

AI-Driven Journalism as a Digital Governance Mechanism for Quality Education and Access to Information: Advancing Sustainable Development through SDG 4 and SDG 16

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Abstract

Artificial Intelligence (AI) has rapidly transformed digital journalism, enabling automated news generation, personalization, and large-scale data analysis. This study examines how AI-driven journalism functions as a digital governance mechanism that promotes quality education (SDG 4) and strengthens access to information, transparency, and institutional accountability (SDG 16). Using a qualitative, policy-based analytical framework, the paper explores the intersection of AI journalism, India's National Education Policy (NEP 2020), and e-governance strategies under the Digital India initiative. Findings reveal that AI journalism, when integrated within e-governance ecosystems, can democratize access to educational and civic information by enabling fact-checking, multilingual news dissemination, and real-time public data visualization. However, unresolved challenges algorithmic bias, ethical opacity, and the digital divide limit its impact. The study recommends establishing transparent governance frameworks, national AI ethics guidelines, and inclusive digital infrastructure to ensure that AI journalism serves as a tool for sustainable education, civic empowerment, and digital democracy aligned with SDG 4 and SDG 16.

Keywords: Artificial Intelligence; Digital Journalism; E-Governance; SDG 4; SDG 16; Quality Education; NEP 2020; Transparency

1. INTRODUCTION

Background and rationale

In journalism, AI has evolved from a basic tool to one of the major elements in automating the creation of news articles, generating data stories, personalizing the distribution of news, and verifying the content in news stories. AI can increase efficiency and access to information; however, it may also reduce quality, bias, and misinformation.

In situations where learning resources are poorly organized, remote learners may still gain access to educational materials and information. Nonetheless, AI-reliant, unregulated learning resources, particularly in poorly defined digital territories, cover wide gaps in borders, algorithms, and infrastructures. The intersection of AI journalism and education addresses many social issues, thus deserves to be researched.

This study situates AI journalism within the nexus of quality education (SDG 4) and information with access to strong institutions (SDG 16). This study examines the role of AI journalism in India within the framework of NEP 2020 and its implications for SDG 4 and SDG 16. The analysis is qualitative in nature, comprising case studies, policy documents, and analytical research. This reflects NEP-2020's emphasis on digital literacy as a foundation of modern learning and skill development (Digital literacy skills in the context of NEP-2020, 2023).

1.2. Linkage with NEP 2020

NEP 2020 emphasizes digital infrastructure, technology-enabled education, and media and information literacy as foundational skills for 21st-century learners." NEP 2020 outlines technology-enabled education, blended learning, and digital infrastructure as key pillars of digital transformation (Digitalization of Education under NEP 2020, 2023). Further, NEP 2020's emphasis on content diversity and multiple languages corresponds with AI technology's ability to translate, summarize, and reshape content. Conversely, NEP 2020 has included potential challenges to digital inclusion, such as privacy and security of data, disparities in infrastructure access, and the capability of teachers and institutions. NEP 2020 therefore frames AI journalism as both an opportunity and a challenge for inclusive education.

1.3. Connection to SDG 4 And SDG 16

As such, SDG 4 seeks to ensure that there is inclusive and equitable quality education and promote lifelong learning opportunities for all. AI journalism helps achieve this goal because it teaches through news. AI journalism simplifies complex information for diverse audiences. AI news tools make information accessible by customizing and simplifying content to suit various learning levels and language needs.

SDG 16 speaks to the promotion and achievement of a just, inclusive, and peaceful society, and the governance of healthy and responsible societal structures. AI journalism helps achieve SDG 16 by fostering the responsible openness and accountability of information to the public. Citizens and civil society have the tools of self-empowerment through automated public data gap analysis, real-time data visualization, AI, and other tools coupled with fact-checkers. This, however, is not a complete scenario; it rests on ethical barriers which limit abuse, governance, and accountability to opaque algorithms.



