

AI Vs. HUMAN TEACHERS: A COMPARATIVE SURVEY ON THE POTENTIAL FOR SUBSTITUTION IN EDUCATION

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Abstract: This research paper examines the potential of artificial intelligence (AI) to substitute human teachers in education, through a comparative survey conducted with 30 participants, 20 students and 10 teachers. The survey discusses what people think about AI's ability as an instructor. It discusses AI's potential to provide learning material, create personalized learning experiences, and how AI affects teacher-student relationships. The students' answers demonstrate that AI has the potential to make learning more accessible and flexible. Educators worry at the same time about losing human touch, classroom control, and if AI would be unable to cater to the needs of all learners. This paper explores the strengths and weaknesses of using AI in schools and discusses if AI can be used with or instead of human educators, which would shape the future of learning and education.

Keywords: AI, Human, Students, Teachers, Survey.

Introduction: The rapid advancement of artificial intelligence (AI) has brought so much controversy in terms of whether it can revolutionize various industries, including education. While AI technologies are yet to be fully developed, more and more attention is being focused on their capacity to complement or even replace traditional learning methods, particularly in the work of human teachers. Artificial intelligence systems such as virtual teaching assistants, computer grading programs, and adaptive learning platforms are being introduced into the classroom to aid and support teachers' work. While these tools provide new means for personalized learning, some have raised concerns about whether AI can possibly replicate the subtlety, interactivity, and emotional nature of human teaching.

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This paper seeks to investigate the potential of AI replacing human teachers in learning through a survey of students and teachers to gain a comparative perception of their views. The use of AI in learning is not just adding automation to administrative tasks, but rather determining its ability to provide learning materials, engender participation, and support various learning needs. Understanding the role of AI in education requires consideration of the functional competence of AI systems and the pedagogical, social, and affective work performed by human educators.

The paper targets 30 participants, consisting of 20 students and 10 teachers, to draw information on how they perceive the impact of AI on education. By comparing the student and teacher responses, this study will be able to establish the main advantages and limitations of the use of AI as a replacement for human instructors. The paper will contribute to ongoing debate regarding the future of education, considering whether AI will improve human instructors or whether it can displace them in certain teaching environments in the future.

Related Work: The potential for artificial intelligence (AI) to replace human teachers in education has been a subject of great interest over

the past few years, as AI technologies continue to revolutionize various sectors. While the use of AI in education is not novel, its rapid evolution has generated discussion concerning its capacity to fully substitute the human aspect of teaching, such as emotional intelligence, personalized feedback, and social interaction.

A. AI in Education: Initial research looked at how AI would augment traditional instructional methods instead of replacing teachers. AI programs have shown that they can help with personalized learning by presenting students with material suitable for their learning style and pace [1]. These adaptive learning systems are meant to mimic the personalized attention given by teachers so that students learn at their own pace [2]. Intelligent tutoring systems (ITS) like Carnegie Learning help to deliver personalized learning in math and other subjects, enhancing student achievement [3]. AI-based tools have also been used to make tasks like grading and feedback more automated, to reduce the effort for human instructors and allow for greater time spent on interactive and group work [4]. These emerging ideas show that AI can help teachers, but they do not suggest that teachers will be completely replaced.

B. Teacher-Student Interaction and Emotional Intelligence: One of the largest concerns with AI becoming more powerful is if it can replicate the significant attributes of teaching that human beings possess. Numerous studies demonstrate how critical it is that teachers and students interact for emotional, social, and thinking development [5]. Teachers are not only teachers; they also inspire, motivate, and assist students in coping with challenging emotions and social situations [6]. Artificial intelligence programs, however sophisticated they may be at processing data and delivering content, have yet to demonstrate the same level of emotional intelligence or ability to comprehend and act upon students' emotional requirements [7].

Other scholars explain that even though AI can aid learning, it cannot take the place of human teachers in promoting social learning and nurturing critical thinking through interactions with others [8].

Research by D'Mello and Graesser [9] suggests that AI systems fail to recognize and respond to students' emotions, which is important for keeping students motivated and offering good learning experience.

