Journal of Multidisciplinary Cases
Vol: 06, No. 02, July-Dec 2026
ISSN: 2799-0990, DOI: 10.55529/jmc.62.1.12

Research Paper

Teacher's ICT readiness and the preference–practice gap: Evidence from Haryana government schools

Dr. Manoj Kaushik[1*], Prof. Sharad Sinha[2]
[1*]SCERT, School Education Department Haryana, Gurugram, India.
[2]Professor and Head, NCERT, New Delhi, India.

Article Info

Article History:
Received: 27 February 2026
Revised: 08 May 2026
Accepted: 16 May 2026
Published: 03 July 2026

Keywords:
Teacher ICT Readiness
Preference–Practice Gap
ICT Schools
NEP 2020
Digital Divide

ABSTRACT

The Ministry of Education in India has identified digital education and the integration of Information and Communication Technology (ICT) into teaching-learning processes as a key educational reform. Despite teachers generally expressing positive attitudes toward ICT, its effective classroom integration in government schools remains limited. This study examines the gap between teachers' favorable perceptions of ICT and their actual classroom practices in government high and senior secondary schools in Haryana, while exploring the influence of institutional and district-level factors. The study draws on state-wide research conducted under the ICT Schools Programme in Haryana (2016–2023). Data were collected from 483 government high and senior secondary schools selected from 3,170 ICT schools across all 21 districts. Participants included principals, computer teachers, subject teachers, and students. Using descriptive statistics, district-level comparisons, and thematic analysis of qualitative responses, the study investigates teachers' ICT attitudes, digital competence, pedagogical practices, infrastructure availability, teacher training, and institutional support. The findings reveal that many teachers continue to face challenges in developing digital teaching materials, integrating e-content into subject instruction, and implementing ICT-supported activity-based learning. Drawing on the Technology Acceptance Model (TAM), the TPACK framework, Diffusion of Innovation Theory, and digital divide perspectives, the study concludes that structural and institutional barriers, rather than negative teacher attitudes, are the primary constraints on effective ICT integration. The paper recommends practice-based teacher training, continuous academic support, stronger school-level digital ecosystems, and district-specific implementation strategies to enhance ICT integration in line with the Ministry of Education's objectives.

Corresponding Author:
Dr. Manoj Kaushik
SCERT, School Education Department Haryana, Gurugram, India.
Email: manoj_kaushik6171@yahoo.com

1. INTRODUCTION

Technology has increasingly become significant in education in India with different national education policies and programmes increasingly playing roles. Since the very beginning with the National Policy on Education (1986), digital learning is portrayed as a valuable tool to enhance education and access to it. NEP 2020 [1] specifically emphasizes on technology-enabled instruction, online learning materials, virtual laboratories, digital infrastructure and blended learning. Another issue advocated by the policy is the necessity to minimize the educational inequalities, through the access of digital resources that can be used by students with varied social and geographical backgrounds.

Nonetheless, the outcome of digital education programs hinges on teachers to a great extent. The finest infrastructure and online resources cannot generate any type of change in the classroom unless the teachers themselves are confident and capable of making that change happen. Teacher attitudes to technology, their digital competencies, institutional level of support as well as the school climate make a significant difference in shaping whether ICT/IT becomes an important aspect of classroom education or not. This has made teacher ICT preparedness as a significant issue to education planners, state governments, and even education institutions like SCERTs and DIETs.

Haryana provides a valuable background of the analysis of those issues. The state has over the years substantially invested in ICT infrastructure by the ICT in Schools scheme [2] that is undertaken in the government schools in all districts. The programme has helped to put in place computer labs, EDUSATs, projectors and other digital infrastructure in thousands of schools. These services in most instances were deployed in outsourced modes which included hardware, software and manpower technical support.

Meanwhile, Haryana is characterized by significant disparities in socio-economic and educational development, on a district level. Districts like Gurugram and Panipat have a relatively better infrastructure and are better digitized as compared to districts like Mewat and Mahendergarh, which still struggle to maintain educational services and infrastructure. These local differences render Haryana a significant example to learn how the local situation affects teacher ICT preparedness, and how school-based digital ecosystems operate. It is on this backdrop that the current research study is dedicated to a 'preference-practice gap' in teacher ICT readiness - the gap between favorable attitudes regarding ICT and usage of technology in classroom instruction amongst teachers. The paper discusses four research questions: (a) What is the nature and extent of this gap? (b) What institutional and structural causes do it have? (c) Which way does it differ by districts? (d) What does it imply, in terms of the policy of teacher professional development and digital education on the side of the ministry of education?

