IJCRT.ORG ISSN : 2320-2882

INTERNATIONAL JOURNAL OF CREATIVE RESEARCH THOUGHTS (IJCRT)

An International Open Access, Peer-reviewed, Refereed Journal

Online Upskilling Of Educators In India: Effectiveness, Challenges, And Implications For Teacher Professional Development

BY

Dr.MD.Zakir Hussain

Assistant Professor of education

Bilal educational society's college of education for women

Bidar

Abstract:

Continuous Professional Development (CPD) is globally recognized as a critical determinant of teaching quality and student achievement [1]. In India, national digital platforms such as DIKSHA, NISHTHA, and SWAYAM have expanded access to teacher upskilling at unprecedented scale, particularly after the COVID-19 pandemic [3][5][7]. The National Education Policy (NEP) 2020 further institutionalizes lifelong professional learning by mandating a minimum of 50 hours of annual CPD for teachers through blended modes [4].

This study critically examines the effectiveness, challenges, and institutional implications of online teacher upskilling in India using secondary data analysis and systematic literature review. Data were drawn from national policy documents, Ministry of Education reports, platform analytics, UNESCO and OECD publications, and peer-reviewed studies published between 2018 and 2024 [3][16][17]. Descriptive trend analysis was applied to participation statistics, while thematic synthesis was used to examine learning outcomes and implementation barriers [15].

Findings indicate that online professional development has improved teachers' digital competencies, pedagogical awareness, and access to professional learning communities [11][14]. However, persistent issues such as the digital divide, low completion rates, limited mentoring, and weak classroom transfer constrain long-term impact [12][7][15]. Comparative evidence suggests that countries integrating online learning with school-embedded mentoring systems achieve stronger instructional improvement [18][19]. The study concludes that online upskilling must be embedded within institutional ecosystems to achieve sustainable professional growth aligned with NEP 2020 objectives [4][21].

2.Keywords: Teacher professional development; online upskilling; DIKSHA; SWAYAM; digital pedagogy; NEP 2020; educational technology

3.Introduction:

Teacher competence is a central determinant of education quality, yet India faces uneven professional development opportunities and regional shortages of trained educators [2]. Traditional in-service training, often delivered through short-term workshops, has shown limited impact on classroom practices and student learning outcomes [15]. Consequently, technology-enabled professional development has emerged as a scalable alternative to conventional training models [11].

The COVID-19 pandemic accelerated the adoption of digital platforms, making online professional development a permanent feature of teacher learning ecosystems [3]. Platforms such as DIKSHA and SWAYAM now host thousands of certified modules on pedagogy, assessment, digital tools, and inclusive education [7][10].

NEP 2020 formalizes this transition by recommending continuous, competency-based professional learning integrated with career progression [4]. However, while enrolment numbers are impressive, empirical evidence on sustained pedagogical transformation remains mixed [12][14]. Therefore, evaluating both effectiveness and limitations of online teacher upskilling is necessary to inform future policy and institutional reforms.

4.Conceptual Framework:

Teacher Professional Development (TPD) is grounded in adult learning theory, emphasizing self-direction, contextual relevance, and reflective practice [8]. Technology-mediated professional learning communities further enable collaboration, peer mentoring, and collective problem solving [9].

OECD countries emphasize collaborative professional learning embedded within schools [17]. Singapore integrates online learning with mentoring and appraisal systems [18]. Finland prioritizes reflective inquiry over certification-based training [19]. UNESCO recommends blended professional ecosystems combining digital tools with institutional support [20].

India can adapt these models to strengthen professional learning coherence [4][21].

This model assumes that professional growth depends on both individual learning and institutional support mechanisms [21].

5.Policy Context in India:

According to the National Education Policy (NEP) 2020, professional growth through technology should be a continual and obligatory process [4]. The following are the key initiatives supporting this vision.

- **NISHTHA**, a series of training modules that assist teachers and school leaders to become skilled professionals [5].
- **DIKSHA**, an online directory of professional development resources and assessments [3].
- **SWAYAM,** offering MOOCs for faculty and students in higher education [7].
- **PM e-Vidya**, combining various platforms, such as television, radio, and online to deliver training [6].
- **NCERT and SCERT websites**, providing state-based digital professional development programmes [10].

The overall goal of these initiatives is to make professional development accessible to anyone in every state through a common set of competencies [5] [9].

6.Secondary Data Tables:

Table 1: Major Online Teacher Upskilling Initiatives in India

Platform	Year	Agency	Target Group	Mode	Reach
DIKSHA	2017	MoE	School teachers	Mobile/Web	70+ million users [3]
NISHTHA	2019	NCERT	Teachers & Heads	Blended	12+ million [5]
SWAYAM	2017	MoE, UGC	HE faculty	MOOC	30+ million [7]
PM e-Vidya	2020	MoE	Teachers & students	Multi-platform	National [6]
State LMS	2018–23	SCERTs	Teachers	Online	State-level [10]

