

Research Paper

Teachers' Perceptions and Use of Government-Led Digital Learning Initiatives in Rural Schools: Evidence from India

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ABSTRACT

Digital learning is frequently posed as a means of enhancing access, continuity, and inclusion. Nevertheless, its application is not even in resource-restricted school environments. It is against this background that the paper examines the awareness, perceptions, and usage by rural teachers in India, specifically PM eVIDYA and DIKSHA, a government led digital initiative. Based on the data in interviews, it examines the way these initiatives are in fact adopted in classroom practice. What is passed through is a little ambivalent. Teachers, most of the time, agree on the pedagogical usefulness of digital tools, but they are more selective and prone to use the formal platforms as supplements. The digital resources are often supplemented to the already existing techniques instead of transforming them in most situations. This trend appears to be tightly linked to the contextual factors, such as the lack of infrastructure, gaps in the sustained training, inequitable access at home, and, in some cases, partial awareness of the larger digital ecosystem. Simultaneously, the teachers are not bound by these conditions. They adapt. Others are self-learners, and others have incorporated both digital and traditional techniques in a manner that may not seem overwhelming to their contexts. These responses, though practical, also hint at the limits of top-down implementation. Taken together, the study suggests that the success of public digital initiatives depends on more than platform availability. The support of teachers and consideration of local realities appear to be no less needed and even more.

Keywords: *Digital Initiatives in Education, Digital Learning, Rural Schools*

Recent debates about education are cycling back to a single point, which is that the definition of good teaching is changing, but maybe not as cleanly as policy documents make it appear. The call to view digital technologies in not as an addition, but as a kind of a daily pedagogical element, something capable of aiding more active and meaningful learning, is growing louder and louder (Abedi et al., 2024). This would be theoretically appealing. Practically it puts teachers in a rather challenging position. They are no longer mere content providers. They are supposed to interpret, adapt and even re-design materials with digital tools to fit extremely different type of students. This change also foreshadows a more general redesign of the role of the teacher. Teaching starts to

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resemble less like transmission and more like facilitation, in which the emphasis is placed upon creating learning experiences, as opposed to just going through the syllabus (Alberola et al., 2021). This is also reflected in policy. Indicatively, the National Education Policy 2020 is very explicit about digital literacy, critical thinking, creativity and experiential learning as key components of schooling (Dhawale, 2023; Sharma, R., & Singh, A., 2021). Coupled with international actions like SDG 4, an apparent effort is being made to put digital initiatives in place as a means of increasing access and equipping students with more interconnected world readiness (Ram D., 2021). However, these aspirations do not easily find their way into the daily classroom practice. The gap between policy and practice becomes especially visible in rural contexts (Venugopal, 2025). Although some urban schools are able to match these expectations closer, usually because of the development of better infrastructure, rural schools have to be able to operate within a smaller range (Dhawale, 2023). And it is not just a matter of devices or access to the internet. Training, awareness, and the mere familiarity of teachers with experimenting with new tools are questions, too, (Islim et al., 2018). What is practically feasible in a classroom in most rural environments is still influenced by unreliable connectivity or the lack of broadband connectivity (Kormos, 2021). And this is why the perceptions of the teachers begin to become very tangible. Their everyday experiences of using digital platforms do not only affect the question of use of these tools, but also how they are used. Large-scale initiatives like PM eVIDYA and DIKSHA depend, to a large extent, on these individual negotiations. A teacher who chooses to show a short video, to send notes on WhatsApp, or to rely on the textbook is already determining the policy on the ground. Even sites like YouTube are a part of this informal ecosystem.

There is, of course, a tendency to make technology appear as the answer to old problems in the rural education. Such an optimism is not altogether false. Nevertheless, it runs the risk of ignoring the reality of the uneven and contextualized digital integration. The novelty of this study is that it attempts to shun the approach of viewing ICT as an issue of mere availability. Rather, it takes a very close examination of the way teachers interact with certain tools, how they adapt, how they stall and occasionally operate within constraints. In this sense, digital integration would not be as much about infrastructure but rather practice. The study, therefore, focuses on how teachers in rural schools understand and use initiatives like PM eVIDYA and DIKSHA in their everyday teaching. The research questions that follow are shaped by this concern, trying to apprehend not just what is available, but what is actually happening in classrooms.

Research Questions

- **RQ1.**What is the perception of teachers in rural schools to government digital programs like PM eVIDYA and DIKSHA?
- **RQ2.** What is the uptake and integration of government digital initiatives and other digital platforms in the teaching practices of teachers in rural schools?
- **RQ3.**Which are the challenges that teachers in rural locations face when they embrace digital learning platforms, especially with regard to infrastructure, training, and parental support.

Objectives

1. To explore the perception of government digital programs such as DIKSHA and PM eVIDYA by rural teachers.

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2. To assess the utilization of government digital programs and other digital resources (such as YouTube) in rural classrooms.
3. To determine the infrastructure, training and parental support challenges teachers face when introducing digital learning platforms in rural settings.

