



Enhancing Accessibility and Flexibility in Teacher Education in India: Overview of Dual Degrees, MOOCs and OERs

Satish S¹, Rajashekara, K S²

¹Librarian, Sree Siddaganga College of Education, Virajapete, Karnataka

Email: srisanayak@gmail.com,

ORCID ID-<https://orcid.org/0000-0003-3501-232X>

² Librarian, Sarvodaya College of Education, BH Road, Tumakuru-572102,

Email: rajashekara.ks@gmail.com, Mob-9900881423

DOI: [10.33329/ijless.12.S1.130](https://doi.org/10.33329/ijless.12.S1.130)



ABSTRACT

The Indian teacher education system faces several challenges, including accessibility, affordability, and quality. This article explores the potential of dual degrees, Massive Open Online Courses (MOOCs), and Open Educational Resources (OERs) to enhance accessibility and flexibility in Indian teacher education. We discuss the current state of teacher education in India, the benefits and challenges of dual degrees, MOOCs, and OERs, and propose a framework for their effective implementation in Indian teacher education.

Keywords: MOOCs, OERs, Dual degree, Teacher education, Open education, Swayam, Lifelong learning.

Introduction

In India, teacher education is an essential element in the educational system, since this is what prepares teachers to deliver quality education to the learners. But the Indian system of teacher education faces many challenges – accessibility, affordability, and above all quality. According to the National Council of Educational Research and Training NCERT, there are more than 1.5 million teachers in India, most of them untrained or unqualified.

Objectives of the Study:

The objectives of this study are:

1. To examine the current state of teacher education in India and identify the challenges faced by teacher education institutions.
2. To explore the potential of dual degrees, MOOCs, and OERs in enhancing accessibility and flexibility in Indian teacher education.
3. To analyze the benefits and challenges of implementing dual degrees, MOOCs, and OERs in Indian teacher education.

In the present generation, ICT has taken the lead in modernizing education and training. Open Educational Resources (OER) are "digital learning resources that are made freely and publicly available on the Internet for use by teachers, educators, and students, as well as independent learners, for

teaching, learning, and research purposes." Massive open online courses (MOOCs) are free, flexible forms of online education intended for large-scale participation.

Dual Degrees in Indian Teacher Education

Dual degrees in teacher education can provide teachers with the opportunity to acquire a broader range of skills and knowledge, making them more effective in the classroom. For example, a dual degree program in special education and elementary education can prepare teachers to work with students with diverse needs. In India, several universities offer dual degree programs in teacher education, such as the University of Delhi's Dual Degree Program in Education.

Massive Open Online Courses in Teacher Education, India

MOOCs are commonly perceived to be more of open educational resources because they are rooted in an institutionally open practice teaching. Moreover, MOOCs include interactivity, feedback, and assessment (by peers or even automated quizzes) but do not yet come with credits or a certification toward a degree. Indian learners undertake this MOOC mainly for upskilling, fulfilling a current need, and out of curiosity as well. They provide the ability for teachers to access high-quality professional development opportunities independent of location. For instance, the SWAYAM platform of the Government of India offers MOOCs on numerous topics including education. This particularly makes MOOCs valuable for teachers in rural and remote areas who have not had access to traditional professional development.

OERs in Indian Teacher Education

Open educational resources (OER) are teaching, learning, and research materials intentionally created and licensed to be free for the end user to own, share, and in most cases, modify. The term "OER" describes publicly accessible materials and resources for any user to use, re-mix, improve, and redistribute under some licenses. These are designed to reduce accessibility barriers by implementing best practices in teaching and to be adapted for local unique contexts.

Open Educational Resources are freely accessible materials that are either in the public domain or carry an open license permitting their use without having to ask permission. OERs are the exact realization, a democratized learning, and reach to all for material that people could not access or lacked the ability to afford. Universities and publishers from all over the world opened their golden door for OERs during the lockdown phase of COVID-19.

Important list of OER initiatives from India

1. National Programme on Technology Enhanced Learning (NPTEL)
2. Study Webs of Active-learning for Young Aspiring Minds (SWAYAM)
3. e-PG Pathshala
4. Consortium for Educational Communication (CEC)
5. The Spoken Tutorial
6. Virtual Labs
7. Free and Open Source Software in Education (FOSSEE)

Benefits of Dual Degrees, MOOCs, and OERs in Indian Teacher Education

The advantages of dual degrees, MOOCs, and OERs for Indian teacher education are as follows:

1. Enhanced accessibility: It means that teacher education through dual degrees, MOOCs, and OERs will grant access to the best educational opportunities available, without limitations caused by geography or financial status.

2. Increased flexibility: Teacher education using dual degrees, MOOCs, and OERs will ensure that the pedagogues have the maximum flexibility to take their educational opportunities at any time that suits them and their schedules best.
3. Improved quality: Dual degrees, MOOCs, and OERs can provide teachers with access to high-quality educational material and opportunity, which can increase the quality of teaching and learning.

