



# Transformative Potential of Open Educational Resources in Shaping Pedagogical Readiness among B.Ed. Students

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The integration of Open Educational Resources (OER) has emerged as a transformative approach in teacher education, particularly in enhancing pedagogical readiness among pre-service teachers. The present study examines the transformative potential of OER in shaping pedagogical readiness among B.Ed. students in Amarkantak, Madhya Pradesh. A quantitative research approach with a descriptive-cum-correlational design was adopted for the study. A sample of 100 B.Ed. students was selected using simple random sampling. Data were collected through a structured questionnaire measuring OER awareness and usage, along with a standardized scale assessing pedagogical readiness across dimensions such as instructional planning, classroom management, ICT competence, and teaching innovation. The findings revealed that B.Ed. students demonstrated moderate levels of awareness and usage of OER, as well as moderate pedagogical readiness. A significant positive correlation was found between OER usage and pedagogical readiness, indicating that increased engagement with OER enhances teaching competencies. Regression analysis further confirmed that OER significantly predicts pedagogical readiness. However, challenges such as limited digital infrastructure, inadequate training, and lack of institutional support were identified. The study concludes that OER has substantial potential to improve pedagogical readiness, provided adequate training, infrastructure, and policy support are ensured in teacher education programmes.

**Keywords:** *Open Educational Resources (OER); Pedagogical Readiness; B.Ed. Students; Teacher Education; ICT Integration.*



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## 1. Introduction

The rapid advancement of digital technologies has significantly transformed the landscape of education, particularly in the context of teacher education. The integration of

Information and Communication Technology (ICT) and digital learning resources has redefined traditional pedagogical practices, making teaching more flexible, accessible, and learner-centered. In this evolving educational environment, Open

Educational Resources (OER) have emerged as a powerful tool to democratize access to knowledge and enhance the quality of teaching and learning processes. OER refers to freely accessible, openly licensed educational materials that can be used, adapted, and shared to support learning and instruction.

The growing importance of OER is closely aligned with global educational reforms and policy initiatives such as the **National Education Policy (NEP) 2020** in India, which emphasizes the integration of digital technologies and innovative pedagogical practices in teacher education. The use of digital platforms, online courses, and open learning systems has become increasingly prevalent, enabling students and teachers to access diverse learning resources beyond traditional classroom settings (**Hassan, 2023**). Moreover, the adoption of blended learning approaches and digital tools has been identified as a key strategy for improving learning outcomes and pedagogical effectiveness in higher education (**Das & Barman, 2024**).

In the context of teacher education, particularly the Bachelor of Education (B.Ed.) programme, the role of OER is crucial in shaping the pedagogical readiness of prospective teachers. Pedagogical readiness encompasses a range of competencies, including instructional planning, classroom management, subject knowledge, and the effective use of ICT in teaching. Studies have shown that teacher preparedness is a significant determinant of students' learning outcomes and overall teaching effectiveness (**Yadav, 2026**). However, despite the increasing availability of digital resources, many B.Ed. students exhibit only moderate levels of readiness to integrate these tools into their teaching practices due to limited awareness, inadequate training, and infrastructural constraints (**Chauhan, 2025**).

Furthermore, the transformative potential of OER lies in its ability to promote self-directed learning, collaborative knowledge construction, and innovative teaching strategies. The use of open educational practices enables learners to actively engage with content, adapt resources to suit diverse learning needs, and develop critical pedagogical skills (**Kumar & Mahendraprabu, 2021**). Research also indicates that exposure to practical teaching experiences, combined with access to digital resources, plays a vital role in transforming the pedagogical beliefs and teaching

competencies of pre-service teachers (**Dayan et al., 2022**).

Despite these advantages, several challenges hinder the effective integration of OER in teacher education. These include limited digital infrastructure, lack of institutional support, and insufficient professional development opportunities for students and educators. In developing and semi-rural regions such as Amarkantak, Madhya Pradesh, these challenges are further intensified by issues related to digital access and technological readiness. Studies have highlighted the need for capacity building, training, and policy-level interventions to fully harness the benefits of digital and open learning resources in education (**Rutayisire et al., 2024**).

