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Artificial Intelligence and Education in Nepal: A Mixed-Methods Study on Student Adoption and Learning Outcomes

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ABSTRACT

AI is transforming education globally, but in Nepal, it remains an under-researched area. While global research focuses on the potential of AI for personalization, efficiency, and decreasing disparities, limited information is available on how AI is being implemented in Nepal, particularly in the urban-rural educational gap. This study employed a mixed-methods strategy to probe into the importance of AI for students' learning. Quantitative data was collected via surveys of 150 students in urban and rural school and college setups, while qualitative data was collected via 11 in-depth interviews with teachers, administrators, and AI experts. Stratified random sampling was utilized to ensure representativeness, while descriptive statistics and inferential statistics were combined with thematic analysis to analyze measurable outcomes as well as context-dependent perceptions. Results indicate that 90.7% of students had knowledge about AI, with 33.3% using AI tools weekly and 30% daily, mostly through smartphones and laptops. Students from urban locations were much more exposed compared to rural students (124 of 135 vs. 12 of 15), indicating an ongoing digital divide. Students reported a slightly higher usage by males compared to females, but both groups acknowledged the benefit of AI for education. Notably, 62.7% of the surveyed respondents believed that AI could reduce education inequality, while issues such as lack of proper infrastructure, low digital literacy, and inadequate teacher training remain overriding concerns. The added value of the research is in situating AI adoption in Nepal, highlighting imbalance of access and utilization, and advocating culturally and language-specific AI tools. Its policy contribution is demonstrated by way of policy recommendations for investments in digital infrastructure, teacher capacity building, integrating AI literacy in curricula, and facilitating access for rural students. Overall, this study suggests that while AI possesses unbelievable potential to transform Nepalese education, its achievement will ultimately depend on sustainable, fair, and ethically guided implementation.

INTRODUCTION

Artificial intelligence (AI) is the capacity of digital computers or computer-operated robots to perform activities usually related with human intelligence. The name is sometimes connected to the creation of systems able to replicate human cognitive abilities including knowledge from experience, reasoning, understanding, and generalization. Computers have been designed since the 1940s to execute highly sophisticated tasks including advanced chess play or proof of mathematical theorems. While memory and processing speed have much improved in modern computers, no artificial intelligence system has yet fully matched human adaptability, especially in jobs needing great daily knowledge. In some fields, including medical diagnosis, search engines, voice or handwriting recognition, and chatbot interactions, AI systems have, nevertheless, attained expert-level performance. (Copeland & Proudfoot, 2007).

The development of creative technologies has profoundly affected approaches of instruction and learning. The integration of artificial intelligence (AI) into education has become rather clear given the fast developments in this field recently (Huang *et al.*, 2021). Modern educational

systems now include artificial intelligence (AI), which is driving developments in tailored learning, intelligent tutoring systems, and adaptive tests. (Bit *et al.*, 2024).

Artificial intelligence (AI) has been progressively included into the field of education as computing and information processing technologies develop rapidly, presenting both new possibilities and problems (Kamalov *et al.*, 2023). By allowing more customized and adaptive assessment (Raza, 2023), artificial intelligence in education (AIED) is revolutionizing established educational methods. Originally emphasizing AI-directed learning where students were passive recipients, then moving towards AI-supported learning with learners as collaborators, and now moving to AI-empowered learning where students actively participate in guiding their educational paths. AIED has evolved through several paradigms over time. By encouraging more personalization, enhancing learning outcomes, and enabling adaptive systems that react to students' needs, these developments in AI have the potential to improve teaching and learning. To fully realize AI's potential to drive future educational reforms, however, there are obstacles to overcome in order to continue integrating it into education (Ouyang

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& Jiao, 2021). While AI-driven education has gained popularity in developed countries, its effects are still in their infancy but are expanding quickly in developing countries like Nepal (Khatri & Karki, 2023). Teacher shortages, traditional, non-interactive teaching methods, and unequal access to high-quality education are just a few of Nepal's educational issues.

