Artificial Intelligence and Student Learning in Higher Education: A Qualitative Exploration from District Gwadar

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ARTICLE INFO	ABSTRACT
	The transformative possible of artificial intelligence (AI) in humanizing university students' academic performance is discovered in this qualitative study. The study suggestions a thorough inspection of how AI-powered technologies support learning and affect students' academic results by using in-person interviews as a data gathering method. The results show that artificial intelligence has many advantages, such as cost-effective solutions, individualized learning experiences, and effective information dispensation. But the study also exposes issues with belief on artificial intelligence, its drawbacks, and the requirement of careful integration. This study is main because it adds to the recent discussion about using artificial intelligence to maximize the usefulness of student learning. By using the knowledge collected from this study, higher education shareholders, educators, and officials may better apply artificial intelligence's potential to develop more efficient, exciting, and student-centered knowledge situations. To exploit the profits of artificial intelligence in open-minded education, it is suggested that educators and councils carefully integrate AI-powered outfits into university curricula, supplementing traditional teaching methods.

Introduction

The teaching profession is a profession that gets respect due to mainly two reasons in Pakistan i.e., altruistic reason and intrinsic. Further, in Pakistan the study has revealed that it is a kind of feminism profession because most of the females are joining this profession where they feel more security and privacy (Kamran & Shahbaz, 2019).

Artificial intelligence is very beneficial tool for the student academic performance. The phrase is repeatedly used to define creativities that create organizations based on the unique intelligent methods of people, such as the volume for thought, meaning-finding, or experience-based learning.

Teaching is only one of the various zones that artificial intelligence (AI) has been revolutionizing (Yeruva, 2023; Assad, 2025). AI has the potential to fully transform education by construction it more adaptable, interesting, and effective (Alneyadi & Wardat, 2023).

Intelligent tutoring structures, chatbots, and mechanical categorizing and evaluation can all upsurge output, excluding teachers' time, and deliver more perfect and trustworthy feedback, though, there are a number of drawbacks to by means of AI in education, such as worries about discretion and security, a lack of self-assurance, expense, and conceivable prejudice (Jarrah et al., 2022). Furthermore, it is needed to take into justification ethical parts including making sure AI-based educational organizations are accessible, transparent, and equitable (AlArabi & Tairab 2022; Tariq et al., 2022). However, since AI may enhance data analysis and empower educators to make data-driven conclusions, it has massive probable in the ground of education.

Artificial intelligence tools have grown popularity in higher education institutions (HEIs) as more nations participate technology into their educational systems, including Pakistan (Ahmad et al., 2021; Dahri & Al-Rahim et al., 2022), Malaysia (Ahmad & Ghapar, 2019; Hua, 2012).

This drift towards AI in education has drawn care from many grounds, such as educators, political forecasters, military strategists, economists, and safety authorities (Ahmad et al., 2021). Beyond traditional bounds, these AI tools have aided in a groundbreaking era of academic sustenance within HEIs (AlDhaen, 2022). Their many landscapes include adapted guidance, speedy support, intuitions based on data, and round-the-clock accessibility via AI catboats and simulated advisors. In the numerical age, this constant availability is very beneficial where students look for enhanced involvement and instant answers to their abstract questions. By enabling horizontal communication amongst students and academic counselors, these tools promote active support and advance students' connection and bond with the school (Bilquise et al., 2023). Furthermore, AI is used in developed education for purposes other than humble automation. Especially, intelligent tutoring systems work as personalized mentors, offering real-time direction and elastic practice across a choice of courses. in Malaysian and Pakistani complex education institutions (Ahmad & Ghapar, 2019; Amin & Rajadurai, 2018). These AI-powered arrangements give students the facility to evaluate their progress and improve their study techniques by enabling continuous assessment and providing direct feedback.

The combination of AI technologies such as ChatGPT into academic writing, publishing, authorship, and research has drawn attention (Foroughi et al., 2023). ChatGPT is becoming more and more popular in higher education, helping students with assignments and citation generation (Crawford et al., 2023). This adoption forces organizations to examine how ChatGPT might revolutionize higher education (Yuce et al., 2019).

