

PUBLIC-PRIVATE PARTNERSHIPS (PPP) IN TEACHER EDUCATION: TRANSFORMING TEACHER TRAINING OR REINFORCING INEQUITIES?

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ABSTRACT

The study talks about how Public-Private Partnerships (PPPs) can enhance teacher training in India. It discusses how the government and private entities can collaborate to offer improved training for teachers, particularly in difficult-to-reach areas or those with limited resources. The objective is to enhance the quality of education by enhancing teacher training to be more effective, inclusive, and accessible. This research examines the advantages of PPPs, including improved methods of teaching, improved management, and broader coverage. This also identifies some of the challenges. They include unequal access to training, varying quality, and insufficient strict rules to ensure fairness. It emphasizes the necessity for transparent national standards of training, equal assistance to all teachers, and additional assistance to teachers from poor backgrounds. Examples of PPPs in India and other nations such as Uganda and the Philippines demonstrate the success of PPPs when they are well planned. It suggests providing financial assistance such as subsidies or free training, and establishing regulations for maintaining quality and equity in all training programs.

KEY WORDS: Public Private Partnership (PPP), Teacher Education, Effectiveness of PPP, Equity Challenges in PPP

1.0 INTRODUCTION

Teachers are the main pillar of any education system. So, their training directly influences in a Nation's building. Teacher training is at the centre of educational quality, being the process through which instructors gain the abilities, knowledge, and dispositions required for enhancing student learning and social progress (Darling, 2017). Teaching is a profession and teacher training is a process of professional preparation of teachers. Preparing someone for a profession is a task that is strenuous and it takes action from various fronts and angles. Teacher Training Institutions are conceived as dynamic centres of practical experiments focussed to the educational approach, curricula and research (, 2009). Historically, the accountability for providing and financing instructor training lay in the hands of public institutions, catalysed by the state's mission of guaranteeing equal access to education as a public good (UNESCO, 2020). Yet, growing needs for new pedagogies, technology integration, and increased outreach have stretched public funds, necessitating a turn toward collaborative forms like Public-Private Partnerships (PPPs) (Patrinos et al., 2009). In the context of education, PPPs involve cooperation between government entities

and private sectors. Proponents believe that these alliances have the potential to revolutionize teacher training through the application of private sector efficiency, expertise, and innovation, thus improving educator readiness for 21st-century classrooms (LaRocque, 2008).

However, PPP is a new innovative idea for Teacher training and education system, but it has two sides. While supporters maintain that PPPs can bring innovation and responsiveness to teacher training systems, critics argue that they can perpetuate existing inequalities by favouring elite institutions and commercial interests at the expense of underserved communities and under-resourced public schools (Verger et al., *The Privatization of Education. A Political Economy of Global Education Reform*, 2016). This study attempts to investigate this double potential of PPPs in teacher training through their effectiveness in enhancing training results and their contribution to educational equity and also investigated the challenges for PPP model.

2.0 REVIEW RELATED LITURATURE:

Biswas (2015) said that there has a big gap between private sector and public sector in teacher training. For bridging this gap, he advocated PPPs as a remedy, mixing public funds with private investment and management to improve pre-service and in-service education, build institutions such as DIETs and CTEs, and incorporate ICT for quality enhancement. The paper presents models such as joint ventures, management contracts, equity, and annuity modalities, stressing trust, equitable deals, and accreditation as success factors, finally seeking to reform teacher education while reducing regional imbalances and resource shortages.

Angelis (2014) said that explores Indian education quality using Public-Private Partnerships (PPPs) and Grant-in-Aid (GIA) schools as a lens, located within neoliberal transformations and the Right to Education (RTE) Act of 2009. It argues against neoliberal marketization of education, under which PPPs emphasize profits at the expense of equity, tending to negate RTE's provision of free, compulsory education. PPPs stand the risk of promoting socio-cultural segregation and superficial quality indicators, such as examination results, over comprehensive learning. The study follows the historical development of the state, mentioning GIA's origins in colonial alliances compared to contemporary PPPs' market-led mechanism. The study finds deep-seated inequalities in the tiered education system in India that are further intensified by neoliberal reforms. De Angelis advocates for a paradigm shift to inclusive education, calling on the state to assert its regulatory capacities and prioritize equity over marketization. Additional studies are suggested to evaluate PPPs' long-term effects and redesign GIA for better accountability and access.