LITERATURE REVIEW

Digital Learning and Government Led Educational Initiatives in School Education.

Digital learning has increasingly been seen as a key to improving access, continuity, and quality in school education, particularly in policy-based reform agendas (Dinc, 2019; Srivastava & Dey, 2018). Digitalisation has gained growing significance in India because of technological-based education practices and overall educational reform initiatives, especially those pertaining to equity and lifelong provision of education (Ram, 2021; Kalyan Dhawale et al., 2023). It has been found that the presence of digital initiatives in policy does not necessarily lead to their successful implementation, especially in settings with limited resources (Khanapurkar, 2020; Venugopal et al., 2025). Furthermore, there is a systematic evidence that the extent of the match between institutional planning, infrastructural support, and contextual adaptation and policy expectations dictate the effectiveness of educational outcomes of digital platforms (Mustafa et al., 2024; Perrotta, 2013). Accordingly, recent studies suggest that it is imperative to research digital efforts not only as a policy, but also as a behavior affected by institutional and contextual factors.

Awareness, Perceptions of Digital Learning, and Teacher Readiness.

According to the literature, teachers play a fundamental role in the successful implementation of digital learning programs, and their acceptance mainly hinges on their awareness, beliefs, confidence, and pedagogical readiness (Abedi et al., 2024; Alberola-Mulet et al., 2021; Mwalongo, 2011). The positive orientation is a factor that does not guarantee the long-term use of the digital resources, but teachers often consider digital resources as useful in explaining, engaging, and providing additional assistance (Istiana Sari et al., 2017; Jannah et al., 2020; Kaur and Kaur, 2019). More studies also show that perceived utility, self-efficacy, institutional support, and opportunities of considerable professional development are also factors that influence the adoption of technology beyond exposure (Sharma and Saini, 2022; Hussain Sahito and Jabeen Khoso, 2021; Nasreen and Chaudhary, 2018). Here, teacher perception can be understood not only as the presence or the lack of acceptance, but a negotiated attitude towards digital practice depending on the context (Thanavathi, 2021; Sepadi et al., 2025).

Digital Teaching Practices and Platform Preferences of Teachers.

Research indicates that the digital practices of teachers are often peripheral, selective, and are shaped by classroom realities as opposed to merely official policy frameworks (Perrotta, 2013; Srivastava and Dey, 2018). The examples of blended methods involve digital resources to clarify a concept, revise it, or engage students but do not replace traditional education (Jannah et al., 2020; Kaur and Kaur, 2019). Moreover, regardless of the fact that these resources that are not the components of formal platform ecosystems, teachers tend to give preference to those that are readily available, easy to bring into the classroom, and effective (Alberola-Mulet et al., 2021; Mwalongo, 2011). As recent studies suggest, platform rigidity often does not play a significant role in the actual classroom usage compared to pedagogical convenience, usability, and instant applicability to the needs of students (Abedi et al., 2024; Sharma and Saini, 2022; Thanavathi, 2021).

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Digital Learning Barriers in Rural settings.

Much evidence has indicated that interrelated structural, institutional, and socioeconomic obstacles restrict digital learning in rural and low-resource settings. Infrastructure is one of the best-documented limitations and has been mentioned multiple times to be a barrier to sustained integration with Unreliable internet, insufficient electricity supply, limited functionality of devices, and lack of digital resources (Dinc, 2019; Wang, 2013; Ramnarain and Malope, 2023; Mustafa et al., 2024; Venugopal et al., In addition to this, certain researches have found out that digital inequality at home also exists, with access to digital learning opportunities largely determined by household income, parental education, availability of devices, and unequal family support (Azubuike, 2021; Venkataswamy, 2015; Kormos, 2021). The issues with the quality of training, usability, and the relevance of digital resources to the context are also noted in the literature, implying that the challenge is not only in the availability of resources but also in the fair and meaningful use of education (Jannah et al., 2020; Venugopal et al., 2025; Perrotta, 2013).

Adaptation, Self-Learning, and Contextual Coping by the Teachers.

Despite all these issues, it has been found that teachers often employ adaptive approaches to ensure some level of digital integration, particularly in situations where minimal support is provided (Mwalongo, 2011; Hussain Sahito and Jabeen Khoso, 2021). In the absence of formal institutional support, such coping mechanisms as situational improvisation, collaboration with peers, and self-education usually emerge (Sepadi et al., 2025; Wang, 2013). Literature suggests that flexibility should not be seen as a sign of efficiency in the system as teacher resilience compensates for the shortcomings rather than solving them (Abedi et al., 2024; Mustafa et al., 2024). Teacher agency may contribute to sustainability but cannot substitute for infrastructural, educational, and policy support needed for successful implementation, according to the research carried out in less fortunate regions (Kormos, 2021; Sharma & Saini, 2022; Venugopal et al., 2025).

Research Gap and Rationale of the current study.