This research investigates the impact of AI on students in Nepal, focusing on its potential to enhance learning outcomes, bridge educational gaps, and develop essential skills for the future workforce. By examining AI adoption and its effectiveness in different regions of Nepal, this study aims to provide a comprehensive understanding of the opportunities and challenges that AI brings to Nepalese students.

LITERATURE REVIEW

Liekum (2025) investigated whether Artificial Intelligence (AI) has the potential to improve teaching and learning across Ghanaian Colleges of Education. It speaks to general applications of AI, that are useful in education such as personalized learning platforms, intelligent tutoring systems, or AI-based assessments, and specifically looks at what AI tools can do such as ChatGPT, Scite-ci, Elicit, Mendeley, Zotero, Google Scholar Litmaps, Quillbot, and PaperPal. Using a mixed-methods approach, the researchers focused on data collected from four across teacher trainees, which encompassed the use of surveys, interviews, classroom observations, questionnaires and a literature review. In summation the study investigated how AI can alleviate teacher workload, support better access to resources, and combat various school and student needs. Findings suggested that while AI may present opportunities for improved teaching quality, research potential and learning outcomes there are key challenges with supporting infrastructure, training, and policy. The study concluded that there would need to be strategic investments into teachers using technology, developing teacher capacity, and an institutional policy framework to enable teachers to engage meaningfully with AI to prepare them to educate their students in 21st-century classrooms, and to develop their students as lifelong learners.

Asif *et al.* (2025) explored the use of Artificial Intelligence (AI) in English as a Foreign Language (EFL) department, specifically examining how educators' and learners' AI literacy can improve the educational experience. A PRISMA review methodology was used to review 12 relevant studies highlighting key themes. Results suggest that AI-driven tools like intelligent tutoring systems, and automated assessments can improve pedagogical engagement, efficiency, and a student-centered approach, but ultimately it is the educator's and the learner's AI literacy that will determine effectiveness. Teachers with higher levels of AI literacy appear able to use AI in a more dynamic and blended approach to instruction. Learners with a higher AI literacy are able to take a more autonomous approach to language

learning. Barriers to effective implementation included pushback from educators, ethical considerations, and varying levels of institutional AI literacy. The study concludes that structured AI literacy programming is needed to effectively implement AI-focused pedagogy and ultimately maximize the benefits of AI in an EFL program while also striving to maintain the essential role of human educators.

The speedy emergence and advancement of generative artificial intelligence (AI) technologies have left an immense footprint in numerous domains, such as education, science, arts, journalism, and communication. Mao *et al.* (2023) aimed at outlining the position of AI in education, i.e., looking at the possibilities and issues related to the application of generative AI in educational testing using a systems thinking approach. After evaluating these opportunities and challenges, the paper discusses major issues and tensions related to implementing generative AI in assessments and the overall educational setting. The aim of the discussion is to provide educators with a model for using AI in the digital learning environment successfully, emphasizing its potential benefits as well as challenges which need to be overcome.

Saputra *et al.* (2023) investigated the rapid growth of artificial intelligence (AI) and its impact on several educational aspects, with an emphasis on the opportunities, difficulties, risks, and barriers related with AI integration in education. A semi-systematic literature review with a meta-narrative method was used to uncover, analyze, and recognize major patterns and themes in the subject. The findings indicate a number of potentials, including the role of artificial intelligence in improving learning material distribution, evaluation processes, management systems, and educational policy creation. However, issues persist in areas such as pedagogy, educational frameworks, and digital literacy. The study also identifies potential concerns, specifically in terms of personal data protection, character development, and ethical considerations in education. Furthermore, key challenges include the high expenses of AI adoption, inadequate teacher and professional training for AI competencies, and the slow pace of curriculum reform and structural changes at educational institutions.