The use of these tools is still being inspected because they are fairly new in academia and higher education. Along with ChatGPT and a number of other websites like Enquiry Rabbit, Consensus, Scinapse, and scite.AI, and Read Cube Papers provide academic research tools like as AI-driven study material organizing and context-aware citations (Chatterjee & Bhattacharjee, 2020). Cutting-edge Cutting program like Education Copilot and DiaChat use natural language dispensation to simplify instructional content and automate diagram development (Ellerton, 2023).

Research Problem

Artificial Intelligence (AI) is transforming the way students learn in higher education, including in regions like District Gwadar. However, its role in supporting students' academic success remains uncertain. As AI-based tools and systems become increasingly common, it is important to investigate how they influence key academic outcomes such as student engagement, learning experiences, and overall performance. This study aims to explore the connection between the use

of AI in university instruction and students' academic performance in District Gwadar, while identifying both the potential benefits and challenges of AI-supported learning in this specific educational context.

Objectives

1. To investigate the extent to which AI types learning easier for university students.
2. To study the effect of AI on students' academic performance.

Literature Review

We use artificial intelligence (AI) to climax that it is a distinct field of research and growth rather than merely a kind of artificial intelligence. Various attempts have been made to describe and precisely what we are talking about. The literature contains a number of alternative definitions, and it is commonly claimed that AI experts do not share a consistent understanding of a single key idea. It's important to remember, nevertheless, that descriptions of AI that are applicable and practical differ based on the intended use.

Academics frequently national that artificial intelligence (AI) is a devious field of research that encompasses a vast range of abstract methodologies and areas of knowledge, in addition to asserting that there is no such thing as AI. However, AI foodstuffs that require access to the mutual market are the subject of EU regulation. For the time being, much of the discourse surrounding artificial intelligence is based on hypothetical possibilities generated by knowledge fiction and the assumption that computers could eventually be intelligent, whatsoever that implies.

Artificial Intelligence in Education

The way artificial intelligence (AI) is converting other industries is not something that education should ignore (Yeruva, 2023). According to Alneyadi and AbuAl-Aish (2023), artificial intelligence (AI) has the potential to completely change education by making it more dynamic, engaging, and engaging. In this evaluation post, we will look at the role of AI in education and how it is fluctuating how people learn (Vinoth, et al., 2022; Hamza et al., 2022). Artificial intelligence (AI) in education refers to the application of AI technologies, such as machine learning and natural language dispensation, to improve the educational process (Alneyadi et al., 2023). Each student's education can be tailored by educators by using algorithms that analyze data, identify trends, and generate computations (Khan et al., 2022). There are many possible advantages to implementing AI in the classroom. One of the primary benefits of artificial intelligence in education is "adapted learning," which allows students to learn at their own pace and in a manner that greatest suits their learning partialities.

Additionally, it helps to improve student interaction by offering engaging and dynamic teaching. experiences (Wardat et al., 2022). Artificial intelligence (AI) has the potential to make education more accessible and inclusive while providing top-notch coaching to students from all backgrounds. More demonstrations of AI in education, such as chatbots, intelligent tutoring systems, adaptive learning, and grading and evaluation, will be covered in the upcoming sections (Madasamy & Raja, 2022).

Along with the ethical respects that must be taken, we will also go over the advantages and experiences of implementing AI in the classroom. Lastly, we'll look at AI's potential in education and the opportunities it offers for advancement. Data-driven artificial intelligence has been in the headlines lately because to its amazing events. However, knowledge-based AI remains crucial in the field of education. The notion that human knowledge and comprehension may be represented in a way that computer algorithms can comprehend is the basis of knowledge-based systems.

Expert systems are another name for some of these systems since they frequently mimic the methods used by experts to make decisions. The 1980s saw a limited adoption of expert systems due to the high cost of modeling domains of expertise and maintaining knowledge images, as well as the challenges of generalizing and moving domain models to new application areas (Tuomi, 2018).

Many AI education systems use a domain model to explain the conceptual structure of the subject of study. Such domain models are frequently costly and challenging to develop since the environment is open and dynamic in real-world settings. Stable domain models are simpler to conceptualize in closed formal fields like mathematics.

This is one of the factors affecting how effective intelligent tutoring systems based on physics and math knowledge are. Knowledge-based AI uses theoretical frameworks taken from human knowledge to construct its intelligence. Because of this, a computer's role in knowledge-based systems is different from that of a basic processor used for preprogrammed designs or text indulgence. Knowledge-based systems employ a straightforward yet general suggestion engine that chooses recorded experiential norms to instruct the computer on what to do next, as opposed to a following algorithm that computes a result from incoming data. The regulations themselves provide more thorough explanations of the existing knowledge on the subject. Knowledge-based systems are distinguished from conventional computer software architecture by this additional layer of abstraction and knowledge picture.