Although there is a wide body of research discussing the issues of digital learning, teacher preparedness, and technology integration, gaps in the literature remain significant. The existing studies have primarily focused on general digital preparedness, overall trends in technology adoption, or blended learning environments; they have comparatively focused less on how digital learning programs are experienced and implemented within rural school settings with scarce resources (Kormos, 2021; Kelley and Knowles, 2016; Wang, 2013). Moreover, much of the existing literature on teacher perceptions and issues has been predominantly quantitative, offering limited information on how teachers conceptualize and negotiate digital initiatives in the context of their daily practice (Kaur and Kaur, 2019; Nasreen and Chaudhary, 2018; Sharma and Saini, 2022; Thanavathi, 2021). There has been little focus on lived engagement with government-led digital platforms by rural teachers despite recent studies starting to offer more context-sensitive qualitative views (Abedi et al., 2024; Alberola-Mulet et al., 2021). The existing literature addresses this gap by qualitatively exploring the issue of teacher awareness, perception, use, and implementation regarding PM eVIDYA and DIKSHA, a state-sponsored digital learning project in India.

METHODOLOGY

Research Design

The study is based on a qualitative approach, and it focuses on exploring the perspectives of teachers regarding the integration of digital technologies into the educational process. A

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qualitative design is appropriate because it will be possible to gain deeper insights into the experiences, interpretations, and thoughts of participants in the natural environment (Creswell, 2013). Even though quantitative surveys are prevalent in most of the studies conducted in this area to measure the level of awareness or attitudes toward technology, qualitative research enables researchers to explore the perceptions of educators towards digital initiatives and address the practical challenges in their daily practice (Mwalongo, 2011; Hussain Sahito and Jabeen Khoso, 2021). Consequently, the present research paper will be based on the stories of teachers on the application of platforms such as PM eVIDYA, DIKSHA, and other online learning technologies in classroom instruction.

Sample and Data Collection

Due to participant availability and administrative constraints, purposive sampling was used to select 20 school teachers for the study. The selected teachers were from three rural schools who were male and female respondents. The participants were teachers of different subjects from grades 6 to 12. Their ages range from 28 to 57 years with a teaching experience of 5 to 12 years. The differences in age, topic areas and teaching experience provided a range of different views on the use of digital technology in teaching.

Table 1. Participant profile and sampling details (N = 20 school teachers)

Characteristic	Description
Total participants	20 school teachers
Sampling method	Purposive sampling (due to administrative constraints and participant accessibility)
School context	Rural schools
Number of schools	3
Gender	Male and female teachers
Age range	28–57 years
Teaching experience	5–20 years
Classes taught	Grades 6–12
Subject background	Multiple subject areas

There was also a diversity in terms of age, teaching experience, grade levels and subject areas, which helped to support different views of digital technology integration in teaching practices.

Data Collection

The instruments used to collect the data were semi-structured interview which included eight open-ended questions that were aimed at reflecting the experience of teachers with digital technologies. It touched on the availability of devices and access to the internet, nature of training and institutional support and integration of digital tools into the classroom practice. Implementation issues, levels of parental support, self-directed learning plans of teachers, and inclusiveness of digital classrooms were also investigated in the schedule with the final conclusion on the recommendations of the participants to improve it. Each interview was allocated about fifteen to twenty minutes. The interviews were carried out at the free time of the teachers, during lunch time or after school as they are very busy. Specifically, when discussing their knowledge in the area of digital technologies, some of the participants appeared rather hesitant at first and appeared concerned about the consequences of their responses on their professional responsibilities. However, teachers were more relaxed and

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shared their experiences when the researcher guaranteed them of anonymity and confidentiality.

Data Analysis

In this research, the thematic analysis framework by Clarke and Braun (2013) is employed in order to reflect these context-specific and multi-faceted experiences. This will enable systematic exploration of common patterns, meanings, and perceptions emerging as a result of the narratives of teachers. Thematic analysis is the method of identifying common themes and patterns within the qualitative data. It does not rely on a particular theoretical or epistemological position as many qualitative methods do. It is a very versatile technique, which is a major advantage in view of the diversity of learning and teaching activities (Maguire, M., & Delahunt, B., 2017). The framework provides a structured but flexible way of understanding how teachers integrate PM eVIDYA into their routine teaching in recognition of the perceived benefits, pedagogical changes, and barriers to integration.

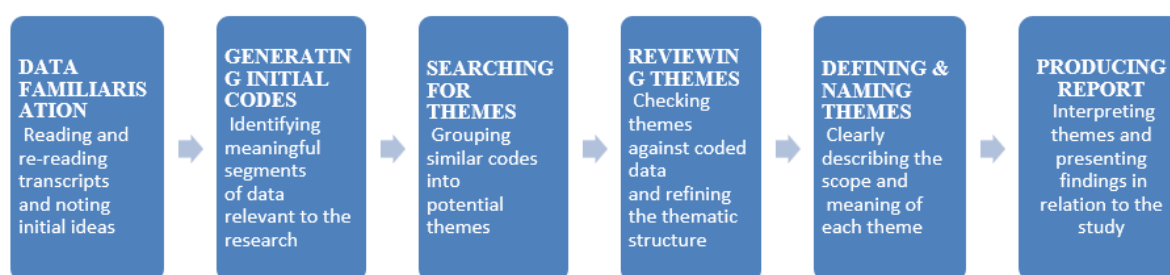


Figure1: Six Phases of Thematic Analysis (Braun & Clarke, 2006)

Other forms of validation, including close transcription, text re-reading of the interview transcripts and close contextualization were employed to augment the validity and credibility of the findings (Creswell, 2013). The school heads of the respective schools were approached and allowed to approve the study and assure them of confidentiality and anonymity.