Artificial intelligence (AI) and big data approaches have several uses in public policy, including education. These technologies have resulted in substantial improvements in teaching techniques, curriculum design, and educational management, influencing both the development and implementation of education policy. While AI has the potential to significantly improve educational results, it also raises worries about new risks and problems that could negate its benefits. Filgueiras (2023) investigated the potential and limitations of AI in education, focusing on how digital technologies are transforming governance practices in the industry. Specifically, the Beijing Consensus on AI in Education was investigated, as well as the issues connected with developing new frameworks for educational governance.

Lameras and Arnab (2022) aimed to elicit trends from recent literature regarding the evolving role of artificial intelligence (AI) in learning. Utilizing the PRISMA process, the review utilised a systematic search, screening, coding, and data analysis process across 141 sources. The key outcomes include a taxonomy of AI use based on pedagogic practice and learning practices, and a framework for supporting teachers to create and reflect upon the skills necessary to embed AI in education. The review also takes into account ethical implications and offers recommendations on the use of AI within pedagogic and learning environments. The findings highlight the ways in which AI can enhance teachers' roles as facilitators of creating, envisioning, and coordinating AI-enabled learning practices. This supports the design of AI systems that can generate data-driven insights to support pedagogy, subject matter, and learner models. Recent developments in Artificial Intelligence in Education (AIED) have generated excitement over its potential to revolutionize learning spaces, though much of these hopes are shaped by misperceptions of the technical capabilities of AI and a limited conception of education's more general social role (Anonymous, YEAR). AIED systems are already present in different forms, each with some assumptions regarding education, as highlighted recently in a typology that categorizes different AI applications, from adaptive learning environments and automated tests to personalized learning, according to their pedagogical foundations. While these technologies offer promising avenues to enabling learning, there are several persistent challenges, such as technological limitations, data-privacy ethical concerns, and issues of unequal access. Other obstacles, including resource constraints, gaps in teacher training, and regulatory issues, further inhibit the large-scale application of AIED. Such a balanced perception of AIED highlights the significance of overcoming such obstacles to ensure responsible utilization of AI potential for education, guaranteeing it adheres to both pedagogic objectives and ethics (Holmes & Tuomi, 2022). Zhai *et al.* (2021) investigated how artificial intelligence (AI) was integrated into the education industry, highlighting growing research trends and potential problems. (Anonymous, year). The study, which examined 100 studies from the Social Sciences Citation Index between 2010 and 2020, divided research into three layers: development (classification, matching, recommendation, and deep learning), application (feedback, reasoning, and adaptive learning), and integration (affective computing, role-playing, immersive learning, and gamification). Future research trends include investigating the Internet of Things, swarm intelligence, deep learning, neuroscience, and evaluating the usefulness of artificial intelligence in education. However, the analysis identifies several obstacles, including the potential of AI being misused, altered teacher and student roles, and social and ethical considerations. These findings offer valuable insights, reinforcing the theoretical foundations of AIED and pointing to promising avenues for collaboration

between educators and AI developers.

Chen *et al.* (2020) evaluated the effect of Artificial Intelligence (AI) on education, specifically its application in administration, teaching, and learning. Based on a conceptual framework that was constructed from preliminary analysis, the study applied a qualitative research approach, predominantly taking a literature review as the methodology to achieve its objectives. Artificial Intelligence, or AI as a field of study, has led to innovations in machine and system architecture that exhibit man-like intelligence with characteristics like cognitive capabilities, learning, being adaptive, and decision-making. The research revealed that adoption of AI is widespread among schools utilizing AI in various forms. From its original placement into computer-related technology, it expanded to web and online intelligent education solutions. Presently, AI tools like embedded systems, humanoid robots, and chatbots are able to carry out instructional tasks alone or together with teachers. Administrative tasks like grading and verification of students' work have been streamlined by the AI platforms. AI has further facilitated the customization of the curriculum and learning materials for individual students to meet their respective needs, enhancing engagement, retention, and the quality of learning.

