



TEACHERS' DIGITAL AWARENESS AS AN ENABLING MECHANISM FOR SDG4: EVIDENCE FROM INDIA'S PM EVIDYA INITIATIVE

Pooja Chaurasia¹

¹ Research Scholar, School of Education and Humanities, Manav Rachna University, Haryana India, Email : Shrikrishanpooja@gmail.com

Mira Mishra^{2*}

^{2*} Assistant Professor, School of Education and Humanities, Manav Rachna University, Haryana, India, Email : Miramishra@mru.edu.in

Ritu Sharma^{3*}

^{3*} Professor, University institute of teacher training and research, Chandigarh university, Mohali, India, Email : Ritu.e18530@cumail.in

Paper Received On: 20 JULY 2026

Peer Reviewed On: 24 AUG 2026

Published On: 01 SEPT 2026

Abstract

The current research investigated the relationship between teacher's digital awareness and the sustainable and inclusive education, which is aligned with Sustainable Development Goal 4 (SDG4). The PM eVidya initiative of India was taken up as a national example to explore the potential of digital learning interventions in improving teachers' digital awareness and building sustainable education. A mixed methods research design was employed: a deductive content analysis of policy documents and a survey of secondary school teachers from government and private schools. Pearson's correlation analysis was used to analyse the relationship between the study variables. The results showed that teachers' digital awareness is satisfactory (approximately 80% correct responses) and that there are positive relationships between digital awareness, the use of digital resources, and technology-mediated teaching practices that promote the SDG4 goals. The results have practical implications for policy-makers and education administrators, as they emphasize the need for more preparedness among teachers, narrowing the digital divide, and successful implementation of sustainable digital tools in education systems.

Keywords: Digital initiative, Education, Teacher awareness, Policy frame work analysis, Sustainable Development Goals 4(Quality education)

INTRODUCTION

The sudden outbreak of COVID-19 reshaped the functioning of almost every sector and institution, with education being one of the most deeply affected. The pandemic disrupted learning and highlighted unequal access to education, creating a need for resilient, inclusive, and sustainable education systems. Education was already at the centre of the global agenda through the 2030 Agenda for Sustainable Development, with Sustainable Development Goal 4 (SDG4) specifically focusing on ensuring inclusive, equitable, and quality education and promoting lifelong learning opportunities for all. This vision requires the effective integration of digital technologies to improve equitable access, enhance educational quality, and expand lifelong learning opportunities by 2030 (Demirbag & Sezgin, 2021). Although considerable efforts have been made to develop digital teaching resources and technologies, the effectiveness of digital education is not only determined by the availability of such resources, but also by how teachers understand, access, and utilize them in their teaching. Thus, teachers' digital awareness can be a significant enabling element that can facilitate the realization of SDG4-oriented educational outcomes from national digital education programs. The National Education Policy (NEP 2020) of India represents the use of technology in education as part of the implementation of the principles and goals of Sustainable Development Goal 4 (SDG4), where inclusive and quality education is envisioned for all. Through these initiatives, the Government of India has made conscious policy efforts to utilise digital technologies in support of SDG4 and its commitment to equitable, inclusive, and quality education (Pandey, 2018). Among the most significant outcomes of these policy efforts was the launch of PM eVidya on 17 May 2020—a holistic program designed to integrate digital, online, and broadcast educational resources into a multimodal digital education ecosystem that ensures equitable and-multimodal access to learning opportunities (Rudawar, 2023). The educational impact of PM eVidya is not only determined by the availability of digital resources but also by teachers' awareness and ability to utilize these resources effectively in their practice. Hence, the digital awareness of teachers is the key link between the PM eVidya ecosystem and SDG4-related education outcomes.

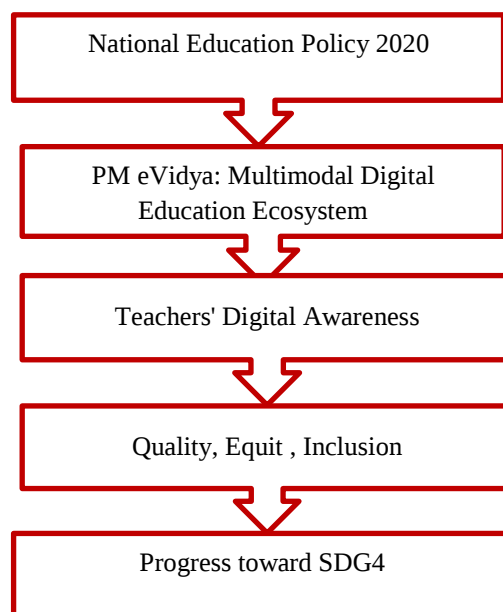


Fig. 1: Conceptual framework illustrating teachers' digital awareness as the enabling mechanism linking the PM eVidya multimodal digital education ecosystem with SDG4-oriented educational outcomes, Source: Author's own representation

While research on digital technologies, technology adoption and digital competence has proliferated, there has been comparatively limited empirical research examining the role of teachers' digital awareness in enhancing national multimodal digital education systems to achieve SDG4-oriented educational outcomes, specifically in the school education context in India. To fill this gap, the present study explores PM eVidya as a national multimodal digital education ecosystem and explores the role of digital awareness of teachers in the support of quality, equity, and inclusion as key aspects of SDG4.