Usually, "if-then" statements that are easy for humans to understand are used to explain the rules. Therefore, the term "rule-based AI" is an acronym for knowledge-based AI. This approach was used in the development of nearly all AI systems used in education until recently. A quick overview of some of these systems can be seen below. Conversely, knowledge-based officialdoms remain entirely mechanical, with a deterministic algorithmic calculation process that consistently yields an exact response given a certain contribution. This has the significant advantage over data-driven AI in that the logic developed may be used to understand the organization's performance.

Artificial Intelligence in Grading and Assessment Process

Artificial intelligence (AI) can assist teachers save time and effort by automating the construction of grading and evaluations and giving pupils immediate feedback (AlAli et al., 2023). Students can get immediate feedback on their concert thanks to AI procedures that can estimate student work and offer comments based on predetermined metrics (AlBahrani et al., 2018; Li et al., 2022). Essay grading systems are one instance of automatic grading driven by AI (Stoica & Wardat, 2021).

These organizations evaluate student writings and provide immediate comments and a score using machine learning algorithms and natural language processing. Among the benefits of AI in education include enhanced data analysis, increased productivity, better student appointments, and customized learning. Personalized learning is one of the many advantages of using AI in education. However, there are also other issues and concerns that must be resolved.

By automating the time-consuming and consequently expensive process of marking student assignments, homework, and appraisals, artificial intelligence (AI) has long been seen as a way to save teachers' time and effort (Watters, 2021). ITS is the most commercialized and well-funded field of study, therefore automatic summative assessment, or "auto graders," is also heavily marketed. Auto graders have been used in computer science and mathematics classes, as well as to assess written tasks, such as the US SATs (Ramesh & Sanampudi, 2021).

The possible uses of such an AI teaching assistant are now unknown, and as we are not aware of any pertinent research or commercial products, this is yet a possibility. However, a new

commercial tool provides an intriguing avenue. Unlike autograders, which employ automatic evaluation (e.g., by providing terms that the instructor has already written and used that they can re-use for the script being graded), (Graide, 2022) assists teachers with their calculation processes. In other words, the teacher, not the AI, supports the valuation.

Personalized Learning through AI

Because artificial intelligence (AI) is being used in education, individualized learning has resulted in varied student learning (Rana et al., 2022). A teaching method known as "modified learning" adapts teachings to the requirements, interests, skills, and shortcomings of each individual student (Samad et al., 2022). To customize lessons to each student's learning style and speed, adaptive learning uses technology (Zarei et al., 2022). To adjust teachings to each student's learning style and speed, technology is used in personalized learning (Zarei et al., 2022). Because AI uses machine learning algorithms to examine data and spot trends in students' learning preferences, habits, and accomplishments, it is essential for personalized learning (Samad et al., 2022).

Personalized learning systems that identify each student's unique needs can then be developed by AI using this data (Samudrala et al., 2022). For instance, AI is able to recognize regions that require improvement, provide relevant learning resources, and modify the degree of difficulty of learning exercises.
AI-based learning platforms can offer tailored educational familiarities in a variety of ways (Ibrahim et al., , 2022). For instance, AI can examine students' prior performance to pinpoint issues and offer assistance (Alarabi & Wardat, 2021).

Additionally, AI can adjust to the student's preferred pace of learning, speeding up or slowing down education as necessary (Al-Bahrani et al., 2020). AI-based personalized learning has been effectively used in a variety of educational contexts, such as K–12 schools, higher education, and business training (Mohammed et al., , 2022). For instance, it has been demonstrated that using AI-powered math software from Carnegie Learning can increase student performance by as much as 30%. Similar to this, the AI-powered language-learning platform Duolingo offers individualized instruction according to each student's learning preferences, interests, and proficiency level (Al-Bahrani & Majdi, 2022).

AI-powered tailored learning has many potential advantages, but there are still several issues that need to be resolved. The requirement for precise and trustworthy data to guide AI systems is one task (Wu et al., 2022). It is crucial to make sure that the data is correct and current because its quality may have an impact on how accurate the tailored learning practice is. Another difficulty is that in order to correctly design AI-based personalized learning, educators need to engage in professional development and exercise (Zahmatkesh et al., 2022). There are still several issues that need to be resolved despite the many emerging benefits of AI-powered adaptive learning.