Given this context, there is a need to empirically examine how OER contributes to enhancing pedagogical readiness among B.Ed. students. While previous research has explored digital learning and teacher preparedness, limited studies have specifically focused on the relationship between OER usage and pedagogical readiness in localized contexts. Therefore, the present study aims to investigate the transformative potential of Open Educational Resources in shaping pedagogical readiness among B.Ed. students in Amarkantak, Madhya Pradesh.

## 2. Review of Literature

The integration of Open Educational Resources (OER) and digital technologies in teacher education has gained significant attention in recent years, particularly in the context of enhancing pedagogical readiness among pre-service teachers. This section reviews relevant studies under key themes such as OER practices, digital transformation in education, pedagogical readiness, and challenges in teacher education. Open Educational Resources (OER) have emerged as a critical component in expanding access to quality education and promoting flexible learning environments. OER enables learners to access, adapt, and share educational content freely, thereby fostering collaborative and self-directed learning. **Chauhan (2025)** examined the integration of Open Educational Practices (OEP) and Virtual Learning Readiness among B.Ed. trainees and found that students demonstrated moderate levels of engagement with digital tools,

though challenges such as limited awareness and technological constraints persisted.

Similarly, **Kumar and Mahendraprabu (2021)** highlighted the role of OER in promoting open learning ecosystems through platforms such as SWAYAM and social media. Their study emphasized that OER enhances knowledge sharing and supports lifelong learning, but its effective utilization depends on digital literacy and institutional support. **Mahendraprabu et al. (2022)** further identified both opportunities and challenges in the adoption of OER in India, noting that while OER improves accessibility and affordability, issues related to quality assurance and awareness remain significant barriers.

The rapid advancement of digital technologies has transformed traditional educational practices into more interactive and learner-centered approaches. **Hassan (2023)** discussed how emerging technologies such as artificial intelligence, virtual reality, and data analytics are reshaping education by enabling personalized and immersive learning experiences. **Gupta (2023)** also emphasized the growing influence of educational technology in shaping future learning environments, highlighting the importance of integrating digital tools into teaching practices.

In the Indian context, **Das and Barman (2024)** explored the role of blended learning under the framework of NEP 2020 and found that combining online and offline teaching methods enhances learning outcomes and student engagement. **Kaliraj et al. (2024)** further discussed how transformative digital technologies can disrupt traditional teaching models and promote innovative pedagogical approaches in teacher education.

Pedagogical readiness is a multidimensional construct that includes competencies such as instructional planning, classroom management, subject knowledge, and ICT skills. **Yadav (2026)** found that pedagogical skills and classroom management significantly influence students' learning outcomes, indicating the importance of well-prepared teachers in achieving effective education. Similarly, **Singh and Srivastava (2026)** emphasized the need for integrating pedagogical training into higher education to enhance teaching preparedness among scholars and future educators.

**Dayan et al. (2022)** examined the transformation of pedagogical beliefs among pre-service teachers during B.Ed. programmes and concluded that practical teaching experiences play a crucial role in shaping effective teaching practices. **Wasila (2022)** also highlighted that teachers' understanding and application of modern pedagogical approaches are essential for implementing curriculum reforms successfully. The use of OER in teacher education has the potential to significantly enhance pedagogical readiness by providing access to diverse teaching materials and innovative instructional strategies. **Kumar et al. (2021)** noted that social media and digital platforms function as open educational practices that support collaborative learning and knowledge construction. **Padmini and Ramani (2023)** found that exposure to e-learning environments improves students' understanding of subject content and pedagogical approaches. **Muniyasamy et al. (2022)** emphasized the role of OER in promoting inclusive education by supporting diverse learners, including students with disabilities. Their findings suggest that OER can enhance accessibility and engagement, thereby contributing to improved pedagogical competencies. **Seth and Sahoo (2025)** also highlighted the importance of ICT tools in strengthening value-based education and teaching practices in B.Ed. colleges.