Although the research questions were primarily based on understanding teacher awareness, classroom implementation, and impediments to implementation, the interview guide also contained questions that encouraged the participants to provide ideas of how digital learning strategies could be enhanced. These responses have not been conceptualized as a particular primary research purpose, but rather were held in thematic analysis as an emerging and practice based theme. They were deemed worthy to include because they reflected grounded perspectives of the teachers on what could enable digital projects to be more meaningful, available, and possible in the remote learning settings.

The interviews were recorded in Hindi and the extracts quoted was translated into English to enable the reporting of those interviews, but without altering the meaning, tone and context of what the participants said.

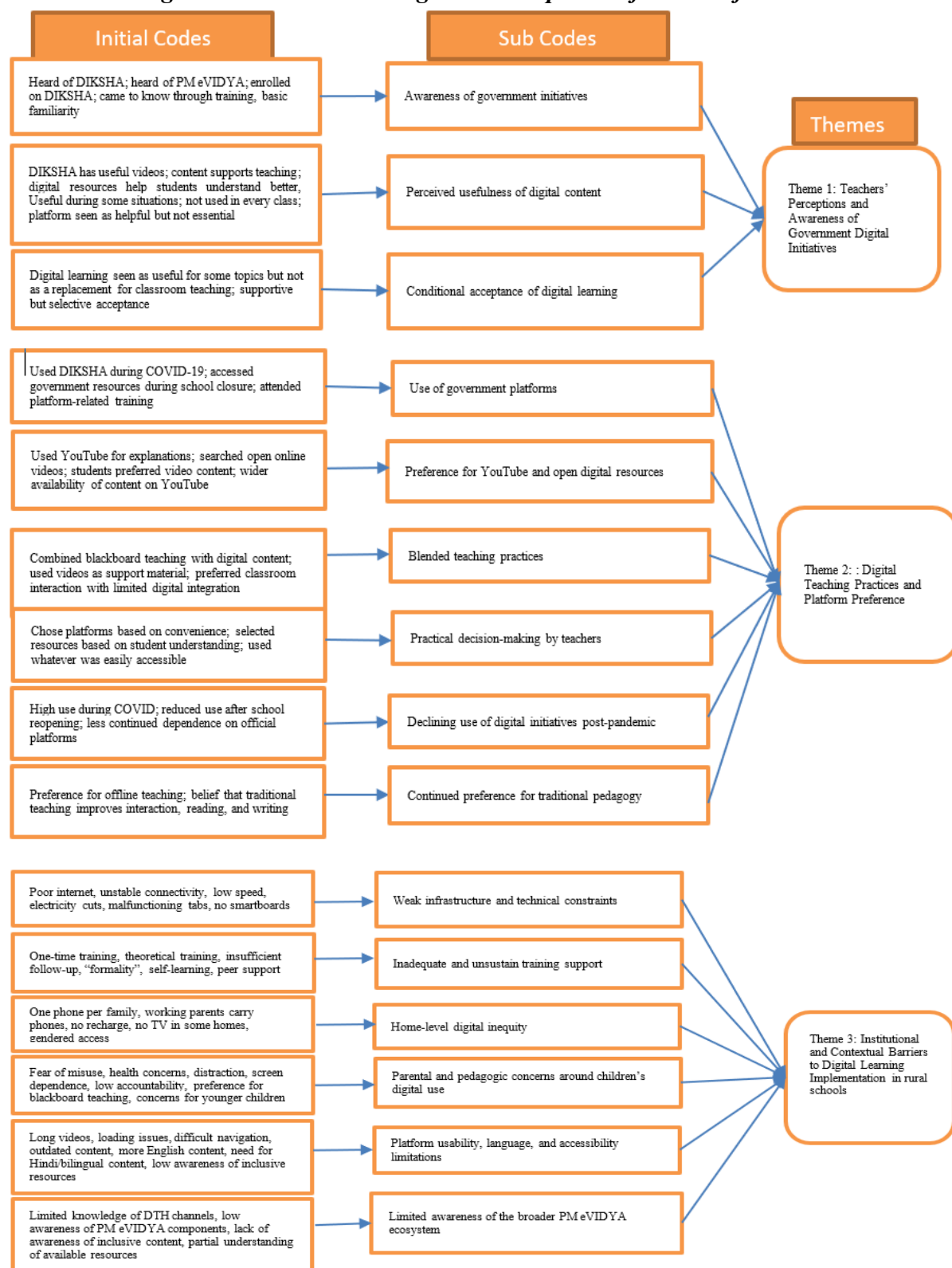
RESULT

The results are explained using themes and sub-themes emerged from the thematic analysis of interview data which is in accordance with Virginia Braun and Victoria Clarke (2012). Themes were generated by a recursive analysis of coded data excerpts and the exploration of