Figure 1. Conceptual Framework for AI Journalism's Impact

2. LITERATURE REVIEW

2.1 Evolution of Journalism in the AI Era

The printing press, radio, television, the internet and all forms of digital media and now AI. As in all previous cases, augmentation of journalism with artificial intelligence tools modifies the production, curation, distribution, and verification of journalistic processes. News agencies, such as, for example, can employ AI Natural Language Generation (NLG) tools to automatically generate short news stories, for example, about finances or sports. Also, machine learning can be useful for the identification of patterns and leads for investigative pieces (Dodds et al., 2024) when used with data journalism.

Reuters' News Tracer identifies breaking news on Twitter, Washington post's "Heliograph" publishes automated local news articles, and Associated Press automates the generation of earnings reports. These tools, however, lead to important concerns about the lack of editorial control and opacity of the systems on which news is sourced. Recent studies warn that the growing use of AI in news production can exacerbate misinformation risks and erode public trust if not governed responsibly (Gutiérrez-Caneda et al., 2024). Scholars identify algorithmic bias, opacity of 'black-box' systems, and organizational knowledge silos as key challenges to accountable AI journalism (Dodds et al., 2024).

2.2 Transformation of Education through AI

One of the recent reviews of large language model (LLM) applications in education text reflects automated feedback and content generation as a positive, while listing privacy, fairness, and lack of transparency as negative considerations (Yan et al., 2023). AI offers a lot of value, when combined with human skills and competencies; though, an over-dependence on AI systems is bound to generate issues.

Real time information is offered AI powered news briefs, data graphics, and AI tailored explanation texts aimed at students. AI news summaries, as well as text translations, are tailored for students learning English as a Second Language (ESL).

Some scholars emphasize the 'advantage paradox' regarding the disparities on the use of AI in education and the potential to widen the digital gap (Li et al., 2025).

Plagiarized AI-driven content and other institutional matters such as the erosion of academic integrity continue to be pressing challenges for schools. Artyukhov et al. in 2024 explore the implications of AI technology on education with a specific focus on academic integrity. AI, as Artyukhov et al. point out, has the potential to improve accessibility. However, the possibility of abuse needs to be taken into account. This means, for example, that the use of AI-driven journalism as learning material should be approached with caution and should be accompanied by a clear strategy on attribution, transparency, and defensible educational purpose.

2.3 NEP 2020 and Digital Literacy

The aim is to ensure that learners shift from the passive consumption of content to actively analysing and creating digital content. This vision is fulfilled in the shift to education AI journalism contemporarily.

AI journalism seamlessly integrates with project based learning and can easily support other cross curricular syllabus components. This encourages a more wholistic approach which integrates education with journalism, and promotes cross literacy engagement.

2.4. AI Journalism, Ethics and Governance

AI journalism raises significant ethical and governance challenges related to bias, accountability, and misuse. Unregulated AI systems may disseminate false information, create echo chambers, and entrench opacity over decision-making. The SDG 16 provisions on the use of AI underscore the importance of access to information, accountability, and the presence of strong institutions.

However, the claim lacks the condition of inclusive governance, equitable access to resources, and the exercising of rights to the use of AI technologies as per the UN (2025). UNESCO promotes the use of ethical AI in the media and calls for the incorporation of transparent and explainable AI systems in news organizations.

Research on Newsroom knowledge silos illustrates how the disaggregation of parts may be coupled with AI responsible use. Editorials may refuse the algorithms, technologists dismiss journalism, and management dismisses ethics for efficiency (Dodds et al 2024). There is a growing body of work on frameworks for explainable AI (XAI), participatory design, and audits as the 'best practice' in algorithm governance. The use of AI in editorial processes also brings about an autonomy versus control paradox. AI systems tend to generate content with little to no human oversight, which may result in diminished accountability

3. METHODOLOGY

This study adopts a qualitative, descriptive-analytical approach to examine AI-driven journalism in relation to SDG 4 and SDG 16 within the Indian context of NEP 2020.

3.1 Research design

The study employs qualitative content and policy analysis, synthesizing peer-reviewed literature, policy documents, and selected case studies. It focuses on identifying patterns related to educational impact, information governance, and ethical challenges of AI journalism.

3.2 Data Sources

3.2.1 Primary Data:

The use of case studies and media outputs from global AI journalism projects

Fact-checking bots and AI moderation systems

AI news tools utilized in educational settings (summaries and outputs)

3.2.2 Secondary Data/Documents:

Policy and legal documents: NEP 2020, national digital education frameworks, media law.