2. RELATED WORK

2.1. Theoretical Perspectives on ICT Integration

The Technology Acceptance Model (TAM) by Davis [3] is one of the oldest models that seek to explain the manner in which technologies are adopted. This model holds that individuals will be more inclined to embrace technology as long as they feel it is handy and convenient to them. TAM has found extensive application in the education sector where it has served to elucidate why teachers can espouse and favour ICT in theory and yet might be open to adopting it in the classroom methods without any confidence or causing disruption.

The other significant input was by Rogers [4], whose Diffusion of Innovation Theory expounds on the processes of how innovations are diffused in organizations and societies. Rogers highlighted the role of the institutional culture, support of the leaders, the impact of peer group, and communication systems in influencing adoption of new technologies in schools.

One of the most important changes in the educational technology research was the introduction of TPACK framework introduced by Mishra and Koehler [5]. The Technological Pedagogical Content Knowledge (TPACK) framework, states that the essential attributes of integrating ICT with other subjects is to make the teacher possess technological knowledge and pedagogical and subject knowledge integrating with the former and incorporating into the latter and it is due to this integration that effective ICT integration is facilitated. Subsequent research by [6], [7] revealed that whilst a number of teachers understand the use of technology tools, they tend to have trouble with the application in the practical classroom setting even with their technological competence, which implies that technological competence alone is ineffective without institutional support and applied pedagogical training.

2.2. Haryana Context and the Conceptual Framework

According to the evidence provided by SCERT Haryana [8], such districts as Gurugram, Panipat and Rewari are in a comparatively better position to develop ICT ecosystem but at the same time, infrastructural and institutional issues are still affecting districts like Mewat and Mahendergarh. The theoretical framework of the proposed study is a combination of TAM [3], TPACK [5], Diffusion of Innovation [4], and digital divide/capability views to describe how ICT integration is influenced by a combination of teacher attitudes, competence, and institutional conditions. Preference-practice gap is a result of differences between positive attitudes and sufficient competence, favorable institutional environment, or enabling infrastructure, which is not a result of difference in attitude alone but differences in capability. The framework is used to inform the analysis by categorizing attitudinational and structural constraints, explaining difference between the districts in terms of different sets of capabilities and diffusion settings, and directly connecting patterns shown to system-level policy levers like teacher professional development and ICT procurement models.

2.3. Barriers to ICT Integration in Schools

Ertmer categorised barriers to ICT integration into first-order barriers which are external like lack of access to computers, poor internet connectivity and poor infrastructure, and second-order barriers which are internal like teacher beliefs, confidence and resistance to change. Expanding this, Hew and Brush [9] have shown that the adoption of technology is not a technical only problem but an organizational and systemic problem, where institutional culture, and school leadership have significant contributions. Krumsvik [10], also suggested that teacher digital competence was scaffolded by gradual practice and self-reflective learning as opposed to workshops. With a critical comment, Selwyn noted that educational technology policies tend to ignore underlying socio-economic disparities and institution realities and access to technology does not necessarily translate to education change [11].

2.4. ICT Integration in the Indian Educational Context

Digital education has emerged as a key policy focus in India via policy initiatives, including ICT@Schools, Digital India, PM evida, and DIKSHA. The NCERT [12] has acknowledged the need to use ICT in learning in schools and has admitted that there are still imbalanced implementations in learning in different states and school systems. A number of Indian investigations have indicated that there is a huge disparity between the wishes of policy and the reality of the classroom. Sharma [13] discovered that although the perceptions of Indian teachers towards ICT are mostly positive, the support infrastructures and training are needed more by teachers in rural areas. Rawal [14] highlighted the fact that digital infrastructure and teacher digital competence must be developed to influence the stakeholders towards further digital integration. Lotha and Vinoth [15] found endemic challenges such as the digital divide, insufficiency of infrastructure, and deficiency of digital skills, among teachers and students.

2.5. Digital Divide and Regional Disparities

According to reports carried out by NITI Aayog [16], there are significant disparities between urban and rural schools in relation to ICT infrastructure and internet availability as well as competence of teachers. Findings by Singhavi and Basargekar [17] revealed that teachers of the regional medium in Maharashtra have low intentions of using ICT in classroom due to partially separate reasons such as access

to more content in the English language. The analysis presented by [18] demonstrated a long-standing digital divide between urban and rural schools and even within the latter, a subdivision of rural schools with limited resources or in less well-off neighborhoods revealed that they have a more significant ICT access barrier and thus have a threat of further increasing the existing educational gap.

3. METHODOLOGY

3.1. Study Context and Design

This research paper is contextualized under the ICT Schools scheme [2], a scheme that commenced its operations in 2004 with the aim of bringing ICT infrastructure, digital contents and teacher training in secondary as well as senior secondary schools, which are later revised in 2010. In Haryana, the scheme provides 3,170 schools of the government in 21 districts and in two phases by combining some government run services with outsourced services. The current study maintains the descriptive, analytical survey design, which is mostly quantitative, through structured survey questionnaires which will be distributed at the school level and qualitative data, in the form of interviews and focus groups discussions, will supplement the data gathered by the questionnaires.