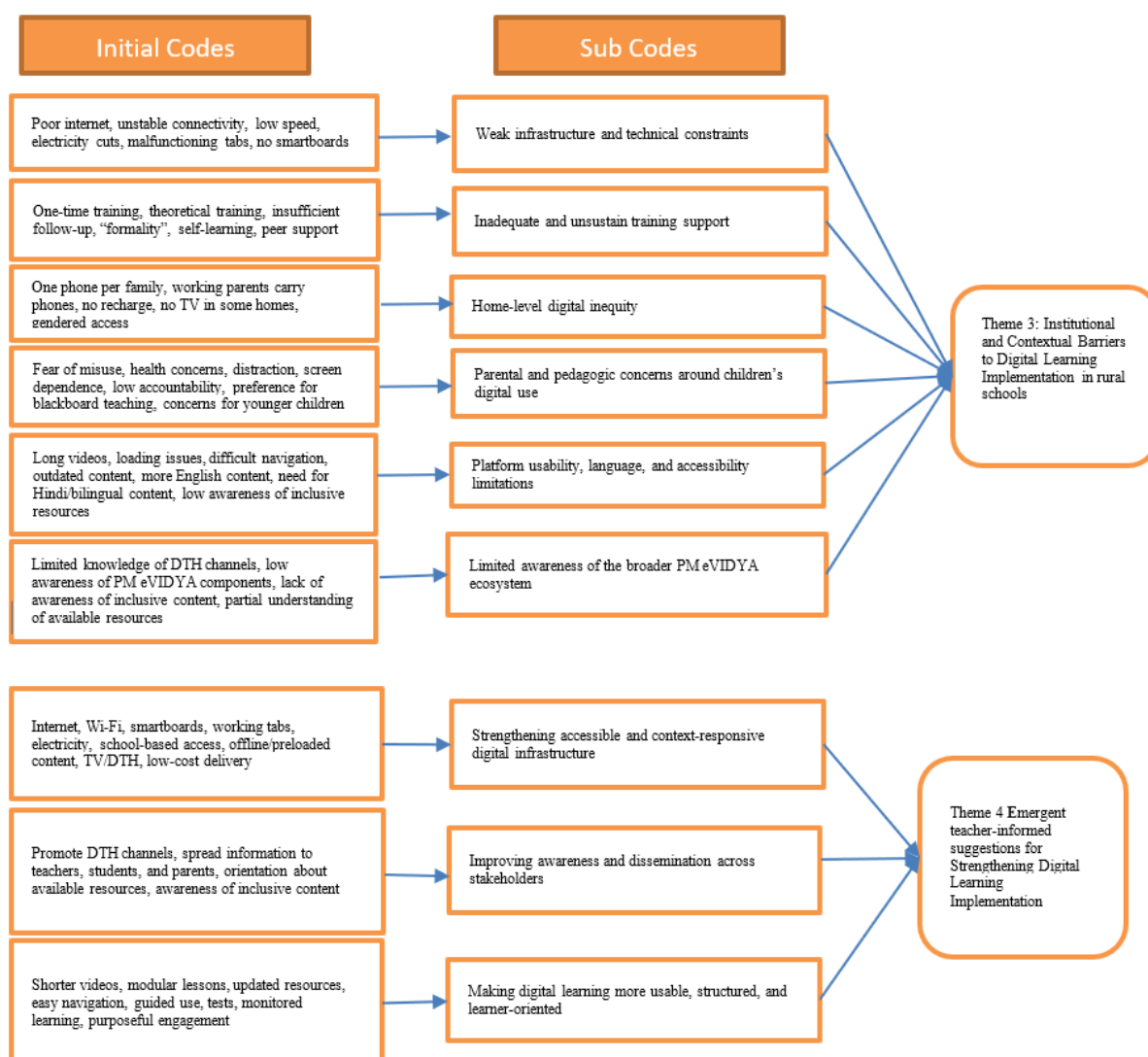
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their interconnections. The coding framework illustrating the progression from initial codes to sub-themes and overarching themes is presented in Table.

Table 2: Coding Framework Illustrating the Development of Themes from Interview Data



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The coding tree provides a general picture of the themes and sub-themes which came about as a result of organizing the interview data. Based on this analytical framework, the results are explained, in terms of themes, below with the support of the best examples of the response of the teachers.

Theme 1: Teacher Perceptions and awareness of Government Digital initiatives.

