Impacts of Artificial Intelligence on Teachers' Role in Lalbandi Municipality, Sarlahi, Nepal

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Abstract

Artificial Intelligence (AI) is the field of computer science which trains machines to imitate intelligent human abilities such as learning, reasoning, and decision-making. Integration of AI in education has the potential to transform traditional teaching techniques and enhance student achievement, especially in Lalbandi Municipality, Sarlahi District, Madhesh Province, Nepal. The aim of this study is to examine the potential effects of AI on the roles, responsibilities, and professional development of educators in this field. The study determines the levels of concern, confidence, attitudes, and perceived usefulness towards AI among educators by combining a comprehensive literature analysis with primary research including 70 teachers from community and private school. The results show that there is a lot of ambiguity regarding the ways in which AI may impact decision-making, job security, and trustworthiness of AI training and its advantages. To address these issues, researcher suggests to improve teachers' self-assurance and comprehension of AI, and cultivate a more positive attitude toward AI technologies. The study emphasizes the critical need for focused AI

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training and support programs. These findings are essential for creating a context-specific strategy for integrating AI into education that puts teachers' needs and agency first, with the ultimate goal of improving Nepal's educational system.

Keywords: Artificial intelligence (AI), AI anxiety, AI integration, AI in education, teachers' roles.

Introduction

Artificial intelligence (AI) has spread in different sectors like medicine, research, agriculture, defence including education at an alarming pace. Like other municipalities also using AI but not specific municipalities are not always named in reports about integration of AI in education sector. Several national and city level initiatives program like pilot program, were organized on AI initiatives in education held in Kathmandu city (Shresta, 2024). One of the leading NGOs in Nepal, named OLE Nepal has implemented technology driven learning including AI-enhanced tool in over hundreds of the schools in various municipalities with partnership of the Ministry of Education in Nepal (Bhattarai, 2024). Annapurna Rural Municipality also published detailed plan for given higher priorities on integrating digital and AI-driven tools in local schools to enhance education quality and access (Annapurna Rural Municipality, 2023). Lalbandi Municipality is affected by the excessive use of AI in teaching-learning activities. Owing to the impact of AI tools in contemporary educational systems, the role of instructors in their classrooms has also been found to change.

Globally, the role of teachers is changing because of the incorporation of AI into education. It is important to understand how artificial intelligence affects private and community school teachers' jobs in Nepal, specifically in Lalbandi Municipality in the Sarlahi District. To better understand the potential difficulties teachers in Lalbandi Municipality face in adjusting to AI-driven learning settings, this study will look at how AI affects their professional lives.

According to Karki et al. (2023), the incorporation of AI in educational environments empowers teachers to capitalize data analysis proficiencies. As a result, important insights into students' learning habits and patterns were revealed. Educators can then modify their pedagogical approaches to maximize learning outcomes by utilizing these data-driven insights.

According to (Fitria, 2023), AI tools in education are intended to enhance intellect and assist in making learning tasks more successful and efficient. Examples of these tools include voice assistants, smart content, presentation translators, global courses, automated assessments, and personalized learning.

The purpose of technology and AI in secondary education is to support and improve teachers' and students' thought processes, not to reduce learning to a series of protocols for material delivery, management, and evaluation. As AI solutions become more prevalent, educational institutions must remain vigilant and ensure that they do not yield monopolistic power to the hidden algorithms that fuel them.

Huang et al. (2021) suggested that AI can optimize teaching methods and provide personalized learning experiences for students based on their individual needs and learning situations and stated that AI-powered adaptive learning technology allows for one-to-one customized instruction between computers and students, simulating the individualized instruction provided by human teachers.

As the education sector in Lalbandi Municipality navigates the integration of AI, it is essential to consider its implications for teachers' roles, responsibilities, and professional development. This article delves into the current state of AI adoption in Lalbandi Municipality's education system, examining the benefits and drawbacks of AI integration from the teachers' perspective. Through a combination of a literature review and primary research, this study aims to provide insights into the impact of AI on the role of teachers in Madhesh Province, highlighting the need for a nuanced and context-specific approach to AI integration that prioritizes the needs and agency of teachers (Pedro et al., 2019).