3.0 OBJECTIVES:

The objectives of the study are to evaluate the effectiveness of PPPs in improving teacher training quality and reach, to investigate the equity implications of PPPs, focusing on disparities in training access and outcomes and to propose evidence-based strategies for designing PPPs that balance transformation and equity.

4.0 METHODOLOGY:

The present study used the analytical method, which aims to gather detailed information regarding particular topic. Qualitative type of research was used for this study. For the purpose of this study, secondary data collection methods were relied upon. The data was sourced from various journals, articles, government website and reports.

5.0 FINDING AND DISCUSSING:

5.1 CONCEPTUAL BACKGROUND OF PUBLIC PRIVATE PARTNERSHIP (PPP):

The public-private partnerships (PPPs) idea is a mixed form of governance between various state and non-state stakeholders across a spectrum of development project (Ali et al., 2024). In PPP, the state (means the public) is primarily a financial provider and plays the role of monitor/regulator, while the private organization primarily offers services in the form of teachers' development, provision of resources, operation of schools, etc. (Ali et al., 2024). There are various models depending on the role and character of the public and private sector entities in the programme (Ali et al., 2024).

1. Educational Management Organisation (EMO): The state provides finance and maintains accountability while a private sector maintains the school management.
2. Voucher school programme: The state grants finance to parents to allow them to select proper school for the child.
3. Foundation-assisted schools: The state extends financial and technical assistance to the partner private schools to admit pupils.
4. Adopt a school model –A philanthropic organization or individual adopts a government school and attempts to better it.
5. Charter schools – The schools are funded by the government but are independent of the regular public school system.

PPP are generally running on the basis of these models.

5.2 EFFECTIVENESS OF PUBLIC PRIVATE PARTNERSHIP IN TEACHER TRAINING:

Capacity Building: Private partners typically formulate and implement specialized training programs, which include modern pedagogic methods and digital tools. This creates more engagement in the classroom. For example, the SHIKSHA program in Uttar Pradesh, India, employed technology-enabled pedagogy through a public-private partnership. A Schools with SHIKSHA interventions had average scores 58 percentage points higher than schools without SHIKSHA interventions. Moreover, following a 15-day revision period with active teacher involvement, additional gains in student scores were observed. (S & Sharma)

Scalability: By taking advantage of private sector efficiency, PPPs can cover large numbers of teachers in various areas. The National Initiative for School Heads' and Teachers' Holistic Advancement (NISHTHA), initiated in 2019, focuses on improving the skills of around 4.2 million school principals and teachers at the primary level. As of the end of the 2019-2020 period, 1,699,931 school heads and teachers were trained under this program. Although NISHTHA is a centrally sponsored program, it works with other stakeholders, including autonomous bodies under the Ministry of Education, like CBSE, KVS, NVS, and others, for content creation and dissemination (NISHTHA Progress report, 2022).

Innovation: The private sector brings in new methods, including online platforms and micro-learning, alongside the conventional government-run programs. For example, ed-tech companies such as BYJU'S and Tata Trusts have incorporated digital training modules in 68% of government school teachers in states such as Punjab and Rajasthan received online training through such arrangements compared to 35% in 2018 (Unified District Information System for Education Report (UDISE), 2022)

Bridging skill gaps: Public-Private Partnerships (PPPs) played a significant role in filling gaps of competent trainers through the involvement of private sector experts to support educational and training programs. Private sector expertise and resources are utilized in PPPs to benefit public institutions by filling key gaps in the public sector. For example, there are more than 50 B.Ed colleges in Assam and produce more than 4500 train teachers per year.

5.3 A COMPREHENSIVE REVIEW OF STATISTICAL DATA:

Training Coverage: Before PPP interventions, 50% of teachers were receiving in-service training every year. NISHTHA, with the potential backing of PPPs, replicated this to reach 4.2 million teachers by 2022 (NISHTHA Progress report, 2022). NISHTHA likely continued to meet or surpass the 50% yearly in-service training target (now among a larger, multi-level teacher population), with 2024 continuing to expand into new stages and persistent online outreach, potentially training 70-80% of eligible educators each year by this time, accounting for its scaled-up infrastructure (India, 2025).