2 LITERATURE REVIEW

Following section discusses the various studies conducted by the authors with respect to SDG4 and digital initiatives in India.

2.1 SDG4 and Digital Education in Global Context

SDG4 focuses on inclusive and equitable quality education and lifelong learning opportunities for all (United Nations [UN], 2015). Digital technology is increasingly acknowledged as a powerful skill development, access to, and transformation of, and strengthening of systems tool (Selwyn, 2022). It enables multiple access points for students to acquire the knowledge, skills, and competencies needed for life and work (Ghanem, 2020) and lifelong learning is seen as vital to broader development and sustainability (Carr et al., 2021; Lawrence et al., 2020). Digital education is more than just virtual or distance education; it involves the appropriate use of digital tools to improve learning quality, inclusion, flexibility, accessibility, and learning opportunities (García-Hernández et al., 2023; Ghanem, 2020). Digital technologies are also changing the "where, when and how learning takes place", leading to increased flexibilities and inclusiveness in the education system (Burbules et al. 2020). Furthermore, mobile learning and ICT can be used to promote access, personalisation, relevance and learning for learners with a variety of needs (Maketo et al., 2023; Hamburg, 2020). The effective and sustainable implementation of digital education, which encompasses digital inclusion, digital education policies, funding, and the proper use of educational technologies, are required for the contribution of digital education towards SDG4 (García-Hernández et al., 2023; Lawrence et al., 2020).

2.2 SDG4 and Digital Initiatives in India

Digital education is now increasingly becoming a part of India's educational system and a way to contribute to SDG4 in a country as diverse as India both geographically and socially. The rapid digitalization of education has presented opportunities to enhance the quality and access to education, teacher capacity, and student learning (Saxena & Agarwal, 2023; Pandey, 2019; Vishwakarma & Singh, 2023). Digital technology offers an important mechanism to enhance equitable access to education in a country as diverse as India with its huge learning population (Pandey, 2019). In response, the Government of India initiated the PM eVIDYA, which is a multi-

modal approach that combines digital education, online education and on-air education using DTH television, radio and other technological modalities, to serve the purpose of extending learning opportunities to remote areas and various regions (Patil et al., 2020). It has also been linked to the efforts of bridging the digital divide and inclusive education (Saxena & Agarwal, 2023) through its multimodal approach.

2.3 Digital awareness as an enabling mechanism for teachers

Digital platforms are not enough to guarantee their effectively use in teaching and learning. Digital competence and awareness of teachers are key enabling factors, however. Some studies indicate that the digital literacy of teachers may be more relevant when it comes to effective use of digital tools for teaching than the availability of digital tools (Pettersson, 2018). Digital learning resources can enhance the effectiveness of teachers' use of digital resources, the development of interactive content, and meaningful learning experiences through supportive learning environments and professional learning (OECD, 2015; Wohlfart & Wagner, 2023). This is especially true of SDG4.c, which places teachers in the center of the quality of teaching and learning (Sunthonkanokpong & Murphy, 2019). However, there is still a significant shortage of well-trained teachers in digital education in developing contexts and a lack of awareness, knowledge and desire to use new technologies (Barclay et al., 2018; Harerimana et al., 2016). Hence, the digital awareness of teachers is crucial linkage between the introduction of initiatives like PM eVIDYA and its implementation in an SDG4-embedded teaching process.

2.4 Research Gap and Research Questions

The literature review indicates that while extensive research has examined the use of digital technologies to achieve SDG4, relatively fewer studies have explored teachers' digital awareness in relation to sustainability-oriented educational outcomes (Anh et al., 2024). Moreover, research examining this relationship in the context of school education in India remains limited. Therefore, the present study investigates how teachers' digital awareness, through PM eVIDYA as a national multimodal digital education ecosystem, can support SDG4 by promoting quality, equity, and inclusion in education. The research questions and objectives are formulated based on these identified gaps.

2.4.1 Research Questions

Based on the research gaps identified through review of related literature, following research questions were framed by the authors:

How does PM eVidya, as a national multimodal digital education ecosystem, contribute to achieving SDG4 goals in India?