The data obtained during the interviews shows that most teachers possessed a fundamental to intermediate knowledge of the governmental digital programs, such as DIKSHA, PM eVIDYA, and NISHTHA. Many of the participants were accustomed to the platforms, attended different training sessions, or experienced them during the COVID-19 pandemic, which means that these programs have reached teachers in large numbers. For example T1 said: *“We enrolled on DIKSHA, and I found it beneficial for both teachers and students. Good videos are available on the platform.”*

T11 also explains: *“I came to know about it through training and many things about technology that we use during our teaching and learning comes through discussion with each other”*

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The views of teachers on the educational utility of these initiatives were generally positive especially in terms of the quality of the material and visual learning support. Some teachers state that the given content is helpful, friendly, and beneficial to the understanding of students. For example, T2 stated,

"The content and questions available on the platform are good, and I also recommend them to my students."

At the same time, the perception of educators suggested that they accepted digital learning but not necessarily unconditionally. Although they recognized its usefulness, most of them did not consider digital platforms to be a wholesome alternative to classroom teaching, but instead applicable only to certain themes, disciplines, or situations. For instance, T4 remarked,

"Digital learning is useful, but it cannot replace teaching completely; parents are fine with it only for some work or homework."

In a similar way, T15 stated, *"Some topics can be taught well through online methods, but both online and traditional teaching are necessary."*

Theme 2: Online Learning and platform preferences.

Although the former theme revolved around the awareness and impressions of digital efforts in teachers, the latter theme explores the way in which these resources have become actual teaching practices. The interview data indicate that a number of teachers reported that they utilized digital tools as a teaching structure only when necessary. For example, T15 stated, *"For some topics, online resources are useful, but not everything can be taught through them, beside that we don't have so much time to design our classroom teaching to incorporate these technologies on the day to day basis."*

A recurring theme within the interviews was that the teachers were more likely to use YouTube, as well as other open digital resources, than official government channels. These tools were often chosen due to their immediate availability, simplicity in explaining and better student understanding. For instance, T18 remarked,

"When we use different methods through YouTube, children understand concepts from different dimensions. There are many good websites and channels where good contents are available free of cost"

and T11 also stated, *"Children can understand better when we show them videos or explain through online examples. They love to be taught that way"*

Another finding that was brought out during the interviews was the continuation of blended learning, which involved only digital materials and face-to-face-teaching. Digital resources were not introduced until they were convenient and teachers were mostly left to rely on direct explanation, board work and classroom interaction. As T4 observed,

"We use both online and offline methods, because children understand better through the classroom interaction. We take them to the projector room where we explain them abstract ideas along with explaining everything on the blackboard".

Another significant aspect of digital practice by teachers was the platform of their choice to practice: rather than relying on formal policy frameworks, teachers seemed to select the material in a manner that was the least complicated and manageable, and immediately applicable to their classroom setting. As T13 stated, *"We use what is easy and available, because we do not always have time to prepare separately."*

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Similarly, T17 noted, *"If the content is easy to access and understandable, then we use it and also recommend it to students."*

Digital Learning Implementation and Institutional and Contextual Barriers to Digital Learning Implementation in rural schools.

Interpretation of interviews indicates that PM eVIDYA and other similar digital learning programs lacked access and sustained use because of structural and contextual barriers. Poor internet access, lack of digital infrastructure in school, electrical outages, and personal devices/hotspots were the most concerning. However, other schools had been offering digital devices, though teachers stressed that the enabling ecology was missing. T16 explained that digital tools were available *"only for saying that yes, we have tabs and smartboard but they are not working properly for actual teaching."*

T4 also noted, *"There is no internet available for teachers in school, so we use our own hotspot, and in rural areas connectivity and electricity are also major problems."*

Second critical limitation was the limited and inconsistent quality of training. Some of the teachers were very directly involved in several orientations, but these orientations were widely referred to as superficial, routine or inadequate to survive in the long run. As such, teachers turned to independent learning and peer relationships to address technological advances. For instance, T6 remarked, *"The training felt like a formality... whatever we learned, we learned mostly by asking each other."*

Cases of single-household families, working parents who spend the day carrying mobile phones, high data bills and in other instances lack of access to Television were frequently mentioned by teachers. These limitations were more pronounced in poorer and rural families. For example, T1 explained,

"If we give them work on WhatsApp, they are not able to do that because there is only one phone at home and parents carry the phone to work."

Another instance was marked by T8, *"In many homes, the first right over the phone is given to the boy, and girls often do not get equal access."*

These responses indicate that gender dynamics of access at home, family circumstances and financial limitations were all factors to digital exclusion other than technology.

Another issue was the parental and pedagogical reluctance regarding the use of digital by children. Teachers reported that a significant number of parents still did not want to give their children access to tablets or smartphones to study due to abuse, distraction, excessive screen time, and potential negative impact on their physical and mental well-being. The personal opinion of teachers was also an issue as they were even more concerned about younger students and the necessity of stricter regulation of use. For instance, T2 mentioned,

"Parents say that children misuse the tab and that traditional teaching is better."

