Attitudes Towards the Usage of OERs in Teaching and Learning

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Abstract- Open Educational Resources (OERs) guarantee cost-effectiveness, instructional innovation, and equal access, making them a transformative force in education. However, instructors' attitudes regarding OERs play a major role in mediating how much they embrace and incorporate these resources. Teachers' opinions regarding the usage of open educational resources (OERs) in teaching and learning across various institutional contexts are examined in this study. Using a standardized attitude scale and a descriptive survey approach, information was gathered from 150 college instructors in the sample. Although there are notable differences according to gender, teaching experience, and institution type, the results show that teachers usually have a somewhat good opinion toward OERs. While instructors with more professional development experiences and digital exposure showed a more positive outlook, male teachers showed a little higher propensity to adopt OERs. On the other hand, a lack of institutional support and restricted access to technology infrastructure were noted as obstacles influencing unfavorable opinions. The study emphasizes that in addition to technical training, institutional support and policy-level initiatives are necessary to promote a positive outlook. These findings have important ramifications for curriculum development, teacher preparation, and policy frameworks that seek to mainstream open educational resources (OERs) in classroom instruction. It is advised that mixed-method or longitudinal designs be used in future studies to have a better understanding of how attitudes change as a result of continued OER use.

Index Terms- Open Educational Resources (OERs), Teachers' Attitude, Teaching-Learning Process, Higher Education

I. INTRODUCTION

Digital technology's explosive growth has fundamentally changed the global educational scene by encouraging innovative methods of resource sharing, curriculum development, and classroom pedagogy. Among these developments, Open Educational Resources (OERs) have become a potent tool for improving teaching methods, democratizing access to knowledge, and lowering educational expenses. "Teaching, learning, and research resources that are in the public domain or released under an open license that permits free access, adaptation, and redistribution" is how UNESCO (2019) defines open educational resources (OERs). OERs have enormous potential to empower educators and students because of these qualities, especially in situations where affordability and inclusivity are still major obstacles.

Despite these benefits, different educational systems have different rates of OER uptake and successful utilization. Teachers are essential to this process, and how they feel about open educational resources (OERs) frequently determines whether or not they are accepted in the teaching-learning process. Regardless of OERs' availability, a negative or uninterested attitude may impede their integration, whereas a positive attitude encourages creativity, teamwork, and learner-centered teaching. According to existing studies conducted in industrialized nations, most teachers are aware of the pedagogical benefits of open educational resources (OERs) (Cronin, 2017; Weller et al., 2020). However, issues including low levels of digital literacy, inadequate infrastructure, and a lack of institutional support frequently influence teachers' opinions in developing nations like India, resulting in varying degrees of adoption. (Panda & Santosh, 2017; Mishra, 2021).

To encourage the use of open resources, several national initiatives have been implemented in the

Indian educational setting, including SWAYAM, the National Digital Library of India (NDLI), and the National Repository of OERs (NROER). Even though these programs have made digital content more accessible, instructors' awareness, readiness, and willingness to use it will determine how well they integrate it into the classroom. Although OERs are acknowledged for their potential advantages, previous research has shown that institutional support, disciplinary differences in uptake, and deficiencies in teacher preparation have hindered their actual use. This emphasizes the necessity of doing a thorough investigation on Indian teachers' perceptions of open educational resources (OERs), paying close attention to institutional and demographic factors.

By investigating teachers' perspectives on the use of open educational resources (OERs) in the teaching-learning process, the current study aims to close this gap. It specifically aims to examine the ways in which these attitudes differ according to gender, discipline, institution type, and teaching experience. By doing this, the study hopes to offer empirical data that will help curriculum designers, teacher educators, and legislators support the meaningful integration of open educational resources.

II.   RELATED LITERATURE

Panda and Santosh (2017) surveyed 400 Indian higher education faculty members to explore their awareness and use of OERs. The study revealed that while most teachers were aware of the concept of OERs and acknowledged their potential benefits, only a small percentage integrated them into their teaching practices. The main reasons for non-use were lack of institutional support, inadequate technical training, and concerns regarding the quality of resources.