What is the status of teachers' awareness of PM eVidya in India?

What is the role of teachers' digital awareness in supporting SDG4-oriented digital **teaching practices?**

2.4.2 Research Objectives

To answer the research questions framed, following research objectives were developed by the authors:

Objective 1: To critically examine the role of PM eVidya as a national multimodal digital education ecosystem, in achieving SDG4 goals

Objective 2: To analyse the status of teachers' awareness of PM eVidya

Objective 3: To examine the role of teachers' digital awareness on SDG4-oriented digital teaching practices

2.4.3 Research Hypothesis

For objective one no hypothesis was framed as it only examines the role of PM eVidya as a national multimodal digital education ecosystem in achieving SDG4.

For objective two no hypothesis was framed as only teachers' awareness status was analysed

Null hypothesis was framed for objective 3;

H₀: Teachers' digital awareness has no significant role on SDG4-oriented digital teaching practices

2.4.4 Research Methodology

A mixed methods research design was used. The secondary data was qualitatively analyzed through a deductive content analysis of the documents from the government and non-government sources to understand the contribution of PM eVidya towards SDG4. The self-constructed questionnaire quantitatively gathered demographic information and assessed teachers' digital awareness of PM eVidya with 8 items and their digital teaching practices linked to SDG4 with 10 items on the Likert scale. Fifty Secondary school teachers from government and private schools were selected using purposive sampling. The instrument was validated by four experts and the reliability was obtained through the Cronbach's alpha value of 0.786. The frequencies, percentages, mean, and Pearson correlation analysis were used to analyse the data.

3. DATA PRESENTATION AND ANALYSIS

3.1 Objective 1: To critically examine the role of PM eVidya as a national multimodal digital education ecosystem, in achieving SDG4 goals

Tool: Deductive content analysis, Document analysis

Table1. Analytical Synthesis of PM eVIDYA Components Aligned with SDG4

Analytical Dimension	PM eVIDYA Component(s)	SDG4 Target(s)	Evidence Educational Mechanism	Overall Alignment
Quality education and access	DIKSHA, NISHTHA, Radio, CWSN E-content	4.1	Digital learning resources, teacher professional development, educational broadcasting, and accessible content strengthen learning quality and expand educational access.	High
Technical and work-relevant skills	DIKSHA, SWAYAM, SWAYAM PRABHA,	4.3, 4.4	Digital platforms promote technical, vocational, employability, entrepreneurship, and lifelong learning competencies through	High

	NISHTHA, Radio		multimodal learning resources.	
Equity inclusion	and SWAYAM PRABHA, NISHTHA, Radio, CWSN E- content, Competitive Examination Preparation	4.5	Inclusive digital resources, DTH broadcasting, accessible content for vulnerable learners, and equitable learning opportunities reduce educational disparities.	High
Sustainable Development learning	DIKSHA, SWAYAM	4.7	Learning materials incorporate themes of human rights, gender equality, global citizenship, and sustainable development.	Moderate– High
Teacher Professional capacity	NISHTHA, CWSN E-content	4.c	Professional development and inclusive teaching resources strengthen teachers' pedagogical competencies and preparedness for diverse learners.	High

The deductive qualitative content analysis resulted in five key analytical dimensions that the PM eVIDYA ecosystem can be linked to SDG4 (Table 1). The results show that it is the complementary digital education components that enable the initiative to contribute to SDG4, not the intervention itself. Equity and inclusion (SDG 4.5) was the most dominant of all the dimensions, with all seven dimensions of PM eVIDYA supporting equitable access to learning opportunities for the various learner groups. Digital learning resources, teacher professional development, educational broadcasting and inclusive content are expressions of quality education (SDG 4.1). Technical and work relevant skills (SDG 4.3-4.4) are encouraged through the platforms of DIKSHA, SWAYAM, SWAYAM PRABHA, NISHTHA and Radio, while sustainable development learning (SDG 4.7) is largely being espoused through the content of DIKSHA and

SWAYAM addressing global citizenship, human rights, gender equality, sustainability, etc. NISHTHA and CWSN e-content enhances the professional capacity of teachers (SDG 4.c).

On the whole, the results indicate that PM eVIDYA is a multi-modal digital education ecosystem that as a whole and through its various elements is contributing to the improvement of quality and inclusion, development of skills and capacities of teachers in the context of SDG4.

3.2 Objective 2: To analyse the status of teachers' awareness of PM eVidya

To analyze the status of teachers' awareness of PM eVidya, the researcher designed a questionnaire consisting of eight items. The first item focuses on teachers' self-assessment of their proficiency with digital tools and technology, using a five-point Likert scale labeled as Expert, Advanced, Intermediate, Beginner, and Novice. The responses to this item provide a foundation for assessing the subsequent items, which investigate various aspects of teachers' awareness and engagement with PM eVidya.

