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Artificial Intelligence- Driven Digital Transformation in Media Education at Higher Education Level in India: Challenges and Opportunities

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Abstract

Digital transformation in higher education is being driven by artificial intelligence (AI) and transforming the skills needed in media and journalism education. This study explores the digital and pedagogical conditions that could impact the future AI-enabled transformation in the selected Indian higher education institutions. A descriptive cross sectional mixed method design was used, with a quantitative survey of 100 faculty members using purposive non-probability sampling and qualitative focus group discussions with faculty and students. Descriptive statistics were employed to measure faculty readiness, technology knowledge, implementation challenges, assessment challenges, alternative assessments using digital tools, and institutional support needs. The results indicated that 77% of faculty members had moderate to high readiness to teach online and 90% had moderate or higher level of familiarity with digital technologies. Practical media subjects, especially camera skills, filmmaking and photography, were still challenging to teach online. The main assessment challenges were restricted direct observation, lack of non-verbal cues and the challenge of assessing practical skills remotely. Digital inequality, limited access to hardware and software, and less peer interaction were also found to be ongoing limitations. The study concludes that Indian media education has a meaningful digital foundation for future AI integration, yet, for that to happen, there is a need for improving AI literacy, infrastructure, equitable access, assessment redesign, and institutional governance.

Keywords: Artificial Intelligence; Media Education; Digital Readiness; Higher Education; AI Literacy

INTRODUCTION

The digital transformation is not only impacting the production, distribution, consumption, and teaching of media, but also moving toward intelligent, automated, and generative systems, which are at the heart of artificial intelligence (AI). AI has been increasingly employed in journalism and media for automated content creation, data-driven reporting, audience analysis, recommendation systems, transcription, translation, image and video generation, and editorial decision support [1]. The changes are changing the nature of work and the competencies needed for graduates to enter the modern media landscape. This has put a strain on higher education institutions to adapt media and journalism programs to include AI-assisted production, computational skills, algorithmic understanding, data literacy, and responsible technology use [2].

The significance of digital transformation in media education is especially strong as technological change in the media sector is faster than traditional curriculum-development cycles. AI is not only being used in computer science or engineering applications but is also being adopted in teaching and learning, assessment, academic support, research and knowledge production in higher education [3]. In the field of journalism, education has also started to integrate AI, data analysis, and computational methods into the curriculum, equipping students for the future of a technology-driven profession [4]. Similarly, BRICS universities also exhibit signs of rising trends in AI skills in journalism courses, with varying levels and methods of integration across institutions and countries [5]. This transformation is particularly relevant in the Indian University context where they will have to address technological modernization, digital divide, faculty capacity, curriculum relevance and employability aspects all in one.

One of the key differences in this shift is between digital competence and AI literacy. Digital competence enables teachers and students to use the learning-management systems, communication tools, online

assessment tools, and media-production tools. AI for education, however, requires more holistic competencies, including an understanding of AI systems, a critical evaluation of the results produced by AI systems, an understanding of the limitations and biases of AI systems, and how to responsibly use AI systems [6]. Technical knowledge, ethics, critical thinking and human oversight are also emphasized in the modern competency models of AI. In the context of Indian higher education, enhancing these skills becomes more pertinent in the context of institutional modernization and equipping students with the ability to thrive in AI-driven workplaces [8].

The main research question is how the rapid evolution of AI-enabled media environments contradicts the technological and pedagogical situation in higher education. Students may understand the opportunities presented by AI tools in their learning, enhancing efficiency, inspiring ideas and supporting them, but they may also have concerns about accuracy, reliance, academic honesty, and responsible use [9]. AI also alters the learning process and the industry that students are training for, making it another challenge for media education. In summary, the comprehensive AI revolution in journalism requires a rethinking of the professional skill, editorial process, evaluation system, creativity, human judgment, and the relationship between media workers and AI [10].

Given this context, the current study is concerned with the digital preparedness and pedagogy of selected education institutions in India at the higher-education level. The study does not evaluate a specific AI system's adoption, performance, or effectiveness. Instead, it delves into the technological and educational landscape that enables or obstructs future AI-driven transformation. The conditions are Faculty Preparedness, Technological Familiarity, Practical Media Instruction, Assessment and Feedback Practices, Institutional Support, Digital Resources and Student Learning Experiences. This positioning is methodologically relevant as digital readiness is a prerequisite for meaningful AI adoption, yet it is not synonymous with direct AI adoption.

As the study is limited to technology mediated media education in selected higher education institutions in India, the study is largely based on the evidence gathered from the faculty and students who have experience of online teaching and learning. Particular attention is given to preparedness, digital literacy and practical issues in teaching, limitations in assessment of students' learning, alternative approaches of assessment, needs for institutional support, and experiences of students. The concepts of AI literacy, use of generative AI, AI adoption behaviour and performance of specific AI tools are not directly operationalised in this study. Therefore, the results are described as measures of digital and pedagogical readiness in relation to future transformation with the support of AI.