Knox (2020) examined the political economy of artificial intelligence in Chinese education by looking at the interaction between government policy and private sector companies. While media and policy discourses would place China's AI development within an integrated national strategy and global competition, this study illustrates a more nuanced landscape involving regional networks and international corporate involvement. The first section talks about two of the Chinese government's key policy documents, emphasizing the central role of educational institutions in advancing national and regional AI agendas, particularly in building domestic capacities. The second section addresses three principal private education companies, New Oriental Group, Tomorrow Advancing Life (TAL), and Squirrel AI, to illustrate the private sector's contribution to the development of AI applications in education. These companies demonstrate the growing strength of China's established private education sector and its push into international markets. The paper concluded by noting that with government policy placing education at the forefront of the national AI initiative, the private sector is seizing favorable political conditions to push educational AI applications and market development forward rapidly.

MATERIALS AND METHODS

AI is revolutionizing education globally, but its development has not been widely researched in Nepal. While research focuses on global implications such as the potential for personalization, efficiencies, and decreased inequities, there is little information about usage or perceptions of AI in Nepal, especially with respect to the urban-rural education gap. The study employed a

mixed methods design to investigate the relevance of AI for student learning. Quantitative data was collected from 150 students across urban and rural school and college contexts through surveys, and qualitative data was obtained from 11 interviews with teachers, administrators, and AI experts. Stratified random sampling was used to achieve representativeness, while descriptive statistics and inferential statistics were melded with thematic analysis to produce measurable outcomes and contextually based perceptions. Results showed that 90.7% of students had heard of AI, and 33.3% used AI tools at least once per week and 30% used at least one per day, mostly from smartphones and laptops. Students from urban areas were exposed to AI tools at much greater levels than rural students (124 of 135 vs. 12 of 15), suggesting that a digital divide remains in play. Students reported slightly greater use by males compared to females, but both groups reported that the educational benefits of AI held true regardless of gender. Notably, 62.7% of the participants surveyed believe that AI can help reduce education inequality but concerns regarding the lack of infrastructure, low digital literacy, and teacher inadequacy remained clear areas of concern. What this research adds to the literature base is the contextual placement of AI acceptance in Nepal, addressing inequities not only in access but also in use, and the supporting of AI tools that are culturally and language relevant to the students. In terms of policy, this research can help inform policy development by way of recommendations for investment in digital infrastructure, teacher capacity building, AI literacy embedded into curriculums and to pay close attention to the inequities of access to students in rural areas. Overall, although AI has incredible potential to change education in Nepal, it will ultimately depend on sustainable, fair and ethical implementation.

RESULTS AND DISCUSSIONS

Quantitative Findings

Survey results provide significant statistics regarding the

use and demographics of AI-based study tools among participants. They overwhelmingly fall in the 20-22 and more than 22 age groups and account for 34% and 38%, respectively, evidencing greater involvement of adults and older children. Male respondents account for 61.3% of the sample, indicating a male-dominated sample, with females at 34%, and a small percentage identifying as 'Other.' Bachelor's degree holders form the largest group, with 64% of respondents, followed by urban-based participants at 90%. High levels of familiarity with AI are reported, with 90.7% of respondents familiar with AI concepts, indicative of its incorporation into contemporary education in urban areas and higher levels of education.

Usage of AI tools varies widely, with 33.3% using them weekly and 30% daily, primarily smartphones and laptops/PCs. Home broadband is the most common source of the internet (65.3%), indicating a need for continuous connectivity. The impact of AI tools on learning is observed to be moderate to excellent, with 30% rating it as 3, and 26.7% as 4, indicating positive impacts on understanding subjects. Nevertheless, half of the interviewees indicate availability of AI tools via schools or colleges, and 64% indicate teachers using AI to teach. While 62.7% of the interviewees feel that AI has the potential to reduce educational inequality, obstacles still exist, the most frequent of which is economic, occurring in 10.7% of the interviewees.