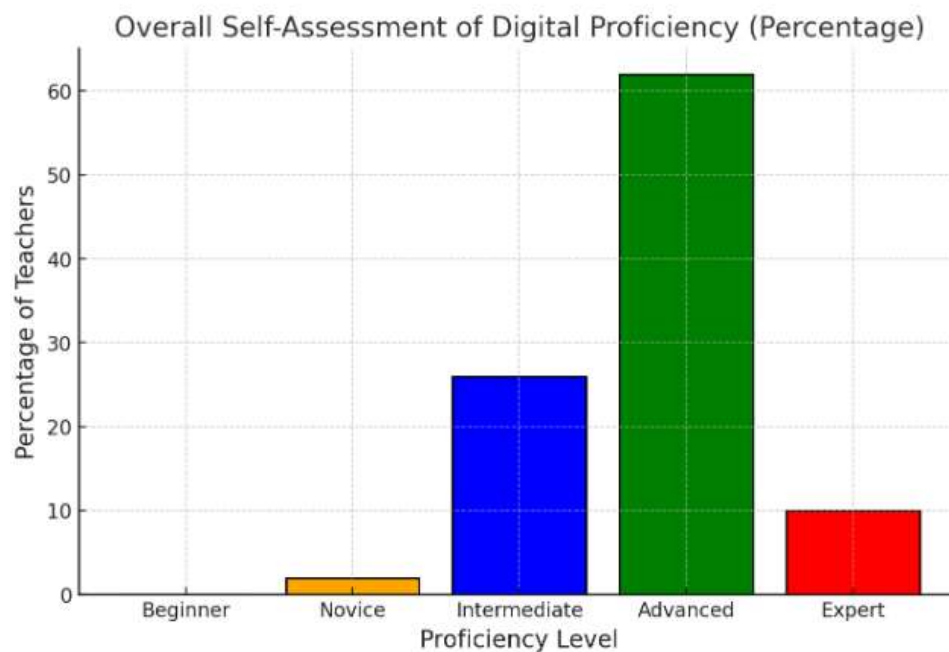


Chart 1: Digital Proficiency level of teachers, Source: Author's own representation

Chart 1 depicts that none of the teachers consider themselves Beginners (0%). A small percentage (2%) identify as Novices, indicating limited familiarity with digital tools. Around a quarter (25%) rate themselves as having Intermediate proficiency. The majority (60%) see themselves as Advanced users, demonstrating a high level of confidence in their digital skills. Additionally, 10% consider themselves Experts, showing exceptional proficiency. The chart indicates a positive self-assessment of digital proficiency among teachers, with most rating themselves as Advanced or Expert. The next seven items in the questionnaire, from Q2 to Q8 were mainly to assess the teacher's awareness of PM eVidya. The majority of the teachers have chosen the right option and it came out clearly that teachers are highly aware.

Table 2: Gender wise Digital Awareness of Teachers

Category	Percentage (%)
Male Teacher Awareness	31
Female Teacher Awareness	79

Table 3: Institution wise Digital Awareness of Teachers

Category	Percentage (%)
Government Teacher Awareness	80
Private Teacher Awareness	20