Academic work on AI in journalism, media ethics, and the use of AI in education.

Organizational publications and reports on the intersection of AI and the SDGs (e.g. UN and UNESCO reports).

Research briefs and white papers like "AI in Action: Accelerating Progress Towards the SDGs" and other documented literature on AI and SD sustainable development.

Data selection employs purposive sampling in selecting a case or document that is significant to the intersection of AI journalism with education, media governance, and the SDGs.

3.3 Analytical Framework

This portion utilizes thematic coding pertinent to SDG and NEP 2020. The themes are:

Access and Quality of Education: the impact of AI Journalism on the learning process, digital literacy, and equity of content.

Access to and Governance of Information: the impact of AI Journalism on transparency, fact checking, civic engagement, and accountability of institutions.

Ethical risks and Bias: algorithmic disinformation, censorship, disregard for the digital space, and other forms of exclusionary digital Governance.

Alignment and Integration of Policies: governance frameworks NEP 2020 and other practices AI Journalism and the governance frameworks and practices of NEP 2020, and other frameworks to AI journalism practices.

The analysis also involves comparing cases to identify patterns and differences such as differentiating global from Indian examples.

3.4 Limitations

This methodology is restricted by a range of factors:

This study is limited by its reliance on secondary data and document analysis, the absence of primary empirical evidence, and the rapidly evolving nature of AI technologies. As a result, findings are contextual and exploratory rather than generalizable.

4. DISCUSSION & ANALYSIS

This chapter looks at SDG 4's intersection with the quality of education and AI Assisted Journalism with SDG 16's right to information and social accountability. This section examines the implications of AI-driven journalism for education (SDG 4) and information governance (SDG 16) within the NEP 2020 framework.

4.1 AI-Driven Journalism: Mechanisms and Models

The innovation in AI journalism encompasses a wide array of technologies. These include Natural Language Generation (NLG) news writing, machine learning in trend or anomaly detection and news writing, fact-checking software, summarizers and translators, and audience analytics for audience-centric content (Dodds et al. 2024). Some systems have a hybrid model where AI generates a skeletal version of content that is then offered to human editors for polishing and completion.

An example is the AEJIM, AI-Environmental Journalism Integration Model. It features real-time hazard detection that is crowdsourced, vetted, and openly reported (Tiltack, 2025). It shows the intersection of journalistic AI with publicly relevant content, particularly education and environment issues.

AI aids in summaries and also translates news that is in English to other languages, which in turn helps in equity in countries with multiple languages like India. It also addresses the constituent of the NEP 2020 which promotes the use of media in a mother tongue and other regional languages.

Different models have different levels of Automation. Simple fully automatic models like the ones used for financial reports are elementary. Others are complex, such as the semi-automated model wherein AI generates a first draft and humans refine it, and the assisted model wherein AI aids in research, drafting, and fact-checking. All models have consequences for the level of relinquished editorial control, responsibility, and trust for the users.

4.2 Impact on Quality Education (SDG 4)

AI journalism holds the potential to be an educational resource with contextual and supportive stories and data visuals to textbooks, teaching learners about current events. Especially for learners in remote areas who do not have easy access to mainstream media, AI curated news summaries can be quite beneficial. AI is already being used to teach journalism, where the discipline is being integrated.

Several institutions of journalism now use AI technology in their curriculum which require the students to use and understand the technology (Babacan et al., 2025). The importance of enabling future journalists to engage critically with AI and other technological tools and systems that use AI has been highlighted by Journalism Education Researchers (Wenger et al. 2024). In the academic context, AI has the ability to help instructors develop narratives fill gaps in the context of their technical lessons and assist in scholarly research. This AI literacy is also necessary for students and other members of society (Hollanek et al. 2025).

Most concerning are the overreliance on the possible AI biases, untruths, and erroneous outputs that come as a result of using AI technology (Gill et al. 2023). Students actively disengaging and consuming AI news are at risk of forming a habit of shallow reading, which is a pervasive problem now. Gaps still exist in the education of students in digitally challenged territories who may not come across AI news, consequently AI education gaps become wider.