The integration of AI technology into the field of education presents numerous challenges for educational institutions, educators, and students. These challenges emerge as they contend with the complexities of precision, personalization, and adaptation of educational offerings and management (Huang et al., 2021).

Objective

In Lalbandi Municipality, Sarlahi District, Madhesh Province, Nepal, the adoption of AI technologies is gaining momentum, promising to revolutionize the way students learn and teachers teach. However, this integration also raises important questions regarding the impact of AI on the role of teachers, who are at the forefront of educational innovation. As AI assumes more responsibility in the

classroom, concerns arise about the potential displacement of teachers, the need for new skills, and the redefinition of their roles. This article explores the impacts of AI on teachers' roles in Lalbandi Municipality, Sarlahi, Nepal, and examines the challenges and opportunities that arise from this technological shift. By understanding the experiences and perspectives of teachers in this region, we can better navigate the complex interplay between technology and pedagogy, ultimately enhancing the quality of education for students in Nepal.

Review of Related Literature

In today's AI-driven educational landscape, the incorporation of AI is expanding with a myriad of innovative AI solutions. AI has emerged as a primary conduit for knowledge dissemination across the global educational system. The pervasive integration of AI in classrooms is catalysing the transition from traditional offline teaching methods to a progressive shift towards online AI-driven instruction.

This study emphasizes how AI improves learning and teaching. This implies that by attending to each student's unique demands, AI can help teachers more effectively provide individualized instruction and improve students' learning outcomes (Huang et al., 2021).

AI plays a crucial role in teacher professional development by improving teachers' skills and knowledge and enhancing their competencies in utilizing AI technologies effectively (al-Zyoud, 2020). This study focused on integrating AI into education to improve teachers' professional capabilities. The use of AI tools and techniques is becoming increasingly popular in various fields, including the education sector, and educators must embrace AI to promote teaching practices and student learning outcomes. The highlights of leveraging AI in teacher education programs call for serious consideration of the benefits that AI can bring to professional development in the education sector.

AI offers the possibility of improving teaching and learning processes in the field of education. Encouraging efficient learning is the goal; it is not meant to replace educators. In addition to emphasizing areas for growth and guaranteeing inclusivity for students with special needs or language barriers, AI systems can offer feedback on student performance. Additionally, many administrative tasks can be automated by AI, giving teachers more time for lesson design and instructional enhancement (Lampou, 2023).

Tomasev et al. (2020) have conducted numerous case studies and discovered a variety of advantages of using AI applications such as smart tutoring systems. Teachers can provide individualized learning experiences that adjust to the pace and learning preferences of each student, enhancing traditional classroom instruction and meeting a range of learning needs. Additionally, AI can assist teachers in producing more dynamic and captivating teaching resources, including augmented reality experiences and virtual simulations, which can improve student learning results and enrich classroom settings. Collaborative AI systems can help educators share information by giving them access to materials, lesson plans, and best practices from a worldwide network. This promotes innovation in teaching methods and professional development among educators. AI has the ability to provide educators with immediate feedback on their instructional strategies and students' development (Tomasev et al., 2020).

The effect of AI on interactions between students and teachers in online learning has attracted increasing attention. AI systems provide efficient assistance for remote learning and teaching, enabling personalized instruction for learners, task automation for teachers, and adaptive evaluation. Nevertheless, it is still unclear how AI systems affect interactions between students and teachers. Seo et al. (2021) examined the voices of 12 students and 11 teachers to investigate various use cases of potential AI systems in online learning. The results demonstrate how participants see AI systems being used in online learning to allow for large-scale, individualized learner-instructor interaction but at the risk of transgressing social norms. While AI systems have been shown to enhance both the volume and quality of communication, as well as to offer tailored, real-time help in more general circumstances and strengthen the sense of connection, concerns have been raised regarding authority, responsibility, and surveillance.