Digital Adoption: UDISE 2021-22 reflects an increase from 35% (2018) to 68% (2021-22) of teachers in Rajasthan and Punjab accessing online training through PPPs (Unified District Information System for Education Report., 2021-22). Nationally, by 2024, 40-50% of teachers (around 3.8-4.7 million) benefited from PPP-enabled digital training. (India, 2025)

Rural Reach: In Chhattisgarh and other states, Tata Trusts' PPP efforts reached more than 30,000 teachers with digital tools by 2021 (trusts, 2021). Nationally, Tata Trusts would have contributed to the 40-50% of teachers accessing PPP-enabled digital training, as estimated in larger trends (Ministry of education, 2024).

5.5 EQUITY CHALLENGES IN PPP-BASED TEACHER TRAINING:

PPPs also bring market-driven mechanisms into public education systems, changing the historical model of state-funded teacher training (Robertson, 2012). Market logics emphasize efficiency and competition, which ends up exacerbating inequalities among teachers unintentionally (Ball & Youdell, 2007). For instance, private partners may offer teacher training in areas with greater potential returns on investment, usually at the expense of rural or marginalized groups (Srivastava, 2010)

This spatial disparity in professional development provision entails that teachers teaching in disadvantaged locations might not gain the same frequency or quality of professional development compared to their counterparts in urban or wealthier neighborhoods (Barreara-Osorio et al., 2009). This is especially problematic given that the effectiveness of teaching represents one of the most important predictors of student success (Hanushek & Rivkin, 2010). When PPPs perpetuate geography-based disparities, they exacerbate pre-existing differences in educational performance.

Additionally, PPPs can produce a two-track system of teacher development, where government-funded, standardized training is provided to public sector teachers and inferior, alternative professional development is offered to private or contract-based teachers (Latham et al., 2012). These inequities have an impact on teacher morale and add to systemic disparities (Tikly, 2020). For example, teachers in private schools might not qualify for the same in-service training programs available to those who teach in public schools, leading to the gap in knowledge and skills (Muralidharan & Sundararaman, 2013).

Another significant equity implication of PPPs is in cost-sharing mechanisms. When teachers fund training programs partially, teachers from lower socio-economic groups might not be able to pay for quality training (Kingdon et al., 2014). This cost barrier generates an unequal

playing field and restricts upward mobility for teachers from lower socio-economic groups (World Bank, 2018). Furthermore, this discourages the attainment of inclusive professional development as the international education agenda in visions of SDG 4 (UN, 2015).

Gender inequalities in teacher training results are also exaggerated in PPP models. Female teachers, who are already disadvantaged by the system in terms of access to professional development, are further excluded when training is contracted out to private providers that are not sensitive to socio-cultural limitations. For instance, women in conservative areas might find it harder to go to centralized training facilities, particularly when there is a lack of flexible or decentralized training mechanisms from private actors (Aikman & Unterhalter, 2007).

5.6 POLICY PATHWAYS TO EQUITY IN PPP TEACHER TRAINING:

Policy on Universal Access to Teacher Training: One of the fundamental equity policies is guaranteeing universal and equitable access to quality teacher training, whether teachers are in public or private schools. Governments can require PPP-funded teacher training programs to be accessible to all teachers, particularly those in disadvantaged areas or low-income schools (UNESCO, 2020). For example, policy structures can mandate that private partners cover rural or marginalized schools as a condition for government subsidies or support (Srivastava, 2010)

Example: The Right to Education Act in India encourages non-discrimination in access to teacher training, and PPPs are encouraged to facilitate training for contract and private school teachers (Kingdon et al., 2014)

Subsidized Training Programs for Disadvantaged Teachers: Equity-focused PPP policies must also incorporate targeted financial support mechanisms like stipends, vouchers, or complete subsidies for disadvantaged background teachers (World Bank, 2018). These mechanisms guarantee that cost does not act as a hindrance to access high-quality training programs. This is particularly crucial where private providers impose fees for training services (Klees, 2020)

Example: Kasturba Gandhi Balika Vidyalaya (KGBV) scheme emphasizes the recruitment and training of female teachers from marginalised backgrounds. By establishing residential schools in rural areas, the program ensures that both students and teachers from marginalized communities have access to education and professional development opportunities. (CRY, 2024)

Regulations on Equity-Based Resource Allocation: Governments should enact policies of prioritizing investment and resources to PPPs of disadvantaged schools. This involves performance-based grants awarding private partners for serving hard-to-reach populations and the achievement of equal training outcomes (Srivastava, 2010).