3.2. Study Area and Sampling

The entire list of 3,170 ICT Schools in the 21 districts was stratified and used as a random sampling technique. Schools were differentiated in terms of district and rural/urban setting, type of school (boys, girls or co-educational), and level of school (high or senior secondary). Out of this population, 483 schools were chosen - about 15 percent of all the ICT Schools in Haryana - the schools were distributed in same proportion to each district. The last sample included 367 rural schools, 116 urban schools; 175 girls schools and 308 co-educational schools; 84 of middle schools and 399 of high/senior secondary schools.

3.3. Respondents and Data Sources

Four respondent groups were developed (a) 483 school principals who provided data on the infrastructure status of ICT in schools and the institutional arrangements; (b) 483 computer/ICT teachers who data on equipment access, perceived barriers; (c) 966 subject teachers (two per school) who data on ICT training, competence and classroom use; and (d) 2,415 students (five per school) who data on ICT enabled learning. We also conducted five semi-structured focus group discussions (FGDs) among District Education Officer, District ICT coordinators, school principals and teachers. The secondary data was collected in the Department of School Education, Government of Haryana, UTKARSH Society, and Samagra Shiksha records.

3.4. Data Analysis

Descriptive statistics (frequencies, percentages, means and standard deviations) were used in analyzing quantitative data. The related cross-tabulations and independent samples t-tests were utilized to compare urban schools with rural ones and investigate the differences at a district level. Interpretation of qualitative data (interviews and FGDs), included the use of thematic analysis, and the central themes covered included termination of contract, period of maintenance, workload limitation and perceived mismatch with classroom realities to training inputs. The patterns at the district level were investigated through summing of school-level indicators to determine comparatively high- and low-readiness districts.

3.5. Ethical Considerations

They gathered data by the consent of the state education authorities and were studied on the basis of informed consent of principals, teachers and students. The respondents were guaranteed that the data they provided would not be disclosed to a third party besides the study but that they would be provided in an aggregate mode without identifying the specific schools or teachers.

4. RESULTS AND DISCUSSION

4.1. Teacher ICT Attitudes and the Preference–Practice Gap

Attitudinal scores of teachers and principals in sampled government schools in Haryana are high-end, indicating a positive attitude towards ICT. Approximately 85 and 87 percent of teachers think that ICT can enhance both the quality of learning and teaching, more than 80 percent of the teachers associate ICT with student involvement and creativity. The use of ICT in administrative tasks is also widely accepted among principals with 71 percent of those indicating that they regularly use ICT in their administrative work.

Nevertheless, such good orientation fails to result in regular classroom application. The proportion of schools claiming high levels of basic computer proficiency in teachers is only 23 percent with almost half of teachers still opting to teach by blackboard. ICT is utilized more on communication than pedagogy with only a little more than a quarter of it preparing digital learning materials. The difference between the attitudinal endorsement and actual practice in all indicators as indicated in Table 1 is dismal.

Table 1. Attitudes vs Practice Indicators

Indicator	High/Agree (%)	Medium (%)	Low/Other (%)
ICT improves learning	85	—	—
ICT improves teaching quality	87	—	—
Student participation improves	81	—	—
Teacher computer proficiency	23	45	28
Preference for ICT teaching	39	—	49 (traditional)
Preparation of digital materials	27	—	—

As shown in Figure 1, the contrast between attitudinal indicators (85–87%) and practice indicators (23–39%) reveals the magnitude of the preference–practice gap.