Challenges and Opportunities

Though dual degrees, MOOCs, and OERs have several benefits, there are also many challenges that must be met with them. That includes:

1. Infrastructure and technological constraints: Most teacher education institutions in India do not have appropriate infrastructure and technology that can be supportive of dual degrees, MOOCs, and OERs.
2. Issues of Quality and Accreditation: Dual degrees, MOOCs, and OERs need to go through the quality assurance of acceptable authorities and accreditation from relevant authorities.
3. Faculty Development and Training: The faculty needs to be developed and trained for designing and delivering dual degrees, MOOCs, and OERs.

Conclusion

Dual degrees, MOOCs, and OERs offer several benefits for Indian teacher education, including enhanced accessibility, increased flexibility, and improved quality. However, there are also several challenges that need to be addressed, including infrastructure and technology constraints, quality and accreditation concerns, and faculty development and training needs. By working together, we can harness the potential of dual degrees, MOOCs, and OERs to improve the quality of teacher education and, ultimately, student learning outcomes in India.

References:

1. Abhishek, N., Kulal, A., Divyashree, M. S., & Dinesh, S. (2023). Effectiveness of MOOCs on learning efficiency of students: a perception study. *Journal of Research in Innovative Teaching and Learning*. <https://doi.org/10.1108/JRIT-12-2022-0091>
2. Alcorn, B., Christensen, G., & Kapur, D. (2015). Higher Education and MOOCs in India and the Global South. *Change: The Magazine of Higher Learning*, 47(3), 42–49. <https://doi.org/10.1080/00091383.2015.1040710>
3. Alhazzani, N. (2020). MOOC's impact on higher education. *Social Sciences and Humanities Open*, 2(1). <https://doi.org/10.1016/j.ssaho.2020.100030>
4. Anand Shankar Raja, M., & Kallarakal, T. K. (2021). "COVID-19 and students perception about MOOCs" a case of Indian higher educational institutions. *Interactive Technology and Smart Education*, 18(3), 450–474. <https://doi.org/10.1108/ITSE-07-2020-0106>
5. Ayoub, A., Amin, R., & Wani, Z. A. (2020). Contribution of developed countries towards MOOCs: an exploration and assessment from a representative platform Coursera. *Asian Association of Open Universities Journal*, 15(2), 251–262. <https://doi.org/10.1108/AAOUJ-03-2020-0016>
6. Bordoloi, R. (2018). Transforming and empowering higher education through Open and Distance Learning in India. *Asian Association of Open Universities Journal*, 13(1), 24–36. <https://doi.org/10.1108/AAOUJ-11-2017-0037>
7. Bordoloi, R., Das, P., & Das, K. (2020). Lifelong learning opportunities through MOOCs in India. *Asian Association of Open Universities Journal*, 15(1), 83–95. <https://doi.org/10.1108/AAOUJ-09-2019-0042>
8. Bordoloi, R., Das, P., & Das, K. (2021). Perception towards online/blended learning at the time of Covid-19 pandemic: an academic analytics in the Indian context. *Asian Association of Open Universities Journal*, 16(1), 41–60. <https://doi.org/10.1108/AAOUJ-09-2020-0079>

9. Burgos Editor, D. (2024). *Lecture Notes in Educational Technology Radical Solutions and Open Science*. <http://www.springer.com/series/11777>
10. Gupta, V., & Jain, N. (2017). Harnessing information and communication technologies for effective knowledge creation: Shaping the future of education. *Journal of Enterprise Information Management*, 30(5), 831–855. <https://doi.org/10.1108/JEIM-10-2016-0173>
11. Kumari, D. A. (2024). *Specific Features of Dual Degree and Integrated Teacher Education Programme*.
12. Ma, L., & Lee, C. S. (2019). Investigating the adoption of MOOCs: A technology–user–environment perspective. *Journal of Computer Assisted Learning*, 35(1), 89–98. <https://doi.org/10.1111/jcal.12314>
13. Mulik, S., Srivastava, M., Yajnik, N., & Taras, V. (2020). Antecedents and outcomes of flow experience of MOOC users. *Journal of International Education in Business*, 13(1), 1–19. <https://doi.org/10.1108/JIEB-10-2018-0049>
14. Paswan, M. (2020). Integration of MOOCs Online Courses into Open and Distance Teacher Education in India. *Educational Quest- An International Journal of Education and Applied Social Sciences*, 11(2). <https://doi.org/10.30954/2230-7311.2.2020.9>
15. Pillai, R., & Sivathanu, B. (2020). An empirical study on the online learning experience of MOOCs: Indian students' perspective. *International Journal of Educational Management*, 34(3), 586–609. <https://doi.org/10.1108/IJEM-01-2019-0025>
16. Roy, S., Bhattacharya, S., & Das, P. (2020). Learning clusters, MOOCs, free videos and organization learning: a case study from Indian SMEs. *Development and Learning in Organizations*, 34(1), 16–20. <https://doi.org/10.1108/DLO-03-2019-0057>
17. Singh, G., & Chauhan, R. (2017). *Asian Journal of Distance Education Awareness towards Massive Open Online Courses (MOOCs) and their usage for Teacher Education in India*. 12(2), 81–88. <http://www.AsianJDE.org>