The study's contribution is the connection between the current digital situation in media education and the new needs of AI-supported higher education. The findings can help universities, media schools, curriculum planners, and educators to find out where current capabilities might be able to support the integration of AI, and where more investment in infrastructure, professional development, assessment redesign, governance, and equitable access is needed. The study also adds to the debate on human-centred AI, as technological transformation should augment, not supplant, hands-on learning, creativity, ethical judgments, professional mentoring, and human decision-making.

Research Objectives

- To assess faculty preparedness, technological familiarity, and perceived institutional support for technology-mediated media education in selected Indian higher-education institutions.
- To examine the major pedagogical and assessment challenges associated with the digital delivery of practical media education, including student engagement, direct observation, feedback, and practical skill evaluation.
- To identify digital teaching practices, assessment adaptations, institutional support requirements, and student learning experiences that provide a foundation for future AI-enabled transformation of media education.

2. Literature Review

AI has gone beyond being a computational technology to becoming a socio-technical force that is impacting journalism, higher education, and professional media practice. AI is now being used to generate, verify, analyze audiences, assist in editorial decisions, and more in journalism. The authors of Hollanek et al. highlighted the importance of critical AI literacy in the responsible use of AI in journalism, which involves assessing algorithmic systems, challenging algorithmic outputs, and understanding moral issues related to AI-assisted journalism [11]. As AI-assisted production becomes the norm in journalism and media education, these skills are becoming more significant.

But faculty readiness is also a key factor in curriculum change. Despite the increasing practical interest in AI technologies, Jaakkola and Wiik found that there is significant variation in journalism educators' readiness to apply AI to journalism education [12]. This means that simply having access to digital tools is not enough for meaningful integration of AI. Dierickx et al. also showed that LLMs can assist with various tasks in the field of journalism, but that operational abilities and critical assessment of the LLMs' output are needed to make them effective [13]. Media education needs to therefore move beyond the traditional digital competence to structured AI literacy and professional AI capability.

Generative AI has opened up significant opportunities for higher education, but also poses new risks. Tlili et al. found advantages like personalised support, accessibility, interaction and quick access to information, but also disadvantages regarding reliability, misuse, and ethical governance [14]. Although Kasneci et al. pointed out the potential for the use of LLMs in the personalization of learning, feedback, creation of content, and academic support, there is also a potential risk for inaccurate information, bias, overreliance, and academic integrity problems [15].

The integration of Generative AI into educational contexts is crucial for determining its effectiveness. Crompton and Burke discovered that while ChatGPT can aid in personalized instruction and flexible learning, it poses difficulties in assessment design, responsible use, and academic integrity [16]. Jo also demonstrated that attitudes towards ChatGPT can change from apprehensive to learning supportive as more people become familiar with the capabilities and limitations of ChatGPT [17]. These results indicate that the use of AI should be viewed as a pedagogical and institutional process, not just a technology-acquisition decision.

Students' perceptions play a key role in the sustainability of AI in education. Johnston et al. discovered that students see the value of using generative AI to support their learning but are worried about fairness, inappropriate use, and the limits of acceptable support [18]. These are especially pertinent in media education, where originality, creativity, authorship and intellectual ownership are key to the practice of the profession.

Strzelecki found that the perceived usefulness, ease of use, and expected performance benefits are factors that impact students' intention to use ChatGPT [19]. Delcker et al. also found that AI competence was significantly correlated with the intention to use and actual use of AI tools for learning [20]. These results show that access to technology does not guarantee that it will be used in meaningful ways. Kim et al. also found significant gaps between faculty and student attitudes and perceptions of generative AI, highlighting the need to consider these differences in implementation strategies.

The ability of faculty is still a key factor in successful AI integration. Verano-Tacoronte et al. demonstrated that the anxiety and uncertainty that might affect university teachers when generative AI advances more rapidly than guidance and professional development within the institution [22]. Training for faculty should not stop at digital skills, but should also cover the use of AI for assessment, algorithmic bias, privacy, intellectual property, hallucination, synthetic media, and responsible use.

Tzirides et al. highlighted the importance of human and artificial intelligence working together to enhance the AI literacy, stating that technological capacity must complement human judgment, critical reasoning and interpretation in context [23]. This is particularly pertinent in the field of media education as creative production, ethical assessment, verification, editorial judgment and professional responsibility cannot be automated.

Another critical aspect of AI revolutionizing education is institutional governance. An et al. found that there is a lot of variability in the higher education policies related to generative AI in teaching, learning, research, and administration [24]. This necessitates clear institutional guidelines on acceptable use, disclosure, accountability, data privacy and responsible participation in AI.

