Perception and practice of using Artificial Intelligence in education: An opinion based study

Sohaib Alam – Ansa Hameed – Martyna Madej – Aleksander Kobylarek

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Abstract
The study advocates that educators create a clear plan and strategy for integrating AI, continue their professional development, and be flexible in the face of new tools and methods in order to successfully traverse this quickly changing environment. Educators can also help AI become more widely used in the classroom and improve the educational setting for their students by encouraging open communication, including participation in the decision-making process, and addressing privacy, ethics, and accessibility concerns. AI techniques were also employed to assist with editing this work; specific recommendations were made, and this research also changed the word choice or grammatical structure. The AI-powered syntax and spelling verification feature of Grammarly made it easy for academicians to quickly go over their work and fix any typing errors. The purpose of this study is to introduce educators to the potential applications of artificial intelligence (AI) in the classroom, both now and in the future, with an emphasis on generative AI, which has been made popular by ChatGPT, Google's Bard, and Microsoft's own Bing Chat. It provides educators with practical advice on how to make the most of these tools now and in the future. The study employs a mixed methodology to seek responses from teachers (40) through a questionnaire about their experiences, difficulties, and future prospects of AI in education. The findings suggest that AI has impacted the learning outcomes of students.
Key words: Artificial Intelligence, learning tools, Chabot, machine learning, practical approach

Introduction

During 2022–2023, instructors expressed worries about dishonesty, plagiarism, and the ineffectiveness of many of their regular assignments in reaction to the fast growth of artificial intelligence (AI). Students could suddenly produce assignments and classwork essays in minutes that were difficult to distinguish from those created by humans. The use of AI to generate unique replies from students rendered outdated the use of traditional plagiarism detection techniques. While some educators, out of extreme excitement, updated their assignments to reflect the changes, others remained ignorant of the latest technological advancements. Using generative AI to produce unique replies from every student rendered outdated the use of traditional plagiarism detection techniques. Although the question of academic integrity was relevant in the months that followed the introduction of these new tools, in order to guarantee that our classrooms effectively serve the requirements of our students, a more stable discussion that embraces and makes room for AI is required. Teachers need to understand artificial intelligence (AI), how students utilise and benefit from it, how it can simplify their lives, and how academic goals that were formerly unachievable may now be accomplished. This study serves as a guide for educators to accomplish that same task. The research includes background information on technology developments (previous, current, and potential future) and their implications for educators at all levels of the educational landscape throughout each section. The present study also includes examples, advice, and thought-provoking questions to assist educators become ready to teach in the AI era. Instructors and the institutions they work in have always had to adapt in response to significant technological

advancements to satisfy their pupils' educational demands and seize new possibilities. AI is comparable to the difficulties that learners have had in the past in this regard. But what distinguishes these difficulties from others is how quickly they emerge and the weaknesses and voids they reveal in our teaching models. Because of these two reasons, educators need to consider the effects of these advances in their pedagogy and react more quickly than in the past. The first study aids in understanding the principles of artificial intelligence; how does it relate to education? The second section of the study emphasises the gaps caused by AI and points out areas where education might undergo significant change. The final section assists in integrating AI into conventional pedagogical theory.

Even if artificial intelligence has entered our classrooms, the benefits to our educational landscape will exceed the hazards associated with these technologies. As we have already begun to witness, the shift and adaptation will not be easy. Still, with the right information and abilities, teachers can enter this new era prepared to concentrate on what they are good at teaching youngsters. However, we must carefully consider how, when, and why we change our practice and pedagogy in accordance with AI, as with any rapid advance in knowledge. The following parts offer an overview of the potential and problems that AI is bringing, even though the whole work is committed to supporting instructors in carefully navigating this shift.

Thus, the emergence of generative AI technology presents a way to delegate most of the labour during instructional time. AI may assist with curriculum development, class planning, assessment creation, teacher feedback and communication drafting. As instructors depend increasingly on AI to handle this part of their task, they will dedicate a greater amount of time to providing learners with direct instruction.

Aims and Objectives of the Study

- To check the recent development in instructional methods in classroom teaching.
- To assess the role and efficacy of artificial intelligence in language learning and teaching.
- To seek observations from teachers about AI in education, its role, reception and incorporation into classroom teaching.

Literature Review

The emergence of artificial intelligence establishes that the discoveries and advancements that have led to computers, robots, and other objects possessing intelligence comparable to that of humans, including cognitive functions, not learning adaptability and decision-making skills. The study found that artificial intelligence (AI) has been widely accepted and employed in various ways in education, especially by educational institutions. Hwang et al. (2020) suggest that perceptions of precision in education highlight the importance of providing preventive and intervention strategies to individual students by analysing their cognitive status or behaviour. Therefore, a critical issue is making learning systems capable of acting as intelligent instructors by integrating the knowledge and intelligence of experienced teachers into the system's decision-making process. Judy Kay (2012) mentions the use of artificial intelligence in education (AIED), and Alam and Usama (2023) highlight how it has opened up new possibilities for creating effective educational programmes and improving technology-enhanced learning settings. Researchers have focused on using artificial intelligence (AIEd) in education for almost thirty years. In 2019, it marked the 20th annual AIEd conference, hosted by the International AIEd Society (IAIED), founded in 1997 and published in the International Journal of AI in Education (IJAIED). On the other hand, educators have recently begun investigating the educational prospects that AI applications may provide for assisting students at every

stage of their education (Bearman et al., 2023). It is common to discuss machine learning and artificial intelligence together. Machine learning is an AI technique for supervised and unsupervised categorisation and profiling. It may be used, for instance, to identify subjects in written assignments or to forecast a student's chance of failing a course or getting accepted into a programme. "A subfield of artificial intelligence that includes software able to recognise patterns, make predictions, and apply newly discovered patterns to situations that were not included or covered by their initial design" is how Popenici and Kerr (2017) describe machine learning.