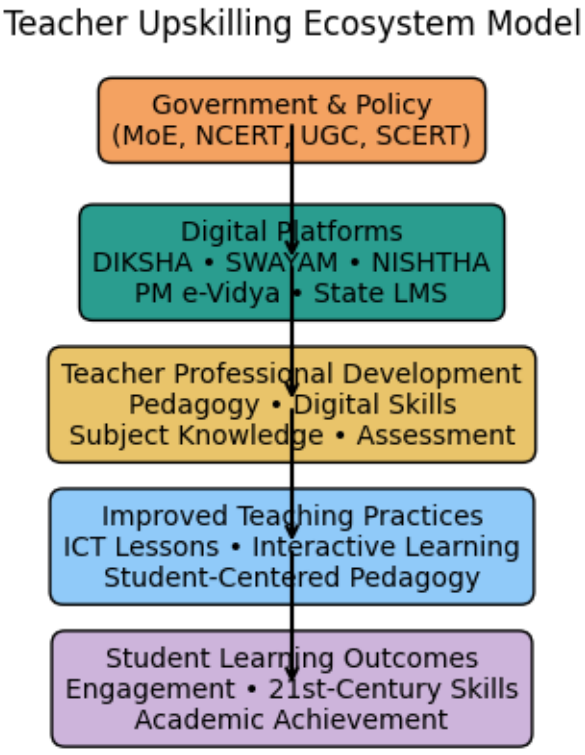

Table 2: Participation Trends in Online Teacher Training

Year	Enrolled in Million	Platform	Source
2019	4.5	NISHTHA	[5]
2020	18.0	DIKSHA	[3]
2021	32.0	DIKSHA	[3]
2022	41.5	DIKSHA	[3]
2023	50+	DIKSHA/SWAYAM	[7]

Table 3: Reported Outcomes of Online CPD

Outcome	Evidence	Positive	Limitations	Ref
Digital skills	Surveys	Improved ICT use	Surface-level mastery	[11],[12]
Pedagogy	Experiments	Active learning	Weak sustainability	[15]
Assessment	Platform data	Formative tools	Limited feedback	[13]
Collaboration	Qualitative	Peer networks	Low participation	[14]

7.Effectiveness of Online Upskilling

Studies indicate significant improvement in teachers' technological pedagogical content knowledge (TPACK) following online training [11]. Teachers report increased confidence in digital assessments and multimedia integration [12]. MOOCs also provide exposure to international pedagogical practices and interdisciplinary approaches [7].

However, sustained classroom innovation requires mentoring and contextual adaptation, which most platforms currently lack [14][15]. Blended professional development models demonstrate greater instructional impact than purely online approaches [15].

8.Challenges and Barriers:

Significant impediments include:

- Digital divide, particularly in rural areas [12]
- Language disparities, limiting the ability of many to access it [16]
- Low completion rates for MOOC courses [7]
- Limited availability of mentoring systems [14]
- Workloads of teachers preclude them from dedicating time to support their students [5]

These limitations will continue to limit the degree of professional transformation regardless of the number of people who are being trained with MOOCS [15].

9.Comparative Global Perspectives

OECD countries emphasize collaborative professional learning embedded within schools [17]. Singapore integrates online learning with mentoring and appraisal systems [18]. Finland prioritizes reflective inquiry over certification-based training [19]. UNESCO recommends blended professional ecosystems combining digital tools with institutional support [20].

India can adapt these models to strengthen professional learning coherence [4][21].

10.Implications for Teacher Education Institutions:

Teacher education institutions should:

- Integrate MOOCs into B.Ed. and M.Ed. curricula [21]
- Recognize micro-credentials for promotions [18]
- Train faculty in digital pedagogy [11]
- Develop blended CPD centres [15]

Such reforms align pre-service and in-service teacher development pathways [21].

11.Policy and Practice Recommendations:

Government

- Institutionalize blended CPD mandates [4]
- Expand rural digital infrastructure [12]

Institutions

- Link CPD with appraisal systems [18]
- Establish mentoring programs [15]

Teacher Educators

- Model digital pedagogies [11]

Technology Providers

- Offer multilingual adaptive platforms [22]

12. Limitations of the Study

The study relies on secondary datasets that may not reflect classroom-level realities. Regional disparities limit generalization, and causal links between training and student outcomes remain underexplored [15].

13. Future Research Directions

Future research may benefit from using:

- Longitudinal classroom observations
- Mixed-method evaluations
- AI-based adaptive CPD approaches to support CPD for teachers
- Learning analytics diagnostics

References:

1. Darling-Hammond, L., et al. (2017). Effective teacher professional development. *Learning Policy Institute*.
2. World Bank. (2020). *Teachers in India: Reform and capacity building*.
3. Ministry of Education. (2023). *DIKSHA dashboard analytics report*.
4. Government of India. (2020). *National Education Policy 2020*.
5. NCERT. (2022). *NISHTHA implementation report*.
6. Ministry of Education. (2021). *PM e-Vidya program overview*.
7. SWAYAM. (2023). *Annual enrollment statistics*.
8. Knowles, M. (1984). *Andragogy in action*. Jossey-Bass.
9. Wenger, E. (1998). *Communities of practice*. Cambridge University Press.
10. NCERT. (2021). *Digital teacher training initiatives*.
11. Mishra, P., & Koehler, M. (2006). TPACK framework. *Teachers College Record*, 108(6), 1017–1054.
12. Kundu, A., & Bej, T. (2021). Digital divide in Indian education. *Education and Information Technologies*, 26, 6463–6485.
13. Redecker, C. (2017). Digital competence framework. *European Commission*

14. Trust, T., et al. (2016). Professional learning networks. *Computers & Education*, 102, 15–34.
15. Desimone, L. (2009). Improving impact studies of teachers' PD. *Educational Researcher*, 38(3), 181–199.
16. UNESCO. (2022). *Global education monitoring report*.
17. OECD. (2019). *TALIS global teacher learning report*.
18. Tan, C. (2018). Teacher PD in Singapore. *Asia Pacific Journal of Education*, 38(2), 1–14.
19. Sahlberg, P. (2015). *Finnish lessons 2.0*. Teachers College Press.
20. UNESCO. (2021). *Teacher policy development guide*.
21. Zeichner, K. (2010). Rethinking teacher education. *Journal of Teacher Education*, 61(1–2), 89–99.
22. Siemens, G., & Baker, R. (2012). Learning analytics. *LAK Proceedings*