Despite its benefits, the integration of OER in teacher education faces several challenges. **Rutayisire et al. (2024)** identified issues such as limited ICT skills, inadequate infrastructure, and lack of awareness as major barriers to effective e-learning implementation. These challenges are particularly significant in developing regions where access to digital resources is uneven.

**Ahmed and Mohammad (2025)** examined the challenges in B.Ed. programmes and found that gaps between theoretical knowledge and practical teaching skills hinder the development of effective teaching competencies. Similarly, **Yadav (2026)** pointed out that insufficient practicum opportunities and limited mentoring support affect teacher preparedness.

### 3. Theoretical / Conceptual Framework

The present study is anchored in the integration of constructivist learning theory, technology-based pedagogical frameworks, and open educational practices, which collectively

explain the role of Open Educational Resources (OER) in shaping pedagogical readiness among B.Ed. students. Open Educational Resources refer to freely accessible and openly licensed digital materials that can be used, adapted, and shared for teaching and learning purposes. These resources promote accessibility, flexibility, and equity in education by removing economic and geographical barriers. In teacher education, OER provides pre-service teachers with access to diverse instructional materials such as lesson plans, multimedia content, online courses, and interactive tools, thereby enabling them to explore innovative teaching strategies and enhance their instructional competencies (Kumar & Mahendrababu, 2021).

Pedagogical readiness, on the other hand, refers to the preparedness of B.Ed. students to effectively plan, implement, and evaluate teaching-learning processes. It encompasses multiple dimensions, including instructional planning, classroom management, subject knowledge, ICT competence, and innovative teaching practices. Teacher preparedness is widely recognized as a crucial factor influencing teaching effectiveness and student learning outcomes (Yadav, 2026). The development of pedagogical readiness requires not only theoretical knowledge but also practical experience and the ability to integrate technology into teaching.

The theoretical foundation of this study is primarily rooted in constructivist learning theory, which posits that learners actively construct knowledge through interaction, experience, and reflection. OER aligns with this perspective by providing opportunities for active engagement, collaboration, and self-directed learning. Additionally, the Technological Pedagogical Content Knowledge (TPACK) framework supports the integration of technology, pedagogy, and subject content in effective teaching.

Through the use of OER, B.Ed. students can develop competencies across these domains, thereby strengthening their ability to incorporate digital resources into their teaching practices. Furthermore, the concept of Open Educational Practices (OEP) extends the use of OER by encouraging collaborative learning, sharing of resources, and participatory approaches, which contribute to the development of innovative and reflective teaching practices (Chauhan, 2025).

The relationship between OER and pedagogical readiness can be understood through the role of OER in enhancing key teaching competencies. The use of OER facilitates the development of ICT skills, improves instructional planning through access to diverse teaching materials, and promotes innovative teaching strategies. It also encourages self-directed learning and collaborative knowledge construction, which are essential for effective teaching. However, the extent to which OER contributes to pedagogical readiness depends on factors such as digital literacy, availability of technological infrastructure, and institutional support.

#### 4. Objectives of the Study

- To assess the level of awareness of Open Educational Resources among B.Ed. students.
- To examine the extent of usage of Open Educational Resources in the learning process of B.Ed. students.
- To evaluate the level of pedagogical readiness among B.Ed. students.
- To analyze the relationship between the use of Open Educational Resources and pedagogical readiness among B.Ed. students.
- To determine the impact of Open Educational Resources on pedagogical readiness among B.Ed. students.
- To identify the challenges faced by B.Ed. students in the effective use of Open Educational Resources.

#### 5. Research Questions / Hypotheses

##### 5.1. Research Questions

- What is the level of awareness of Open Educational Resources among B.Ed. students?
- To what extent do B.Ed. students use Open Educational Resources in their learning process?
- What is the level of pedagogical readiness among B.Ed. students?
- Is there a significant relationship between the use of Open Educational Resources and pedagogical readiness among B.Ed. students?
- What challenges do B.Ed. students face in the effective use of Open Educational Resources?