Roy (2020), in her research paper, discussed how computerised reasoning can provide feedback on how well a course is done overall, help teachers and students design courses tailored to their needs, and provide students with all the information they need. She has given examples of Facebook Messenger Chabot for mathematics learning is a conversational interface (Yang & Evans, 2019) that was created so that users may text a bot to understand maths concepts. In addition to solving equations, the Bot suggests relevant YouTube videos. Techniques like text-to-narrated films turn dry text into interesting films with audio and subtitles. It can use image search and title recognition to create films from PDFs and text, locate pertinent photos on Google, download them, and then export them as a film. In a similar manner, ReadEx is an exceptional app for reading documents. As the user reads, this software generates quiz questions automatically using NLP or natural language processing.

A small number of schools are also using AI frameworks to monitor students' progress and notify teachers when there may be a problem with how the syllabus is implemented. The way we interact with data has changed as a result of simulated intelligence-based frameworks. Rather than providing students with the scientific aptitudes they consistently need in the classroom, these frameworks help find and use data in both academic settings and schools (Vazhayil et al., 2019). They can also help students learn more effectively and may even be able to take the place of real-world mentoring. Claude from Anthropic, Google's Bard, and OpenAI's GPT-4 (Lund & Wang, 2023) are a few well-known text creation models. All of these models will continue towards better-improving text—whether it is for academic papers, textbooks, emails, or commercial communications. These text creation models, for instance, can already create memorable brand slogans, customised emails for clients, and humorous meme captions. There are certain models called multi-modal generation that are capable of doing many jobs. The fact that they can manage many project components increases the potential for their application, particularly in professional settings. For instance, Canva and Microsoft Office 365 have built-in capabilities that let you create whole slideshow presentations using text, pictures, and design produced by the AI system (Li et al., 2023). Nonetheless, most academics and practitioners in computers and education still find it difficult to practise pertinent activities or systems. The difficulties in creating intelligent teaching methods and systems for adaptive learning are methods for replicating human intelligence in addition to computer programming abilities specialists (Camacho et al., 2008). One noteworthy paper discussing the prospects from two different angles gives instances of how artificial intelligence (AI) might support education systems in using data to raise the standard and quality of education in developing nations. The two themes that address systemic and pedagogical solutions in this part are AI to help instructors by promoting personalisation and improved learning outcomes, investigating how AI can enhance educational access, collaborative settings, and intelligent tutoring systems. Here, the study provides ways to enhance a state's ability to oversee expansive educational systems by boosting data from schools and cases from the above-mentioned places.

Shaikh et al. (2023) explain how learners can interact with ChatGPT and the effect on language skills. The research findings align with the present study, i.e., artificial intelligence maximises the students' learning outcomes. Agustini (2023) opines that AI allows students to be self-confident and become more independent learners. Javier

and Moorhouse (2023) introduced IDEA (introduction, development, engagement, assimilation) by employing ChatGPT; this process can impact learning outcomes. Alam et al. (2023) also foreground the AI tool Grammarly efficacy among learners in their study. The findings concluded that there are significant differences between the groups who receive the treatment.

This specific study has provided a thorough overview of the potential and problems associated with AIED (Artificial Intelligence in Education) as well as future directions in four important areas of education: learning, teaching, assessment, and administration. Examining the paper's learning outcomes, the effects of AIEd on students' academic performance, motivation and engagement, skills of the 21st century, and non-cognitive features have all been considered. Furthermore, the effects of AIEd on teachers' productivity, aptitude as teachers, and perspective on AIEd have all been investigated in connection to teacher practice and education.

Artificial Intelligence, Opportunities, and Challenges

Artificial intelligence (AI) has made significant advancements in various fields, and education is no exception. Artificial education refers to integrating AI technologies and tools into the educational system to enhance teaching and learning experiences. This section will delve into the role of artificial education in education, specifically focusing on how teachers perceive this emerging technology. Teachers play a vital role in shaping the future of education, and their perspective on AI incorporation is crucial. Teachers' perceptions of artificial education can vary, ranging from scepticism to enthusiasm. Some educators may view AI as a threat to their profession, fearing that it could replace human teachers entirely. On the other hand, many teachers recognise that AI has the potential to revolutionise education positively.

