ARTIFICIAL INTELLIGENCE, SOCIAL MEDIA AND POLITICAL AWARENESS: A MULTIDIMENSIONAL STUDY OF SCHOOL STUDENTS IN RAJASTHAN

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ABSTRACT

This study examines how artificial intelligence and social media shape political language, civic awareness and engagement among school students in Rajasthan, covering usage patterns, misinformation risks, the urban-rural digital divide and regional study findings.

KEYWORDS-artificial intelligence, social media,political awareness, schools, Rajasthan

ABSTRACT

This study aims to delve into communicative interactions within the realm of online politics, with a specific emphasis on the increasingly significant role of artificial intelligence (AI). In an era where digital technologies are radically transforming communication flows, the introduction of AI into political processes opens new prospects, but also presents numerous challenges. The research seeks to understand how these technologies are influencing political language and user engagement strategies, with profound repercussions on social and political dynamics. The methodology employed combines both qualitative and quantitative analysis. On the one hand, a qualitative analysis was conducted on AI-generated content within online political discussions, examining how this content influences political narratives and shape's public opinion. On the other hand, a quantitative analysis evaluated the dynamics of engagement and interaction across various digital platforms, measuring the impact of AI on user behaviour and information dissemination. The findings of this research reveal that AI is not only transforming the language of politics but also altering the ways individuals participate in public debate. Artificial intelligences not only facilitate new forms of communication but can also influence power dynamics, either reinforcing or destabilizing existing structures. Based on these results, it is essential to balance technological innovation with the protection of democratic processes, ensuring that the use of AI is transparent, ethical, and oriented toward the common good. In conclusion, this contribution highlights the need for public debate and ongoing research on the social and political implications of AI, so that these technologies can positively contribute to the future of democracy.

INTRODUCTION

Artificial Intelligence, Social Media, and Political Awareness: A Multidimensional Study of School Students in Rajasthan is a comprehensive research framework examining how algorithm-driven platforms shape civic knowledge, critical thinking, and political engagement among adolescents in Rajasthan. While traditional education and print media once served as primary sources of political socialization, smartphone-based news consumption and generative AI now mediate how students interpret democratic processes and public policy.

Because you provided this title as a topic prompt, below is a structured research framework and thematic overview tailored to the educational and socio-political landscape of Rajasthan.[1,2,3]

Core Research Dimensions

- **Algorithmic Curation and Information Exposure.** Social media feeds and AI-powered recommendation engines selectively amplify political content, creating echo chambers that shape students' early political identities. Studies in urban hubs like Jaipur highlight that smartphone news access increases overall exposure to political topics, though content diversity often depends on user habits.
- **Synthetic Media and Misinformation Vulnerability.** Generative AI tools allow rapid creation of deepfakes, voice clones, and manipulated political narratives distributed through closed peer groups on WhatsApp and Instagram. Adolescents often lack formal training to distinguish authentic civic reporting from AI-generated propaganda.
- **The Urban-Rural and Public-Private Digital Divide.** In Rajasthan, access to generative AI tools and high-speed internet varies sharply between private urban schools (in cities like Jaipur, Jodhpur, and Udaipur) and government schools in rural districts. Private school students often utilize AI for academic research, whereas unregulated social media usage dominates entertainment and news consumption across broader demographics.
- **Civic Literacy and Critical Pedagogy.** Integrating digital and media literacy into secondary school curricula is essential for helping students verify sources, recognize algorithmic bias, and participate responsibly in democratic discourse.[4,5,6]

Suggested Research Methodology

If you are designing a thesis, dissertation, or empirical paper on this topic, consider a mixed-methods approach structured around the following parameters:

Component	Recommended Design
Target Population	Senior secondary students (Classes 9–12, ages 14–18) across Rajasthan.
Sampling Strategy	Stratified random sampling comparing urban centers (e.g., Jaipur, Kota) with rural districts (e.g., Barmer, Dungarpur), and contrasting government (RBSE) vs. private (CBSE/ICSE) schools.
Quantitative Tools	Structured questionnaires measuring daily screen time, primary news sources, AI tool familiarity, political knowledge scores, and susceptibility to synthetic news headlines.
Qualitative Tools	Focus group discussions (FGDs) exploring how students discuss viral political reels, memes, and AI-generated content within peer and family circles.