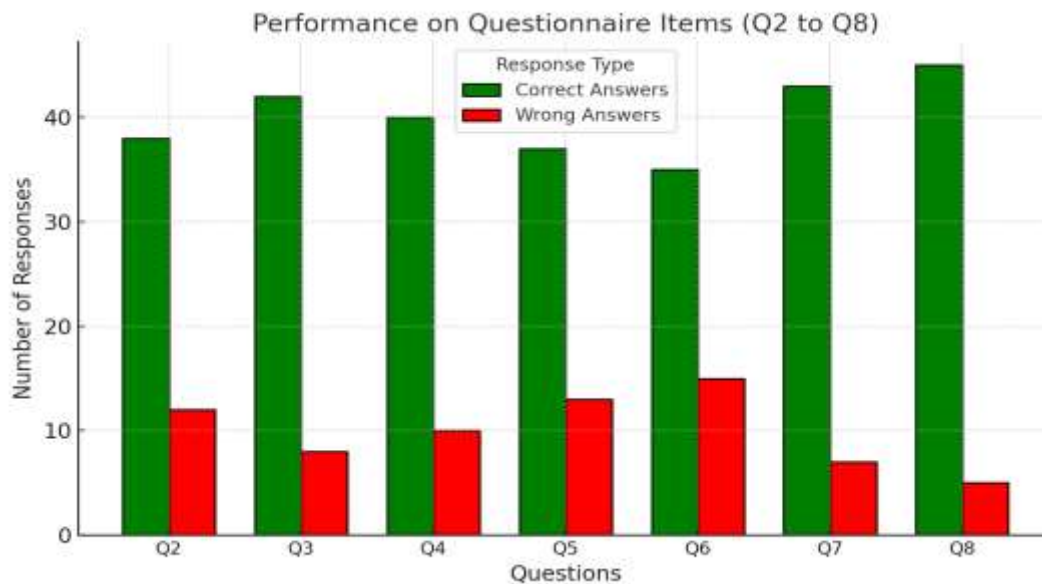


Chart 2: Chart of Teachers' awareness of PM eVidya, Source: Author's own representation

Teachers' awareness of various educational programs and platforms varies, according to the statistics. In general, 78% of teachers are aware of the programs; however, female educators are more aware of them (79%) than male teachers (31%). The awareness level of government teachers is higher (80%) than that of private teachers (20%). There is a comparatively high degree of information of particular efforts, such as the DIKSHA portal, PM eVidya DTH TV channels, and NIOS programming, with awareness ranging from 65% to 80%. There are still gaps, though, as evidenced by the fact that 30% of respondents are oblivious of DIKSHA's Energised Test Book function and 33% are uninformed of the SWAYAM platform. 25% of teachers are unaware of the programs, whereas 75% of teachers are aware of them altogether.

3.3 Objective 3 To examine the role of teachers' digital awareness on SDG4-oriented digital teaching practices

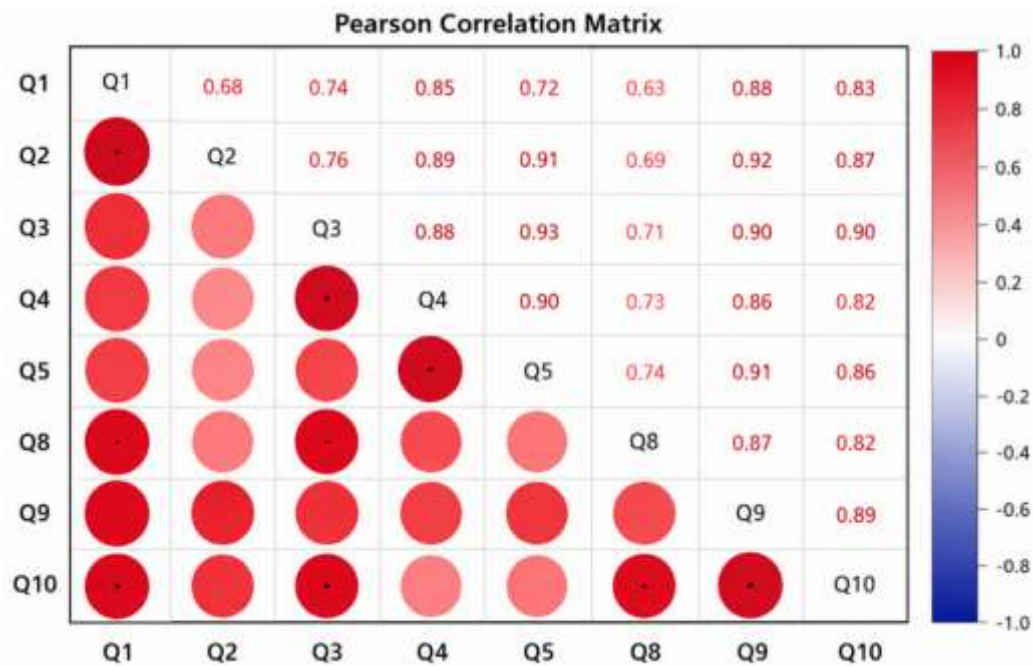
Tool: SPSS Analysis of Pearson's Correlation Data

Pearson's correlation analysis was used to investigate the relationships between the digital awareness practices of teachers and their use of digital resources for teaching and learning to explore the role of teacher's digital awareness in achieving SDG4. The analysis focused on identifying whether there was a relationship between digital awareness and practices within the classroom which would help achieve SDG4 goals, specifically quality, equitable and inclusive education.

Fig. 2: Pearson Correlation Matrix Showing the Relationships among Teachers' Digital Awareness Variables Related to SDG4

Source: Authors' analysis

A correlation matrix (Figure 3) indicates positive correlation between all selected variables. A high positive correlation was observed between promoting DIKSHA e-textbooks (Q1) and using mobile devices as teaching-learning tools (Q9) ($r = 0.8962$). Likewise, the correlation of encouraging students to learn new skills with promoting internet use for school-related projects was strong ($r = 0.9223$) (Q2 and Q10). A strong positive correlation was also observed between recommending PM eVidya digital learning platforms (Q3) and the use of PM eVidya digital tools in teaching (Q5) ($r = 0.9380$).