The New Education Policy (NEP) outlines the critical need for the inclusion of digital skills, critical thinking, and multilingual instruction (Ministry of Education, 2020). AI news modules can potentially be integrated within the social science, language, and media courses. Students, for instance, could be tasked with comparing AI news articles with their human-written counterparts, analyzing for bias, or reconstructing narratives.

There is no doubt that, AI journalism could enrich the educational content available and foster a more active form of learning. The equitable access to and the capability of the teachers, design principles that foster critique over passive consumption, and the content itself formulate the most important components to active learning paradigm frameworks.

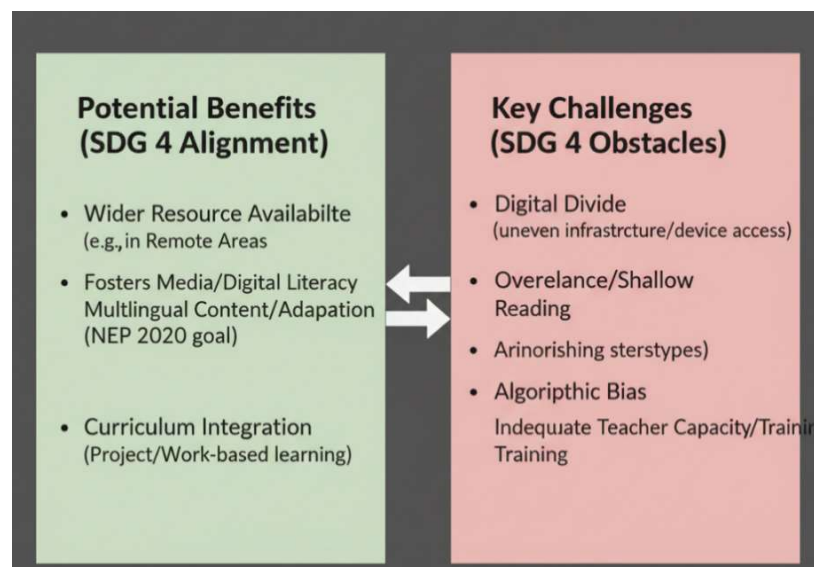


Figure 2. The Dual Impact of AI Journalism on Quality Education (SDG 4)

4.3 Impacts on Access to Information & Governance (SDG 16)

AI journalism contributes to achieving SDG 16 by enhancing transparency, information access, and institutional accountability. Citizens can monitor their institutions more actively due to AI technologies like public budget anomaly detection, automated government document summaries, and fact-checking bots.

For instance, a 2025 declaration by UNESCO calls on media stakeholders to practice AI with a spirit of integrity and transparency, legal accountability, and responsible information use (UNESCO, 2025). As noted by Ibrahim et al. (2025), the integration of AI within human rights and legal accountability frameworks can facilitate the realization of SDG 16.0

Even so, AI, if used irresponsibly, could shift a preference toward a culture of surveillance, as opposed to upholding the rule of law (Ibrahim et al, 2025). Prior Policy Research on AI (Artificial Intelligence) as a Way to Strengthen Institutional Transparency and Justice Mechanisms that are Consistent with SDG 16, (Dasandi et al:2025).

The public's perception toward the AI news outputs could be unfavourable due to the so-called “manipulations” done on information outputs, which in turn could heavily cloud the trust they have toward the relevant institutions. The Paris Charter on AI and Journalism (RFS et al, 2023), for example, outlines certain ethical safeguards which stipulate that the AI-generated content must be kept transparent while maintaining the other ethical safeguards of the Charter. AI-driven analytics and information systems have been recognized as accelerators for achieving multiple SDGs by improving data access, monitoring, and governance outcomes (Gosselink et al., 2024).

To maximize the positive outcomes and minimize the negative ones, the AI journalism projects should have a primary focus on social inclusion and equitable access, transparency, and accountability.

The incorporation of AI with Parliamentary records, Right to Information replies, or even locality budgets, in the Indian context, could bolster institutional accountability. With the help of AI-generated summaries, students and citizens would engage more meaningfully with the public metrics of school performance, local government functionality, and other outcome measures. This fulfils the NEP 2020 vision of promoting active citizenship.