Academic integrity is another challenge as generative AI can generate text, images, audio, video, and other creative content. Coates et al. suggested that universities need to rethink integrity systems to safeguard and promote authentic higher order thinking, in addition to traditional integrity detection systems [25]. In media education, this is especially significant as AI-generated content can directly impact authorship, originality, and creative evaluation.

In total, the literature suggests that there are five interrelated dimensions that influence the transformation of media education through AI: AI literacy, faculty readiness, student acceptance, pedagogical redesign, and institutional governance. But there has been relatively little empirical work focused on the underlying digital and pedagogical context that can facilitate or hinder the integration of AI in Indian media education. The present study aims to fill this gap by studying faculty readiness, technological familiarity, practical teaching constraints, assessment challenges, support needed by institutions, and student learning experiences as the signs of readiness for future transformation with AI.

3. Research Methodology

The study was conducted based on the descriptive cross sectional mixed method design of research to understand the technological, pedagogical and institutional conditions of digital transformation in Media Education in Higher Education in India. The design was a combination of quantitative survey questions and qualitative focus group discussions for measurable response patterns and contextual experiences. This was appropriate, as the study was to identify the patterns of technology mediated teaching and to understand how the faculty and students enacted the patterns.

The quantitative aspect was obtained from adopting the primary data collected using a structured questionnaire with closed and open-ended items. The instrument focused on faculty members' readiness to teach online, familiarity with digital technologies, difficulties to teach hands-on media courses, limitations of assessment and feedback, other means of digital assessment, and institutional supports required. These dimensions were used as proxies for digital readiness and technology-mediated pedagogical capacity, but not as direct measures of AI adoption. The qualitative component was done through focus group discussions with the faculty members and students of the undergraduate and postgraduate course of study in media. These

conversations offered context evidence regarding digital access, practical skill development, student engagement, peer collaboration, resources available, and technology-enabled teaching practices. The qualitative strand was not employed to develop an alternate theoretical model, but to enhance interpretation of the quantitative results.

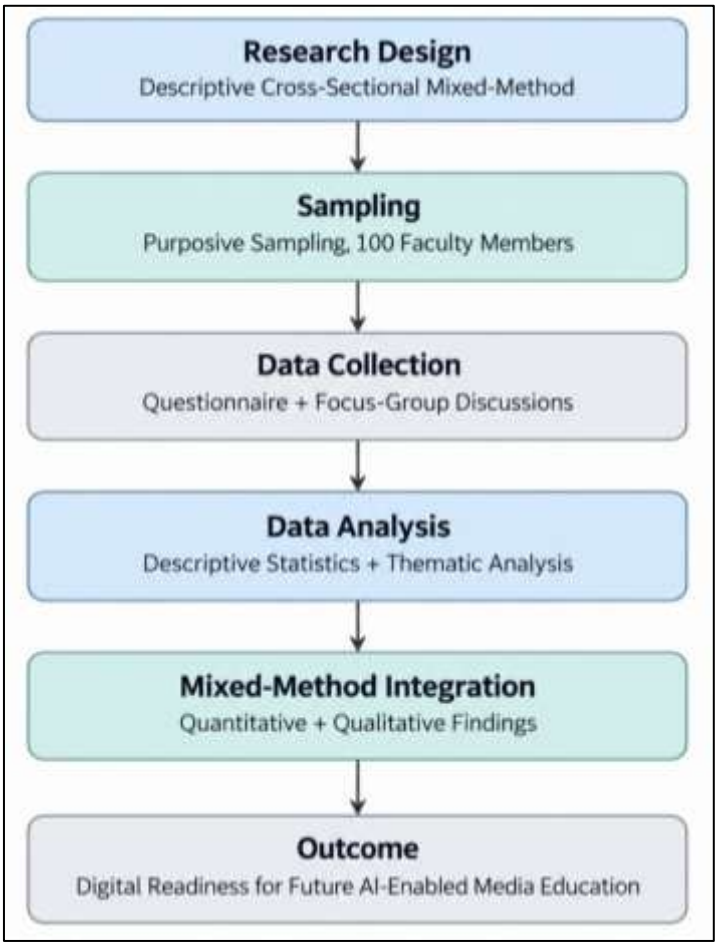

Figure 1. Methodological Framework for Digital Readiness and AI-Enabled Transformation in Media Education

3.1 Sampling Design and Participants

The sampling method used was purposive non-probability sampling, where the respondents had to be someone who directly experienced the process of teaching or learning the media-related courses in the online learning environment. The quantitative sample comprised of 100 faculty members who were mainly from the Pearl Academy campuses in Delhi, Mumbai, Bengaluru and UPES, Dehradun. Qualitative focus group component was also conducted with faculty and students. The study's purpose was not to represent the broader population of higher education students, but rather to explore the experiences of those who had specific experiences with technology-mediated media education, so a purposive sampling approach was appropriate. This sampling approach enabled the study to elicit informed responses from those who had first-hand experience of pedagogical and technological challenges being investigated.