From an optimistic standpoint, teachers embrace artificial education as a valuable tool to augment their teaching methods and improve student outcomes. They acknowledge that AI can automate administrative tasks, such as grading papers or organising lesson plans, thereby freeing up time for more personalised instruction. Furthermore, teachers can provide individualised support tailored to each student's unique needs through adaptive learning algorithms and intelligent tutoring systems powered by AI. These technologies can analyse vast amounts of data about students' learning patterns and offer personalised feedback or recommendations for further study.

However, it is essential to note that while AI has remarkable capabilities, there are limits to its abilities. Teachers emphasise the irreplaceable human elements in education, such as empathy, emotional connection with students, and critical thinking that cannot be replicated by machines. In conclusion, artificial education holds immense potential to transform traditional pedagogical approaches by empowering educators with advanced tools and techniques. Understanding how teachers perceive this technology is crucial for its successful implementation within educational institutions worldwide. By embracing AI as an ally rather than a competitor, educators can harness its benefits while preserving the invaluable human touch in shaping young minds toward a brighter future.

Research Questions

- What educational opportunities can AI offer?
- What difficulties do teachers have while using AI?
- What challenges come with using artificial intelligence (AI) excessively in the educational setting?

Research Methodology

The present study delves into the observations made by the pedagogues using the technology-based praxis in their classroom teaching. The questionnaire was sent by email to seek their responses. Forty (40) teachers responded to the mail sent by the researcher and agreed to participate in the study. The nature of the questions asked was both open-ended and close-ended. Likert scale questions were asked through the questionnaire, and some questions were open-ended where contributors had to write their responses. The present study uses a mixed approach of seeking teachers' input to check the efficacy of artificial intelligence in classroom pedagogy. Additionally, the participants were chosen using the purposive method in the study to facilitate the data collection procedures. After the pilot study, minor suggestions and inputs were incorporated into the questionnaire. The researcher designed and developed the questionnaire, so it is important to check the reliability of the instrument used for the present study. Cronbach's Alpha is used to test the reliability of the questionnaire.

Analysis of the Data and Discussion

The data collected was tabulated through an Excel sheet first and then analysed through SPSS.

The first question asks about what they feel about artificial intelligence as used in classroom pedagogy, which can be used as a tool in the educational setting. Moreover, most of them are using it in some way or another. The options are shown in Figure 1 below. All the options were coded in a numeric value for the tabulation and analysis.

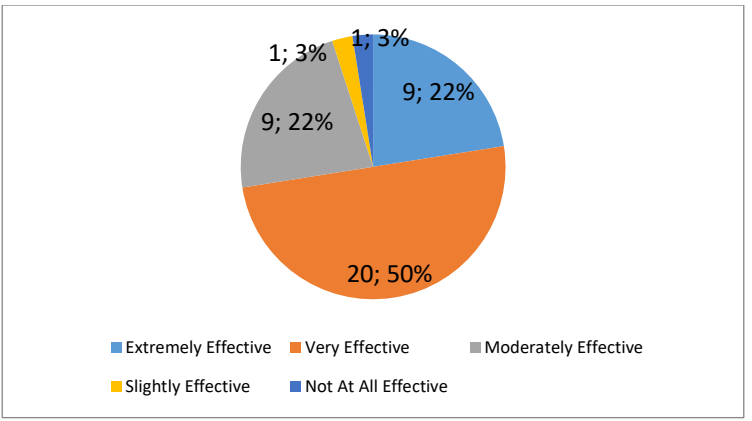

Figure 1: Personal observations from Respondent about AI in pedagogy

The responses recorded as shown in Fig. 1 above, out of forty (40), nine (9) respondents chose option 'extremely effective', twenty (20) chose option 'very effective', nine (9) chose option 'moderately effective', only one (1) respondent chose 'slightly effective', and one (1) chose option 'not at all effective'. Artificial intelligence in education is still a new phenomenon for teachers across the globe that has awoken the tech industry to exploit the most of it by choosing ways to conduct numerous sessions on different platforms. However, it has not been added to the curriculum nor used by teachers in actual classrooms. However, they responded it is an effective strategy to teach language skills.

The next question asked about the purpose of artificial intelligence and the need of the hour to incorporate it in education, i.e. how one can use it effectively to maximise learning outcomes. The options for this question include that it is more effective in the classroom to practice, easy to control with teaching techniques, produces explicit

knowledge of the language, and is an effective tool, but it requires a direction and roadmap to develop a strategy.