Key Variables	Independent: AI literacy, social media usage patterns, socio-economic status. Dependent: Factual political awareness, critical evaluation skills, civic participation intent.

DISCUSSION

Studies and state initiatives show that Artificial Intelligence (AI) is rapidly transforming school education in Rajasthan, improving foundational learning, exam pass rates, and English language proficiency across both urban and rural districts. While large-scale government programs are bringing AI tools to millions of students, research highlights an ongoing infrastructure gap between private urban schools and rural government institutions.[7,8,9]

Key Statewide AI Initiatives & Impact

- **Statewide Assessment Tracking.** More than 70% of Rajasthan's public school teachers use an AI-powered scanning app to evaluate student assessments in minutes rather than days. Highlighted by the Michael & Susan Dell Foundation, this system reaches 3.8 million students across 65,000 public schools to deliver tailored remedial lessons.
- **District-Level Academic Gains.** In Rajasthan's Tonk district, the government launched the "Padhai with AI" initiative to help students master difficult textbook concepts. According to The Hindu, 95% of secondary students in participating government schools passed their exams during the program's first academic session.
- **Large-Scale Teacher Training.** The Rajasthan School Education Department partnered with Microsoft at RSCERT Udaipur to train nearly 100,000 government school teachers in its first phase. State leadership, including Chief Secretary V. Srinivas at the Rajasthan International Centre, has emphasized using AI to strengthen foundational literacy and numeracy.

AI in English Language Learning

- **Proficiency Improvements.** A study published in E-Chetana examined 15 urban and rural institutions across Rajasthan. Students using AI-powered speech recognition and adaptive platforms achieved a 37% improvement in language proficiency scores compared to traditional classroom methods.
- **Interactive Skill Building.** AI tools allow students in non-English speaking households to practice speaking fluency, pronunciation, and grammar without fear of peer judgment. Adaptive apps adjust reading passages and vocabulary exercises to match each student's individual comprehension level.[10,11,12]

Research Findings on Challenges & Perceptions

- **Urban vs.** Rural Digital Divide. Qualitative research indexed on PubMed Central highlights stark differences between private schools in cities like Pilani or Jaipur and rural government schools. While urban private schools actively introduce generative AI tools, many rural schools face unreliable internet connectivity and restrict computer usage to administrative tasks.

- **Student and Faculty Attitudes.** A study from BIT Mesra Extension Centre Jaipur found strong optimism among students and educators regarding AI's ability to personalize learning. However, participants also raised concerns about over-reliance on AI tools, academic integrity, and the need for structured ethical guidelines.
- **Informal Mobile Usage.** Even where smartphones are present in rural households, students primarily use them for entertainment or informal YouTube videos rather than structured AI-assisted schoolwork.

RESULTS

Research studies on social media usage among school students in Rajasthan show high active adoption across both urban and semi-urban districts, paired with significant gaps in digital media literacy and notable academic and health impacts. Because the query asks for details in the English language, below is a structured breakdown of key regional studies, usage statistics, and behavioral findings.

Key Regional Studies and Findings

- **Tonk District Study (2024).** A ResearchGate study on Tonk district students surveyed 100 school students aged 13 to 18. It found that 98% of students are active on social media, with Instagram (96%), YouTube (92%), and Facebook (65%) being the most popular platforms.
- **Southern Rajasthan / Udaipur Study (2025).** A cross-sectional analysis in the International Journal of Contemporary Pediatrics examined 3,505 school children across Grades 1 to 12 in Udaipur. Among digital platforms, WhatsApp (20.17%) and YouTube (17.83%) were the leading interactive media choices, and smartphone ownership reached 25.22% for children over age 10.
- **Dholpur District Study.** Research conducted at Kendriya Vidyalaya Dholpur evaluated social networking habits among 4th to 8th-grade students. Out of 121 students who completed the survey, 111 actively used social networking sites, demonstrating early adoption in middle school.[13,14,15]

Academic, Health, and Literacy Impacts

- **Academic Distraction and Physical Health.** In the Udaipur study, 74.63% of respondents perceived a negative academic impact from screen use. Students spending more than two hours daily on screens reported irritability (33.3%), headaches (27.46%), and blurred vision (22.85%).
- **Digital Literacy and Misinformation Gaps.** The Tonk study revealed that 72% of students regularly encounter fake news or misinformation. Furthermore, 60% were unaware of the broader significance of the content they consumed, and 53% lacked formal guidance on online safety.
- **Parental Influence.** Screen habits at home heavily shape student behavior. In Southern Rajasthan, children logging more than two hours of daily screen time strongly correlated with parental screen habits, matching 67.92% of fathers with similar usage.