3.2 Data Collection Procedure

Data were gathered from two sources: a structured survey instrument and focus-group discussions, both of which were used to gather primary data. The data collected from closed-ended items in the questionnaire were quantitative and were analyzed using descriptive statistics, whereas the data collected from open-ended items in the questionnaire and focus-group discussions were qualitative and analyzed based on participants' perceptions and experiences.

Technological readiness, awareness of digital platforms, challenges to teaching practical media subjects, alternative digital assessment methods, and faculty support needs were covered by the survey. The focus group discussions explored other related issues in greater detail, including digital inequality, internet access, hardware and software access, practical learning, engagement, peer interactions and adaptive teaching. Both sources provided an opportunity for methodological triangulation of numerical response patterns with contextual evidence from the participants.

3.3 Quantitative Data Analysis

The quantitative data were summarized, coded, tabulated and analyzed by descriptive statistical methods. For each item on the questionnaire, frequency distributions and percentages were computed to determine the predominant response patterns for the sample. The analysis was based on faculty readiness, technology familiarity, teaching challenges, assessment limitations, digital assessment practices, and perceived needs for support. The research design was descriptive and not causal or predictive, so only summary statistics were used in the analysis and no inferential modelling was attempted.

3.4 Qualitative Data Analysis

The qualitative data obtained from the open-ended responses and focus-group discussions were analyzed using descriptive thematic analysis. The analytical process comprised of familiarizing oneself with the participant responses, identifying recurring ideas, grouping of similar responses into larger categories, and categorizing of the larger categories into interpretive themes. The main themes were related to digital access, technological infrastructure, practical skill delivery, student engagement, collaborative learning, faculty adaptation, and technology-supported pedagogical innovation. This process enabled recurring experiences to be systematically organized and linked with the quantitative findings.

3.5 Mixed-Method Integration

The quantitative and qualitative strands were combined at the interpretation stage. The prevalence of major challenges and opportunities was determined from survey results, and qualitative evidence was used to explain the circumstances surrounding the patterns. For instance, quantitative results about challenges in practical media education were analysed in conjunction with teachers' and students' experiences of restricted access to equipment, decreased face-to-face contact and restricted studio-based learning. This integration reinforced the descriptive interpretation by integrating numerical patterns with contextual evidence, but not necessarily causal relationships.

3.6 Methodological Positioning for AI-Driven Transformation

The study does not directly assess the adoption of AI, AI literacy, or the performance of specific AI systems. Rather, the empirical variables represent the digital readiness, technological capacity, pedagogical constraints, and institutional support conditions that provide a foundation for the subsequent AI-enabled transformation of media education. The interpretation of the findings and implications of the findings are therefore limited to discussion with regard to AI. This stance ensures methodological validity and enables the empirical findings to be integrated into the general knowledge of digital transformation in Indian media education using AI.

4. Results

Descriptive statistical analysis and frequency distributions were used for the quantitative survey data and patterns observed in the qualitative evidence from the focus-group discussions with faculty and students were interpreted. The results are classified under the following headings: faculty readiness, obstacles to media education, familiarity with technology, limitations in assessment, digital assessment practices, institutional needs, and participants' experiences with technology mediated learning. The analysis is descriptive and only variables that have been collected in the data collection process are presented.

4.1 Faculty Preparedness for Technology-Mediated Teaching

The faculty respondents had different degrees of readiness for the shift to online teaching. About 44% stated moderate preparedness and 33% very prepared as shown in Table 1. 19% responded that they were somewhat prepared and 4% responded that they were completely unprepared. The extremely prepared category was not selected by any of the respondent.

Table 1. Distribution of Faculty Preparedness for Online Teaching

Preparedness level	Frequency	Percentage (%)
Not at all prepared	4	4
Slightly prepared	19	19
Moderately prepared	44	44
Very prepared	33	33
Extremely prepared	0	0
Total	100	100

The total collected responses showed that 77% of the respondents were either moderately or very prepared. The spread therefore shows a high background level of readiness but there were no respondents in the highest category which could show that readiness was rather high.

4.2 Difficulties in Delivering Practical Media Subjects

There were significant variations among subject areas. Production-oriented subjects were found to be significantly more challenging to teach online than theoretical instruction.

Table 2. Media Subject Areas Reported as Difficult to Teach Online

Subject area	Frequency	Percentage (%)
Software	37	37
Filmmaking	61	61
Photography	61	61
Camera skills	72	72
Theory	0	0

The top three areas of difficulty reported were camera skills at 72%, followed by filmmaking and photography at 61% each. Thirty-seven percent indicated that software instruction was a problem, and none indicated a similar problem with a theoretical subject.

