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A STUDY OF ATTITUDES OF AFGHAN STUDENTS AND TEACHERS TOWARDS THE USE OF ARTIFICIAL INTELLIGENCE AS REPLACEMENT OF EDUCATORS IN THE FUTURE

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Abstract

As the global landscape of education continues to evolve, the growing trend of integrating artificial intelligence into educational methods. In an increasingly technologically advanced world where artificial intelligence (AI) permeates schools, colleges, and universities, recent technological developments and the rapid adoption of new technologies in education are examined to predict the future of education. AI is showing itself as a miracle in the education sector and advancing it daily, both during and after the COVID-19 pandemic. This study looks at how Afghan educators and students feel about using AI in the classroom going forward. The results of this study demonstrate a significant difference in the attitudes of Afghan teachers and students towards the use of artificial intelligence in the educational sector. The study also discusses the challenges, potential solutions, and recommendations based on the findings that come out from the survey which was administered to participants from a variety of Afghan educational institutions. Additionally, the study advances knowledge of AI's potential application in the Afghan educational system and provides guidance for appropriate implementation strategies.

Keywords: *Attitude, Artificial Intelligence, Education, Teaching-Learning Process, Educator*

INTRODUCTION

The quick progression of artificial intelligence (AI) technology has revolutionary prospects for global education. Artificial Intelligence (AI) has been incorporated into many aspects of life in recent years, and this integration has been nothing short of revolutionary. Since education is a cornerstone of society, it is not immune to this paradigm change. Artificial intelligence (AI) promises to be a significant new tool that fosters creativity and opens up new possibilities for human activities. Artificial Intelligence (AI) is poised to revolutionise various industries and fields, including labour shifts and displacement, defence and cybersecurity, smart home and city technologies, autopilots, and weaponry. Its advancement in education is also certain. Artificial Intelligence has the ability to revolutionise the teaching-learning process, tackle some of the major issues facing education, and advance the area more quickly. It will have significant effects on learning in the future by giving students direct support as well as by displacing or enabling teachers to be less occupied with regular, repetitive work and more receptive to the requirements of their pupils.

A few colleges have already begun implementing AI in several fields with great success. Salehi & Burgueño (2018) assert that artificial intelligence (AI) techniques, including machine learning, deep learning, and pattern recognition, may effectively resolve difficult structural engineering issues, save time, and boost computational efficiency. Also, AI in oncology is successfully used for tumour segmentation, diagnosis, tracking, and prognosis prediction, with potential for a promising future in healthcare (Londhe & Bhasin, 2019). In Afghanistan also many institutes are using AI too.

AI in education enhances instruction, assessment, feedback on course quality, global classroom creation, performance tracking, and problem solving (Singh & Mishra, 2021). Also AI in education has significantly improved administration, instruction, and learning by enhancing efficiency, fostering student retention, and enhancing curriculum personalization (Chen et al., 2020).

AI in education presents both practical and ethical challenges, and adapting educational programs for future pedagogues is crucial for effective implementation and ethical training according to (Likova-Arsenova, 2020).

AI in higher education research mainly focuses on profiling, assessment, and personalization, but there is a need for more critical reflection on challenges, risks, and ethical approaches (Zawacki-Richter et al., 2019).

AI's future is complex, with various perspectives and opinions from leading experts and specialists (Haenlein & Kaplan, 2019). Artificial teachers can be used in education without replacing real teachers, as they still need subjectivity and agency, and can be integrated into sociotechnical assemblages (Alekseeva, 2020).

Using AI's in Education has different benefits:

Customised Learning: AI-driven adaptive learning platforms are able to evaluate student information and adjust the pace and substance of instruction to meet each student's unique learning requirements and preferences (Kumar & Sangwan, 2020).

Enhanced Student Engagement: To increase student engagement and immersion, gamification components, virtual reality, and simulations can be incorporated into based on artificial intelligence engaging educational platforms (Lozano, 2020).

Data-Driven Insights: AI systems are able to analyse enormous volumes of educational data to spot trends, patterns, and areas that need development. This allows teachers to make well-informed decisions about the design of curricula and instructional tactics (Hsiao & Lee, 2020).

Automation of Administrative Tasks: According to Khamparia et al. (2020), artificial intelligence (AI) can automate administrative tasks including scheduling, grading, and student enrolment, freeing up teachers' time to concentrate on deeper student interactions.

Support for Special Needs Education: Artificial intelligence (AI) tools like speech recognition and natural language processing can offer individualised assistance and adjustments for students with special needs, facilitating their inclusion in mainstream classrooms (Perera et al., 2020).

Access to Quality Education: AI-powered educational platforms can improve the accessibility to high-quality resources of education and expertise, particularly in underserved or remote areas where access to traditional educational infrastructure may be limited (Mohan & Sundararajan, 2020).

Continuous Learning and Professional Development: AI-driven recommendation systems can suggest personalized learning paths and resources for educators to enhance their teaching skills and stay abreast of the latest pedagogical trends and research (Zheng et al., 2020).

Early Intervention and Predictive Analytics: AI algorithms can detect early signs of learning difficulties or student disengagement based on behavioural patterns and performance data, enabling timely interventions to support struggling students (Suthagar, 2020).

In contrast, there are different challenges regarding using AI's in education. There are challenges that have been extensively discussed in academic papers, reports, and expert opinions:

Insufficient Emotional Intelligence: Artificial Intelligence is incapable of comprehending and feeling human emotions, which is a critical component of the teaching-learning process (Hill, 2019).

Complexity of Human Interaction: Teaching involves nuanced interactions that go beyond transferring information, including interpreting non-verbal cues and adapting to student responses (Hew & Cheung, 2010).