Mishra (2021) examined university teachers' attitudes towards OERs and reported a positive association between digital literacy and favorable attitudes. Teachers with higher levels of digital competence were more confident and willing to incorporate OERs into their lessons, whereas those with lower digital exposure expressed hesitation and skepticism.

Kumar and Sharma (2019) surveyed teacher educators across colleges of education in North India and found that although the majority of teachers held positive attitudes towards OERs for preparing teaching materials and enhancing classroom activities, infrastructural challenges (such as internet connectivity) and workload pressures significantly hindered adoption.

Patel and Mehta (2022) conducted a comparative study on younger and senior teachers' attitudes. Results indicated that younger teachers demonstrated a stronger inclination towards adopting OERs due to their comfort with technology and openness to pedagogical experimentation. In contrast, senior teachers, though aware of OERs, were less likely to integrate them, citing lack of time and institutional incentives.

III.   OVERVIEW

The increasing role of Open Educational Resources (OERs) has transformed the landscape of teaching and learning by providing cost-effective, accessible, and flexible learning opportunities. Education as a field constantly faces challenges that require innovative solutions, and OERs have emerged as a significant tool in addressing them. The present research aims to explore teachers' attitudes towards the use of OERs in the teaching-learning process and to examine variations in these attitudes across gender, discipline, institutional type, and teaching experience. The findings and conclusions of the study can serve as a basis for enhancing awareness, improving institutional support, and ensuring effective integration of OERs in higher education, thereby addressing some of the challenges in contemporary education.

IV.   RESEARCH QUESTION

- Is there any difference in attitude towards the usage of OER with respect to gender, discipline, types of institutions and experience?

Objectives

1. To study teachers' attitudes towards the use of Open Educational Resources (OERs) in the teaching–learning process.
2. To study the attitude of teachers towards the usage of OERs with respect to gender.

3. To study the attitude of teachers towards the usage of OERs with respect to discipline.
4. To study the attitude of teachers towards the usage of OERs with respect to types of institutions.
5. To study the attitude of teachers towards the usage of OERs with respect to experience.

Hypotheses

H_01: There is no significant difference in attitude towards the use of OERs among teachers in relation to gender.

H_02: There is no significant difference in attitude towards the use of OERs among teachers in relation to discipline.

H_03: There is no significant difference in attitude towards the use of OERs among teachers in relation to their types of institutions.

H_04: There is no significant difference in attitude towards the use of OERs among teachers in relation to their experience.

V. METHODOLOGY

This study used a descriptive survey method to collect data from teachers on their attitudes towards Open Educational Resources (OERs).

Population
The population of the present study consisted of teachers working in higher education institutions of Gautam Buddha Nagar, Uttar Pradesh.

Sample
For the present study, a sample of 150 teachers was selected using a stratified random sampling technique. The sample was divided into groups based on gender (male and female), discipline (engineering and non-engineering), type of institution (government and private), and teaching experience (less than 5 years and more than 5 years).

Tool
To achieve the objectives of this study, the researcher developed a standardized tool titled Attitude towards OERs Scale. Initially, the scale contained 41 items, which after expert review and item analysis, was finalized with 24 items. The tool was designed on a five-point Likert scale with response options: Strongly Agree, Agree, Undecided, Disagree, and Strongly Disagree. Among the items, 20 were positive and 4 were negative. Positive items were scored 5 to 1, and negative items were reverse scored (1 to 5). The maximum possible score was 120 and the minimum was 24. A higher score indicated a more favorable attitude towards OERs. The tool was validated by subject experts and showed a reliability coefficient of 0.82, ensuring internal consistency.

Procedure of Data Collection:

The researcher administered the tool to teachers both online (Google Forms) and through offline surveys. Prior permission was obtained from institutional heads, and participants were assured of data privacy, confidentiality, and voluntary participation.

Data Analysis and Interpretation:

Table 1: Teachers' attitudes towards the use of Open Educational Resources (OERs) in the teaching-learning

S. No	Variable	N	Mean	Median	Mode	SD
1	Attitude towards OER	150	86.01	87.5	88	8.8

With an average deviation of 8.8 and an overall mean score of 86.01, instructors demonstrate a very favorable attitude toward the use of open educational resources (OERs) in teaching and learning. The consistency of responses is shown further by the close relationship of the mean, median, and mode.