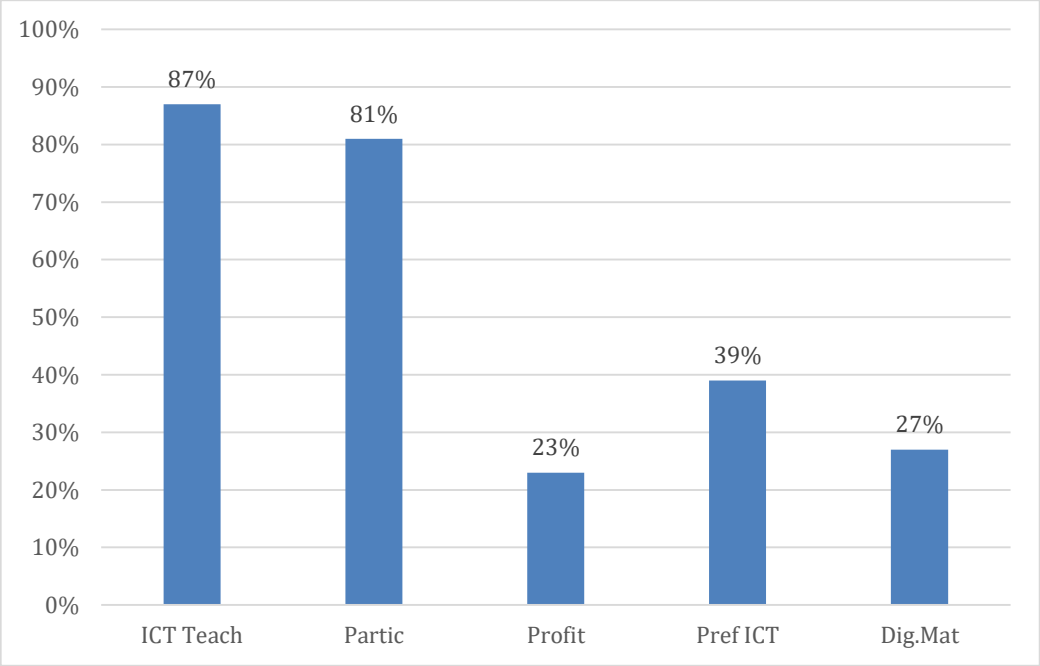

Figure 1. Teacher ICT Attitudes vs Classroom Use (%)

The functional use is also the gap. The ICT as we can see in Table 2 is extensively used in the conduct of admissions and office duties (80 percent) but in the enrichment of content and remedial teaching, it is crucely obsolete.

Table 2. ICT Use by Function (Principals)

Function	High Use (%)	Low/No Use (%)
Admissions & office work	80	—
Content enrichment	29	60
Remedial teaching	27	60

4.2. Training, Competence, and Perceived Need

There is an acute lack of ICT training coverage on a state level. Just around 13 percent of teachers and 30 percent of principals have undergone ICT training (non-teaching staff coverage is even less at 7 percent) as can be seen in Table 3. There are acute disparities in training access, at the level of district. Nevertheless, training is much in demand: according to Table 4, 75 percent of teacher's state that they need ICT training, and those districts characterized by low access to training indicate the greatest demand.

Table 3. ICT Training Coverage

Category	Trained (%)	Not Trained (%)
Teachers	13	87
Principals	30	66
Non-teaching staff	7	93

Table 4. Teacher Perception of Training Need

Response	Percentage (%)
Agree	75
Partially agree	11
Disagree	10
No response	4

The gap in training, as depicted in Figure 2, is highest with the non-teaching staff (93% untrained) and then the teachers (87% untrained) but still poorer with the principals.

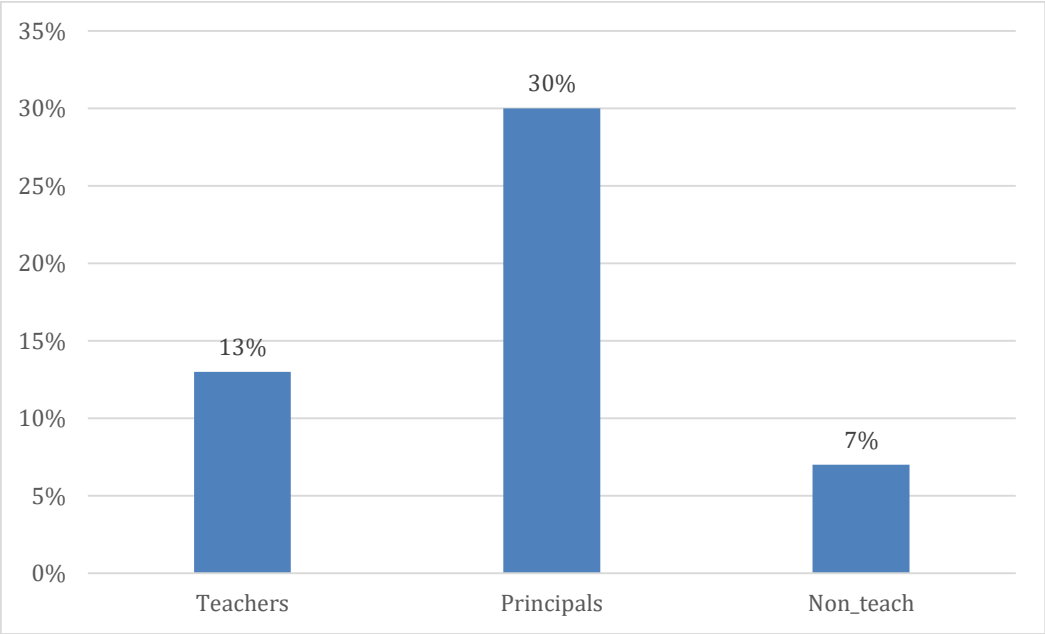

Figure 2. ICT Training Coverage by Stakeholder (%)

Computer teachers demonstrate high competence (about 80 percent high proficiency), but do not have the role of trying to work closely with other teachers. This division within the institution discourages

development of TPACK [5] - blending of technological, pedagogical, and content knowledge - needed to have competence in making efficient use of ICT in classrooms.