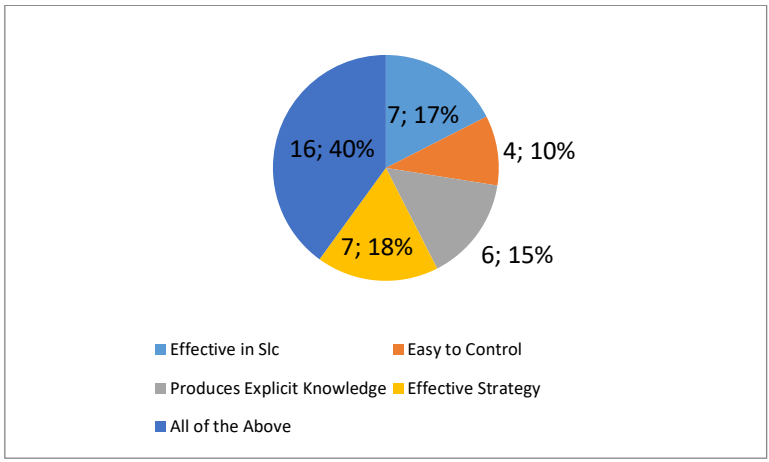

Figure 2: Observation on Incorporation of AI in Education

The responses recorded regarding observations among pedagogues have very mixed responses; however, marginally, it is quite evident that they are confident that incorporating AI in education will be beneficial for students. Seven (7) teachers selected option 'it is effective in language education, four (4) teachers selected option 'easy to control with technological soundness of individual', six (6) teachers selected option 'produces explicit knowledge of the language', seven (7) teachers selected option 'it is an effective tool which can have impact on learners proficiency and sixteen (16) teachers selected option 'all of the above. The next question asks about how much the present teachers like AI tools or are willing to allow students to use them in their classroom. The options were always, very frequently, occasionally, rarely, and never. The question intends to ask the general perception about using AI as a teaching aid in classroom pedagogy.

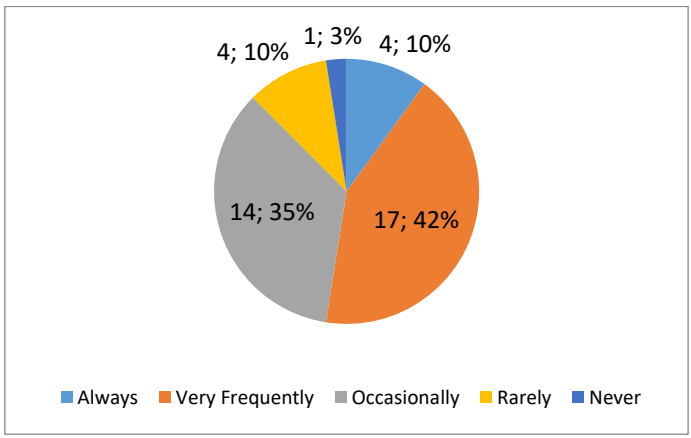

Figure 3: AI tools in classroom teaching

The responses recorded were (Fig. 3), four (4) teachers responded 'always', seventeen (17) teachers responded 'very frequently', fourteen (14) teachers responded 'occasionally', four (4) teachers responded 'rarely', and only one (1) responded 'never'. Figure 3 demonstrates that only 1.1% of teachers responded negatively to this question; the rest of them responded positively.
The next question ponders over AI tools as a part of the English language classroom. The options for this question were that it is extremely effective, very effective, moderately effective, slightly effective, or not at all effective. The tabulated data is shown in Fig. 4 below.

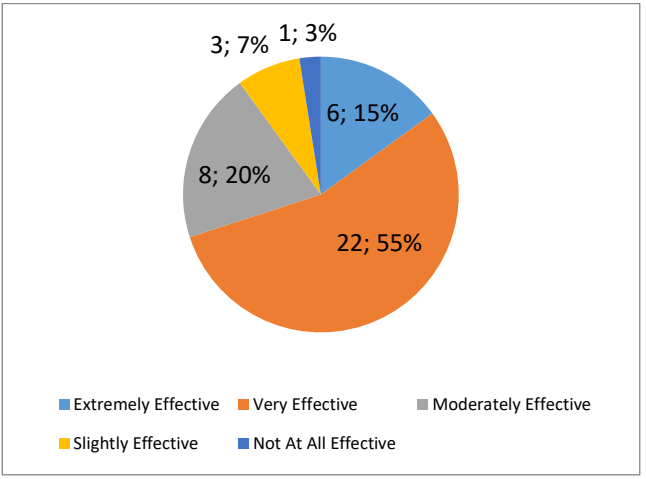

Figure 4: AI tools as a part of the English language classroom

The responses recorded (see Figure 4 above) were six (6) teachers chose the option 'extremely effective', twenty-two (22) teachers chose the option 'very effective', eight (8) teachers chose the option 'moderately effective', three (3) teachers chose the option 'slightly effective', and only one (1) teacher chose the option 'not at all effective'. It can be seen from the above table and figure that very few teachers responded negatively, whereas the majority of them agreed that the approach is effective in second language teaching. However, when they were asked what the modus operandi of applying these AI tools was, they were hesitant to provide any details. Moreover, some responded that they often used Duo-lingo and Google Translation to find a solution whenever needed or to avoid the language barrier. Moreover, numerous platforms like Ted Talk (for pronunciation and language structures) and the British Council provide materials on language skills useful in classroom pedagogy.
The next question in the questionnaire asks specifically about using AI tools in their classroom teaching. The options for this question were always, very frequently, occasionally, rarely and never (Fig.5).
Responses recorded for this question were three (3) teachers selected the option 'always', fifteen (15) teachers selected the option 'very frequently', sixteen (16) teachers selected the option 'occasionally', three (3) teachers selected the option 'rarely', and three (3) teachers selected the option 'never'. As demonstrated in Figure 5 (above), only 0.75% of teachers responded negatively to this statement; otherwise, the rest of them agreed that they use AI tools texts in their classroom. Moreover, teachers feel extremely positive, and they believe students' learning outcomes increase somehow, but the instructor has to take care when he/she is using these digital tools in

the classroom pedagogy. For example, the activities or samples have to be improvised according to the classroom nature and the level of the students when using AI tools for language teaching (Alam et al., 2020). Teachers among participants firmly believe that AI tools gradually develop creativity and spontaneity, give the opportunity for self-expression, enhance the performance of the learners and promote the use of English in real-life occurrences.