Slimi (2023), examines how AI affects teaching and learning, evaluation, ethics, necessary skills, and the future careers to investigate its influence on higher education. Based on a survey of participants in higher education, this study uses a qualitative methodology. The findings of this study highlight the critical role that AI will play in higher education. The results demonstrate how successful and efficient AI is in providing graduates with new skills for the future employment. They also emphasized the importance of considering AI's ethical implications. The study shows that to prepare graduates for the future workforce; institutions of higher learning need to include AI in their curricula more thoroughly.

Teachers are becoming more familiar with and are adopting AI tools and technologies, reflecting an integration of common AI skills and teaching pedagogy, as well as AI products replacing traditional teaching strategies and improving the learning experience for both teachers and students (and Mobile Computing, 2023). The main aim of this study is to learn and leverage AI in educational systems to adapt to the evolving landscape of educational technology and instructional methods (and Mobile Computing, 2023).

With the use of AI in education, teachers can now focus on higher-order skills and create individualized learning experiences rather than simply imparting knowledge (Rafferty, 2023). Educators must adjust to these developments by acquiring new skills and successfully incorporating AI into their lesson plans. AI works best when used as an additional tool to ease the workload of teachers and enhance both teachers' and students' productivity. To guarantee the effective integration of AI in education, it will be imperative to tackle many issues, such as teacher training, infrastructure and financial constraints, data privacy, and security concerns (Rafferty, 2023).

A research paper by Saputra et al. (2023), states that teachers may face difficulties in adapting their teaching methods to manage AI technology effectively. Balancing teaching practices using AI-based tools can challenge educators. These challenges may include ethical, security and privacy, professional development, and curricular and inclusive education issues (Saputra et al., 2023).

Ahmed et al. (2023) examined how AI influences students' decision-making, inattention, and privacy concerns. The findings demonstrate that implementing AI in education causes users to become more indolent by performing and automating tasks, increases security and privacy concerns, and decreases human decision-making ability. The study makes several recommendations, including eliminating unfair behaviour, reducing trust in AI technology for decision-making, and ensuring that AI raises no ethical issues in education.

In the context of Nepal, the literature surrounding the impact of AI on education is focused on the investigation of how AI is evolving in education, with a particular focus on academic and intellectual integrity. Khatri and Karki (2023) study uses a qualitative methodology that includes a literature review to investigate this issue. This approach helps to understand the possible advantages and difficulties that AI can pose for education, productivity, and acceptance. Higher

education can benefit greatly from the application of AI in teaching and learning. However, as AI is increasingly used in higher education, questions about ethics and integrity in education arise (Khatri & Karki, 2023). In addition, Katri and Karki (2023) investigated how AI could threaten academic authenticity by limiting critical thinking, stifling innovation, and reducing originality in research and instruction. Maintaining the integrity of scientific research requires a commitment to ethical and intellectual values. It is critical to focus on embracing AI's advantages in higher education while skilfully managing any risks or difficulties that may arise (Khatri & Karki, 2023).

According to Karki et al. (2023), approximately 25% of the studies highlight the importance of educators acquiring competence in utilizing AI technology and understanding the implications of AI integration in education.

Zawacki-Richter, O., et al. (2019) and Xu, W., & Ouyang, F. (2022) identified significant research gaps in AI in education, including insufficient focus on STEM fields, lack of integration with educational theories, and ethical challenges. They conclude that although AI offers transformative potential, more research is needed to address these gaps and improve practical implementation (as summarized in Lemaron, 2024).

The impacts of AI on student-teacher interaction, particularly in online learning contexts, are still unknown, despite the fact that it has been demonstrated to enable personalized education and automate administrative tasks. More investigation is required to understand the ways in which AI affects the dynamics of student-teacher relationships as well as the possible risks of AI defying social norms (Seo et al., 2021).

A major focus of teacher training and competency development is the requirement that educators become proficient in the use of AI technologies. However, there is a lack of research on the specific courses and approaches to professional development that work best for equipping teachers with AI skills. Further investigation is necessary to formulate and assess comprehensive training frameworks that cater to the diverse needs of educators (Karki et al., 2023; al-Zyoud, 2020).