4.3. Infrastructure, Functionality, and Institutional Arrangements

Increasingly installed ICT infrastructure is yet to be distributed equally. On average only 56 percent of the number of computers is operational, as indicated in Table 5, there is a large variation by district. Panipat, with a high-performing level, attains a functional rate of about 90 percent and Mewat, with low performance, has much lower rates.

Table 5. ICT Infrastructure Status

Indicator	Percentage (%)
Functional computers (average)	56
High-function districts (e.g., Panipat)	~90
Low-function districts (e.g., Mewat)	Significantly lower

There is also limited access to the internet. According to Table 6, connection of computers via official internet channels is only 11 percent. Teachers, as shown in Figure 3, use LAN connections (41%) and personal or official dongles (23% and 19% respectively) the most to connect.

Table 6. Internet Connectivity

Type of Access	Percentage (%)
Functional internet-enabled computers	11
LAN connection	41
Personal dongle/mobile	23
Official dongle	19

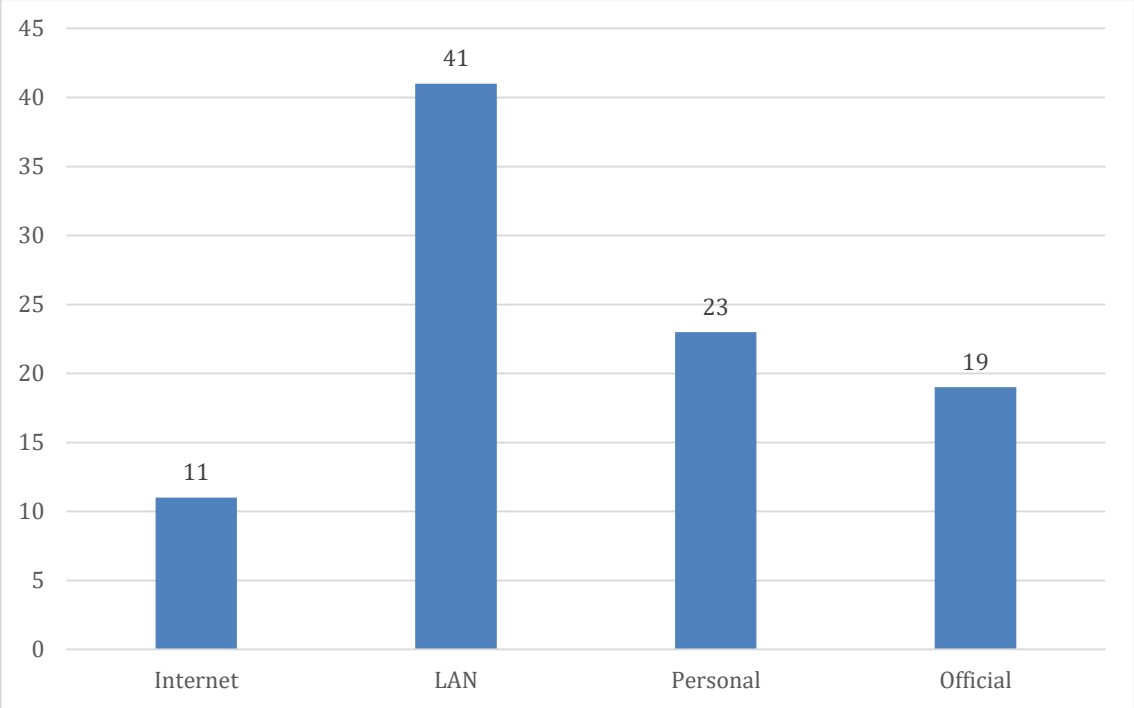

Figure 3. Internet Connectivity in Schools (%)

At school level, as demonstrated in Table 7, most schools rely on outsourced computer teachers (63 percent) with only 4 percent employing permanent computer teachers. Such unstable setup brings in

instability in both technical support and maintenance and is a direct cause of the low functionality rates that can be witnessed all across the state.