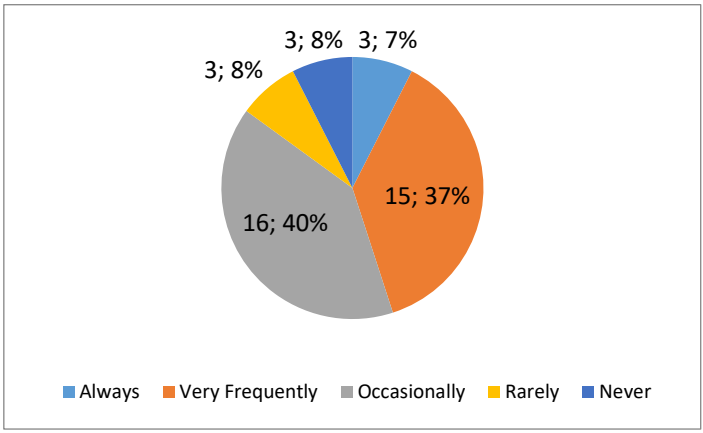

Figure 5: Use of AI tools in the classroom

The next question in the questionnaire enquires about the motivation behind using AI in education in the English language classroom. It takes a lot of courage to start a language class using these AI tools when the nature of the classroom is heterogeneous and large in size. It needs a smart classroom with a good internet connection, infrastructure and support from institutions. The options for this question were it engages the learner's involvement, serves as a fluency activity, prepares for real-life unpredictability, promotes cooperation and group cohesion, and all of the above.

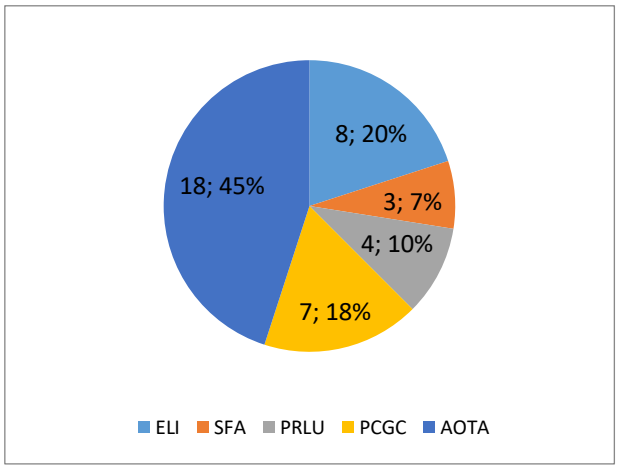

Figure 6: Motivation behind the incorporation of AI in the Classroom

The responses recorded as shown in Fig. 6, eight (8) teachers selected the option ' it ensures learners involvement', three (3) teachers selected the option ' serves as a

fluency activity (SFA), four (4) teachers selected the option 'prepare for real-life unpredictability' (PRLU), seven (7) teachers selected the option ' promotes cooperation and group cohesion' (PCGC), and eighteen (18) teachers selected the option 'all of the above'(AOTA). The data shown in Figure 8 (below) demonstrates that 45% of teachers selected all of the above options.

The data firmly supports that it can be an effective approach to teaching the English language, and teachers are motivated to use it in the classroom. However, it is not included in the curriculum, and they always have the problem of finishing the syllabus within the stipulated time. An amalgamation of AI in education or language teaching can be a game changer if it is exploited properly for the benefit of learning purposes.

The next questions are open-ended types, and respondents were asked to share their experiences, difficulties, and observational notes about Artificial intelligence use in education, particularly in language classrooms. The questions intend to inquire about aspects of AI inclusion in the classroom and its difficulties for teachers and learners. The nature of the question is descriptive because every individual has their own kind of experience, which is why the researcher has designed this questionnaire segment to inculcate every individual response. It discusses the problems and difficulties of using AI in classroom pedagogy. The responses are discussed below.

The learners are still facing problems in language structures, and they said AI-generated texts provide stimuli to understand or practice different sets of language skills. However, it is the instructor's responsibility to carefully monitor these classroom procedures. Participants also agreed that a lack of language skills is difficult to interact with others. AI can be a powerful medium through which they can learn how exactly language structures can be used in multiple or difficult situations.