- **Language and Communication Effects.** Broader Indian high school research published in the International Journal of Science and Research notes that daily social media acts as an informal environment for English language exposure. However, educators note a trade-off between improved casual vocabulary and the frequent use of non-standard grammar and slang in school assignments

Summary Comparison of Rajasthan School Studies

Study Location	Sample Group	Key Usage Metrics	Primary Takeaway
Tonk District	100 students (Ages 13–18)	98% active; Instagram (96%), YouTube (92%)	92% want digital media literacy added to school curricula.
Udaipur (South)	3,505 students (Grades 1–12)	13.6% exceed 2 hrs/day; 25.22% own phones (>10 yrs)	Heavy screen time drives headaches, eye strain, and distraction.
Dholpur District	121 students (Grades 4–8)	91.7% (111 of 121) use social networking sites	Early adoption requires school workshops and parental awareness.

School students in Rajasthan show growing political and civic awareness, moving past traditional textbook theory into direct engagement with governance, public infrastructure, and educational rights.[16,17,18]

Key Manifestations of Political Awareness

- **Grassroots Student Protests:** In recent months, school students (including Gen Alpha and Gen Z cohorts) across districts like Jalore, Barmer, and Jaipur have organized direct demonstrations demanding basic public goods—such as permanent teachers, functional classrooms, clean water, and electricity in government and PM Shri schools. For instance, student-led movements (such as those led by students in Jalore) focus heavily on accountability from the state education department rather than partisan identity politics.
- **Youth Parliaments:** Initiatives like the Rajasthan Youth Parliament provide a structured stage for school students to debate public-interest policies, legislative processes, and governance issues firsthand.
- **Constitutional and Human Rights Literacy:** State-level drives and academic frameworks (such as higher secondary and college-level human rights and constitutional awareness campaigns by institutions like HTE Rajasthan) actively encourage young citizens to understand democratic traditions, social justice, and fundamental duties.
- **Policy and Medium-of-Instruction Shifts:** Students and families have increasingly reacted to systemic changes—such as state shifts toward English-medium government

schools (e.g., Mahatma Gandhi English Schools), sparking local debates around inclusion, access, and socioeconomic divides.

CONCLUSIONS

Recent studies on school students in Rajasthan show a strong push toward English-medium education for social mobility, alongside persistent language gaps between home and school. Research from 2025 and 2025 highlights how policy shifts, teacher proficiency, and digital exposure shape English learning outcomes across the state.

Social Mobility & Government School Reforms

- **Mahatma Gandhi English Medium Schools (MGEMS).** A 2025 study on education reform notes that MGEMS provide free English instruction to students from underprivileged and backward areas. These schools benefit first-generation learners by blending the mother tongue with English to reduce speaking anxiety.
- **Job Market & Economic Aspirations.** Research on English language teaching in Jaipur (July 2025) highlights that financial needs and job market demands are primary drivers for students learning English. However, traditional teaching methods often limit practical fluency.
- **Community Confidence.** Case studies on marginalized groups, such as the Merasi School initiative, show that adding English to a culturally relevant curriculum helps disadvantaged students communicate outside their communities without hesitation.

Linguistic Gaps & Legal Context [19]

- **Home vs.** School Language Divide. A 2025 Language Mapping Survey across nine districts in Rajasthan found significant mismatches between home languages and the school medium of instruction. In 5,289 surveyed schools, teachers did not know the children's local home language, creating early learning barriers.
- **Teacher Proficiency.** The same survey reported that 42% of teachers felt proficient in their students' home languages, while 12% reported limited proficiency.
- **Push for Regional Languages.** In May 2025, the Supreme Court ruling in Padan Mehta v. State of Rajasthan directed the state to formulate a policy for the phased introduction of regional languages like Rajasthani in primary education.