In addition to interpreting and submitting the data produced by the algorithms, teachers must agree to receive training in the usage of AI technology. Personalized learning driven by AI has the potential to transform education and help students realize their greatest potential. Each student can receive targeted assistance through tailored learning, which can improve academic performance, retention rates, and engagement. A more tailored and efficient learning process is made possible by AI's ability to provide personalized feedback and recommendations for enhancement (Jarrah et al., 2022).

The Challenges Artificial Intelligence Confronted in Education

The field of artificial intelligence has a lot of promise despite numerous technological trials. The challenges this review identifies could be categorized into three groups: technique, teachers and

students, and social ethics. The issues would be more intricate and forward-thinking, particularly if they involved an educational application. "Basic value" still predominates in the conventional, and they typically fail to submit a significant number of students' "added-value" due to cost worries, despite the fact that AI attitudes have demonstrated and predicted intelligent addition in the field of education (Stoica & Wardat, 2021). Several researchers discovered, for instance, that many AI systems were made for a generic purpose and could not be customized for a specific domain, learning activities, or educational objectives (Watters, 2021).

This would make it impossible to comprehend altered learning activities. According to the 2018 Horizon study, reevaluating the role of educators is another crucial issue. How effectively AI is applied in the classroom is greatly influenced by how teachers view the technology (Madasamy & Raja, 2022). Teachers may be too reliant or utterly uncooperative. The former may be due to insufficient, incorrect, irrelevant, or out-of-date professional development, while the latter may be due to teachers' irrational expectations. These teachers may overstate their knowledge of emerging AI technologies at the price of becoming proficient with them. Furthermore, from the viewpoint of the students, AI attitudes may offer them useful and effective resources that enable them to evade finishing the knowledge distribution tasks that instructors set (Ellerton, 2023).

For instance, the AI interpreters might provide pre-made images, pre-programmed text, inflection, and even prepared instances. As a result, students are reluctant to participate in the inquiry-based activities that promote in-depth learning. The ethical issues surrounding AI offer researchers and educators with prospects to experiment (Al-Bahrani & Majdi, 2022). Although it was strong that artificial intelligence (AI) has completed important advances in recent years, mostly as a result of more affordable privilege and data availability, student data might still be harmed, shared, or made public (Yeruva, 2023). Educators and AI technicians will experiment a continuing vigilant effort as we consider how we gather, examine, and share large data and data analytic breakthroughs.

Advantages and Limitations of Artificial Intelligence in Education

Submissions of artificial intelligence (AI) are used to impersonator hominid intelligence in instruction to solve problems or reach conclusions. AI addresses hesitation and speeds up problem-solving or decision-making while contribution the interests of longevity, faithfulness, and affordability. In a variety of domains, including production, finance, dialectology, law, business, and medicine, artificial intelligence (AI) has been applied to modeling, prediction, decision assistance, and switch submissions (Rana et al., 2022).

Despite its amazing advantages, artificial intelligence has limitations in terms of value and capabilities, just like any software. We'll talk about these limits later in this essay. Before describing AI's disadvantages, this essay will temporarily cover its benefits. AI applications can provide longevity in a society where human intelligence is connected to a specific person or group of people, preventing knowledge from being lost when the individual or group members leave or become inaccessible (AlDhaen, 2022). Information in an AI setting may have an infinite lifespan as long as the issues and decision-making scenarios are still connected (Stoica & Wardat, 2021). Additionally, AI increases the likelihood of creating a learning capacity that can be used to advance the applicability and permanence of the claim.

As their use in tender's increases, "underpinning learning," a characteristic of AI tools that enables them to learn from real-world success and failure, has the virtue of collectively enhancing the tools' reliability. Any technology is typically only usable when its faithfulness has been verified, and artificial intelligence (AI) has already confirmed to be extremely dependable in a wide range of recommendations because of its capacity to intelligently mimic human intellect. Artificial intelligence (AI), which is linked to a number of mechanizations, reduces costs by eliminating the

need for staff time (Tuomi, 2018). An action can significantly reduce labor time and active expenses by utilizing the proper AI tools in the executive development.