Similarly, high positive correlation was observed between the promotion of DTH channels of PM eVidya to students (Q4) and Internet use for school work (Q10) ($r = 0.8984$). The correlation between encouraging students to access digital content available on PM eVidya (Q8) and encouraging students to develop new skills (Q2) was the highest with $r = 0.9733$. In general, the results showed that higher digital awareness was associated with higher levels of digital teaching

practices for teachers. These positive associations suggest that teachers' digital awareness is closely linked with the use of digital resources that support the objectives of SDG4.

4 DISCUSSION

The results show that the awareness of teachers with respect to government digital initiatives is closely related to its use in the classroom and both can in turn drive the achievement of the SDG4 overall goals. The results are analyzed and discussed with respect to the literature available on digital education, digital teaching practice of teachers, and technology supported learning. Nearly 80% of the respondents displayed adequate understanding of PM eVidya, showing a rather high level of awareness of government digital education programs. The elevated awareness among teachers noted in this study aligns with previous research highlighting the growing digital competence and ICT awareness among teachers, which are essential for the integration of technology and effective digital pedagogy (Pettersson, 2018; Sailer et al., 2021; Wohlfart & Wagner, 2023). The results show a satisfactory level of success in the implementation of the government's policy on digital education in teaching teachers about national digital platforms.

The study also reveals that teachers are not only informed about digital initiatives, but gradually also start to incorporate these into their teaching. The promotion of DIKSHA e textbooks, PM eVidya resources, mobile learning, internet-based activities is a gradual shift towards technology enabled teaching. This discovery is in line with the previous studies which suggest that digital initiatives in India have greatly heightened the possibilities to develop and enhance the quality of teaching and accessibility to education (Pandey, 2019; Saxena & Agarwal, 2023). PM eVidya's 'multi-modal' design was intentionally designed to address educational inequities and enhance learner access in a variety of learning environments (Patil et al., 2020). It is also observed that the use of digital resources has grown in the classroom, which is also in line with the new vision of education under Digital India and the NEP 2020, where technology is not just an educational aid but is also considered to enhance the quality and equity of education. The previous studies also showed that digital education improves the engagement, accessibility and learning experience of learners (Choksi et al., 2020; Vishwakarma & Singh, 2023).

The findings also revealed that teachers' digital awareness is not limited to digital initiatives but is manifested in their teaching. The close linkage of teachers to promote DIKSHA e-textbooks, mobile learning and internet based learning activities is an indication of the growing acceptance of the digital resources as a pedagogical tool. These results are in line with those of García-Hernández et al. (2023) who stated that the digital education goes beyond online teaching, referring to the quality, access and inclusion of education. In the same way, Maketo et al. (2023) emphasized the need for mobile learning as a means of achieving more educational opportunities, especially in situations where traditional education approaches might be less accessible. The results then indicate that teachers are increasingly using a wide range of digital tools to provide more flexible learning spaces and greater opportunities for learner-centered learning. The positive association between teachers' encouragement of new skills and the use of internet-based learning activities further illustrates that teachers are now more aware of the value of digital technologies for students

to learn independently and to acquire lifelong skills. This discovery is in line with SDG4, which not only aims to provide access to education but also to build skills for lifelong learning (United Nations, 2015, Ghanem, 2020). Teachers enable students to discover digital content and the Internet, fostering critical thinking, information literacy, and problem solving skills that are not only applicable to school, but also in the world beyond. The other noteworthy discovery is that a high correlation is found between teachers' awareness of PM eVidya and its classroom use. The multimodal approach followed in PM eVidya was aimed at enhancing the accessibility of education via online platforms, TV, radio, and digital repositories (Patil et al., 2020; Saxena & Agarwal, 2023). From the present findings, it can be implied that teachers are using these resources with increasing frequency while educating students, thus contributing towards the goals of Digital India and NEP 2020

5. CONCLUSION

From the results, it can be seen that teachers act as a conduit between national policies on digital education and its implementation in the classroom. Digital awareness of teachers, technology use and the integration of technology into teaching help to create more inclusive, equitable and accessible learning environments, which is a key element of SDG4. Ongoing PD and institutional support and enhanced digital infrastructure is therefore crucial to make the most of PM eVidya. Adopting new digital technologies has long-term implications for enhancing the quality of the education and for the notion of informed citizenship in a technologically driven world (Wagner, 2018). The results also show that the use of ICTs has the potential to enhance the access to education, the way education is delivered, and the learning results, which therefore enhances SDG4 (Saxena & Agarwal, 2023). In the same way, it is possible to make learning more interactive, accessible, and meaningful using online learning, mobile learning, virtual reality (VR), and augmented reality (AR) (Hamburg, 2020). The effectiveness of government digitization efforts, however, is heavily reliant on teachers, with ongoing training and supportive policies (Agustina, 2025). Digital awareness and technological resources among teachers can help improve the quality and equity of education and help promote sustainable educational development through such multi model initiatives as PM eVidya (Henderson, 2011).