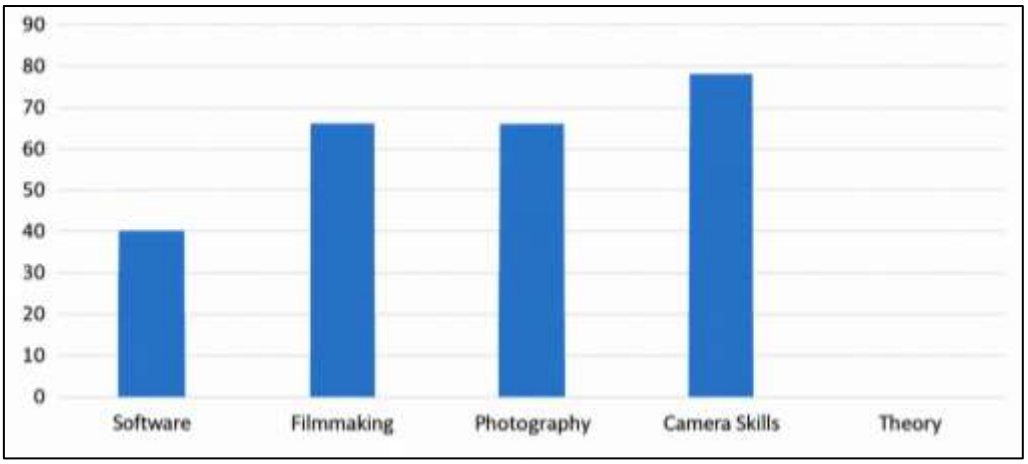

Figure 2. Distribution of Difficulties in Teaching Media Subjects Online

As shown in figure 2, the subjects that are more difficult to teach are practical and production oriented. It was observed that the pattern was that a camera-based and production-intensive learning approach was significantly more difficult than was a theoretical approach, and this was when the learning was mediated by technology.

4.3 Faculty Time Investment in Addressing Online Teaching Challenges

Faculty members also differed in the amount of time devoted to investigating and responding to online teaching challenges.

Table 3. Weekly Time Devoted to Understanding Online Teaching Challenges

Weekly time allocation	Frequency	Percentage (%)
Less than 2 hours	44	44
3–5 hours	54	54
More than 10 hours	2	2
Total	100	100

54% spent 3-5 hours a week getting to know the challenges of online teaching. 44% spent less than 2 hours and only 2% spent more than 10. This pattern suggests moderate pedagogical adaptation activity and weekly activity continued to be limited.

4.4 Technological Familiarity of Faculty Members

Faculty familiarity with technological tools and platforms was generally high.

Table 4. Faculty Familiarity with Digital Teaching Technologies

Level of technological familiarity	Frequency	Percentage (%)
Very familiar	36	36
Moderately familiar	54	54
Somewhat unfamiliar	10	10
Total	100	100

90% of the respondents said that they were at least somewhat familiar with the technological platforms necessary for online teaching. 54% indicated being moderately familiar and 36% very familiar, with only 10% indicating some level of unfamiliarity.

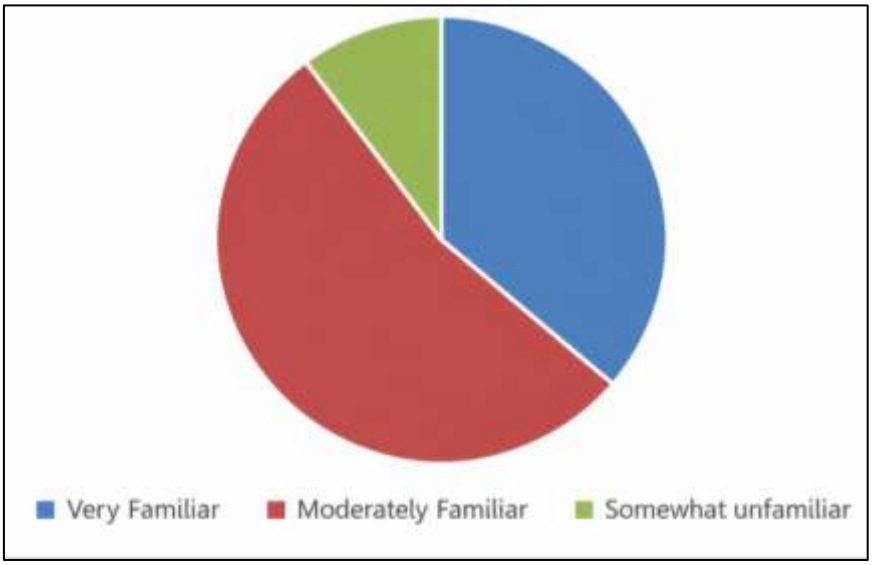

Figure 3. Faculty Familiarity with Technological Tools and Platforms

Figure 3 displays this distribution of responses in the "moderate" and "high" familiarity ranges, and the digital familiarity of the faculty members who participated in the survey was generally high.