Table 7. Computer Teacher Availability

Category	Percentage (%)
Permanent	4
Outsourced	63
Other/uncertain	33

4.4. District-Wise Patterns in ICT Readiness and Usage

Districts like Panipat, Gurugram and Hisar are rather more ICT prepared with increased training access, improved infrastructure, and more utilization [19]. However, in these regions, there is a minor way difference in the gap between positive attitudes and actual use. Conversely, lower functionality, a lack of training and extensive reliance on personal connectivity, are seen in those districts such as Mewat and Mahendergarh, which have created a greater divide despite the high level of teacher interest [20]. The size of the preference-practice gap is mainly determined by the district performance in terms of infrastructure and training as depicted in Table 8.

Table 8. District Comparison

District Type	Infrastructure	Training	ICT Use	Gap Level
High-performing	High	Moderate–High	Moderate–High	Narrow
Low-performing	Low	Low	Low	Wide

The use of ICT is also still skewed towards administration and not pedagogy across the districts. Table 9 reveals that library management and laboratory management has a high non-use rate of about 50 percent, this means that still ICT is yet to penetrate more than the basic administrative functions of most schools.

Table 9. ICT Use in School Functions

Function	High Use (%)	No Use (%)
Library management	14	~50
Laboratory management	19	~50

4.5. Teacher Confidence, Digital Culture, and Classroom Implementation

Teachers are overwhelmingly of the opinion that ICT positively increases classroom engagement (78 percent agreement) in resource-constrained districts, too. Nevertheless, in normal classroom applications of ICT, the situation is quite low as revealed by Table 10, with the application varying widely among schools. This gap indicates the difference between the perceived usefulness (high) and perceived ease of use (limited through inadequate infrastructure, lack of training and time demands related to examination-oriented curricula) much like TAM would say [3], [21].

Table 10. Perception vs Use

Indicator	Percentage (%)
ICT makes lessons engaging	78
Frequent classroom ICT use	Limited (varies by district)

The school culture and leadership has a significant impact on ICT adoption [22]. Even in schools that have comparable levels of infrastructure, there are greater classroom integration in schools with supportive principals and collaborative practices. The teacher, principal and student feedbacks all show that the use of ICT in classrooms is not a regular practice. In general, the preference practice gap is not the

unwillingness of teachers, but rather the mixture of a shortage of training, unequal infrastructure, and the lack of the institutional support of the concept [23].

4.6. Discussion

The results support that there is indeed a preference-practice gap in the Haryana government schools. According to TAM [3], ICT is perceived as useful with high ratings, but the perceived ease of use is low as most teachers do not have confidence, support, and reliable access. Even with positive attitudes, the level of effort needed to utilize ICT is high with a mere 56 percent of the computers working and limited to only 11 percent with the internet. TPACK [5] can be used to understand why ICT is utilized on administration more than on subject teaching principals and office staff primarily use ICT to make admissions and records in cases where the subject knows the technical information and requires an integrated technological, pedagogical and content knowledge that most teachers have not had the time to develop.

The Diffusion of Innovation Theory [4] is no exception: in well-performing districts, like Panipat and Gurugram, where it is possible to have functional equipment, better training, and exposure of principals, early adopters can be used to impact their colleagues, whereas in districts like Mewat, where the infrastructure is weak and the system of supports is fragile, only a few people can be interested in using ICT. The capability approach [20] shows that it is not simply access but usable access where the teachers and students of Mewat have high positive impressions of ICT despite poor infrastructure that shows high aspirations but lack real opportunities to use technology to meaningfully. It will also take capacity building over the long-run, maintenance of infrastructures, and encouraging institutional arrangements but not single ICT input to narrow the preference and practice gap.

5. CONCLUSION

The current study has investigated the preference practice mismatch in teacher ICT preparedness of 483 government schools in Haryana. The results indicate that the use of ICT in most schools is either sporadic or minimal and is mostly used in the administrative department, yet traditional teaching methods are still predominant when it comes to the classroom. The disparities in the quality of infrastructures, internet dependability, technical support, school leadership and training prospects determine ICT utilization patterns across the districts.

With TAM and TPACK, Diffusion of innovation Theory, views on digital divide and the capability approach integrated, as well as in the study; evidence of factor forming the teacher ICT readiness is not only an individual level competency or attitude but rather the broader educational context. The results refute naive beliefs that the reason why ICT is not used high in government schools is mainly because of teacher opposition. Digital integration cannot prior to provision of infrastructure to be meaningful.

It is sustainable because it relies upon: (a) cycles of continuous professional development (CPD) at the district level which combines modular training, mentoring of peers, and in-classroom demonstrations of ICT use and application; (b) leadership development programmes of principals that facilitate digital management and monitoring of ICT use; (c) stabilisation of ICT facilities through maintenance monitoring systems and clearer accountability provision in outsourced service contracts; (d) measures of pedagogic use that are more discrete than the hardware-based measures; (e) district-differentiated ICT planning according to local infrastructural circumstances and teacher levels of readiness. These policy directions echo the priorities of NEP 2020 on teacher professional development, digital infrastructure, equity, though they place them differently and emphasize the fundamental challenge that transformative positive attitudes into applied capability and enduring instructional application.