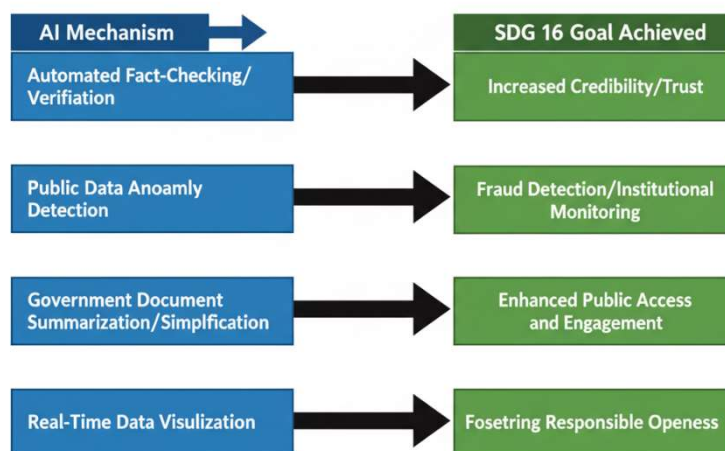


Figure 3. AI Journalism's Mechanisms for Institutional Accountability (SDG 16)

4.4 Integration with NEP 2020 Goals

Their approach to education encompasses the ability to think critically, to communicate in more than one language, and to be prepared for life in a digital world. These objectives can be augmented through the use of AI.

To begin with, integrating media and AI literacy into the school curricula can begin to realize the vision of multiliteracies in the NEP 2020.

Also, NEP aims at equitable access and a reduction of digital divides. AI journalism must be available to all, and not only to people living in urbanized areas with stable internet connections. AI tools need to be integrated into design for low-bandwidth, offline, and vernacular contexts.

Finally, NEP encourages project and work-based learning. Educators can design tasks where students use tools for AI summarisation to create local news commentary, which they then critically examine and refine. These tasks foster critical thinking, digital citizenship, and civic engagement in the students.

This, however, would require the technology to be deployed justly, transparently, and with appropriate etiquette.

4.5 Challenges, Risks, and Mitigation

Misinformation and algorithmic bias: AI systems trained on biased datasets are likely to silence marginalized communities. Journalists working in the Basque Country reported that 89.9% of them believe AI increases the possibility of disinformation (Peña-Alonso et al., 2025).

Accountability and transparency: Undermined elucidations fosters a deficit of accountability within the decision-making process which fosters a culture of no transparency. The Paris Charter advocates for the absence of opacity and silences closures (RSF et al., 2023).

Access to technology: The gap in digital technology presents a unique challenge to the inclusion of the most marginalized learners. Increasingly international discussions on policy regarding AI have begun to highlight the opportunities offered by Democracy through the application of AI within journalism and the Ethical Risks posed through AI in Journalism (Unric 2025).

Critical thinking: Users are likely to take the outputs of the AI process at face value, which could result in a diminished ability to think critically. Research in education has shown that students are concerned with issues of accuracy and integrity.

Abuse by other institutions and the State: The use of AI journalism tools may be more easily employed for the dissemination of propaganda and the stifling of opposing views. There is broad-based Public Discussion as to whether AI has the potential to undermine Journalistic Autonomy and Editorial Integrity as well as raise concerns regarding the overall infiltration of Automation within Journalism (Will Artificial Intelligence be the Death of Journalism? 2025).

Sustainability issues: the world's AI models consume vicious amounts of energy. This has raised issues about both the sustainability of the planet and the sustainability of the costs involved (UNDP, 2025).

Possible solutions could include the:

Development and integration of institutional oversight, peer review, and community evaluation.

Employing bias XAI and algorithmic bias audits of the system.

Compliance with the internationally recognized ethical principles, e.g. The Paris Charter, and the formulation of appropriate domestic legal frameworks.

Providing the neglected areas with devices, internet, and electricity.

Disseminating AI training to professional and lay journalists.