5.1 Future Recommendations

Future research should involve more representative and geographically diverse samples of schools and teachers and explore teachers' digital competence and technology integration skills. Future investment in teacher training, digital infrastructure and effective implementation of PM eVidya in the framework of NEP 2020 will further boost India's efforts to achieve quality, equitable and inclusive education.

References:

Agustina, S. (2025). *Teachers' Experiences in Using Digital Media for Learning to Support Quality Education in SDG 4 at SDN Pejaten Timur 05*. Publication of the International Journal and Academic Research, 2(1), 25–31. <https://doi.org/10.63222/pijar.v2i1.29>

- Alsharida, R. A., Hammood, M. M., & Al-Emran, M. (2021). Mobile Learning Adoption: A Systematic Review of the Technology Acceptance Model from 2017 to 2020. *International Journal of Emerging Technologies in Learning*, 16(5), 147–162. <https://doi.org/10.3991/ijet.v16i05.18093>
- Anh, L., Nguyen, T., & Habók, A. (2024). Tools for assessing teacher digital literacy: a review. *Journal of Computers in Education*, 11(1), 305–546. <https://doi.org/10.1007/s40692-022-00257-5>
- Barclay, C., Donalds, C., & Osei-Bryson, K. M. (2018). Investigating critical success factors in online learning environments in higher education systems in the Caribbean. *Information Technology for Development*, 24(3), 582-611
- Burbules, N. C., Fan, G., & Repp, P. (2020). Five trends of education and technology in a sustainable future. *Geography and Sustainability*, 1, 93–97. <https://doi.org/10.1016/j.geosus.2020.05.001>
- Carr, R. M., Lane-Fall, M. B., South, E., Brady, D., Momplaisir, F., Guerra, C. E., ... & Hamilton, R. (2021). Academic careers and the COVID-19 pandemic: Reversing the tide. *Science Translational Medicine*, 13(584).
- Cerro Velázquez, F., & Morales Méndez, G. (2018). Augmented Reality and Mobile Devices: A Binominal Methodological Resource for Inclusive Education (SDG 4). An Example in Secondary Education. <https://doi.org/10.3390/su10103446>
- Demirbağ, İ, & Sezgin, S. (2021). Book review: Guidelines on the development of open educational resources policies. *The International Review of Research in Open and Distributed Learning*, 22(2), 261–263.
- Ghanem, S. (2020, November 11). E-learning in Higher Education to Achieve SDG 4: Benefits and Challenges. 2020 2nd International Sustainability and Resilience Conference: Technology and Innovation in Building Designs. <https://doi.org/10.1109/IEEECONF51154.2020.9319981>
- García-Hernández, A., García-Valcárcel Muñoz-Repiso, A., Casillas-Martín, S., & Cabezas-González, M. (2023). Sustainability in Digital Education: A Systematic Review of Innovative Proposals. In *Education Sciences* (Vol. 13, Issue 1). MDPI. <https://doi.org/10.3390/educsci13010033>
- Hamburg, Facilitating lifelong learning in SMEs towards SDG4, *Adv. Soc. Sci. Res. J.* 7 (9) (2020)262–272.
- Huawe (2018). Accelerating SDGs through ICT. www.huawei.com/minisite/gci/assets/files/Huawei_2018_SDG_report_en.pdf
- Harerimana, A., Mtshali, N. G., Ewing, H., Maniriho, F., Kyamusoke, E., Mukankaka, A., & Mugarura, J. (2016). E-learning in nursing education in Rwanda: Benefits and challenges. An exploration of participants' perceptsives. *IOSR J Nurs and Health Sc*, 5(3), 64-92
- Henderson, C. B. (2011). Facilitating change in undergraduate STEM instructional practices: An analytic review of the literature. *Journal of research in science teaching*, , 48(8), 952-984.)