Similarly, T15 noted, *"Parents ask why the tab was given at all and say it should be taken back because it affects children's physical and mental health."*

Teachers also reported hindrances to meaningful implementation due to accessibility and language and platform usability. The official online resources, as some respondents noted, were *either too lengthy, complex, slow to log onto, or simply lacked the interest to implement into the learning process*. In addition, some teachers noted that though it was possible that a good number of students would have benefitted better using Hindi reading

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materials or bilingual reading materials, a lot of it was in English. T9 stated the same concern, *"The videos are good, but they are too lengthy and children lose interest."*

The other issue that emerges is the lack of awareness of the broader ecosystem of PM eVIDYA platform particularly with respect to DTH channels, inclusive resources or other resources on the platform, besides DIKSHA. For example, T5 stated,

"We ourselves do not know about the DTH channels, so how will we tell the students?"

When asked about available content on inclusive classroom for special children Teacher 11

"I did not know that any such content was available for children with special needs."

These responses suggest that lack of information on the digital ecosystem was one of the issues beyond the infrastructural and accessibility challenges.

Theme 4 Emergent teacher-informed suggestions for Strengthening Digital Learning Implementation

A prominent recommendation throughout interviews was the need to develop accessible and context-responsive digital infrastructure. Teachers constantly underlined that digital learning might become relevant only when supported by stable internet, electricity, smartboards, working gadgets, and school-based access rather than rely on personal resources. Some further indicated that offline or low-cost delivery modes, including preloaded content or TV-based learning, might be more practicable in areas with limited resources. For instance, T4 suggested,

"If not in all classrooms, at least three or four classes should have smartboards so that students can learn through them."

In another case, T6 also remarked, *"TV-based PM eVIDYA should be promoted because every child may not have a phone."*

Improving awareness and dissemination across various stakeholders, particularly among students, teachers, and parents, was another compelling recommendation. Many participants believed that many of PM eVIDYA's potentially helpful features were still underutilized not because they were worthless. but because stakeholders were not thoroughly informed about them.

For example, T12 noted that teachers themselves needed better awareness *"before guiding students and parents properly."*

Another thing that teachers suggested that digital learning be more learner-focused, organized, and useful. They favored for shorter, useful, and classroom-friendly content that might enhance teaching without adding to the preparation load. For instance, T9 suggested that digital resources should be *"shorter and more practical so children do not lose interest."*

The interview data suggests that teachers did not reject digital learning altogether; in fact, they gave pragmatic suggestions for making it more attainable, accessible, and relevant to their educational settings.

DISCUSSION

The study findings show that rural teachers' use of government digital projects like PM eVIDYA and DIKSHA was practical and based on certain conditions. They were not completely against or fully supportive of these projects. Through the three research questions which guided the study, it comes out that teachers accepted digital platforms only

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if they were helpful, easy to use, and suitable for teaching in their local schools and home settings context.

Regarding RQ1, teachers displayed a rudimentary but inconsistent understanding of government digital resources. Although the majority of participants were aware of these activities and connected them to training or digital content, their understanding was usually weak. This implies that teacher deep platform proficiency and ecosystem-level awareness are not always guaranteed by the existence of digital initiatives in policy and administration. This result is consistent with Khanapurkar's (2020) observation that schools are frequently classified as "digital" only on scant observable indications, even while significant pedagogical preparedness is still lacking. The current results also imply that awareness was frequently exposure-based rather than engagement-based, influenced more by the dissemination of government notice and training than by active pedagogical engagement. Teachers' opinions of digital learning were measured but generally positive at the same time. Teachers' generally favorable but cautious opinions show that the acceptance of digital initiatives was impacted by the confidence and support needed for their ongoing use in addition to their apparent utility (Cho et al., 2020). Consistent with earlier studies indicating that teachers often perceive technology as an effective means to enhance curriculum delivery and aid student learning. They regarded digital tools as beneficial for explaining concepts, providing visual aids, and offering additional learning opportunities (Abedi et al., 2024; Srivastava & Dey, 2018). Nonetheless, this positive outlook did not result in complete trust in digital platforms as major teaching instruments. Instead, teachers viewed them as supplementary instructional aids rather than replacements for traditional teaching methods. This distinction is significant because it implies that teachers' decisions were impacted by practical classroom concerns and pedagogical reasoning, rather than purely theoretical attitudes toward technology. Wong's (2016) findings also noted that teachers' willingness to use instructional technology is often shaped more by the conditions that facilitate its use than by its perceived usefulness.

The results of RQ2 appear to be headed in the same direction. Digital tool use by teachers seems more contingent than habitual. Platforms (such as DIKSHA and PM eVIDYA) were used to provide support or explanation, but not in ordinary teaching. The reason is that the use of YouTube and other open source materials was adopted by many educators in large part due to ease of access and use as well as to be more useful in the immediate classroom environment.