4.5 Assessment and Feedback Challenges

Assessment represented one of the most substantial areas of difficulty. Respondents could identify more than one challenge; therefore, percentages in Table 5 are not mutually exclusive.

Table 5. Challenges in Assessing Student Progress and Providing Feedback

Assessment-related challenge	Frequency	Percentage (%)
Limited opportunities for direct observation	75	75
Lack of non-verbal cues	75	75
Difficulty assessing practical skills/projects remotely	55	55
Ensuring academic integrity	38	38
Managing assignments and timely feedback	21	21
Difficulty providing constructive feedback remotely	20	20
Technical issues affecting timely feedback	16	16

Limited opportunities for direct observation and the absence of non-verbal cues were the dominant challenges, each reported by 75% of respondents. Difficulty evaluating practical skills or projects remotely was identified by 55%, while academic integrity was reported by 38%.

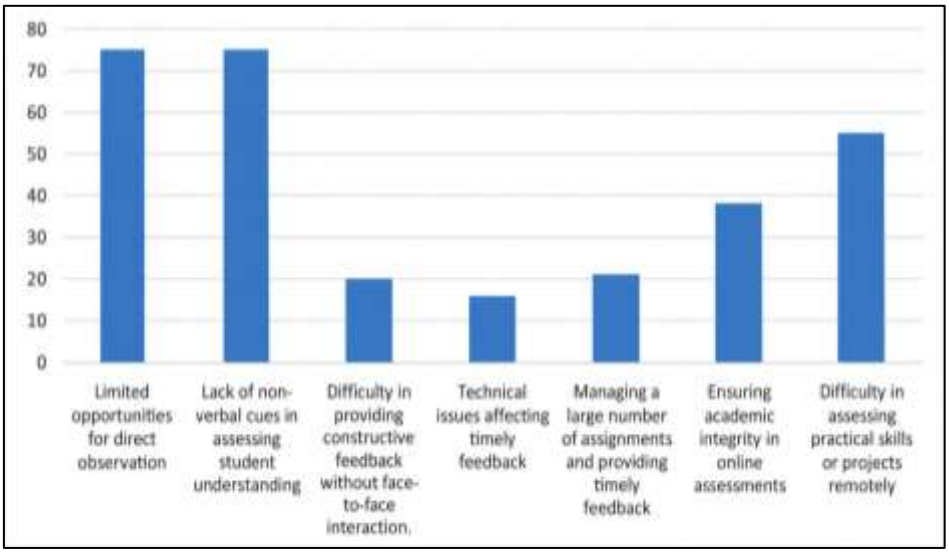

Figure 4. Distribution of Assessment and Feedback Challenges in Online Media Education

Figure 4 shows that interactional and observational constraints were more prominent than purely technical barriers, highlighting the difficulty of evaluating practical and performance-oriented learning through remote

environments.

4.6 Adoption of Alternative Digital Assessment Practices

Faculty members responded to assessment constraints through a range of alternative digital mechanisms.

Table 6. Alternative Assessment Methods Used in Online Media Education

Assessment method	Frequency	Percentage (%)
Online quizzes or tests	92	92
Social media or online community engagement	88	88
Online portfolios or showcases	71	71
Peer assessment/collaborative assignments	49	49
Live presentations via video conferencing	48	48
Video or multimedia projects	13	13
Online discussion forums or debates	13	13

Online quizzes were the most frequently adopted mechanism at 92%, followed by social media or online community engagement at 88% and online portfolios at 71%. Peer assessment and collaborative assignments were reported by 49%, and live presentations by 48%. Multimedia projects and discussion forums were less prevalent at 13% each.