The implementation of AI in education raises several issues, including security, privacy, and ethical considerations. Despite the recognition of these problems, there is a lack of comprehensive research on effective solutions. Research should focus on

creating privacy frameworks, security measures, and ethical principles to mitigate risks associated with AI in educational contexts (Ahmad et al., 2023; Rafferty, 2023).

It is acknowledged that striking a balance between AI-based tools and conventional teaching methods can be difficult, but there is a lack of research on the effective approaches and techniques to adopt. More research is needed to identify ways to incorporate AI into existing pedagogical frameworks without sacrificing the effectiveness of conventional teaching techniques (Saputra et al., 2023).

While AI can improve inclusivity by meeting the needs of students with special needs, there is a lack of research on the practical applications and outcomes of such initiatives. Studies should investigate how AI can be effectively implemented and used to support inclusive education to ensure that all students benefit from AI advancements (Lampou, 2023).

Although there is little empirical evidence to support these concerns, concerns have been expressed about AI potentially restricting originality, creativity, and critical thinking in education. Research should examine the long-term effects of AI on students' capacity for critical thinking and innovation to ensure that AI promotes, rather than hinders, intellectual development (Khatri & Karki, 2023).

Although AI can free up teachers' time and automate administrative tasks, its impact on the overall quality of education is still unclear. Further research is needed to determine whether administrative efficiency driven by AI results in better teaching and learning outcomes (Lampou, 2023).

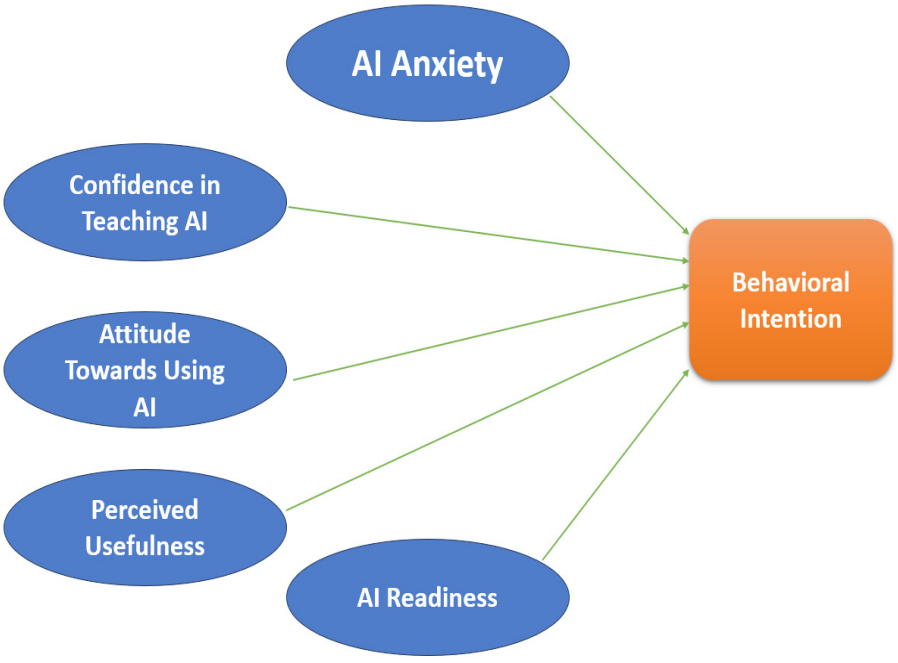
The educational sector can better utilize AI's potential and ensure that its integration improves teaching and learning experiences while minimizing risks and issues by addressing these research gaps.