Because judgments must be complete commonly under clear doubts (i.e., with fractional and unclear information), artificial intelligence (AI) systems are appropriate in situations where a strong scientific relationship between cause and effect cannot be detected. AI models are able to imprisonment the uncertainty of real-world cause and effect situations by fusing current information with probabilities and future extrapolation computations (Yeruva, 2023). Furthermore, unlike most exclusively analytical methods, AI systems are able to transition between quantitative and qualitative data.

In instances where a firm scientific connection between cause and effect cannot be discovered, artificial intelligence (AI) systems are ideal since judgments must often be made under obvious doubts (i.e., with incomplete and ambiguous information). By combining current data with probability and future extrapolation calculations, AI models may reflect the indecision of real-world cause and effect scenarios. Moreover, AI systems may switch between quantitative and qualitative input, unlike the majority of purely analytical approaches (Madasamy & Raja, 2022).

As envisioned in the vehicle–infrastructure addition or the related vehicle program, researchers have demonstrated that artificial intelligence (AI) is more accurate than many other measures currently in use in assessing and forecasting traffic conditions based on tiny traffic data collected from sedans on their path (Crawford et al., 2023). AI may also be highly helpful in the transport refuge sector, which makes use of minute circulation statistics.

Here, robotic reaction and controller strategies can be created and supervised using artificial intellect (AI) approaches, which can also be utilized to detect security breaches. Due to its well-known benefits and achievements, artificial intelligence (AI) is highly beneficial in the development and management of communication networks (Chatterjee & Bhattacharjee, 2020). Specifically, real-time recognition, discovery, response, and direction are essential functions of intelligent bearing systems, and AI can be effectively used in each of these recommendations. In actuality, a distinct traffic gadget and control system might be the key to the arrival of real-time traffic association and control.

In this instance, the necessary road network is succeeded by spread sensor networks, which are broad and comprise multiple intelligent device network levels. These networks mechanically categorize and react to occurrences. Such an intelligent device network composed of AI tools can help establish the future group of passage association (Bilquise et al., 2023). We anticipate that AI techniques will be applied more frequently in domains related to transportation because of their numerous benefits. However, it's crucial to keep in mind that, like any other technology, AI techniques have limitations.

As before mentioned in van Zayden's article, a main criticism of many AI values (like neural networks) is that they are typically viewed as black cases that simply attempt to establish a connection between input and construction variables using a workout data set (Khan et al., 2022). This means that the tool's ability to simplify to conditions that were unclear in the data set is directly brought into question. Two approaches have been future to discuss the black box problem: combining AI paradigms with more conformist solution procedures, or combining many AI examples into a cross solution (e.g., combining neural networks with fuzzy sets to create neurofuzzy system ems).

Another issue is that AI-based search practices, such as genetic improvements and ant collection optimization, are not ever certain to produce the "optimal" outcome. Furthermore, when using AI-based search ways to solve a problem, it is frequently difficult to have a true understanding of the

problematic and the nature of the solution, in contrast to scientific software design methods. One important feature of this limitation is the need to conduct sympathy studies quickly (Ramesh & Sanampudi, 2021).

According to the counterargument to the helplessness to confirm optimality, a "explanation" is better than "no resolution" at all for challenging optimization issues that are intolerable to address using conformist optimization and scientific software design methodologies (Alneyadi & Wardat, 2023). However, there is a lot of empirical support for the notion that "good" penalties are usually harvested by AI-based search engines.

The physical aspect of possible task is another restriction or challenge associated with mechanization in general—AI is not an exception. For example, if AI systems are employed in the near future to create completely or partially self-sufficient automobiles, who should be held accountable in the event of an accident involving a self-directed car? This constraint is a significant issue that needs attention even though it is not mechanical (Ahmad et al., 2021).

Lastly, it should be generally recognized that if we are to focus on AI requests in the section, there is still a great deal of uncertainty among transport specialists over the extent to which AI can help them decide on some of their issues (Foroughi et al., 2023).