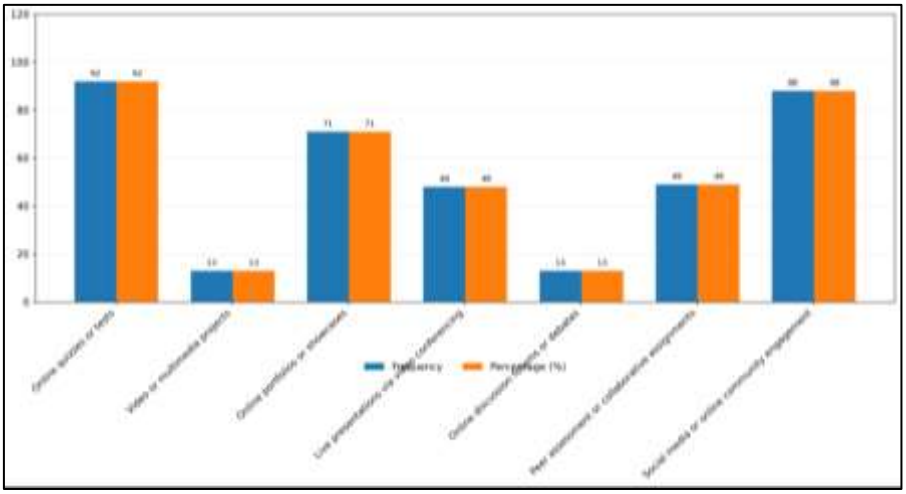

Figure 5. Utilization of Alternative Digital Assessment Methods

The figure 5 demonstrates substantial variation in assessment adaptation, with structured online testing, digital portfolios, and community-based engagement being considerably more prevalent than multimedia-project and discussion-based approaches.

4.7 Institutional and Professional Support Requirements

Faculty responses also identified several forms of support required to strengthen technology-mediated teaching.

Table 7. Faculty-Reported Support Requirements for Effective Online Teaching

Support requirement	Frequency reported	Percentage (%)
Training to develop engaging online assessments	To be verified	98
Digital tools and accessories	80	74
Access to reliable internet	47	44
Regular training for online lecture planning	80	74
Latest upgraded learning platforms	5	5

Training for engaging online assessments was the most frequently identified requirement, reported by 98% of respondents. Digital tools and accessories and regular faculty training were each reported by 74%, while 44% emphasized reliable internet access and 5% identified upgraded learning platforms.

The original record reports a frequency of 106 for the first item despite the stated quantitative sample of 100. The frequency should therefore be verified against the source data before the final manuscript is submitted; the reported percentage of 98% should not be converted into a frequency without confirmation.

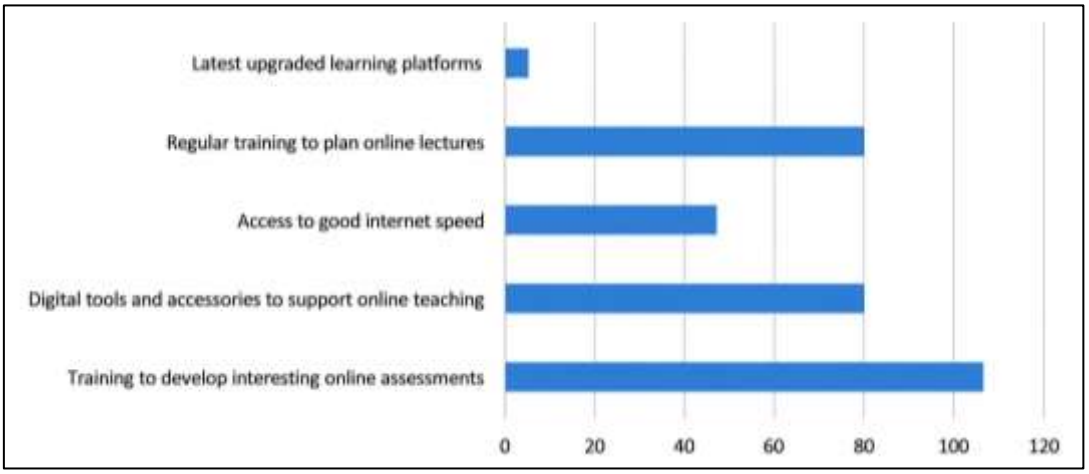

Figure 6. Faculty Support Requirements for Technology-Mediated Teaching

Figure 6 indicates that professional development and access to technological resources were prioritized more strongly than replacement or upgrading of learning platforms alone.

4.8 Qualitative Findings from Faculty Focus Groups

The quantitative patterns were supplemented by evidence from faculty focus-group discussions. Unstable internet connection, unequal access to hardware and software, inadequate AV equipment, challenges in teaching practical skills, and less engagement of learners were consistently mentioned. Around 80% of the faculty participants mentioned digital inequalities and the lack of access to suitable technological resources.
Faculty members also outlined adaptive responses such as virtual museum and factory visits, home studio kits with lighting and photography equipment, remote shooting activities, expert masterclasses, provision of software packages and access to digital-library.

Table 8. Thematic Synthesis of Faculty Focus-Group Findings

Qualitative category	Principal observations
Structural and technological constraints	Internet limitations, digital inequality, hardware/software shortages
Pedagogical constraints	Practical skill delivery, interaction limitations, reduced engagement
Adaptive teaching practices	Virtual visits, home studio kits, remote production activities
Institutional responses	Software provision, digital-library access, expert-led sessions

4.9 Student Learning Experiences

Student focus group feedback confirmed the challenges of practical learning, connectivity, collaboration and access to software. The loss of studio-based instruction and less peer-to-peer interaction were noted as important factors by the participants.
Meanwhile, the student evidence showed clear benefits. About 60% said they had good experiences in theory classes and the same percentage said they had good experiences in software classes. 80% appreciated flexibility of learning in their own environment and at their own speed.