Over the past several decades, there has been growing interest in the application of AI in the field of education. Due to AI's rapid expansion, it is being used in many educational settings, such as adaptive learning, school administration, and improving educational accessibility. Even though AI has many potential advantages, there are serious implementation-related challenges that must be addressed. This study looks at the advancements and applications of AI in education as well as the barriers to acceptance and use. This study evaluates AI's benefits, including increased learning effectiveness, personalized learning experiences, and streamlined administrative processes in education, by conducting a comprehensive literature analysis. However, the study also notes drawbacks, such as concerns about

student data privacy, a decline in interpersonal communication, and the changing role of educators in the AI era. Public school adoption of AI may also be hampered by budgetary and infrastructure constraints. Various solutions to these problems are proposed in the referenced studies. The study's conclusion highlights the need for supportive regulations, adequate planning, and enhanced teacher understanding of AI to promote its use. Furthermore, it advocates for the creation of an adaptive curriculum that is aligned with advancements in the field. By addressing these challenges, teaching and learning may be transformed, enhancing accessibility, effectiveness, and quality of instruction.

Conceptual Framework

The focus of this research article is to conduct a detailed analysis of the behavioural intention of teachers' roles using AI tools in the classroom. Five independent variables influence teachers' roles in the classroom. These are AI anxiety, confidence in teaching AI, attitude towards using AI, usefulness, and AI readiness. A review of the literature indicates that managing teachers' roles in the classroom and behavioural intention are related (Ayanwale et al., 2022).



Regarding the anxiety of AI among teachers in the community and private schools of Lalbandi Municipality, it has directly impacted their behavioural intention and its effects have been observed in their classroom teaching. Similarly, confidence in AI in teaching-learning activities has also affected teachers' behavioural intention. In addition, attitude towards using AI, perceived usefulness and AI readiness of the teachers have been identified as factors contributing to teachers' behavioural intention, resulting in a direct effect on teaching-learning activities among teachers in the community and private schools of Lalbandi Municipality.

Research Methods

This study employed descriptive and analytical approaches to address the issues of using AI on teachers' roles in Lalbandi Municipality, Sarlahi District, Nepal. This method was used to analyze and interpret the information collected from the respondents. Raw data are interpreted, presented, and analysed using various statistical tools such as percentages, correlation, and regression.

The population of the study consisted of 100 primary and secondary school teachers of whom 70 teachers were selected as a sample to conduct this study.

This study was based on primary data. A questionnaire consisting of 15 items related to the use of artificial intelligence on teachers' roles in Lalbandi Municipality. The questions included multiple-choice and open-ended questions, and 70 out of 70 questionnaires were distributed to the secondary-level school teachers using google forms, and 55 questionnaires were collected on time. As needed, some secondary data were also used for the study.

For the research study, true and accurate information is needed. To achieve the objective of the study, Quantitative method was used with primary information serving as the main source of the study. Based on the study's requirements, this information has been collected from the relevant community and private schools. By developing the questionnaire and distributing it to the technical and non-technical secondary teachers from community and private schools.

The answers received from the questionnaire required tabulation and analysis. The data are classified and tabulated in a systematic manner in a frequency distribution format. The data are organized into tables based on the objective. Processing of data was done on a computer by using IBM SPSS Statistics 27.0.1. A simple arithmetic percentage tool was used for the analysis and interpretation of findings.

Data analysis has used statistical tools as needed, based on the data obtained from primary sources. The tools employed for analysing the percentages and correlation.

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.843	.844	19

The reliability and validity are measured by Cronbach's alpha which ensure the quality of the research. From the above reliability statistics table, resulted value is 0.843 out of 0.844 standardized for 19 items which indicating a high level of internal consistency.

Result and Analysis

The data analysed are presented in the subsequent paragraphs:

Table 1

AI Anxiety

AI apprehension			**Job replacement**			**AI decisions**		
	N	%		N	%		N	%
SD	15	27.3%	SD	18	32.7%	SD	16	29.10%
D	17	30.9%	D	6	10.9%	D	5	9.10%
N	9	16.4%	N	18	32.7%	N	13	23.60%
A	7	12.7%	A	8	14.5%	A	12	21.80%
SA	6	10.9%	SA	5	9.1%	SA	9	16.40%
O	1	1.8%						

Source: Field Survey, 2025/02/09.