However, most educators, teachers, and practitioners said that AI in education is still merging as a potential resource of pedagogy, do not have materials available and are not practiced among pedagogues in most cases. The reason behind this dilemma, understood by researchers, is that there are no guidelines for exploiting it for educational purposes. The other reasons can be a lack of technological skills and infrastructure. Infrastructure is one of the issues with this approach. However, one has to understand that today’s internet is a necessity, not a choice, for individuals, so whatever is available, one has to use it and act accordingly. Problems of preparing the lessons and arranging the materials according to the learners' age, level, and background can be another challenge for teachers using AI in their classrooms. Some of the issues and problems disclosed by the participants are the following:

- Hesitation among learners in participating in such activities, exercises, and lessons.
- Some have old syllabi and old teaching techniques that do not give space for applying AI tools in the classroom.
- One of the participants responded that their students face problems in learning the language at the verbal level, and it does not help with learning new vocabulary. The difficulty with segmental and supra-segmental features of language as well as pronunciation.
- Learners are hesitant to participate in drama activities, and the size of the classroom, which has a large number of students, does not allow the teacher to experiment with an activity-based learning strategy. Additionally, completion of the syllabus is always the priority for a teacher. Time constraints to finish the syllabus.
- Lack of infrastructure, classroom size, trained teachers, and multimedia resources. Difficulty initiating the conversation and too much self-consciousness while using English before a large audience.

- Inhibitions, in the beginning, difficulty in switching from traditional to interactive learning methods. The problem is that the style and language content are not familiar to the students.
- Dialogues are sometimes not appropriate for students, they do not internalize it.
- Learners are motivated at the beginning but have difficulty understanding complex dialogues and lack listening skills. Sometimes they are not able to relate what they learn in the classroom through drama.

The remaining participants hesitated to answer this question and left it blank. The reason may be that they do not have AI tools in their classroom. However, others have given plenty of insights about their problem when they use AI tools or its components to teach English.

The next question in the questionnaire asks about how the difficulty faced by teachers would be solved or possibly minimized to a greater extent. This particular question is also descriptive, and the researcher has asked respondents to write their own solutions. The responses are discussed below.

- One of the respondents answered that incorporating AI in education can allow students to use language structures frequently and encourage participation in classroom activities.
- By clarifying the ideas behind the classroom praxis and asking them to concentrate enough to understand the process. However, one has to try to practice with a smaller group in order to avoid chaos.
- By providing enough inputs and materials that help students to initiate the idea to get familiar with it. Introducing the AI in the curriculum and syllabus, developing AI based content and activities, and providing training to the teachers to become proficient.
- Teachers should be given enough training and preparation time to craft their own road map. They can use ready-made materials in the classroom and give students time to comprehend them, but the rationale should be clear. And groups should be formed heterogeneously. (it can be a help in vocabulary building)
- Teacher trainers should be hired by administrations to provide training on how to exploit AI tools and techniques in pedagogy. Proper guidance should be provided in the training to improve it in classroom practice.
- The syllabus should incorporate AI tools and techniques, i.e. it should be given enough classroom space. Dedication is needed to develop a practical approach, and more advancement is needed in students and teachers to become friendly to AI in education.
- Continuous and guided teaching is required to resolve the difficulty. The needs analysis should be conducted among students, and sustained use of AI in ELT should be followed.
- The material and methods have to be eclectic in nature. The focus should be on all skills of language because it helps a learner to understand the nuances of language effectively.

The next question intends to investigate the opinions of the respondents about integrating AI into education, its role and its efficacy. The options for this question were extremely effective, very effective, moderately effective, slightly effective, and not at all effective.

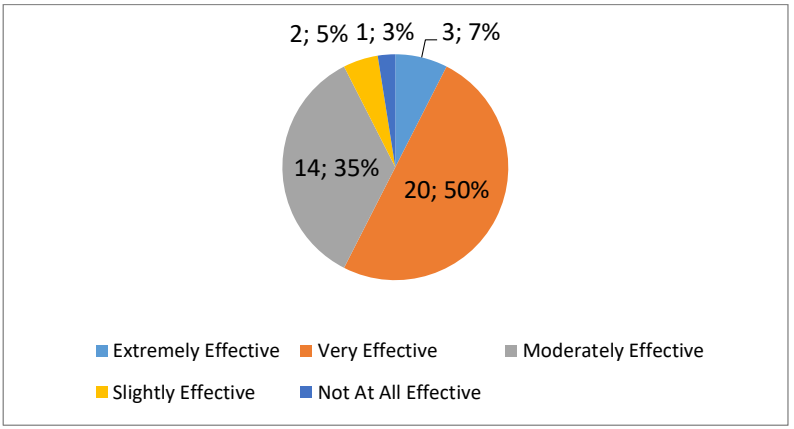

Figure 7: AI in education, its role and efficacy

The responses recorded after tabulation of data were three (3) teachers selected the option 'extremely effective', twenty (20) teachers selected the option 'very effective', fourteen (14) teachers selected the option 'moderately effective', two (2) teachers selected the option 'slightly effective', and only one (1) selected 'not at all effective'. Fig. 7 clearly demonstrates that 50% of the participants responded that they want to integrate, and it is very effective in the classroom. The difficulty of application is still alive as to how to incorporate it actually in the classroom pedagogy as, to date, educators do not have guidelines or a roadmap to follow. A trial and error policy is being followed by individuals in their respective classrooms.