4.10 Integrated Empirical Pattern

The overall results show four main trends. First, faculty were moderately prepared and had relatively high levels of technology knowledge. Second, digital delivery proved to be significantly more effective for theoretical and software oriented learning than for practical media-production activities. Third, assessment was still limited in terms of direct observation, minimised non-verbal interaction and challenges in assessing practical skills. Fourth, faculty and students exhibited adaptive capacity in the form of alternative assessment, virtual activities, digital resources, online collaboration, and flexible learning.
The results of these studies together offer an empirical profile of the technological and pedagogical conditions of the digital transformation in media education. They offer empirical evidence to interpret the digital readiness and its implications for the subsequent AI-enabled transformation, without mixing up the variables that were measured in the study with the implications of AI that were developed in the Discussion section.

5. Discussion

The results indicate that there exists a strong digital foundation for the future of AI-enabled media education in India, albeit at different levels of preparedness. There was moderate faculty preparedness, with 77% reporting moderate or high preparedness and 90% reporting moderate or high familiarity with digital technologies. But digital competence is not synonymous with AI literacy. There are other abilities that are

needed for effective integration of AI, such as critical evaluation of the outputs of AI systems, ethical use of AI and responsible human oversight of AI systems. Faculty readiness and AI literacy are also highlighted in prior studies as key enablers for effective adoption in journalism and higher education [11]–[13].

One of the key areas of limitation was related to practical media education. 72% of the respondents said that camera skills were hard to teach online, followed by filmmaking (61%) and photography (61%). These findings indicate that technology mediated education is highly task dependent. While AI-assisted simulation, virtual production, multimodal learning, and automated feedback can supplement hands-on learning, they are not a substitute for studio-based experience, creativity, observation, or professional judgment. Thus, the use of Generative AI as a pedagogical tool is more valuable as an augmentative tool than a replacement tool [14]–[17]. This is further underscored by the assessment challenges. 75% reported limited direct observation and 75% reported limited non-verbal cues and 55% reported difficulty assessing practical skills. AI-powered formative feedback and adaptive assessment might help mitigate some of these drawbacks, but academic integrity will be crucial as generative AI systems can generate text, images, audio, and video. Perceived usefulness, competence, and clear boundaries for responsible participation also impact student acceptance and effective use [18]–[21].

Sustainable transformation thus depends on faculty development. The training should not be limited to digital skills but should also cover prompt literacy, validation of AI-generated content, algorithmic bias, intellectual property, privacy, synthetic media, and responsible human-AI collaboration [22, 23]. The institutional governance also plays a pivotal role, as there are certain policies that need to be in place for AI use to be effective, such as acceptable use of AI, AI authorship, assessment, accountability, and academic integrity [24, 25].

The qualitative results also show that infrastructure and equity continue to be issues. Connectivity, hardware and software limitations, and access inequity with audiovisual resources can turn into an AI divide when advanced tools and machines have to be accessed on the cloud or through subscription services or are too heavy on the device. Based on the results, it can be seen that the AI model can be used to support individualization, evaluation, digital production, and learning support, while teachers are still needed to provide mentoring and personalization, creativity, ethical aspects, and contextual understanding. Thus the empirical results of the study are proxies for digital readiness for AI-powered transformation, but not evidence of AI adoption or effectiveness of AI-systems.

6. Conclusion

The study shows that the process of AI transformation in Indian media education is not simply a technological shift, but rather a continuation of the digital transformation. There was a significant level of technological familiarity and readiness among faculty members and institutions had already implemented a variety of digital teaching and assessment practices. However, in the practical world of media education there are substantial restrictions in terms of media skill assessment, engagement, infrastructure, and equal access to the digital media. These conditions are important as they are the basis for successful integration of AI.

The findings indicate that AI adoption should be done in a more human-centric way. AI can support customization of learning, formative feedback, creation of digital content, software teaching, accessibility, and flexible assessment, but not hands-on learning, creative decision-making, ethical considerations, collaborative creation, or professional mentorship. Thus, faculty development should not focus on the traditional digital skills but also include AI literacy, responsible use of generative AI, algorithmic bias, academic integrity, synthetic media, copyright, and AI-assisted assessment.

Infrastructure, connectivity, access to software, governance and equitable participation should also be covered by institutional policies. A limitation of the study is the descriptive cross-sectional design and the absence of direct measures of adoption of AI or of effectiveness of the AI-system. The results thus do not directly reflect the implementation of AI but rather provide a baseline for future research on AI. Future studies are required to explore the AI-specific competencies, AI adoption, utilization of generative AI, and the effectiveness of media-learning interventions with the support of AI in larger and more diverse populations.

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