Personalized Learning: Effective teaching often requires tailoring instruction to individual student needs, which can be challenging for AI systems to accomplish as effectively as human teachers (Bulger et al., 2016).

Ethical Issues: The application of AI in education raises ethical questions about privacy, data security, algorithm bias, and equity, among other things (Selwyn, 2018).

Creativity and Critical Thinking: Teaching involves fostering higher-order cognitive skills such as creativity and critical thinking, which may be difficult for AI to facilitate (Fadel & Lemke, 2019).

Teacher Roles Extend Beyond Instruction: Teachers serve as mentors, role models, and sources of support for students, roles that AI may struggle to fulfil (Yueh, 2018).

Cultural and Linguistic Understanding: Teaching often requires an understanding of cultural nuances and linguistic diversity, which AI may have difficulty interpreting accurately (Niemiec et al., 2016).

Technical Limitations and Reliability: AI systems can encounter technical issues or errors that disrupt the learning process and undermine student trust (Buckingham, 2019).

Resistance and Acceptance: Stakeholders may resist the widespread adoption of AI in education due to concerns about job displacement and the overall impact on educational quality (Williamson, 2020).

Cost and Accessibility: Implementing AI in education requires significant investment in technology infrastructure and training, which may pose challenges in terms of affordability and accessibility (Wong & Li, 2017).

These challenges highlight the complexities involved in using AI to replace teachers and suggest that while AI can complement teaching practices, it is unlikely to fully replace human educators in the foreseeable future.

In Afghanistan, where access to quality education remains a challenge, AI has a particularly large potential to improve teaching and learning environments. This study investigates the attitudes of Afghan students and teachers towards the use of AI as educators in the future. Also the researcher will compare the percentage of students and teachers' attitude and will find their correlation too.

OBJECTIVES

1. To study the attitudes of Afghan students and teachers towards the use of AI as educators in the future.

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2. To correlate between the attitudes of Afghan students and teachers towards the use of AI as educators in the future.

Delimitation of the study

This study focuses specifically on the attitudes of Afghan students and teachers towards the use of AI as educators and does not address broader issues related to AI in education, such as curriculum development or policy implications. Additionally, the study primarily examines perceptions within the Afghan context and may not be generalizable to other regions or contexts.

Variables

In this study the dependent variable is Attitude of Afghan students and teachers and independent variable is Artificial Intelligence.

Hypothesis

H_{01} There is no significant correlation between the mean score of the attitudes of Afghan students and teachers towards the use of AI as educators in the future.

Research method

The current study used a descriptive survey method. Students and instructors from different educational establishments throughout Afghanistan form the study's population.

Using the random selection method, 30 Afghan teachers and 30 Afghan pupils were chosen as a sample size from the population.

A questionnaire has been developed to collect the information.

The information was gathered from Afghan educators using an online Google form, and from Afghan students by means of in-person visits and questionnaire distribution.

The data was evaluated using spearman's correlation coefficient to determine the relationship between the attitude of Afghan students and teachers and a comparison of the percentage of replies from both groups.

FINDINGS AND DISCUSSION

The percentage and correlation between teachers' and students' perspectives on AI are displayed in the following table:

Sr.	Questions	A ST (DA%)	A TE (DA%)	A ST (MB%)	A TE (MB%)	A ST (A%)	A TE (A%)	Correlation
1	AI is the educational system's future and will completely change it.	3	24	13	13	84	63	**0.366**
2	AI will affect teaching as a vocation.	19	0	10	10	71	90	**0.438**
3	Teacher-bots created by AI will completely replace teachers in classrooms.	15	81	17	10	68	9	**-0.647**
4	AI will always be able to tackle student issues more effectively than teachers.	33	62	24	29	43	9	**-0.427**
5	More than professors, AI will be able to relate to students.	81	84	9	13	10	3	**0.682**
6	AI won't promote students' overall growth; it will just help them academically.	19	20	14	17	67	63	**0.577**
7	In the classroom, teachers and AI will always be required.	5	7	0	13	95	80	**0.605**
8	AI will benefit pupils in every aspect, with the exception of forming emotional and social bonds with them.	24	20	19	20	57	60	**0.515**
9	AI is going to weaken the connection between students and teachers.	19	13	9	17	72	70	**0.517**
10	AI will assess pupils with greater accuracy than instructors.	20	48	10	29	70	23	**-0.448**

	Overall correlation	**0.672**	**0.344**	**0.641**	

Here, **A ST** = Afghan Students, **A TE**= Afghan Teachers, **DA**= Disagree, **MB**= May be, **A**= Agree

It found significantly strong positive correlations for the participants who disagreed (0.672) and agreed (0.641) with the statements, and a weak positive correlation for those who were neutral (0.344).
This means that the p-values for these correlations were likely less than the significance level, p=0.033 and the null hypothesis was rejected for these groups.
So there is a significant linear relationship between Afghan students' and teachers' attitudes regarding using artificial intelligence in education.

CONCLUSION

The current study explains how Afghan teachers and students feel about utilising artificial intelligence and how they see an AI-enabled classroom in the future. AI will assist teachers by handling all academic tasks and assisting students in enhancing their overall development. Although in education, the using of Artificial Intelligence will present numerous potential, it will be difficult to completely replace instructors with AI in the near future. We must overcome several obstacles related to AI, including costs, management, and administration. Additionally, implementing AI in every school, college, and university will not be simple. No matter how much we advance the educational system with new technologies, teachers will always be needed in the classroom. The current research is helpful in determining how teachers and students might benefit from the gradual and careful implementation of AI technology.

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