Note: *SD =Strongly Disagree, D=Disagree, N=Neutral, A=Agree, SA=Strongly Agreed, O=Other Opinions.*

By using Likert Scale method, the examination of the AI Anxiety Table (Table 1) indicates that respondents' degrees of concern about various aspects of integrating AI into their jobs vary. Regarding AI anxiety, a sizable portion indicated disagreement (27.3%) and strong disagreement (30.9%), likely. Any other opinions

(1.8%) show a notable degree of concern. The responses were divided on the topic of *job* replacement; 32.7% strongly disagreed and 32.7% neutral. In contrast, 14.5% agreed, and 9.1% strongly agreed, indicating conflicting opinions regarding the threat that AI poses to job security. There was some opposition to AI making decisions in the workplace, as evidenced by the 29.1% who strongly disagreed and the 9.1% who disagreed, but overall, 38.2% agreed or strongly agreed. The study shows a variety of opinions about AI technology, ranging from rejection and concern to acceptance and support.

Table 2

Confidence in Teaching AI

Confidence			Understanding			Effectiveness		
	N	%		N	%		N	%
SD	25	45.5%	SD	17	30.90%	SD	20	36.4%
D	16	29.1%	D	24	43.60%	D	23	41.8%
N	7	12.7%	N	8	14.50%	N	7	12.7%
A	6	10.9%	A	6	10.90%	A	3	5.5%
SA	1	1.8%				SA	1	1.8%
						O	1	1.8%

Source: Field Survey, 2025/02/09.

Note: *SD =Strongly Disagree, D=Disagree, N=Neutral, A=Agree, SA=Strongly Agreed, O=Other Opinions.*

The analysis of Table 2, Confidence in Teaching AI, reveals that respondents have a significant lack of knowledge and confidence when it comes to AI education. Regarding confidence, 29.1% disagreed, and a sizable 45.5% strongly disagreed that they were confident in their ability to teach AI. A significant portion of participants expressed dissatisfaction with their understanding of AI, with 43.6% disagreeing and 30.9% strongly disagreeing. 41.8% disagreed, and 36.4% strongly disagreed with the perceived effectiveness of teaching AI, highlighting the overall sense of inadequacy. All categories showed that a very small percentage of respondents agreed or strongly agreed, emphasizing the need for improved AI education and training.

Table 3

Attitude Towards Using AI

Attitudes			Highly beneficial			Likely		
	N	**%**		**N**	**%**		**N**	**%**
SD	30	54.5%	SD	15	27.3%	SD	25	45.5%
D	22	40.0%	D	32	58.2%	D	20	36.4%
N	2	3.6%	N	6	10.9%	N	6	10.9%
SA	1	1.8%	A	1	1.8%	SA	2	3.6%
			SA	1	1.8%	O	2	3.6%

Source: Field Survey, 2025/02/09.

Note: *SD =Strongly Disagree, D=Disagree, N=Neutral, A=Agree, SA=Strongly Agreed, O=Other Opinions.*

Respondents' opinions are primarily viewed negatively, according to the analysis of Table 3, "Attitude Towards Using AI." There was widespread scepticism revealed by the 54.5% who chose "SD" (Strongly Disagree) and the 40.0% who chose "D" (Disagree) for the category of AI being highly beneficial. The majority, with 27.3% choosing "SD" and 58.2% choosing "D," again provided unfavourable responses when asked how likely they were to use AI. Regarding overall likelihood, 45.5% chose "SD," and 36.4% chose "D." Only small numbers of respondents in each category indicated agreement or strong agreement, with the majority of responses being negative. Based on these findings, attitudes toward the use of AI may need to be improved by addressing concerns and demonstrating clear advantages.

Table 4

Perceived Usefulness

Extremely useful			Frequently used			Significant time		
	N	**%**		**N**	**%**		**N**	**%**
SD	17	30.9%	SD	13	23.60%	SD	23	41.8%
D	30	54.5%	D	17	30.90%	D	19	34.5%
N	7	12.7%	N	21	38.20%	N	6	10.9%
O	1	1.8%	A	3	5.50%	A	7	12.7%
			SA	1	1.80%			

Source: Field Survey, 2025/02/09.