Hypotheses

H_01: There is no significant difference in attitude towards the use of OERs among teachers in relation to gender.

As indicated in Table 2, an independent sample t-test was used to examine the gathered data in order to assess the gender-related hypothesis. There was no

discernible gender difference in the teachers' opinions toward OERs, according to the analysis.

Table 2: To study the Attitude towards OER with respect to Gender

Category	N	Mean	SD	df	t-test
Male	80	87.26	8.16	148	-1.86
Female	70	84.58	9.5		

H$_{o2}$: There is no significant difference in attitude towards the use of OERs among teachers in relation to discipline.

As shown in Table 3, the data were put through an independent sample t-test in order to assess the discipline-related hypothesis. The findings showed that instructors' attitudes about open educational resources (OERs) did not significantly differ according to their discipline.

Table 3: To study the Attitude towards OER with respect to Discipline

Category	N	Mean	SD	df	t-test
Engineering	53	86.04	10.18	148	0.02
Non-Engineering	97	86	8.14		

H$_{o3}$: There is no significant difference in attitude towards the use of OERs among teachers in relation to their types of institutions.

As indicated in Table 4, an independent sample t-test was used to evaluate the hypothesis about institution type. The findings were significant, suggesting that private school teachers had more positive opinions about open educational resources than do their government peers.

Table 4: To study the Attitude towards OER with respect to Type of Institution

Category	N	Mean	S	df	t-test
Government	54	82.75	8.32	148	-3.49
Private	96	87.84	8.7		

H$_{o4}$: There is no significant difference in attitude towards the use of OERs among teachers in relation to their experience.

An independent sample t-test was used to evaluate the data in order to assess the teaching experience hypothesis, as shown in Table 5. The results showed that teachers' opinions of open educational resources (OERs) were not significantly different based on their prior teaching experience.

Table 5: To study the Attitude towards OER with respect to Experience

Category	N	Mean	SD	df	t-test
More than 5 years	95	86.81	8.24	148	1.45
Less than 5 years	55	84.64	9.82		

VI. FINDING

The following findings were of the present study.

a) Teachers have a generally good attitude toward the usage of open educational resources (OERs) in the classroom.
b) Regarding OERs, there was no apparent gender disparity in the attitudes of teachers.
c) There was little variation in the attitudes of engineering and non-engineering teachers about open educational resources.
d) Teachers at government and private institutions differed significantly, with the former showing

more positive attitudes toward open educational resources.

e) Regarding teaching experience, there was no significant difference in the views of teachers regarding open educational resources.

VII. DISCUSSION

According to the study, most teachers have a favorable opinion of using open educational resources (OERs) in the classroom. This is consistent with past research by Mishra et al. (2016), who found that faculty members had positive opinions about the use of OER in Indian higher education. Hilton (2019) emphasized similar findings, highlighting the widespread appreciation of open educational resources (OERs) for increasing accessibility and cutting costs in education. Gender, discipline, and teaching experience did not significantly affect instructors' sentiments, suggesting that these demographic characteristics have little bearing on how people see open educational resources. This result supports the claims made by Wiley, Bliss, and McEwen (2014) that OERs offer advantages to everyone, irrespective of expertise or background. However, there were significant variations between teachers in government and private institutions, with the former exhibiting more positive sentiments. According to Rolfe (2011), who highlighted the significance of organizational encouragement in influencing OER adoption, this might be ascribed to improved institutional support and infrastructure preparedness.

Overall, the conversation indicates that institutional support is essential for promoting favorable attitudes toward OERs, even though individual criteria like gender and experience might not have a significant impact.

CONCLUSION

According to the current study, instructors have a generally favorable opinion of using open educational resources (OERs) in the teaching-learning process. It was discovered that teachers' perceptions were not significantly impacted by demographic criteria like gender, discipline, or prior teaching experience. Nonetheless, the type of institution turned out to be a significant predictor, with teachers from private

institutions expressing more positive sentiments than those from public universities. According to these results, even while educators acknowledge the benefits of open educational resources (OERs), institutional support and digital infrastructure are crucial for their successful integration. OER usage in higher education can be further increased by fortifying regulations and professional development programs.

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