Example: India's Grant-in-Aid (GIA) model involves government funding to private schools that serve disadvantaged communities. While the model provides financial support, concerns have been raised about the lack of performance-based criteria in fund allocation. Studies suggest that without tying grants to specific outcomes, the model may not effectively address disparities in educational quality (De Angelis, 2014).

Quality Assurance and Standardization Policies: To reduce disparities in outcomes, policies should ensure quality assurance and standardization of teacher training programs among both public and private providers (Verger & Moschetti, 2017)). This involves establishing national guidelines for curriculum, pedagogy, length, and certification to

guarantee that all teachers—whether they work in the public or private sector—undergo training of similar quality (Robertson, 2012)

Example: The NCTE has established detailed regulations outlining the norms and standards for teacher education institutions. These regulations cover aspects such as infrastructure requirements, faculty qualifications, curriculum design, and assessment procedures. By enforcing these standards, the NCTE ensures that all institutions, regardless of their management (public or private), maintain a baseline quality in teacher training programs. (NCTE, 2022)

5.7 STRATEGIES FOR DESIGNING PPP'S THAT BALANCE TRANSFORMATION AND EQUITY:

Build Capacity Through Train-the-Trainer Models: It encompasses establishing an inclusive and scalable education system through the training of a few master trainers from different areas who then train other teachers in the locality (Biswas, 2015). Within a PPP environment, the approach taps the expertise and resources of the private sector to prepare such trainers while achieving far-reaching transformative impact (e.g., upskilling millions of educators) while equitably addressing it through enabling local educators to respond to regional demands (e.g., rural or disadvantaged communities) (Brion, 2018).

Private partners like ed-tech firms and NGOs design and deliver high-quality training to a limited number of master trainers selected from various regions, including urban, rural, and tribal areas (Fulgencio, 2021). They cascade the training to local teachers through these master trainers, thus facilitating scale and access (Servey et al., 2020). Care is taken to recruit the trainers from underserved region of the state and also from underrepresented groups like women educators. These trainers are supported with culturally responsive materials and regular mentorship. This decentralized model speeds up large-scale teacher upskilling in domains like digital literacy and pedagogy, decreasing reliance on centralized systems while enhancing inclusion and sustainability (Fulgencio, 2021).

e.g.: Tata Trusts' CLIX initiative trained 2,700 master teachers by 2021, who then impacted 150,000 students across underserved states like Chhattisgarh, showing equity gains through localized capacity (Trusts, 2021). Tata Trusts' PPP with MIT and TISS in CLIX combined private expertise (e.g., digital tools) with public infrastructure, inducting master trainers who localized content, reaching estimated 40,000-50,000 teachers by 2024.

Engage Communities as Active Partners in PPP Models for Education: It means to engage local stakeholders—e.g., parents, local leaders, and local organizations—in planning, implementation, and oversight of PPPs in education. This approach makes sure that disruptive interventions (e.g., comprehensive teacher training or infrastructure improvements) are tied to local priorities and needs and hence improve equity by tackling the unique challenges experienced by marginalized or underserved populations (e.g., rural, tribal, or low-income communities).

Under this model, representatives of the community are incorporated into Public-Private Partnerships (PPPs) governance, planning, and feedback cycles so their inputs inform goals, resource allocation, and delivery mechanisms. Technical skills, like digital technologies, are provided by private partners, with communities offering equal access guidance. Marginalized groups, such as tribal groups and rural mothers and fathers, are brought in to address particular obstacles like language and availability. This partnership builds trust and local ownership, enabling scaling of activities like teacher training and school improvements,

Ultimately multiplying the effects of such initiatives.

Chhattisgarh and Rajasthan, adopting feedback in order to customize digital tools for teachers and students. By 2021, CLIX covered 30,000 teachers and 150,000 students, projecting an estimated 40,000-50,000 teachers in 2024 with evidence of equity gains in underserved communities (TRUST, 2023; Tata Trusts, 2021).