Research Methodology

This study employed a qualitative research methodology to explore the role of Artificial Intelligence in student learning. A case study research design was adopted to achieve the objectives of the study. The target population consisted of students from the University of Gwadar. A total of five students, four females and one male, were selected using a convenience sampling technique. Data were collected through face-to-face interviews, using self-developed, semi-structured open-ended questions as the primary data collection tool. To ensure the validity of the tool, expert feedback was obtained from the research supervisor. Ethical considerations were strictly observed throughout the study. Participants were informed about the purpose of the research prior to data collection and assured that their information would remain secure and confidential. Participation was voluntary, and students were made to feel comfortable, free from any physical or emotional harm. Anonymity and confidentiality of all responses were maintained to uphold research integrity and protect the rights of the participants.

Data Analysis

Role of artificial intelligence on student academic performance

Artificial intelligence transforms learning by personalizing education, improving outcomes, and enhancing student engagement.

Benefits of the tool/platform

Artificial Intelligence tool/platform provide personalized learning involvements, cultivating student engagement and outcomes. Students can track their progress and pinpoint areas for development with the help of their real-time comments.

As participant one said:

> Artificial Intelligence mere liye ek bohat madadgar tool hai. Yeh mere liye ek misaali ustaad ki tarah hai aur yeh ek behtareen learning platform bhi hai. Is ke zariye hum asaani se mukhtalif qisam ka ilm aur mufeed maloomat chand hi lamhon mein hasil kar sakte hain. [Artificial Intelligence is very helpful tool for

> me, it is like an ideal teacher for me and also it is best learning platform by this we easily get many type of knowledge effective information within a minute].

Participant two said:

> Haan, mein ziada tar Artificial Intelligence ka istemal apni study process mein karta hoon kyunke yeh students ke liye bohat hi madadgaar tool hai. Yeh humein mufeed maloomat faraham karta hai, parhne ka amal asaan banata hai, aur humari skills ko bhi develop karta hai. [yes I mostly use Artificial Intelligence in my study process because it is very helpful tool for all students and it is providing beneficial knowledge make learning process easier and also develop our skills].

Another participant said:

> Mujhe Artificial Intelligence ke zariye mukhtalif qisam ka ilm asaan aur seedhi zubaan mein milta hai. Meri rai mein Artificial Intelligence humare liye bohat hi asar daar tool hai kyunke yeh hamesha mufeed feedback faraham karta hai. [I get different type of knowledge by Artificial Intelligence in the simple word and my opinion Artificial Intelligence is very effective tool for us because it is always providing beneficial feedback].

Participate four claimed that:

> Artificial intelligence bohat se faide faraham karti hai, jaise ke insani ghaltiyon mein kami, waqt ki bachat, digital madad, aur ghair janibdaar faislay. [Numerous advantages of artificial intelligence include a decrease in human mistake, time savings, digital support, and objective decision-making].

Positive Attributes

Positive attributes are good qualities that make a person special. These include kindness, honesty, empathy, responsibility, and respect. People with these traits tend to build strong relationships, achieve their goals, and make a positive impact on those around them.

As participants one and four claimed that:

> Artificial Intelligence tamam students ke liye bohat hi mufeed tool hai. Yeh hamare liye ek ideal teacher ki tarah kaam karti hai. AI aik behtareen learning platform bhi hai jahan se hum har qisam ka ilm hasil kar sakte hain. Artificial Intelligence mujhe ek shandar aur samajhdar ustad ki tarah guide karti hai. Iske zariye hum apni taleem ko asaan aur behtar bana sakte hain. [Artificial intelligence is very helpful tool for all students, it's like an ideal teacher for us and also it is best learning platform we get many type of knowledge by this, Artificial intelligence guide me like a wonderful teacher].

Participant four further said,

> Artificial Intelligence taleem ko behtar bana sakti hai learning ko personalize karke, assignments ko jaldi check karke, ek smart tutor ki tarah kaam karke aur universities ko management mein madad de kar. [Artificial intelligence can make education better by personalizing learning, checking

assignment fast, acting as a smart tutor and helping universities with management].

Participant two and three said:

> Hum mukhtalif qisam ka ilm hasil karne ke liye mukhtalif Artificial Intelligence tools ka use karte hain, kyunke yeh bohat hi effective aur zaroori tool hai, aur doosri cheezon se behtar bhi hai. Zyada tar mein WhatsApp ki Artificial Intelligence ka istemal karta hoon, kyunke yeh authentic hoti hai aur mufeed aur dilchasp jawab faraham karti hai. [we use different type of Artificial intelligence for different types of knowledge because it is very effective and imperative tool and also better thin other, mostly I use WhatsApp's Artificial intelligence because it is authentic and provide useful and entrusting answer].