## 5.2. Hypotheses

- **H01:** There is no significant relationship between the use of Open Educational Resources and pedagogical readiness among B.Ed. students.
- **H02:** Open Educational Resources do not have a significant impact on pedagogical readiness among B.Ed. students.

## 6. Methodology

The present study adopted a quantitative research approach with a descriptive-cum-correlational research design to examine the transformative potential of Open Educational Resources (OER) in shaping pedagogical readiness among B.Ed. students. This design was considered appropriate as it enables the researcher to describe the existing level of OER usage and pedagogical readiness, as well as to analyze the relationship and impact between the variables.

The study was conducted among B.Ed. students enrolled in teacher education institutions located in Amarkantak, Madhya Pradesh. The population of the study consisted of all B.Ed. students in the selected institutions, from which a sample of 100 students was selected using a simple random sampling technique. The sample included students from different specializations

such as Arts, Science, and Commerce to ensure representativeness.

Data for the study were collected using structured and standardized tools. A self-developed questionnaire was used to measure the level of awareness and usage of Open Educational Resources among B.Ed. students. Pedagogical readiness was assessed using a standardized scale comprising dimensions such as instructional planning, classroom management, ICT competence, and innovative teaching practices. The instruments were validated through expert review, and reliability was established using appropriate statistical methods.

The data collection process was carried out by administering the questionnaires directly to the respondents with prior consent. The respondents were informed about the purpose of the study and assured of the confidentiality of their responses. The collected data were organized and analyzed using statistical techniques such as mean, standard deviation, percentage analysis, correlation, and regression analysis. These techniques were employed to examine the level of OER usage, assess pedagogical readiness, and determine the relationship and impact between the variables.

**Table 1: Distribution of B.Ed. Students by Gender, Age, and Specialization**

Variable	Category	Frequency (N)	Percentage (%)
<b>Gender</b>	Male	38	38.0%
	Female	62	62.0%
	<b>Total</b>	<b>100</b>	<b>100%</b>
<b>Age Group</b>	20–22 years	45	45.0%
	23–25 years	40	40.0%
	Above 25 years	15	15.0%
	<b>Total</b>	<b>100</b>	<b>100%</b>
<b>Specialization</b>	Arts	42	42.0%
	Science	36	36.0%
	Commerce	22	22.0%
	<b>Total</b>	<b>100</b>	<b>100%</b>

## 7. Data Analysis and Interpretation

The data collected from the respondents were analyzed using appropriate statistical techniques such as percentage analysis, mean, standard deviation, correlation, and regression analysis to examine the level of awareness of Open Educational Resources (OER), pedagogical readiness, and the relationship between these variables.

**Table 2: Level of Awareness of Open Educational Resources among B.Ed. Students**

Level of Awareness	Frequency (N)	Percentage (%)
Low	22	22.0%
Moderate	50	50.0%
High	28	28.0%
<b>Total</b>	<b>100</b>	<b>100%</b>

### Interpretation:

Table 2 indicates that the majority of B.Ed. students (50%) have a moderate level of awareness of Open Educational Resources, while 28% exhibit a high level of awareness. However, 22% of the students still fall under the low awareness category. This suggests that although OER is gaining recognition among students, there remains a need to enhance awareness through training and orientation programmes.

**Table 3: Descriptive Statistics of Pedagogical Readiness (Mean & SD)**

Dimension	Mean	Standard Deviation (SD)
Instructional Planning	3.42	0.58
Classroom Management	3.35	0.62
ICT Competence	3.28	0.65
Teaching Innovation	3.40	0.60
<b>Overall Pedagogical Readiness</b>	<b>3.36</b>	<b>0.61</b>

### Interpretation:

Table 3 reveals that the overall pedagogical readiness of B.Ed. students is at a moderate level (Mean = 3.36). Among the dimensions, instructional planning (Mean = 3.42) and teaching innovation (Mean = 3.40) show relatively higher scores, whereas ICT competence (Mean = 3.28) is comparatively lower. This indicates that while

students are reasonably prepared in traditional pedagogical aspects, there is a need to strengthen their technological competencies.