The felt need for AI in the education of Nepal's future is strong, with 34% indicating it is very important and 27.3% considering it extremely important. Still, there are adoption challenges that are universal, including lack of access, weak digital literacy, and expense, meaning there is a need for additional support and infrastructure. Overall, although AI is recognized to be a revolutionary tool for education, unequal access and integration among different groups still persist, demonstrating the need for concerted efforts to realize the full potential of AI in Nepal's education system.

Table 1: Familiarity with the AI

| | No | Yes |
|--------------------------------|----|-----|
| Education | | |
| Bachelor | 4 | 92 |
| Doctorate | 0 | 2 |
| Higher Secondary or Equivalent | 5 | 26 |
| Masters | 5 | 16 |
| Gender | | |
| Female | 4 | 47 |
| Male | 9 | 83 |
| Other | 1 | 6 |
| Age Group | | |
| 16-18 | 2 | 15 |
| 18-20 | 3 | 22 |
| 20-22 | 5 | 46 |

| | | |
|------------------------------|----|-----|
| Above 22 | 4 | 53 |
| Location of Institute | | |
| Rural | 3 | 12 |
| Urban | 11 | 124 |
| Total | 14 | 136 |

The cross-tabulation of familiarity with AI tools reveals that a majority of respondents across all groups are familiar with AI, 136 out of 150 respondents reporting familiarity. Bachelor’s degree holders are the most familiar, with 92 out of 96 respondents reporting familiarity with AI, followed by master’s and higher secondary students. All doctorate-level respondents are familiar with AI. By gender, males are most familiar (83 out of 92), then women (47 out of 51), and others (6 out of 7). Familiarity is also

highest by age, and the 20-22 and above 22 age groups register the highest awareness (46 and 53, respectively). Urban respondents are most familiar with AI (124 out of 135), while rural respondents are less familiar (12 out of 15). Overall, awareness of AI is shared across gender, age, educational attainment, and place, albeit with slight discrepancies primarily among young, female, and rural participants.

The cross-tabulation of AI tool usage indicates that

Table 2: Use of the AI

| | Daily | Frequently (weekly) | Never | Occasionally (once or twice a month) |
|--|-------|---------------------|-------|--------------------------------------|
| Education | | | | |
| Bachelor | 32 | 32 | 8 | 24 |
| Doctorate | 2 | 0 | 0 | 0 |
| Higher Secondary or Equivalent | 7 | 10 | 8 | 6 |
| Masters | 4 | 8 | 6 | 3 |
| Gender | | | | |
| Female | 19 | 13 | 7 | 12 |
| Male | 25 | 36 | 12 | 19 |
| Other | 1 | 1 | 3 | 2 |
| Age | | | | |
| 16-18 | 5 | 2 | 3 | 7 |
| 18-20 | 7 | 8 | 4 | 6 |
| 20-22 | 14 | 18 | 7 | 12 |
| Above 22 | 19 | 22 | 8 | 8 |
| Location of the Educational Institute | | | | |
| Rural | 4 | 4 | 6 | 1 |
| Urban | 41 | 46 | 16 | 32 |

bachelor’s degree holders are the most frequent users, with equal numbers (32 each) reporting daily and weekly usage, followed by occasional users (24) and a small number who never use AI tools (8). Master’s and higher secondary students show similar patterns, with more weekly users than daily or occasional ones, while doctoral respondents exclusively report daily use. Gender-wise, males exhibit the highest engagement, with 36 using AI tools weekly and 25 daily, while females primarily use them daily (19) and occasionally (12). Respondents identifying as ‘Other’ mostly report minimal usage. Usage frequency also varies with age, as older respondents (above 22) demonstrate the highest regular engagement, with 22 using AI tools weekly and 19 daily, while the 20-22 age group also shows significant daily and weekly use. Urban respondents

show considerably higher engagement than rural ones, with 87 using AI tools daily or weekly compared to 8 in rural areas, reflecting disparities in access and adoption between urban and rural educational settings.