- Lawrence, A. W., Ihebuzor, N., & Lawrence, D. O. (2020). Some Challenges Militating against Developing Countries Achieving SDG 4 on Targets: Nigeria as Case Study. *Modern Economy*, 11(07), 1307–1328. <https://doi.org/10.4236/me.2020.117093>
- Maketo, L., Issa, T., Issa, T., & Nau, S. Z. (2023). M-Learning adoption in higher education towards SDG4. *Future Generation Computer Systems*, 147, 304–315. <https://doi.org/10.1016/j.future.2023.05.010>
- Mendez, D., Mendez, M., & Anguita, J. M. (2020). The effect of digital platforms in the motivation of future primary education teachers towards mathematics New Trends and Issues Proceedings. In *New Trends and Issues Proceedings on Humanities and Social Sciences* (Vol. 7, Issue 3). <http://orcid.org/0000-0002-6724-4697>
- Méndez, D., Méndez, M., & Anguita, J. M. (2022). Digital Teaching Competence in Teacher Training as an Element to Attain SDG 4 of the 2030 Agenda. *Sustainability* (Switzerland), 14(18). <https://doi.org/10.3390/su141811387>
- N. Mehrbakhsh, (2023) The Metaverse and Its Impacts on Sustainable Development Goals 4: Quality Education, *Journal of soft computing and decision support system*, vol.10, no.4)
- Pandey, B. (2019). Ensure quality education for all in India: Prerequisite for achieving SDG 4. In S. Chaturvedi, T. James, S. Saha, & P. Shaw (Eds.), *2030 agenda and India: Moving from quantity to quality*. *South Asia economic and policy studies* (pp. 165–196). Singapore: Springer. https://doi.org/10.1007/978-981-32-9091-4_8
- Pandey, B. (2018). Achieving SDG 4 in India: Moving from Quantity to Quality Education for All. www.ris.org.in
- Patil, I., Arora, P., Khosla, R., Tomer, S., Merchant, S., Jain, V., & Goyal, Y. (2020). The PM eVidya scheme as an e-learning scheme for disadvantaged students in India during the covid-19 pandemic. *International Journal of Advanced Research*, 8(7), 1018–1028. <https://doi.org/10.21474/IJAR01/11364>
- Pettersson, F. (2018). On the issues of digital competence in educational contexts – a review of literature. *Education and Information Technologies*, 23(3), 1005–1021. <https://doi.org/10.1007/s10639-017-9649-3>
- Pritilata Pegu Doley. (2021). ICT awareness among the provincialised college teachers of Nagaon district, Assam, India.
- Sharadkumar Rudrawar, S. (2023). Digitization Of Education In India Towards NEP-2020 Policy. www.aadharsocial.com
- Sailer, M., Murböck, J., & Fischer, F. (2021). Digital learning in schools: What does it take beyond digital technology? *Teaching and Teacher Education*, 103, 103346. <https://doi.org/10.1016/j.tate.2021.103346>
- Saxena, R., & Agarwal, C. (2023). THE STUDY OF THE IMPACT OF ICT ENABLED UNIVERSITY EDUCATION ON SUSTAINABLE DEVELOPMENT GOALS IN INDIA changing face of entrepreneurship through innovation View project Banking and financial Institutions View project. <https://www.researchgate.net/publication/372890966>

- Selwyn, N. (2022). *Digital degrowth: toward radically sustainable education technology. Learning, Media and Technology.* <https://doi.org/10.1080/17439884.2022.2159978>
- Thakur, N. (2014). A Study on Awareness of Trained Teachers in relation to Information and Communication Technology. *IOSR Journal of Research & Method in Education (IOSRJRME)*, 4(1), 06–11. <https://doi.org/10.9790/7388-04150611>
- United Nations Development Programme (UNDP) (2016), “Human Development Report 2016: Human Development for Everyone”, UNDP, New York, NY, available at: http://hdr.undp.org/sites/default/files/2016_human_development_report.pdf
- <https://www.oecd.org/education/education-at-a-glance-2015.htm> retrieved on 20.09.2023
- Vishwakarma, P., & Singh, D. (2023). Digitalisation of Education with NEP-2020 and its Impact on Quality of Life. www.irjet.net
- Wagner, D. A. (2018). Technology for Education in Low-Income Countries: Supporting the UN Sustainable Development Goals. In *ICT-Supported Innovations in Small Countries and Developing Regions* (pp. 51–74). Springer International Publishing. https://doi.org/10.1007/978-3-319-67657-9_3
- Wohlfart, O., & Wagner, I. (2023). Teachers’ role in digitalizing education: an umbrella review. 71, 339–365. <https://doi.org/10.1007/s11423-022-10166-0>

Pooja Chaurasia, Mira Mishra & Ritu Sharma. (2026). TEACHERS' DIGITAL AWARENESS AS AN ENABLING MECHANISM FOR SDG4: EVIDENCE FROM INDIA'S PM EVIDYA INITIATIVE. *Scholarly Research Journal for Interdisciplinary Studies*, 15(96), 62–75. <https://doi.org/10.5281/zenodo.22508084>