The precursor of this, perhaps, is that educators are making this decision based on what works at the moment, as opposed to what is officially suggested. It appears that the aspect of convenience and usability is more extreme than the impact of the institutional expectation. Speaking of which, the use of technology is not only conditional, but also depends on the perceived usefulness, and on the confidence, system support and situational fit (Cho et al., 2020). This is repeated by Jannah (2020) who observe that teachers are not going to implement digital tools equally by Mishra and Koehler (2006), who believe that the applicability of technology will be different depending on how successful the integration of pedagogy into technology will be. In this regard, the emergence of open platforms may not be regarded as such a reproach of the activities of the government but rather an alteration in the classroom reality.

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The RQ3 findings offer a pre-view of the causes of why digital integration is still being perceived to be unequal and in most instances, restricted. It is remarkable that these impediments do not exist in a vacuum. They are parallel and intersecting. Implementation appears to be slowed down by a number of factors, including poor infrastructure, poor training, disparities in the home based, some parent resistance and even platform architecture. It is not just a matter of access, then. More important possibly is the larger ecosystem, which is more utilitarian (Warschauer, 2004). Most schools do not allow easy use due to the lack of reliable internet connectivity, frequent blackouts, damaged devices and the absence of basic resources like These trends are representative of historic problems with infrastructure and cost and inequality that remain barriers to digital learning endeavors in rural schools (Khanapurkar et al., 2020; Venugopal et al., 2025; Maja 2023). Training is a more complex matter, as well, than it might seem. There are many teachers who have participated in DIKSHA, NISHTHA and other ICT programs workshops, however, these are mostly a one-off affair with little follow up and experience. Therefore, the knowledge does not necessarily translate into the application of knowledge in classroom. This may be interpreted as an indication that teacher preparedness and pedagogical assurance is more of a crucial point of meaningful digital adoption than access to devices (Sari et al., 2017; Blanchard et al., 2016; Jannah et al., 2020; Wu et al., 2022). This also elucidates why awareness alone does not guarantee enduring integration.

Finally, the findings suggest that home-level and sociocultural factors, such as unavailability of devices, economic, and parental reluctance towards children using digital devices, had a substantial impact on the utilization of digital devices by teachers. These issues contribute to understanding why it was not a simple task yet to maintain digital education outside the classroom and why educators tended to use a conservative and narrow approach. This confirms the findings of Zinger et al. (2017), who concluded that teachers tend to use technology more often when students feel that they have more access to ICT at home.

Collectively, the results indicate that the negotiators of digital implementation were rural teachers depending on the situation, not the unwillingness to use digital activities (Maja 2023). According to their responses, the effectiveness of PM e VIDYA and other programs like this is determined by their usefulness in pedagogical terms, institutional support, and the equal nature of the program in terms of social equality besides the presence of platforms.

Implications for Policy and Practice

The recommendation of the teachers in this study indicated that the situation under which the digital learning was to be conducted was the issue and not the technology. Based on their recommendations, three priorities need to be implemented. Firstly, the digital activities must be facilitated by sound and context sensitive infrastructure such as energy, internet, functioning gadgets and low cost or offline, facilities such as TV-based or pre-loaded learning facilities. This is especially imperative in the rural areas where access is still skewed (Venugopal et al., 2025; Khanapurkar et al., 2020). Second, schools and systems of education must engage in practice-based and ongoing teacher support, as compared to one-training hands-on training. Sustainable adoption includes lifelong learning and professional growth, peer mentoring, classroom-relevant digital pedagogy (Blanchard et al., 2016; Maja 2023). The necessity to constantly professionally grow to possess digital skills and facilitate successful integration of the classroom is pointed out in the past studies, as the teachers in this study believe is needed (Mercader and Gairín, 2020). Third, digital content should be

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made more useful, shorter, language-accessible, and user-friendly so that teachers may effectively incorporate it into their daily teaching. In this regard, effective digital adoption in rural schools necessitates not only policy development, but also context-sensitive design, stakeholder awareness, and instructional usability.

CONCLUSION

This discussion indicates, perhaps at a greater magnitude that the actual value of initiatives such as PM eVIDYA and DIKSHA does not only lie in the existence of the programs but also in the use of the programs. Despite being about rural India, the trend appears to be accepted. Digital learning does not alienate the teachers but makes them rather selective and depends on practical considerations. It therefore does not pose the question of whether there should be some digital platforms, but whether they can be viable, reliable and applicable in the real-life classroom setting. On a bigger scale, this demonstrates that there are still anxieties of digital inclusiveness that are going on worldwide. This access alone is not an assurance of successful integration. The infrastructure and teacher preparation, platform design and out of classroom support, both appear to play a role that plays a large part in determining success. In this sense, those strategies that are solely geared towards provision of technology might not take much consideration on the realities of implementation. It appears to be important to integrate context-sensitive and pedagogically-grounded approaches not only in one system but across different educational systems. However, certain limitations should be kept in mind as purposive sample decreases the possibility of generalizing and self-reported statistics may not be a real picture of what was actually being done in the classroom. However, the study offers an excellent insight into the ways in which teachers can survive in the digital ventures with problematic conditions. The study can be later extended to rural, semi-urban, and urban regions and track the relationships of the teachers over time and have a better understanding of how they evolve in their interaction with digital platforms.

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Conflict of Interest

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