Inferences and Strategies

Artificial intelligence poses numerous challenges for teachers in the practical sense as to how someone can incorporate it in classroom pedagogy. Open AI or ChatGPT, or any platform which allows users to correct their paragraphs or automatically produces written structures, only provides robotic paragraphs, which will not allow learners to learn the nuances of language skills. It does not provide any material for developing creativity, critical thinking, and other supra-segmental language features. However, it is a matter of fact that language can be learnt by using or practising, so if an instructor is improvising these robotic language structures into some kind of robust activity for integrated language skills, then and only then will it be effective in classroom teaching.

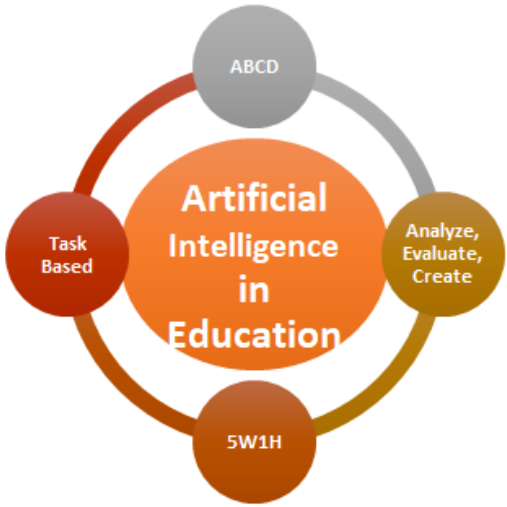

Figure 8: AI Strategies in Education

To incorporate AI in education or language teaching, one has to implement the idea of Audience, Behaviour, Content, and Degree formula in the classroom. Audience is your learners, behaviour is their nature and level, content is the material one chooses to teach, and degree refers to the content, i.e. the content should be in line with their level. The procedure of teaching language skills should be focused on the idea of first analysing, evaluating, and then creating. Students should be given practice enough to produce or create using their own schema. Over the period of time they will gradually be starting to write or speak using their own schema. For this practice, one can also use 5W1H (what, why. where, which, when, and how) to mind map before they actually start something to write and speak with the help of artificial tools. The whole process is discussed above in the fig. 8.

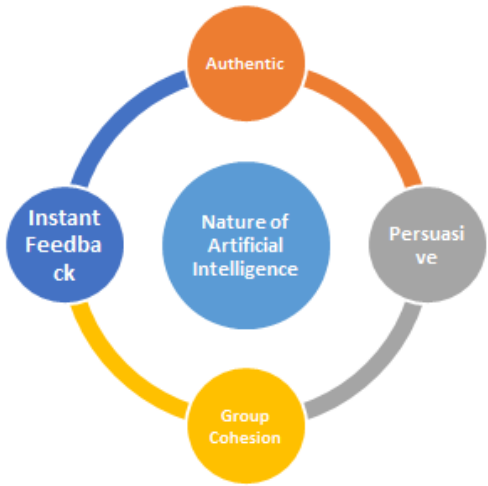

Figure 9: Nature of Artificial Intelligence

The nature of these AI tools is authentic as it gives the option of choosing an academic language. It is persuasive in nature and follows the concept of no one left behind; anyone and everyone who is connected and has skills, can use them for their own purposes. AI promotes group cohesion if it applies pair work or group work and the best thing about this tool is that it gives you instant feedback.

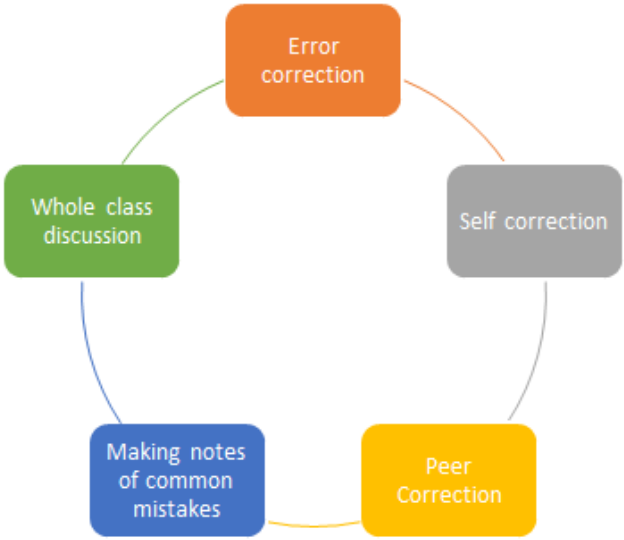

Figure 10: Error Correction and Feedback

The amalgamation of artificial intelligence in classroom pedagogy can raise challenges for teaching procedures. For example, feedback and correction after using AI tools to complete the classroom tasks or procedures. Fig 10 above demonstrates a simple activity through which one can correct learners' errors using peer correction, making common notes leading towards a whole classroom discussion. Discussion among peers is a key element in the language classroom because it promotes students' dialogues and allows them to develop their communicative competence.