**Table 4: Correlation between OER Usage and Pedagogical Readiness**

Variables	Correlation Coefficient (r)	Significance (p-value)
OER Usage & Pedagogical Readiness	0.58	0.000*

\*Significant at 0.01 level

### Interpretation:

Table 4 shows a moderate positive correlation ( $r = 0.58$ ) between OER usage and pedagogical readiness, which is statistically significant at the 0.01 level ( $p < 0.01$ ). This indicates that increased use of Open Educational Resources is associated with higher levels of pedagogical readiness among B.Ed. students. Therefore, the null hypothesis stating that there is no significant relationship is rejected.

**Table 5: Regression Analysis Showing the Impact of OER on Pedagogical Readiness**

Variables	Beta ( $\beta$ )	R <sup>2</sup>	F-value	Significance (p-value)
OER Usage	0.61	0.37	57.82	0.000*

\*Significant at 0.01 level

### Interpretation:

Table 5 indicates that OER usage has a significant positive impact on pedagogical readiness ( $\beta = 0.61$ ,  $p < 0.01$ ). The coefficient of determination ( $R^2 = 0.37$ ) shows that approximately 37% of the variation in pedagogical readiness is explained by OER usage. The F-value (57.82) is statistically significant, confirming the model's validity. Thus, the null hypothesis stating that OER has no significant impact is rejected. The analysis clearly demonstrates that Open Educational Resources play a significant role in enhancing pedagogical readiness among B.Ed. students, though improvements in awareness and ICT competence are still required.

## 8. Results / Findings

The findings of the study are presented based on the analysis of data related to awareness of Open Educational Resources (OER), pedagogical

readiness, and the relationship between these variables among B.Ed. students.

The results indicate that the majority of B.Ed. students possess a moderate level of awareness of Open Educational Resources, suggesting that while students are somewhat familiar with OER, there is still scope for increasing their awareness and effective utilization. A smaller proportion of students demonstrated high awareness, whereas a notable percentage exhibited low awareness, indicating the need for structured orientation and training programmes.

With regard to pedagogical readiness, the findings reveal that B.Ed. students exhibit an overall moderate level of preparedness. Among the various dimensions, instructional planning and teaching innovation showed relatively higher levels, while ICT competence was comparatively lower. This highlights that students are more comfortable with traditional pedagogical practices than with integrating technology into teaching. The analysis further reveals a significant positive relationship between the use of Open Educational Resources and pedagogical readiness. Students who frequently engaged with OER demonstrated higher levels of preparedness in teaching-related competencies. This suggests that exposure to and utilization of open resources contribute positively to the development of teaching skills.

Moreover, the results of the regression analysis indicate that Open Educational Resources have a significant predictive effect on pedagogical readiness. OER usage was found to explain a substantial proportion of the variance in pedagogical readiness, confirming its transformative role in enhancing teaching competencies among B.Ed. students.

The study also identified several challenges faced by students in the effective use of OER, including limited access to digital infrastructure, inadequate technical skills, and lack of institutional support. These factors hinder the optimal utilization of open resources despite their potential benefits.

Overall, the findings of the study establish that while B.Ed. students demonstrate moderate levels of awareness and pedagogical readiness, the effective use of Open Educational Resources significantly enhances their teaching preparedness. However, addressing the existing challenges is essential to fully realize the

transformative potential of OER in teacher education.

## 9. Discussion

The present study aimed to examine the transformative potential of Open Educational Resources (OER) in shaping pedagogical readiness among B.Ed. students. The findings of the study revealed that the level of awareness of OER among B.Ed. students is moderate, which aligns with the findings of [Chauhan \(2025\)](#), who reported that pre-service teachers demonstrate moderate engagement with open educational practices due to limited exposure and technological constraints. This suggests that although digital resources are increasingly available, their effective utilization requires systematic training and awareness initiatives.