Implement Robust Monitoring and Evaluation (M&E) Systems: It means putting in place integrated, evidence-based frameworks in PPPs to rigorously monitor and measure both transformational results (e.g., number of teachers trained or infrastructure installed) and equity effects (e.g., impact on rural or marginalized populations) (Mokua & Kimutai, 2019).

Private sector partners and public institutions work together to establish strong Monitoring and Evaluation (M&E) systems that monitor both transformation and equity results in education. These systems collect and analyse data on important indicators like the number of trained teachers, equipped schools, and female teacher participation rates, as well as comparing results across urban, rural, and tribal areas. By utilizing sophisticated technology platforms, private partners co-finance and roll out these systems in a way that optimizes data management and analysis (Dzhikiya et al., 2023). Public entities, on the other hand, guarantee that equity objectives are maintained throughout the process. Most importantly, the data is broken down by region, gender, and socioeconomic status so that disparities can be detected and targeted interventions made in underserved communities (IAPB, 2020).

India's 14.71 lakh schools, showing that 57.2% had operational computers and 53.9% had internet connectivity, but gaps remained (e.g., 20% internet connectivity in Bihar compared to 90% in Kerala). These figures informed interventions, with M&E playing a key role in mapping equity gaps (Ministry of education, 2024). NISHTHA had trained more than 4.5 million teachers by 2024, but poor rural monitoring constrained its equity reach, despite DIKSHA analytics monitoring usage (NISHTHA Training Updates, 2023). Tata Trusts' CLIX, with an estimated 40,000-50,000 teachers reached in 2024, employed localized M&E for rural effectiveness (.

Establish dual goal link with measurable equity indicator: In India 57.2% of school had computer (Ministry of education, 2024). But only 20% in Bihar had internet access, compared to 90% in Kerala (Ministry of education, 2024). This highlights uneven digital transformation benefits. By 2024 NISHTHA Trained around 4.2 million teachers, but due to infrastructural gap rural uptake lagged (NISHTHA Training Updates, 2023). As a solution of these conditions, establish dual goal i.e. set transformation targets (e.g., training millions) alongside equity goals (e.g., rural teacher reach) with specific, measurable metrics. This PPP model helps to set a balance teacher training scenario.

Implement Scalable Digital Solutions with Contextual Customization: For this strategies state mandate some private companies that design multilingual, low bandwidth tools, with funding tied to equity-focused deployment in undeserved area. E.g. use platforms like DIKSHA for scale and equity through local adaptations (e.g., offline modules, local languages). PPPs should obligate private partners to overcome contextual barriers.

In India 94.95 lakh teachers accessing online training by 2024 via DIKSHA (NISHTHA Training Updates, 2023). However, equity faltered in low connectivity areas such as Chhattisgarh's which has 30% internet access unless adopted locally (Ministry of education, 2024). Tata Trusts' ITE program tailored digital content to rural teachers, reaching 24,000 learners and educators by 2023.

6.0 CONCLUSION:

Public-Private Partnerships (PPPs) have immensely helped improve the effectiveness, innovativeness, and scalability of teacher training interventions. Evidence in programs like SHIKSHA and NISHTHA shows PPPs can help bring in better pedagogic practices and contribute immensely to a large-scale training outreach. Despite this, results show that persisting equity gaps exist; rural, marginalized, and low-income settings are generally served by reduced access to professional development of higher quality. The market-driven character of some PPP models has, in a few instances, served to widen prevailing inequalities by emphasizing profitability and urban-biased outreach.

Hence, though PPPs hold a lot of promise to revolutionize teacher education, their equitable potential depends on the development of strong policy frameworks guaranteeing universal access, standardization, and differential support for the disadvantaged. Moreover, efficient monitoring and evaluation processes, coupled with contextually appropriate digital solutions, are needed to harmonize large-scale change with the ideals of educational equity and social justice.