Note: *SD =Strongly Disagree, D=Disagree, N=Neutral, A=Agree, SA=Strongly Agreed, O=Other Opinions.*

The analysis of Table 4, "Perceived Usefulness," shows that perceived usefulness varies in different aspects. Regarding the attribute's exceptional usefulness, a considerable portion of participants (30.9%) rated it as "SD" (Strongly Disagree), with those who rated it as "D" (Disagree) following at 54.5%. On the other hand, very few people responded to the "SA" (Strongly Agree) category; only 1.8% of respondents considered it highly useful. In terms of frequency of use, "SD" was again the most common (23.6%), with "D" being used by a sizable portion (30.9%). Similarly, the majority of people's perceptions of the attribute were unfavourable, with "SD" being the highest (41.8%) and "D" ranking third (34.5%). These findings suggest possible areas for improvement or clarification in the attribute's usefulness, as they indicate a tendency among respondents to perceive it as less useful and time-consuming.

Table 5

AI Readiness

	Readiness			Training			Support	
	N	**%**		**N**	**%**		**N**	**%**
SD	26	47.3%	SD	9	16.4%	SD	21	38.2%
D	23	41.8%	D	10	18.2%	D	14	25.5%
N	4	7.3%	N	3	5.5%	N	10	18.2%
A	2	3.6%	A	6	10.9%	A	3	5.5%
			SA	26	47.3%	SA	5	9.1%
			O	1	1.8%	O	2	3.6%

Source: Field Survey, 2025/02/09.

Note: *SD =Strongly Disagree, D=Disagree, N=Neutral, A=Agree, SA=Strongly Agreed, O=Other Opinions.*

The analysis of Table 5, "AI Readiness," reveals a range of preparedness levels in terms of several aspects. Regarding general readiness, a considerable portion of participants (47.3%) expressed "SD" (Strongly Disagree), while a significant portion (41.8%) also indicated "D" (Disagree). However, there was a notable level of preparedness, as evidenced by the 47.3% "SA" (Strongly Agree) rating, indicating

a diverse opinion among the participants. Regarding training and support, "SD" was commonly expressed, showing dissatisfaction or deficiencies in these areas with 16.4% and 38.2%, respectively. On the other hand, "SA" responses were the highest for training (47.3%) and support (9.1%), indicating favourable opinions in these specific areas. These findings suggest the need for targeted improvement strategies in support and training to enhance respondents' overall AI readiness.

Table 6

Correlation between Different Variables

	AIA	CTA	ATA	PUN	ARN	ARN
AIA	1					
CTA	.303	1				
ATA	.205	.580	1			
PUN	.478	.446	.525	1		
ARN	.636	.460	.202	.557	1	1

Source: Survey Questionnaire 2025.

Note: *AIA=AI Anxiety, CTA=Confidence in Teaching, ATA=Attitude Towards Using AI, PUN=Perceived Usefulness, ARN=AI Readiness*

The Correlation Table (Table 6) highlights significant relationships between various factors related to AI. AI Anxiety (AIA) has a significant positive correlation with AI Readiness (ARN) at .636, suggesting that higher anxiety is linked with greater readiness. Confidence in Teaching (CTA) is moderately correlated with both Perceived Usefulness (PUN) at .446 and Attitude Towards Using AI (ATA) at .580, indicating that greater confidence in teaching is associated with more positive attitudes and perceived usefulness of AI. Attitude Towards Using AI (ATA) shows moderate correlations with Perceived Usefulness (PUN) at .525, suggesting that positive attitudes are linked to greater perceived usefulness. Finally, AI Readiness (ARN) is positively correlated with Perceived Usefulness (PUN) at .557, indicating that higher readiness levels are linked with greater perceived usefulness of AI. These correlations highlight the interconnections between anxiety, confidence, attitude, perceived usefulness, and readiness in the context of AI.