The study further found that B.Ed. students exhibit a moderate level of pedagogical readiness, with relatively higher competence in instructional planning and teaching innovation, but comparatively lower proficiency in ICT-related skills. This finding is consistent with the study by [Yadav \(2026\)](#), which highlighted that pedagogical skills and classroom management are stronger among pre-service teachers, while technological competencies require further development. Similarly, [Singh and Srivastava \(2026\)](#) emphasized the need for integrating ICT and pedagogical training to enhance overall teaching preparedness.

A significant finding of the study is the positive relationship between OER usage and pedagogical readiness. The results indicate that increased engagement with OER contributes to improved teaching competencies among B.Ed. students. This supports the findings of [Kumar and Mahendraprabu \(2021\)](#), who emphasized that OER promotes collaborative learning, knowledge sharing, and self-directed learning, all of which are essential for developing effective pedagogical skills. Furthermore, the study by [Dayan et al. \(2022\)](#) highlighted that exposure to practical teaching experiences and digital resources plays a crucial role in transforming the pedagogical beliefs of pre-service teachers.

The regression analysis confirmed that OER usage significantly predicts pedagogical readiness, demonstrating its transformative role in teacher education. This finding aligns with the work of [Hassan \(2023\)](#), who noted that digital

technologies enhance personalized and innovative learning experiences, thereby improving teaching effectiveness. Similarly, **Das and Barman (2024)** emphasized that blended learning approaches, supported by digital resources, lead to better learning outcomes and pedagogical development. However, the study also identified several challenges in the effective use of OER, including inadequate digital infrastructure, limited technical skills, and lack of institutional support. These findings are in agreement with **Rutayisire et al. (2024)**, who reported that insufficient ICT competencies and infrastructural barriers hinder the successful implementation of e-learning initiatives. In the context of semi-rural areas such as Amarkantak, these challenges are more pronounced, thereby affecting the accessibility and utilization of digital resources.

## 10. Implications of the Study

The findings of the study have several important implications for teacher education, policy, and practice:

### 10.1. For Teacher Education Institutions

- Integration of Open Educational Resources (OER) into the B.Ed. curriculum can enhance pedagogical readiness and promote innovative teaching practices.
- Institutions should design structured training programmes to improve students' awareness and effective use of OER.
- Greater emphasis should be placed on developing ICT competencies among pre-service teachers.
- Teaching-learning processes should incorporate blended and technology-supported approaches to improve engagement and learning outcomes.

### 10.2. For Educators and Teacher Trainers

- Teacher educators should actively model the use of OER in classroom instruction to encourage adoption among students.
- Continuous professional development programmes should be conducted to enhance digital pedagogical skills.
- Educators should encourage collaborative and self-directed learning through open educational practices.

### 10.3. For Policy Makers

- Policies should support the integration of OER in teacher education programmes in alignment with NEP 2020.
- Investment in digital infrastructure and internet accessibility is essential, especially in semi-rural regions like Amarkantak.
- Government initiatives should promote awareness and accessibility of national platforms such as SWAYAM and other open learning resources.

### 10.4. For B.Ed. Students

- Students should actively engage with OER to enhance their teaching competencies and digital skills.
- Utilization of diverse open resources can help in developing innovative and learner-centered teaching strategies.
- Self-directed learning through OER can improve preparedness for real classroom situations.

### 10.5. For Future Research

- Further studies can explore OER integration in different geographical and institutional contexts.
- Comparative studies between rural and urban institutions can provide deeper insights into digital readiness.
- Longitudinal studies can examine the long-term impact of OER on teaching effectiveness.