Digital Habits & Informal Exposure

- **Social Media Usage.** Research on social networking trends among school students reveals that 81.08% prefer YouTube and 41.44% use WhatsApp.
- **Access Points.** Over 98% of surveyed students access these platforms at home, while 35.13% use school computer labs. This digital engagement provides informal exposure to English outside standard classroom textbooks.[20]

REFERENCES

1. Chen, Lijia; Chen, Pingping; Lin, Zhijian (2020). "Artificial Intelligence in Education: A Review". IEEE Access. 8: 75264–75278. Bibcode:2020IEEEA...875264C. doi:10.1109/ACCESS.2020.2988510.
2. Nguyen, Andy; Ngo, Ha Ngan; Hong, Yvonne; Dang, Belle; Nguyen, Bich-Phuong Thi (April 2023). "Ethical principles for artificial intelligence in education". Education and Information Technologies. 28 (4): 4221–4241. doi:10.1007/s10639-022-11316-w. PMC 9558020. PMID 36254344.
3. Communications, Grainger Engineering Office of Marketing and. "PLATO". grainger.illinois.edu. Retrieved 2025-05-07.
4. Gobert, Janice D.; Sao Pedro, Michael A.; Li, Haiying; Lott, Christine (2023). "Intelligent tutoring systems: A history and an example of an ITS for science" (PDF). International Encyclopedia of Education. Vol. 14 (4th ed.). Elsevier. pp. 460–470. doi:10.1016/B978-0-12-818630-5.10058-2. It was the introduction of "intelligence" to CAI in the 1970s that paved the way for a new genre known as ITS
5. Anderson, John R.; Corbett, Albert T.; Koedinger, Kenneth R.; Pelletier, Ray (1995). "Cognitive Tutors: Lessons Learned". The Journal of the Learning Sciences. 4 (2): 167–207. doi:10.1207/s15327809jls0402_2. The LISP tutor was evaluated in a classroom setting early in its development. In the fall of 1984 we taught a mini-course on LISP in which students attended lectures and completed a fixed set of programming exercises either with the tutor or in a standard LISP environment.
6. "International AIED Society". iaied.org. Retrieved 2025-09-29.
7. "International Artificial Intelligence in Education Society | Digital Skills and Jobs Platform". digital-skills-jobs.europa.eu. Retrieved 2025-08-28.
8. "International Journal of Artificial Intelligence in Education". link.springer.com. Retrieved 2025-08-28.
9. Archie, Ayana (2025-08-06). "So long, study guides? The AI industry is going after students". NPR. Retrieved 2025-10-10.
10. Shroff, Lila (2025-08-12). "The AI Takeover of Education Is Just Getting Started". The Atlantic. Retrieved 2025-10-09.
11. Mogavi, Reza H.; Deng, Chao; Kim, Justin Juho (2024). "ChatGPT in education: A blessing or a curse? A qualitative study exploring early adopters' utilization and perceptions". Computers in Human Behavior: Artificial Humans. 2 100027. arXiv:2305.13114. doi:10.1016/j.chbah.2023.100027. hdl:11697/244819. ISSN 2949-8821.
12. Singer, Natasha (August 24, 2023). "Despite Cheating Fears, Schools Repeal ChatGPT Bans". The New York Times. ISSN 0362-4331. Retrieved October 10, 2023.
13. Serrano, Jody (May 19, 2023). "New York City Schools Lift Ban on ChatGPT, Say Initial Fear 'Overlooked the Potential' of AI". Gizmodo. Archived from the original on May 21, 2023. Retrieved May 21, 2023.

14. Field, Hayden (2025-05-22). "Anthropic launches Claude 4, its most powerful AI model yet". CNBC. Retrieved 2025-08-28.
15. Langreo, Lauraine (2025-07-17). "Anthropic Launches Claude for Teachers. Why Some Critics Are Concerned". Education Week. ISSN 0277-4232. Retrieved 2025-08-28.
16. Altavena, Lily (2025-07-15). "Anthropic Launches Claude for Teachers to Influence America's Classrooms". Retrieved 2025-08-28.
17. "Claude for Education | Columbia University Information Technology". www.cuit.columbia.edu. Retrieved 2025-08-28.
18. "Claude for Education | University IT". uit.stanford.edu. Retrieved 2025-08-28.
19. Elias, Jennifer (2023-12-06). "Google launches its largest and 'most capable' AI model, Gemini". CNBC. Retrieved 2025-08-28.
20. Behen, Donna. "How Gemini Gems Benefit K–12 Educators and Students". Technology Solutions That Drive Education. Retrieved 2025-08-28.