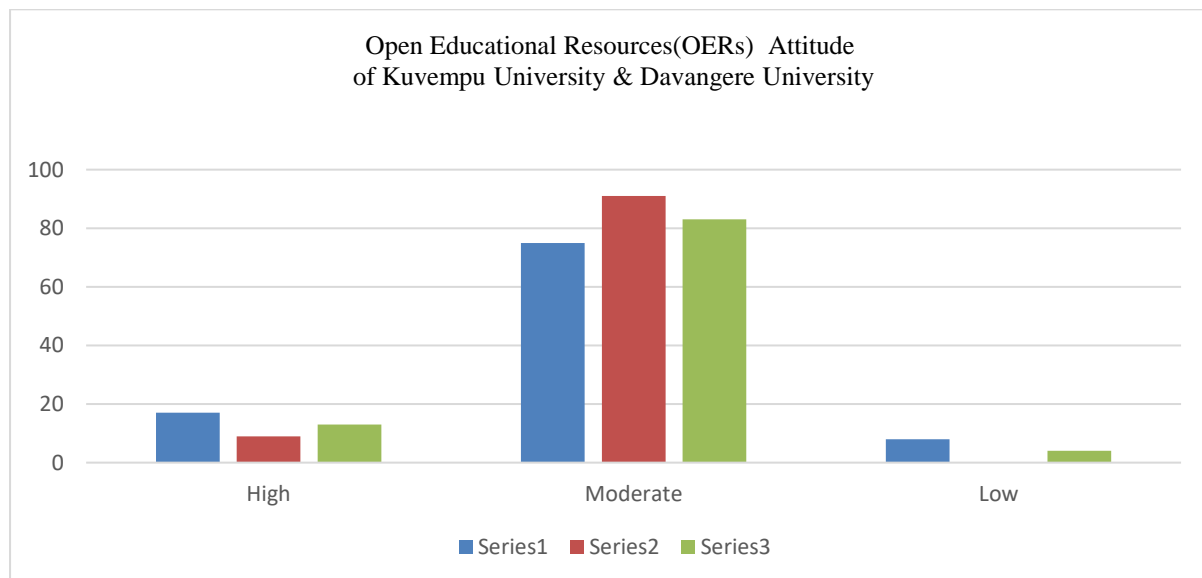
It has been found from Table -04 that there is moderate attitude about OER among teacher educators of both universities. The table depicts overall moderate attitude (83 %) among teacher educators. Further, it was found that Davangere University teacher educators have high levels of moderate attitude (91%) compared to Kuvempu University teacher educators (75%) followed by high & low attitude levels. It has been found that the Kuvempu University teacher educators have low attitude (08

%) & high level of attitude 17 %. But among Davangere University teacher educators have a high attitude (09%) compared to the low level which is null.

FINDINGS OF THE STUDY:

The study found a moderate level of Open Educational Resources (OER)attitude at all streams of secondary teacher educators in total. Except these, the following are the other findings of the present study.

1. The male & female teacher educators at Kuvempu University & Davangere University have moderate attitude overall.

2. The female teacher educators have higher levels of OER attitude than male teacher educators in overall.

3. The arts & science teacher educators at Kuvempu University & Davangere University have moderate attitude in overall.

4. The Science teacher educators have higher levels of OER attitude than arts teacher educators in overall.

5. The aided & unaided teacher educators at Kuvempu University & Davangere University have moderate attitude in overall.

6. The unaided teacher educators have higher levels of OER attitude than aided teacher educators.

7. The teacher educators at Kuvempu University & Davangere University have moderate attitude in overall.

8. The Davangere University teacher educators have higher levels of OER attitude than Kuvempu University teacher educators.

9. The teacher educators at Kuvempu University & Davangere University in arts & science have moderate attitude in overall.

Conclusion:

When the overall findings are observed it was found that, the teacher educators of both universities have a moderate level of attitude about the OER. This shows that the usage of OER which is provided by different agencies have not been utilised up to the mark by the teacher educators of their less interest. Hence efforts are necessary in this regard by both the universities in particular and educational institutions in general to train the teacher educators in this regard to have awareness by their good attitude. So that student teachers can become more knowledgeable & efficient in the profession of teaching.

References

[1]. Lizzeth Navarro-Ibarra et. al (2023). Knowledge gaps in education and ICT: A literature review in open access publications. Contemporary Educational Technology.https://www.cedtech.net/download/knowledge-gaps-in-education-and-ict-a-literature-review-in-open-access-publications-13770.pdf

[2]. Manju (2022). OER_Its Utilization and Impact an Evaluative Study of Central Universities in Delhi. (**http://hdl.handle.net/10603/404480**)

[3]. Victoria I. Marin et. al (2020) A Comparative Study of National Infrastructures for Digital (Open) Educational Resources in Higher Education.

[4]. Sujatha Santhosh(2017).A study into policy status & use of open access Educational Resources in Distance Education & Training Institutions in India. **(http://hdl.handle.net/10603/217587)**

[5]. Mangai, G. (2019). Impact of Open Access Resource on Higher Education -a comparative study between the research scholars of Alagappa & Bharathidasan University of Tamil Nadu. - (http://hdl.handle.net/10603/288573)

[6]. Khamees, Ruaa Ali (2017).Improved & efficient intelligent educational system using open resources (http://hdl.handle.net/10603/286369)

[7]. K. Vijayalakshmi., and Menon Rethy. B. (2017).The Perspective of Teacher Educators and Teaching Competencies for Imparting Two Year B.Ed. Program Suggested by NCTE in Karnataka, *IOSR Journal of Business and Management*, pp. 51-54.

[8]. Nair Preeti (2017).A Study on Identifying Teaching Competencies and Factors Affecting Teaching Competencies with Special Reference to MBA Institutes in Gujarat.

[9]. C Valaramathi. (2017)Open Access Journals and their Implication on Science Technology and Medical Library Users An Analysis Quality Factor. (http://hdl.handle.net/10603/142726)

[10]. Bakhru K M (2017).Personal Competencies for Effective Teaching: A Review Based Study, *an International Journal of Education and Applied Social Science*-. Vol. 8, pp. 297-303.

[11]. https://theconversation.com/open-education-resources-offer-many-benefits-how-to-remove-obstacles-171687

[12]. https://theconversation.com/open-educational-resources-for-emergency-remote-teaching-a-new-paradigm-155899

[13]. https://theconversation.com/how-blockchain-could-help-the-world-meet-the-uns-global-goals-in-higher-education-152885#:

[14]. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3921481

[15]. https://www.sciencedirect.com/science/article/pii/S0360131519302465