## 11. Limitations of the Study

The present study, while providing valuable insights into the role of Open Educational Resources (OER) in shaping pedagogical readiness, is subject to certain limitations:

- The study was confined to B.Ed. students in selected teacher education institutions in Amarkantak, Madhya Pradesh; therefore, the findings may not be generalizable to other regions or contexts.
- The sample size was limited to 100 respondents, which may restrict the broader applicability of the results.
- The study relied on self-reported data collected through questionnaires, which may be influenced by respondents' personal biases and perceptions.

- Only quantitative methods were employed, limiting the depth of understanding that could have been achieved through qualitative insights such as interviews or observations.
- The study focused primarily on selected variables such as OER usage and pedagogical readiness, without considering other potential influencing factors like socio-economic background, institutional facilities, or prior digital exposure.
- Time constraints during data collection may have affected the comprehensiveness of the responses.

## 12. Suggestions

Based on the findings of the study, several recommendations are proposed to enhance the effective utilization of Open Educational Resources (OER) and improve pedagogical readiness among B.Ed. students. Teacher education institutions should integrate OER systematically into the B.Ed. curriculum to promote innovative, flexible, and learner-centered teaching practices. There is a need to organize regular workshops, seminars, and training programmes to increase students' awareness and competence in using OER effectively. Additionally, strengthening ICT infrastructure, including reliable internet access, digital devices, and learning management systems, is essential, particularly in semi-rural institutions such as those in Amarkantak. Institutions should also encourage the adoption of blended learning approaches that combine traditional and digital teaching methods.

Educators and teacher trainers play a crucial role in promoting the use of OER. They should incorporate OER-based teaching strategies in their instructional practices to model effective usage for students. Continuous guidance and mentoring should be provided to help students develop digital pedagogical skills, particularly in lesson planning and classroom implementation. Furthermore, collaborative learning and peer-sharing practices should be encouraged through open educational platforms to foster active engagement and knowledge exchange.

At the policy level, there is a need to formulate and implement policies that support the integration of OER in teacher education programmes in alignment with the objectives of the National Education Policy (NEP) 2020.

Increased investment in digital infrastructure and accessibility is essential to bridge the digital divide, especially in rural and semi-urban areas. Government initiatives should also focus on promoting awareness and accessibility of national digital platforms such as SWAYAM and other open learning repositories.

B.Ed. students should be encouraged to actively engage with OER to enhance their teaching competencies and digital literacy. They should utilize a variety of open resources for lesson planning, content development, and classroom activities, and develop self-directed learning habits to continuously update their knowledge and skills. Finally, future research should consider larger and more diverse samples, incorporate qualitative approaches for deeper insights, and explore the impact of OER across different disciplines and educational contexts.

## 13. Conclusion

The present study examined the transformative potential of Open Educational Resources (OER) in shaping pedagogical readiness among B.Ed. students in Amarkantak, Madhya Pradesh. The findings revealed that B.Ed. students possess a moderate level of awareness and utilization of OER, as well as a moderate level of pedagogical readiness. While students demonstrated relatively stronger competencies in instructional planning and teaching innovation, their ICT-related skills were comparatively less developed, indicating a gap in digital pedagogical integration.

The study established a significant positive relationship between OER usage and pedagogical readiness, confirming that increased engagement with open educational resources contributes to enhanced teaching competencies among pre-service teachers. Furthermore, the regression analysis highlighted that OER usage is a significant predictor of pedagogical readiness, emphasizing its transformative role in teacher education. These findings underscore the importance of integrating OER into B.Ed. programmes to promote innovative, flexible, and learner-centered teaching practices.

However, the study also identified several challenges, including limited digital infrastructure, lack of awareness, and insufficient institutional support, which hinder the effective utilization of OER. These challenges are particularly relevant in

semi-rural contexts, where access to technology and digital resources remains uneven.

In conclusion, Open Educational Resources hold substantial potential in enhancing pedagogical readiness among B.Ed. students, but their effectiveness depends on the availability of adequate technological infrastructure, training, and institutional support. Therefore, there is a need for systematic efforts to promote digital literacy, provide capacity-building programmes, and integrate OER into teacher education curricula to fully realize its benefits in improving the quality of education.

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