Discussion and Conclusion

The analysis of the AI Anxiety Table (Table 1) highlights a spectrum of attitudes towards AI integration in the workplace, with significant anxiety and resistance, particularly regarding job replacement. However, there is also significant openness to AI decision-making, indicating a mixed but evolving acceptance of AI technologies among respondents. The analysis of Table 2, "Confidence in Teaching AI," reveals a significant lack of confidence and understanding among respondents regarding AI education, with the majority feeling inadequate in both comprehension and effectiveness of teaching AI. This underscores the urgent need for enhanced AI education and training programs. The analysis of Table 3, "Attitude Towards Using AI," reveals a predominantly negative perception among respondents, with the majority expressing scepticism about AI's benefits and likelihood of use. Minimal positive responses highlight the need for addressing concerns and demonstrating the benefits of AI to improve attitudes. The analysis of Table 4, "Perceived Usefulness," reveals that respondents generally perceive the attribute as less useful and time-consuming, with predominant ratings of "Strongly Disagree" and "Disagree" across usefulness, frequency of use, and time spent. Minimal positive responses indicate a need for improvement or clarification of its utility. The analysis of Table 5, "AI Readiness," reveals a diverse perception, with significant portions of respondents feeling unprepared ("Strongly Disagree" and "Disagree") and a significant group feeling highly prepared ("Strongly Agree"). There is a clear need for enhanced training and support to improve overall AI readiness.

The overall analysis reveals a complex and multifaceted view of AI integration in the workplace, marked by significant anxiety, scepticism, and a lack of confidence, particularly in teaching and understanding AI. Despite some openness to AI decision-making and a significant group feeling highly prepared, the predominant perception is one of inadequacy and concern, particularly regarding job replacement, perceived usefulness, and overall readiness. These findings highlight an urgent need for targeted education and training programs to enhance confidence, clarify AI's utility, and address concerns to foster a more positive and accepting attitude towards AI technologies. This need for training aligns with previous studies that emphasize the importance of structured and comprehensive professional development frameworks for teachers. For example, al-Zyoud (2020) highlighted how AI can enhance teachers' skills and competencies, while Karki et al. (2023) identified a lack of specific training programs as a critical gap in current AI integration efforts.

However, this study found that despite awareness of the need for training, many teachers remain unprepared, indicating a disconnect between training needs and existing support structures.

Further Limitations and Implications

Limitations

The study's sample size is limited to 70 teachers, which may not be representative of the entire population of teachers in Lalbandi Municipality or other regions. This limits the generalizability of the findings.

Of the 70 questionnaires that were distributed, only 55 were collected on time, which could affect the completeness and reliability of the data.

Scope of Data: The study relies primarily on self-reported data from questionnaires, which may be subject to biases, such as social desirability or incomplete responses.

Statistical Tools: The analysis is limited to basic statistical tools, like percentages and correlation, which may not capture more complex relationships or provide deeper insights.

Implications

Need for Larger Studies: Future research should consider larger and more diverse samples to improve the representativeness and generalizability of the findings across various regions and educational contexts.

Improving Response Rates: Implementing strategies to increase response rates, such as follow-ups or incentives, could improve data completeness and reliability.

Enhanced Data Collection Methods: Incorporating additional data collection methods, such as interviews or focus groups, could provide a more thorough understanding of teachers' perspectives on AI.

Advanced Statistical Analysis: Using more advanced statistical techniques could reveal deeper insights and more detailed relationships within the data.

Targeted Training Programs: The findings underscore the need for targeted AI training and support programs for teachers to address identified gaps in confidence and understanding, thereby enhancing their preparedness and effectiveness in integrating AI into their roles.

In summary, the study provides valuable insights into widespread anxiety and scepticism towards AI integration in the workplace, underscored by a lack of confidence in teaching and understanding AI. While some are open to AI decision-making and feel prepared, overall perceptions tend towards inadequacy and concern, particularly regarding job security and perceived usefulness. Addressing these issues through targeted education and training programs is essential to promoting a more positive and accepting attitude towards AI technologies.

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