Impact on Learning

Learning open doors to new ideas, skills, and perspectives. It enables people to develop, make wise choices, and accomplish their objectives. People can enhance their lives and positively impact society by learning new skills.

Participant three said:

> Mujhe Artificial Intelligence ke zariye mukhtalif qisam ki malomaat asaan aur simple alfaaz mein milti hain. Meri rai mein Artificial Intelligence students ke liye bohat hi effective tool hai, aur zyadatar yeh reliable (authentic) jawab bhi faraham karti hai. [I get different type of information by Artificial intelligence in the simple word and my opinion Artificial intelligence is very effective tool for students, and also Artificial intelligence mostly provide reliable answer].

According to participants two and three,

> Artificial Intelligence hamare taleemi nizaam mein students ke learning experience ko behtareen banane mein aham kirdar ada kar sakti hai. AI students ke kaam par foran feedback de sakti hai, jo unki behtar samajh aur taraqqi mein madadgar hota hai. Ye naye tareeqon se learning ka tajurba faraham karti hai, jaise ke intelligent tutoring systems, grading ko automate karna, aur learning system ko zyada asar dar aur mukammal banana. AI ka istemal taleem ko na sirf asaan banata hai balkay usay zyada engaging aur personal bhi banata hai. [Yes Artificial intelligence can significantly enhance students learning experiences in our education system. Artificial intelligence can offer instant feedback on student work, and Artificial intelligence provide new learning experience, offering intelligent tutoring systems, automating grading and Artificial intelligence can be learning system more effective].

Another participant said:

> Jee haan, Artificial Intelligence mere liye learning ko zyada interesting aur asaan bana deti hai. AI learning ko fun aur engaging banati hai simple games ke zariye, jo na sirf samajhne mein madad karti hain balkay bore nahi honay deti. Artificial Intelligence humein

> motivate karti hai ke hum mazeed seekhein aur apni performance behtar banayein. [yes Artificial intelligence can make learning more engaging and easy for me. Artificial intelligence makes learning fun with simple game and Artificial Intelligence motivate us].

Limitations of AI

Limitation are constraints or weaknesses that hinder progress or achievement. They can be physical, mental, or situational, and may require creative problem solving or adaptability to overcome. Recognizing limitations helps identify areas for improvement and growth.

As participant four claimed that,

> Artificial Intelligence par hadd se zyada inhsar karne ke kai nuqsanaat ho sakte hain, jaise ke insani skills ka kam ho jana, emotional intelligence ka faqat hona, aur ethical faislay karne ki salahiyat ka na hona. Halankeh Artificial Intelligence bohat se faide deti hai aur hamari zindagi ko behtar bana sakti hai, lekin iska mo'tadil aur soch samajh kar istemal karna bohat zaroori hai [There are many disadvantages depending too much on Artificial intelligence can be determinate such as loss of human skill, lack of emotional intelligence and ethical reasoning. While Artificial intelligence offers incredible benefits and can enhance our live in many ways, balanced use is crucial].

and participant three said

> Artificial Intelligence hamari creativity ko kam kar sakti hai aur humein technology par hadd se zyada depend karne wala bana sakti hai. [Artificial intelligence can reduce creativity, male us overly depend on technology].

Features of AI

Feature is a notable part or characteristic of something, like a product, system, or persons. It can be a functionality, attribute, or trait that stands out or serves a specific purpose. Features can make something unique, useful, or appealing.

Participant four said

> Artificial Intelligence taleem ko behtar bana sakti hai kyun ke yeh har student ke liye learning ko personalize karti hai, homework ko tezi se check karti hai, smart tutor ka kirdar ada karti hai, aur universities ko management mein madad deti hai. [Artificial intelligence can make education better by personalizing learning, checking homework fast acting as a smart tutor and helping universities with management].

Another participant said

> Artificial Intelligence ki madad se hum apna waqt behtar tareeke se manage kar sakte hain aur mukhtalif qisam ke sahi jawab asaani se dhoond sakte hain. [With Artificial intelligence we manage own time and find many type of correct answer in easy way].