Discussion

AI is still emerging every day, and there is no set roadmap for pedagogues worldwide that can be followed in classroom pedagogy. Each day, new Chabot and their version are coming up with new tools and updated algorithms to understand and use it in a better way. Moreover, it is a fact that AI has made significant strides in various industries, and education is no exception. However, despite its potential benefits, several challenges need to be addressed for AI to have a meaningful impact on education. One of the main challenges is the ethical implications of using AI in educational settings. Privacy concerns arise when student data is collected and analysed by AI systems. Additionally, there is a risk of perpetuating biases if AI algorithms are not carefully designed and monitored. Another challenge lies in ensuring that AI systems are effective in supporting learning outcomes. While AI can provide personalized learning experiences and adaptive feedback, it must be able to accurately assess student progress and tailor instruction accordingly. The quality of

educational content generated by AI also needs to be carefully evaluated to ensure its accuracy and relevance.

Furthermore, there is a need for proper training and professional development for educators to effectively integrate AI into their teaching practices. Without adequate support and understanding, educators may struggle to leverage the full potential of AI technologies.

Looking ahead, the future roadmap for AI in education should prioritize addressing these challenges. It requires collaboration between researchers, educators, policymakers, and technology developers to develop robust frameworks that protect student privacy while harnessing the power of AI for enhanced learning experiences. In conclusion, while artificial intelligence holds promise for transforming education, it must navigate through ethical concerns, ensure effectiveness in supporting learning outcomes, provide appropriate training for educators, and foster collaboration among stakeholders. Only then can academia truly unlock the potential of AI in shaping the future of education.

Conclusion

The above discussion concluded that AI does have a role to play in education and language teaching, but the road to success has numerous challenges and difficulties. The present study attempts to understand the nuances of integrating AI in classroom pedagogy. The automated response has opened a wide room for language teachers worldwide to exploit this as a pedagogy tool or to enhance the learner's language skills. This study will be helpful for those who think and try to develop some concrete approaches to using AI in classroom teaching, along with inventing some practical approaches. AI in education is a powerful tool, yet it is still developing, and the pedagogues are still searching for a practical roadmap for implementing AI in their classrooms.

Limitation, Recommendation and Future Scope of Study

The study's limitation can be seen as it was done on a limited number of respondents. A larger number of surveys are needed to make policy changes at a higher level. It is not feasible for an individual researcher to conduct such a large survey for numerous reasons. The study talks about general AI tools, and the floor is open for future scope of study for scholars to conduct research on particle AI tools.

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Sohaib Alam, Dr. Ph.D.
Department of English, College of Sciences and Humanities, Prince Sattam Bin Abdulaziz University
Abdullah Bin Amer Street, 16278
Kingdom of Saudi Arabia

Ansa Hameed, Dr. Ph.D.
Department of English, College of Sciences and Humanities, Prince Sattam Bin Abdulaziz University
Abdullah Bin Amer Street, 16278

Kingdom of Saudi Arabia

Martyna Madej, MA
Institute of Pedagogy, University of Wrocław
ul. J. Wł. Dawida 1, 50-527 Wrocław
Poland

Aleksander Kobylarek, Dr. Ph.D.
Institute of Pedagogy, University of Wrocław
ul. J. Wł. Dawida 1, 50-527 Wrocław
Poland

Appendix-1

Please fill out this questionnaire by providing correct responses. The researcher is pursuing a study on Artificial Intelligence in Education. The findings of this study will be available to assist English language teachers in improving their teaching skills and will boost learner's performance using AI tools.

1. What makes you consider Artificial Intelligence as part of classroom pedagogy?
(a) It is extremely effective (b) It is very effective (c) It is moderately effective
d) It is slightly effective (e) Not at All Effective

2. What do you think is the purpose of AI activities in education?
(a) It is more effective in classroom pedagogy
(b) Easy to control classroom
(c) Produces explicit knowledge
(d) Effective strategy
(e) All of the above

3. To what extent do teachers like AI tools or are willing to allow students to use them in their classrooms?
(a) Always (b) Very frequently (c) Occasionally
(d) Rarely (e) Never

4. What makes you consider AI a part of your classroom pedagogy?
(a) Extremely effective (b) Very effective (c) Moderately effective
d) Slightly effective (e) Not at All Effective

5. To what extent do you use AI tools in classroom pedagogy?
(a) Always (b) Very frequently (c) Occasionally
d) Rarely (e) Never

6. What motivates you to use AI tools and Chatbots for educational purposes?
(a) Ensure learners' involvement (b) Serve as a fluency activity
(c) Prepare for real-life unpredictability (d) Promote cooperation and group cohesion
(e) All of the above

7. How would you describe the advantages of using AI in education?

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8. How would you like to describe the disadvantages of using AI in education?

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……

9. What are the challenges for a teacher to teach through AI tools?

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……

10. Do you think AI in education is effective? If yes, please elaborate.

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……

11. State the role of AI and its challenges in classroom pedagogy.

……

……

12. List the aspects of AI tools that have posed difficulties in classroom integration.
(a)……..……
(b)...…….……..…….....
(c) ……..……

13. Give comments on how such difficulties can be solved.

……..……

……..…….....……

14. What is your opinion on integrating AI in education?
(a) Extremely Effective (b) Very Effective (c) Moderately Effective
d) Slightly Effective (e) Not at All Effective

15. Do you have adequate information on AI in education? How it can be implemented
(a) Yes (b) No

16. Comment on the attitude of learners in using AI tools for education.

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