5. FINDINGS AND IMPLICATIONS

5.1 Key Findings

1. Wider availability of educational resources in remote and rural areas.

In the context of limited resources, the summarization of complex articles and the adaptation of relevant cognate materials into the users' local languages helps address the paradox of the age of AI and access to information (2024).

2. Nurturing Media Literacy and Critical Thinking

In activities that incorporate AI news tools, such as students working to compare news produced by AI and human journalists, learners become engaged in what can be termed critical curriculum media reflection. This allows learners to identify bias, misrepresentation and framing. These pedagogical practices illustrate the ability of AI to assist learners in the understanding of journalism and news literacy.

3. Promoting Transparency and Accountability

Citizens can be empowered to monitor institutions such as the automated AI journalism systems that fact check, untangle public budgetary spending, and summarize government documents.

UNESCO's the use of AI ethically in newsrooms illustrates the Media industries use of AI is in compliance with the Freedom of the Press.

4. Any potential future advantage is set against ongoing risks and rising inequality.

The potential advantages of AI are countered with numerous challenges. Most journalists tend to understand that the threat of disinformation from AI is considerable. AI and Disinformation is one of the Studies conducted by Peña-Alonso which shows that 89.88% of respondents consider that AI poses the greatest threat to disinformation. The digital divide when applied to devices, the internet, and the knowledge to use the AI systems is such that inequity results in a lack of education which is counterproductive. The absence of accountability and clarity with respect to algorithms that govern AI and Journalism undermines trust.

5. The primary gaps are those concerning the disconnect between implementing developed policies and practice, and the existing issues of insufficient capacity.

Policy objectives often remain unfulfilled due in part to the unavailability of requisite, well-aligned resources, adequate educational frameworks, requisite technology, or favourable institutional ethos.

5.2 Policy and Practical Implications.

Having observed the facts, the following recommendations are key.

AI journalism needs to be taught under digital, media, and information literacy in the NEP. It includes the AI journalism modules for school, teacher education, and higher education programs. Lessons should include the pedagogy of AI journalism by analyzing and comparing AI-generated news and human-produced news, AI summary fact-checking, and students generating news using AI. To achieve a sustainable way of using AI systems (Artificial Intelligence), we need to strike a balance between Innovation and Environmental/Social Considerations and this has been increasingly highlighted in Research on Sustainable Development as one of the key concerns of Sustainable Development Research (Gohr et al:2025).

5.2.1 Right to access resources, funding, and infrastructure.

Governments must aim to provide broadband, low-cost devices, and AI-enabled platforms to the rural and underserved areas to ensure digital equity. They must also provide low or no bandwidth AI access (UN Global Compact, 2025).

5.2.2 Creating a digital society along with inclusive quality education

Courses and workshops on AI and its ethical Integration technology should be designed for teachers, students, and working new media professionals (Sarrionandia et al., 2025).

5.2.3 The ethical and regulatory frameworks

As a matter of principle, the implementation of AI systems should be restricted to activities that are open to external scrutiny and that can be justified on rational grounds. The media, as a self-regulatory body, must also take the lead in defining AI content labelling, algorithm self-assessment, and other accountability mechanisms for the responsible use of such technologies.

5.2.4 Assessment and evaluation

To begin with, the constructs to assess the impact of AI journalism on students' motivation and on their understanding of the subject need to be developed. Likewise, the impact of AI-driven reports of public discourse on the public and their governing response, and the response of governance institutions to those reports, also need to be assessed.

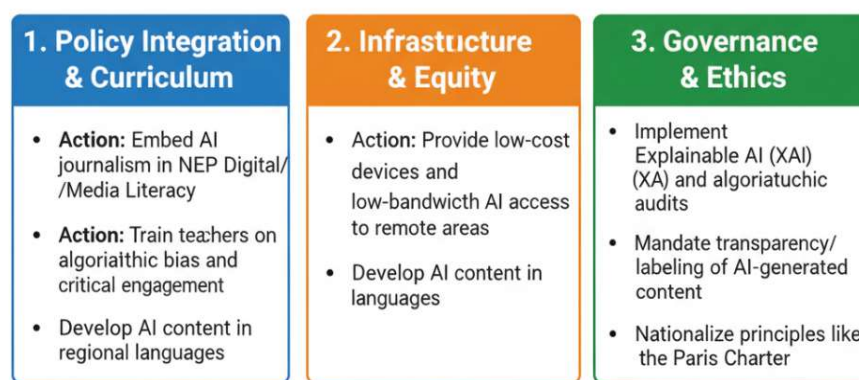


Figure 4. Policy and Practical Recommendations for Responsible Implementation

5.3 Future Prospects & Research Agenda

The integration of AI journalism with education and governance offers significant opportunities for future development:

Implement and evaluate hybrid AI and human newsroom models at the local and regional levels in India, particularly in regional language media linked with educational institutions.

Gather evidence of improved student learning outcomes to demonstrate the impact of AI journalism integration into classroom activities.

Establish frameworks for the proprietary and public governance of AI journalism to promote ethical, transparent, and open-sourced systems for algorithmic accountability.

Address the needs of marginalized populations by eliminating AI-driven news that reinforces stereotypes and biases toward underrepresented and minority voices.

6. CONCLUSION AND RECOMMENDATIONS

In this research, we've looked at how artificial intelligence-supported news media could contribute to improving access to information, promote strong institutions, and improve access to education, especially in terms of how it can help implement National Education Policy (NEP) 2020. Our results show that AI-supported journalism would provide greater access to educational resources in many languages, increase information literacy, and strengthen both

transparency and institutional accountability using tools such as automated data analysis, summary tools, and fact-checking tools.

This potential for AI-supported journalism can only be realised through good and responsible governance of AI technology. If AI journalism is allowed to develop without proper oversight, this could result in the spread of disinformation, the amplification of algorithmic bias, and increased digital exclusion of historically underrepresented or marginalised groups. AI-supported journalism should not be seen only as a way to advance media innovation but also as a way to connect education with civic participation and to hold governments accountable through electronic governance (e-gov).

To fulfil this promise, we suggest integrating AI-supported journalism into digital literacy outreach within NEP 2020. We also recommend creating minimum ethical standards regarding the need for transparency and algorithmic accountability, and expanding low-bandwidth digital networks into under-resourced areas. Collaboration among various stakeholders is critical to developing the capacity to create these programmes, ongoing evaluation of their effectiveness, and citizen engagement in the development of these programmes. Finally, it is important to promote the development of resource-efficient and sustainable models for AI to support the goals of the development community. An ethical and inclusive approach to the use of AI-supported journalism has the potential to provide substantial support for participatory and informed citizenship, as well as increased transparency and accountability within both media and education systems.

7. FINAL REFLECTION

To what extent AI will change these fields still remains to be seen. In India, the NEP 2020 provide solid policy framework for the integration of AI. Digital literacy and multi lingualise, and purposeful use of technology and critical thinking remain important tools. AI journalism is a tool for the enhancement of human agency, and increase in human social learning.

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DECLARATION OF GENERATIVE AI AND AI-ASSISTED TECHNOLOGIES IN THE WRITING PROCESS

Generative AI tools and technologies were used only for language refinement and formatting improvements. The authors are fully responsible for the content.

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AUTHOR CONTRIBUTIONS

Author A developed the concept and prepared the initial draft; Author B contributed to literature review and content improvement; Author C assisted in methodology and structure; Author D supported editing and formatting; Author E contributed to proofreading and references; and Author F performed major revisions, supervised the work, and serves as the Corresponding Author responsible for all journal communications. All authors approved the final manuscript.

CONFLICT OF INTEREST

All authors declare that they have no conflict of interest regarding the publication of this paper.

APPENDIX: Graphical Abstract

The following conceptual figure illustrates how AI-driven journalism functions as a digital governance mechanism to support quality education, enhance access to reliable information, promote transparency and accountability, and advance the objectives of SDG 4 (Quality Education) and SDG 16 (Peace, Justice and Strong Institutions).



Figure A1. Coloured infographic schematic illustrating the AI-driven journalism ecosystem, digital governance processes, educational and civic outcomes, associated challenges, and policy recommendations aligned with SDG 4 and SDG 16

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