The cross-tabulation of the impact of AI-based tools on improving understanding shows that bachelor’s degree holders report the highest moderate impact, with 34 rating it as 3, followed by significant impact ratings of 4 (23 respondents) and 5 (20 respondents). Master’s degree holders primarily report scores of 4 (8 respondents), while higher secondary respondents show a mixed impact, mainly rating it as moderate (9 respondents). Doctorate-level respondents indicate a significant impact, with one rating it as 4 and another as 5. Gender-wise, males perceive a stronger impact, with 28 rating it as 4 and 19

as 5, compared to females, who have a more moderate perception (17 rating it as 3). Age-wise, respondents above 22 exhibit the strongest perceived impact, with 20 scoring it as 4 and 13 as 5, while younger age groups (16-18 and 18-20) generally report lower scores. Urban respondents

consistently rate the impact higher, with 40 scoring it as 4 and 27 as 5, whereas rural respondents report lower scores overall, highlighting urban-rural disparities in AI tool effectiveness.

The cross-tabulation of awareness of the significance

Table 3: Impact of AI Based tools in improving the understanding

| | 1 | 2 | 3 | 4 | 5 |
|--|----|---|----|----|----|
| Education | | | | | |
| Bachelor | 14 | 5 | 34 | 23 | 20 |
| Doctorate | 0 | 0 | 0 | 1 | 1 |
| Higher Secondary or Equivalent | 5 | 4 | 9 | 8 | 5 |
| Masters | 4 | 1 | 2 | 8 | 6 |
| Gender | | | | | |
| Female | 7 | 3 | 17 | 12 | 12 |
| Male | 15 | 5 | 25 | 28 | 19 |
| Other | 1 | 2 | 3 | 0 | 1 |
| Age | | | | | |
| 16-18 | 4 | 2 | 4 | 2 | 5 |
| 18-20 | 5 | 2 | 9 | 4 | 5 |
| 20-22 | 10 | 2 | 16 | 14 | 9 |
| Above 22 | 4 | 4 | 16 | 20 | 13 |
| Location of Educational Institute | | | | | |
| Rural | 4 | 2 | 4 | 0 | 5 |
| Urban | 19 | 8 | 41 | 40 | 27 |

Table 4: Importance of AI for the future of education in Nepal

| | 1 | 2 | 3 | 4 | 5 |
|--|----|----|----|----|----|
| Education | | | | | |
| Bachelor | 9 | 10 | 20 | 24 | 33 |
| Doctorate | 0 | 0 | 0 | 0 | 2 |
| Higher Secondary or Equivalent | 1 | 1 | 7 | 11 | 11 |
| Masters | 4 | 0 | 6 | 6 | 5 |
| Gender | | | | | |
| Female | 6 | 3 | 14 | 16 | 12 |
| Male | 7 | 7 | 17 | 23 | 38 |
| Other | 1 | 1 | 2 | 2 | 1 |
| Age | | | | | |
| 16-18 | 1 | 2 | 5 | 4 | 5 |
| 18-20 | 2 | 2 | 8 | 7 | 6 |
| 20-22 | 4 | 4 | 11 | 16 | 16 |
| Above 22 | 7 | 3 | 9 | 14 | 24 |
| Location of the educational Institute | | | | | |
| Rural | 1 | 1 | 6 | 3 | 4 |
| Urban | 13 | 10 | 27 | 38 | 47 |

of AI in terms of education in Nepal in the future identifies that bachelor's degree holders are the most conscious about the significance of AI, 33 ranking as very significant (score of 4) and 24 ranking as highly

significant (score of 5). Higher secondary respondents also show high support, 11 of whom rate it 4 or 5. Master's degree respondents have quite more divergent opinions, with more middling scores, but both doctorate