REFERENCES

1. Aikman, S., & Unterhalter, E. (2007). *Practices of gender equality in education in low-income countries*. DFID.
2. Ali, S., Bhutta, M. S., Ahmed, S., Ansari, A. N., Ahmed, A., & Qadir, Y. (2024). Effectiveness of public-private partnerships on educational access and quality of primary and secondary schooling in low- and middle-income countries: A systematic review. *Campbell Wiley Collaboration*, 1-7. <https://doi.org/https://doi.org/10.1002/cl2.1385>
3. Ball, S., & Youdell, D. (2007). *Hidden privatisation in public education*. Education International.
4. Barreara-Osorio, F., Guaqueta, J., & Patrinos, H. (2009). *The role and impact of public-private partnerships in education*. World Bank.
5. CRY. (2024, August 5). Retrieved from Child Rights and You.: <https://www.cry.org/blog/government-schemes-for-free-education-in-india/>
6. Darling, H. (2017). *Teacher education around the world: What can we learn from international practice?* European Journal of Teacher Education. <https://doi.org/https://doi.org/10.1080/02619768.2017.1315399>
7. De Angelis, R. (2014). Quality in Indian Education: Public-Private Partnerships and Grant-In-Aid Schools. *Educate journal*, 14(2), 13-28.
8. Hanushek, E., & Rivkin, S. (2010). Generalizations about using value-added measures of teacher quality. *American Economic Review*, 100(2), 267-271.
9. India, G. o. (2025). *Annual Report 2024-2025*. Ministry of Education.
10. Kingdon, G., Little, A., Aslam, M., Rawal, S., Moe, T., Patrinos, H., & Sharma, S. (2014). *A rigorous review of the political economy of education systems in developing countries*. DFID.
11. Klees, S. J. (2020). *The World Bank and education: Critiques and alternatives*. Springer.
12. LaRocque, N. (2008). Public-Private Partnerships in Basic Education: An International Review.
13. Latham, M., Durán, E., & Weber, E. (2012). The effects of teacher professional development. *International Journal of Educational Development*, 32(4), 1-8.

14. Ministry of education. (2024). *UDISE+ 2023-24 Report*. Department of School Education & Literacy, Government of India.
15. Muralidharan, K., & Sundararaman, V. (2013). *Contract teachers: Experimental evidence from India*. NBER Working Paper No. 19440.
16. NCERT. (2018). *Teacher Education in India: Status and Trends*. National Council of Educational Research and Training.
17. NCTE. (2022). Retrieved from National Council For Teacher Education: <https://ncte.gov.in/website/regulation.aspx>
18. Patrinos, H., Osorio, F., & Guáqueta, J. (2009). *The Role and Impact of Public-Private Partnerships in Education*. World Bank.
19. Robertson, S. (2012). Placing teachers in global governance agendas. *Comparative Education Review*, 56(4), 584-607. <https://doi.org/10.1086/667414>
20. S, B., & Sharma, A. (n.d.). *Technology-integrated Pedagogy, Learning Outcomes and Retention: Can Public-Private Partnerships Play a Role in Primary Education in India?* SAGE Publications Ltd.
21. Srivastava, P. (2010). Public-private partnerships and the global agenda of education access. *Canadian Journal of Development Studies*, 149-165.
22. Srivastava, P. (2013). *Low-fee private schooling*. UNESCO Education for All Global Monitoring Report.
23. Tata Trusts. (2021, November 12). Retrieved from TATA trust org website: <https://www.tatatrusts.org/media/press-releases/tata-trusts-and-tata-institute-of-social-sciences-launch-centre-of-excellence-in-teacher-education>
24. Tikly, L. (2020). *Education for sustainable development in the Global South*. Routledge.
25. trusts, T. (2021). *Annual Report 2020-21*. tata trust.
26. Trusts, T. (2021). *Tata Trusts and Tata Institute of Social Sciences Launch Centre of Excellence in Teacher Education*. Tata Trusts. (2021).
27. UN. (2015). *Transforming our world: The 2030 Agenda for Sustainable Development*. United Nations.
28. UNESCO. (2020). *Global Education Monitoring Report 2020: Inclusion and Education*. UNESCO.
29. UNESCO. (2020). *Global Education Monitoring Report 2020: Inclusion and education – All means all*. UNESCO.
30. Verger, A., & Moschetti, M. (2017). *Public-private partnerships in education: Exploring different models and policy options*. Open Society Foundations.
31. Verger, A., Fontdevila, C., & Zancazo, A. (2016). *The Privatization of Education. A Political Economy of Global Education Reform*. Teachers College Press.
32. World Bank. (2018). *World Development Report 2018*. World bank.