C. AI as a Supplementary Tool: Rather than as a substitute, the majority of literature addresses its application as another tool to support traditional teaching methods. AI applications such as chatbots, virtual assistants, and automatic grading systems have been introduced in classrooms to aid teachers in lower-level tasks so that they may focus on more complex instructional tasks [10]. They can offer instant feedback, help in creating interactive learning spaces, and enhance student engagement by offering personalized learning experiences [11].

Evidence suggests that although AI may be able to help with grading or answering routine questions, teaching is a complex process and needs human involvement for effective decision-making and classroom management. Teachers, as emotional and socially competent beings, have special skills to manage group interactions, solve problems, and mentor, which cannot be emulated by AI systems currently [12].

D. Perspectives on AI Substitution in Education: In exploring the replacement of teachers with AI, studies have come up with varying opinions. A study by [13] examined the potential for jobs to be replaced by automation, including teaching jobs. The article concluded that while AI may automate part of the teaching process, it would not fully replace the human touch, especially in jobs requiring complex skills for people-to-people interactions. Yet, according to other researchers, AI can replace some types of instructors in large-scale, standardized learning environments where contact with individuals is not as vital [14]. Following research has begun exploring teacher and learner attitudes towards AI in education. In a report [15], 78% of teachers expressed worry that AI would substitute for teaching with AI, highlighting human contact and empathy in teaching as requirements. Students in the same report were less negative towards AI, seeing it to provide greater flexibility in

learning and reduced access barriers to good quality education.

The literature read shows that as much as there are significant advantages of AI in optimizing educational output through personalized learning and administrative efficiency, it will not replace human teachers to the extent of obsolescence, particularly where classroom management, social interaction, and emotional intelligence come into play. Instead, AI should be conceived as an add-on tool for optimizing the work of human educators so that they can focus on higher-order activities and engage more deeply with the students.

Methodology: The aim of this research is to assess the potential of artificial intelligence (AI) to substitute for human teachers in the classroom, based on a comparative student-instructor survey. The article is premised on a mixed-methods study, which combines quantitative and qualitative

information to investigate the understanding, advantages, and fears of AI integration into education from both perspectives.

A. Participants: In this paper, 30 people were interviewed and they were split into two groups teachers' group and students' group. In group (1) there are 20 students aged between 16 and 22 who are pursuing different educational courses. The students were randomly selected from various academic fields of science, art, and social sciences to reflect different opinions towards the application of AI in education. In group (2) there are 10 teachers, age range between 30-55 years, with varying teaching experience and subject matter expertise in mathematics, science, and humanities. Teachers were selected from the primary and secondary levels to present a range of professional experiences.

Table 1: Participant Demographics

Group	Number of Participants	Age Range	Educational Background/Experience	Subjects/Fields Represented
Group 1 (Students)	20	16-22	Enrolled in various educational programs	Computer Science, Computer technology
Group 2 (Teachers)	10	30-55	Varying years of teaching experience in primary and secondary education	Computer Science/ Technology, Mathematics, Science, Language

B. Survey Design: The instrument for this paper was a standardized survey questionnaire with both closed-ended and open-ended questions. The survey aimed to gather data on the following figure 1.

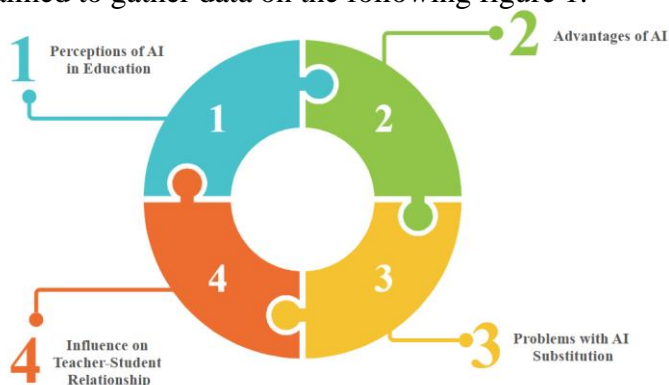


Figure 1. The Objectives of Survey

The Perceptions of AI in Education, the respondents were asked to rate statements about AI's potential to