Acknowledgments

The authors have no specific acknowledgments to make for this research.

Funding Information

This research received no specific grant from any funding agency in the public, commercial, or not-for-profit sectors.

Author Contributions Statement

Name of Author	C	M	So	Va	Fo	I	R	D	O	E	Vi	Su	P	Fu
Dr. Manoj Kaushik	✓	✓	✓	✓		✓		✓	✓	✓	✓	✓	✓	✓
Prof. Sharad Sinha	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	

C : **C**onceptualization
M : **M**ethodology
So : **So**ftware
Va : **Va**lidation
Fo : **Fo**rmal analysis
I : **I**nvestigation
R : **R**esources
D : **D**ata Curation
O : Writing - **O**riginal Draft
E : Writing - Review & **E**diting
Vi : **Vi**sualization
Su : **Su**pervision
P : **P**roject administration
Fu : **Fu**nding acquisition

Conflict of Interest Statement

The authors declare that there are no conflicts of interest regarding the publication of this paper.

Informed Consent

All participants were informed about the purpose of the study and their voluntary consent was obtained prior to data collection.

Ethical Approval

Formal ethical approval was not required for this study as it involved voluntary participation and anonymous questionnaire responses from participants. The research was conducted in accordance with general ethical principles for research involving human participants.

Data Availability

The data that support the findings of this study are available from the corresponding author upon reasonable request.

REFERENCES

[1] M. J. Koehler, P. Mishra, and W. Cain, 'What is technological pedagogical content knowledge (TPACK)?', J. Educ., vol. 193, no. 3, pp. 13-19, Oct. 2013. doi.org/10.1177/002205741319300303

[2] P. A. Ertmer and A. T. Ottenbreit-Leftwich, 'Teacher technology change', J. Res. Technol. Educ., vol. 42, no. 3, pp. 255-284, Mar. 2010. doi.org/10.1080/15391523.2010.10782551

[3] P. A. Ertmer, 'Addressing first- and second-order barriers to change: Strategies for technology integration', Educ. Technol. Res. Dev., vol. 47, no. 4, pp. 47-61, Dec. 1999. doi.org/10.1007/BF02299597

[4] K. F. Hew and T. Brush, 'Integrating technology into K-12 teaching and learning: current knowledge gaps and recommendations for future research', Educ. Technol. Res. Dev., vol. 55, no. 3, pp. 223-252, June 2007. doi.org/10.1007/s11423-006-9022-5

[5] P. Mishra and M. J. Koehler, 'Technological pedagogical content knowledge: A framework for teacher knowledge', Teachers College Record, vol. 108, no. 6, pp. 1017-1054, June 2006. doi.org/10.1177/016146810610800610

[6] J. Voogt, O. Erstad, C. Dede, and P. Mishra, 'Challenges to learning and schooling in the digital networked world of the 21st century', Journal of Computer Assisted Learning, vol. 29, no. 5, pp. 403-413, Oct. 2013. doi.org/10.1111/jcal.12029

[7] M. J. Koehler, P. Mishra, K. Kereluik, T. S. Shin, and C. R. Graham, The Technological Pedagogical Content Knowledge Framework. New York, NY, USA: Springer, 2014, pp. 101-111. doi.org/10.1007/978-1-4614-3185-5_9

[8] N. Selwyn, 'The use of computer technology in university teaching and learning: a critical perspective', J. Comput. Assist. Learn., vol. 23, no. 2, pp. 83-94, Apr. 2007. doi.org/10.1111/j.1365-2729.2006.00204.x

[9] K. F. Hew and T. Brush, 'Integrating technology into K-12 teaching and learning: Current knowledge gaps and recommendations for future research', Educational Technology Research and Development, vol. 55, no. 3, pp. 223-252, June 2007. doi.org/10.1007/s11423-006-9022-5

[10] R. J. Krumsvik, 'Situated learning and teachers' digital competence', Education and Information Technologies, vol. 13, no. 4, pp. 279-290, Dec. 2008. doi.org/10.1007/s10639-008-9069-5

[11] V. Venkatesh and F. D. Davis, 'A theoretical extension of the Technology Acceptance Model: Four longitudinal field studies', Manage. Sci., vol. 46, no. 2, pp. 186-204, Feb. 2000. doi.org/10.1287/mnsc.46.2.186.11926

[12] V. Venkatesh, M. G. Morris, G. B. Davis, and F. D. Davis, 'User acceptance of information technology: Toward A unified View1', Manag. Inf. Syst. Q., vol. 27, no. 3, pp. 425-478, Sept. 2003. doi.org/10.2307/30036540