respondents rate it as very important. Gender-wise, males exhibit maximum conviction, and 38 respond with it being 5, while 23 respond with 4, where females exhibit lower priority, as 16 respondents rate it at 4 while 12 respondent rate it 5. When analyzed on a age basis, respondents over 22 years present the maximum trust in AI significance, with 24 rating at 5, while 14 rate it as 4; the lower-age groups report on average lower grades. Urban respondents overwhelmingly consider AI critical, with 47 rating it as 5 and 38 as 4, compared to rural respondents, where only 4 rate it as 5. Overall, the perception of AI's importance is stronger among males, older respondents, and urban participants, indicating a broader recognition of AI's role in shaping Nepal's educational future.

Qualitative Findings

Respondent 10, a developer, emphasized that AI can revolutionize learning by tailoring education based on individual students' needs, especially through adaptive learning systems and mobile apps that can be accessed offline or at low connectivity. Few infrastructures, unreliable internet, and not enough trained teachers remain powerful roadblocks to mass deployment of AI, however. Respondent 11 shared similar views, particularly the uneven readiness of urban and rural teachers, and highlighted that enhancing infrastructure and specific training are paramount to the success of AI-driven learning solutions in Nepal.

With respect to suitable AI technologies, Respondents 10 and 11 agreed that learning platforms with adaptive learning, mobile apps, and AI-powered tools like chatbots and interactive simulations are most suitable for the Nepali environment. Respondent 10 underscored the necessity to incorporate local language and local culture in such tools to make them more relevant and engaging for students, especially in rural and far-flung areas. At the same time, Respondent 11 emphasized the implementation of AI applications such as interactive simulations to enable students to better imagine complicated things, especially in courses such as geology, rendering learning more immersive and hands-on. Both respondents view AI as pivotal to rectifying the learning inequalities between city and country pupils, providing the latter with access to quality learning materials that they may lack otherwise.

Respondents 10 and 11 both mentioned infrastructure issues, such as unstable electricity and internet connectivity, as major challenges in implementing AI tools in rural areas. Respondent 10 also highlighted the need for teacher training and developing locally relevant content to ensure that the AI tools are aligned with the curriculum and students' realities. Respondent 11 invoked the time factor and energy consumed by teachers as well as by students to overcome the learning curve associated with adapting to new AI technology.

Respondent 10 predicted that AI would merge with virtual and augmented reality to create learning spaces that immersed students and could boost student engagement and outcomes by a massive amount. In addition, data

analytics had the capacity to track student performance and provide targeted interventions. Respondent 11 pointed out that AI currently improved testing in the sense that it's being conducted, particularly through adaptive testing and the likes of Kahoot, providing instant feedback, though other forms of qualitative feedback are still superior in some cases.

CONCLUSION

This study shows that artificial intelligence has large potential for promoting education in Nepal by facilitating personalized education, reducing inequities and addressing the future workforce. Survey results showed that there is a level of awareness on AI in education (90.7%), awareness levels were higher among male students, and AI is used regularly by almost two-thirds of learners, but the digital divide is evident, with urban learners and male students benefitting more than rural or female students. Interviews showed that issues related to infrastructure, low digital literacies, and limited teacher training were ongoing obstacles.

While the study demonstrates the possible benefits of using AI in education, this needs to be coupled with limitations related to the size of the sample, representation of an urban based sample, and because AI is still in its infancy in education in Nepal. The data shows that policies should be targeted and explicitly seek to close the rural-urban divide through access to expanded digital infrastructure in rural schools, through subsidizing access to affordable AI tools and teachers' development in the use of AI-enabled learning, as well as AI tools that are culturally relevant implemented to be culturally and linguistically relevant.

In summary, AI can be envisaged as a potential opportunity to shift and reshape Nepal's education system, but there will be no promise unless there is intentional, equitable, and sustained policy approaches that aim to address the structural gaps that already exist.

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