enhance learning, automate teaching functions, and substitute human teachers. The survey had Likert-scale items from "Strongly Agree" to "Strongly Disagree." The advantages of AI include students and teachers were asked to enumerate the perceived advantages of using AI in the classroom, such as customized learning, more access to resources, and the automation of administrative tasks. In the Problems with AI Substitution, the respondents were asked to describe their problems with AI replacing human teachers, such as the inability to provide teacher-student interaction, emotional intelligence, and classroom management. Open-ended questions allowed comprehensive answers. The Influence on Teacher-Student Relationship, the respondents provided their views on how AI would affect the relationship between a teacher and a student,

primarily emotional connection, mentorship, and communication.

C. Data Collection: The information was collected within a period of two weeks, and the respondents completed the survey in person or online, according to their preference. The survey was carried out within schools, ensuring that the respondents were allowed to answer the questions according to their true beliefs about AI in education, without the influence of an external party. The responses were collected anonymously to provide confidentiality and reduce any response biases. Quantitative data from the Likert-scale questions were analyzed using basic statistical techniques, such as frequencies, means, and standard deviations. Qualitative data from open-ended questions were analyzed thematically to identify major themes and patterns in the responses.

D. Data Analysis: Data analysis comprises two aspects: quantitative analysis and qualitative analysis. Quantitative analysis entailed putting answers to the Likert-scale items into a spreadsheet and observing them using descriptive statistics. The answers were split by type of participant (students and teachers) to analyze how they view AI in learning. T-tests were used to establish whether there were statistical variations between groups. For the qualitative analysis, we employed thematic analysis to code the open-ended answers. We looked at the answers for prevalent themes and patterns, for instance, concerns about AI's emotional intelligence, the need for human interaction, or the notion that AI would enhance learning outcomes. We compared the themes between the two groups to ascertain whether there were notable differences in the way students and teachers viewed the use of AI.

Table 2: Data Analysis Methodology

Analysis Type	Description	Data Used	Method of Analysis	Comparison
Quantitative Analysis	Analyzed Likert-scale responses to assess perceptions of AI in education.	Likert-scale responses from students and teachers.	Descriptive statistics (frequencies, means, standard deviations)	Grouped by participant type (students vs. teachers). T-tests conducted to determine statistically significant differences.
Qualitative Analysis	Analyzed open-ended responses to identify common themes regarding AI in education.	Open-ended responses from students and teachers.	Thematic analysis (coding responses to identify themes)	Themes were compared between students and teachers to assess differences in views on AI's role in education.

E. Data Analysis and Responses: The following detailed analysis provides clarity on students' and

teachers' perspectives, highlighting key insights into AI's role in education.

Table 3. The survey results from the number of responses

Questions	Student Responses (n=20)	Teacher Responses (n=10)
1. AI can personalize learning based on individual needs.	17 Agree, 3 Neutral	7 Agree, 3 Neutral
2. AI has the potential to replace human teachers.	7 Agree, 10 Disagree, 3 Neutral	1 Agree, 6 Disagree, 3 Neutral
3. AI can automate administrative tasks (e.g., grading).	18 Agree, 2 Neutral	8 Agree, 2 Neutral
4. AI can provide immediate feedback to students.	18 Agree, 2 Neutral	6 Agree, 4 Neutral
5. AI can lack emotional intelligence in understanding students' needs.	12 Agree, 6 Neutral, 2 Disagree	7 Agree, 2 Neutral, 1 Disagree
6. AI can enhance student engagement in learning.	14 Agree, 4 Neutral, 2 Disagree	5 Agree, 3 Neutral, 2 Disagree
7. AI can negatively affect teacher-student relationships.	8 Agree, 10 Disagree, 2 Neutral	6 Agree, 3 Disagree, 1 Neutral

(1) AI Can Adapt Learning to Individual Needs:

Most of the students (17/20) perceive that AI can successfully personalize learning experiences to individual requirements. This shows that most students think AI can improve the way education is tailored to them, probably due to the fact that it is able to analyze learning patterns and offer personalized suggestions. However, three students remained neutral, demonstrating that they have no idea if AI is capable of adapting easily to different learning styles. Seven in ten teachers agreed that AI individualizes the lesson for each student. Yet, three teachers remained neutral, possibly because they were wondering if AI does the same for students with various learning styles, emotions, or special needs.