[13] T. Teo, 'Modelling technology acceptance in education: A study of pre-service teachers', Comput. Educ., vol. 52, no. 2, pp. 302-312, Feb. 2009. doi.org/10.1016/j.compedu.2008.08.006

[14] 'Mapping of school teachers' digital competency in the context of digital infrastructure: A systematic review and empirical study of India', Journal of Professional Capital and Community, vol. 9, no. 3, pp. 173-195, Aug. 2024. doi.org/10.1108/JPCC-01-2024-0016

[15] T. Teo, 'Factors influencing teachers' intention to use technology: Model development and test', Comput. Educ., vol. 57, no. 4, pp. 2432-2440, Dec. 2011. doi.org/10.1016/j.compedu.2011.06.008

[16] J. Voogt, P. Fisser, N. Pareja Roblin, J. Tondeur, and J. van Braak, 'Technological pedagogical content knowledge - a review of the literature', J. Comput. Assist. Learn., vol. 29, no. 2, pp. 109-121, Apr. 2013. doi.org/10.1111/j.1365-2729.2012.00487.x

[17] D. C. Nielsen, A. L. Barry, and P. T. Staab, 'Teachers' reflections of professional change during a literacy-reform initiative', Teach. Teach. Educ., vol. 24, no. 5, pp. 1288-1303, July 2008. doi.org/10.1016/j.tate.2007.01.015

[18] N. Singh, 'Bridging the digital divide: A comprehensive analysis of ICT infrastructure in rural schools of Jharkhand, India', Theory and Practice, vol. 30, no. 6, pp. 4456-4460, June 2024. doi.org/10.53555/kuey.v30i6.7279

[19] P. A. Ertmer, 'Addressing first- and second-order barriers to change: Strategies for technology integration', Educational Technology Research and Development, vol. 47, no. 4, pp. 47-61, Dec. 1999. doi.org/10.1007/BF02299597

[20] J. Tondeur, J. van Braak, G. Sang, J. Voogt, P. Fisser, and A. Ottenbreit-Leftwich, 'Preparing pre-service teachers to integrate technology in education: A synthesis of qualitative evidence', Comput. Educ., vol. 59, no. 1, pp. 134-144, Aug. 2012. doi.org/10.1016/j.compedu.2011.10.009

[21] M. Drent and M. Meelissen, 'Which factors obstruct or stimulate teacher educators to use ICT innovatively?', Comput. Educ., vol. 51, no. 1, pp. 187-199, Aug. 2008. doi.org/10.1016/j.compedu.2007.05.001

[22] Schleicher, Valuing our Teachers and Raising their Status: How Communities Can Help. Paris, France: OECD Publishing, 2018. doi.org/10.1787/9789264292697-en

[23] J. E. Lawrence and U. A. Tar, 'Factors that influence teachers' adoption and integration of ICT in teaching/learning process', EMI Educ. Media Int., vol. 55, no. 1, pp. 79-105, Jan. 2018. doi.org/10.1080/09523987.2018.1439712

How to Cite: Dr. Manoj Kaushik, Prof. Sharad Sinha. (2026). Teacher's ICT readiness and the preference–practice gap: Evidence from Haryana government schools. Journal of Multidisciplinary Cases (JMC), 6(2), 1-12. https://doi.org/10.55529/jmc.62.1.12

BIOGRAPHIE OF AUTHORS

	**Dr. Manoj Kaushik**, is the Head of the Educational Technology Department and DIETs Wing at the State Council of Educational Research and Training (SCERT) Haryana, Gurugram. He holds a Ph.D. in Educational Technology from Mewar University, alongside post-graduate degrees in Physics and Computer Applications. With over three decades of experience in the school education ecosystem, Dr. Kaushik specializes in ICT integration, teacher professional development, and digital pedagogy aligned with NEP 2020. He serves as the State Nodal Officer for national digital initiatives including DIKSHA and frequently acts as a core resource person for CIET-NCERT. His research interests lie at the intersection of action research, classroom observation frameworks, and the deployment of educational technologies. He has represented the state at numerous national seminars and contributes extensively to curriculum and e-content development frameworks. Email: manoj_kaushik6171@yahoo.com
	**Prof. Sharad Sinha**, is Professor and Head, Department of Teacher Education (DTE), NIE, NCERT, New Delhi. With over 32 years of experience in teacher education, curriculum development, research, and academic leadership, she has made significant contributions to national initiatives such as NISHTHA, NPST and National Mentoring Mission. She has worked extensively with the Ministry of Education, SCERTs, and DIETs to strengthen teacher professional development and educational quality. An accomplished scholar and keynote speaker, she continues to play a vital role in advancing teacher education and educational reform in India. Email: drsharadsinha@gmail.com