Confirmed by the participant one,

> Artificial Intelligence zyada mo'asar aur mu'asir hai. Yeh mujhe personalized tawajjuh deti hai, mushkil topics ko jaldi samajhne mein madad karti hai, aur taleemi resources ki wasee range faraham karti hai. Yeh meri ghaltiyon ko bhi durust karti hai aur behtari ke liye suggestions bhi deti hai. [Artificial intelligence is a more effective and efficient. Artificial intelligence provides personalized attention, help me to understand complex topic faster and offers a wide range of educational resources. It is also correct my mistake and give suggestion for improvement].

Cost Effectiveness

Cost effectiveness means achieving desired result while minimizing costs. It's about getting the best value for the money spent. In simple term, it's doing things efficiently and economically, without unnecessary expenses, to maximize benefits.

As participant 1 claimed that

> Main zyadatar WhatsApp Artificial Intelligence ka use karta hoon kyun ke yeh kam lagat mein milti hai, asaan aur seedhi baat mein ideas ya knowledge share karti hai, aur tafseel se jawab bhi deti hai. [I use mostly WhatsApp Artificial intelligence because it is minimum cost and share very simple ideas or knowledge and also provide answer in detail].

Dependency

Dependency means relying on something or someone for support, help, or survival it's when one thing can't function or exist without the other. For example, a country might depend on technology for daily tasks. As according to participant four,

> Artificial Intelligence hamari creativity ko kam kar sakti hai aur humein technology par hadd se zyada depend karne wala bana sakti hai. [Artificial intelligence can reduce creativity, make us overly dependent on technology].

Discussion

Artificial intelligence improves student skills by offering interactive tools, real-time feedback, and a personalized learning path. This innovatory method redefines education by releasing the entire potential of every learner. AI has the probable to be a dynamic educational tool that provides students with meaningful learning experiences while decreasing the workloads of both teachers and pupils.

There are many chances for the progress of AI applications in education when mutual with current educational improvements such as gamification, tailored learning, and useful source digitization.

For example, using intelligent tutoring organizations (ITS), the exhibiting ability of AI methods has been exactly practical to construct sensitive and adaptive tutorials for the construction of tailored learning situations as a solution to the teacher absence (Boulay, 2016).

According to Alneyadi et al. (2023), artificial intelligence (AI) in education mentions to the claim of AI technologies, such as machine learning and expected language processing, to improve the educational procedure.

Artificial Intelligence offers high quality of knowledge and proves precious for grading and assessment by systematizing evaluation developments, confirming consistency, and offering instant feedback. Artificial Intelligence powered tools analyze student performance, recognize areas of improvement, and generate detail reports, allowing educators to create data-driven conclusions. This is not one improves the correctness and competence of classifying but also agrees teachers to focus on provided that modified support, so refining overall educational results.

By the aid of AI, instruction can develop more wide-ranging and manageable, permitting pupils from totally qualifications to receive first-class instruction. We will go into greater factor about the ways AI is being used in education in the segments that follow, with chatbots, Madasamy, Raja, AL-bonsrulah, and Al-Bahrani (2022) discuss intelligent tutoring systems, tailored learning, and grading and evaluation.

Conclusion

In conclusion, it has been uncovered that including artificial intelligence (AI) into university instruction importantly advances students' academic accomplishment. A deeper understanding of composite concepts through winning and communicating evidence, more output in completing tasks, and revised learning skills that cater to each student's needs are just a few of the many benefits of AI tools.

AI's volume to offer pupils personalized help, allow self-paced learning, and give real-time feedback are imperative features that enhance its usefulness. Despite AI's enormously useful effects on education, it is important to identify some of its likely drawbacks, such as the possibility of technological need and the requirement for cost-effective placement. Still, these problems are importantly outweighed by the benefits of AI in education, which makes it a useful source for learners. Universities can equip students with the data and assistances wanted to prosper in a humanity that is agreeable further more needful on technology by using AI. In the end, joining AI persistently into university instruction may result in better academic concert, higher levels.

Recommendation

Universities and educators should strategically participate AI tools into their curriculum to deliver modified learning skills, real-time response, and tailor-made support. Educators require inclusive training to successfully utilize AI tools, and institutions should conduct thorough cost-benefit analyses. A balance between traditional teaching methods and AI-powered tools is crucial to avoid over-reliance on technology. Furthermore, ongoing research is necessary to explore AI's long-term impact on student academic performance and identify areas for development. By implementing these measures, universities can bind AI's latent to improve student grades and produce a more adaptive learning setting.

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