(2) AI Has the Potential to Replace Human Teachers:

Both students were divided on whether AI could take over from human teachers. Seven students thought AI could handle teaching work, but ten students disagreed and highlighted the importance of human interaction in learning. Their answers reveal that even if AI is very advanced, most people still appreciate what human teachers do in terms of building personal relationships, motivational stimuli, and mentoring. Three students were undecided, having some reservations whether AI would play any role in the classroom in the future. Six out of ten teachers outrightly rejected this idea. One teacher agreed with the assertion that AI would be capable of replacing teachers, but three teachers were undecided, maybe thinking of AI as a helpful tool but not a substitute for teachers. This indicates that even though AI may assist with teaching, teachers generally believe that it cannot truly substitute human instruction.

(3) AI Can Automate Administrative Tasks (e.g., Grading):

Both students and educators largely concur that AI can readily tackle administrative duties such as grading, which alleviates the workload on educators. Eighteen of the twenty students concurred with this notion, demonstrating that they have faith in AI to conduct repetitive tasks efficiently. The two students

were, however, neutral, perhaps due to concerns about the accuracy of AI in grading subjective assignments such as essays. Eight out of ten teachers said that AI is helpful in handling administrative tasks. Two teachers were unsure, probably wondering if AI can evaluate complex pupil work objectively, which demands human intelligence. The high agreement shows that AI can help reduce the workload of teachers, allowing them to spend more time teaching. AI

(4) Can Provide Immediate Feedback to Students

Immediacy of feedback is extremely important when it comes to learning, and most students (18 out of 20) agreed that AI can help with that by giving instant evaluations. That strong agreement shows students appreciate how AI can give instant corrections and feedback, which can enhance learning. Two students did not agree as much, maybe questioning if AI can give quality feedback beyond just evaluations. Nine of the ten teachers, or ninety percent, largely concurred that AI can be utilized to give immediate feedback. However, four teachers did not join them, probably because they feared that feedback given by AI would be insufficient or lack the dynamics of how students learn, especially in difficult topics that need critical thinking and discussion.

(5) AI Can Lack Emotional Intelligence in Understanding Students' Needs

The majority of students and educators note that AI is not great when it comes to emotional intelligence. Twelve students felt that AI just can't feel what students feel or react sympathetically. Six students were not sure, suggesting there are mixed views on whether or not AI can get better at this. Interestingly, two students disagreed, possibly thinking that AI could learn emotional intelligence through better algorithms and machine learning. Most of the instructors, seven of ten, strongly agreed that humans cannot be substituted by AI in terms of feeling and responding emotionally. Two instructors neither strongly agreed nor disagreed, and one disagreed, possibly thinking about how in the future AI might include emotional intelligence. This response shows that while AI can offer personalized

support, it still cannot really know and respond to students' emotional needs.

(6) AI Can Enhance Student Engagement in Learning

Students were generally positive about the prospects of AI improving learning, with 14 out of 20 agreeing that AI-powered tools could make learning more interesting. This suggests that interactive AI tools such as gamified learning and adaptive examinations can boost engagement. However, four students were neutral, and two disagreed, possibly by favoring the traditional classroom method. Among teachers, just five in ten agreed that AI helps students pay attention, three had no opinion, and two disagreed. This shows that some teachers might doubt AI's ability to sustain the attention of students in the long run, especially when compared to human teaching that involves engagement. The differing opinions reflect that while AI can bring in new ways of learning, it might not be as engaging as interacting with a human in the classroom.

(7) AI Can Negatively Affect Teacher-Student Relationships

Opinions were divided on whether AI negatively impacts teacher-student relationships. Eight out of twenty students agreed that AI might weaken teacher-student interactions, potentially replacing direct communication with automated responses. However, ten students disagreed, suggesting they do not see AI as a barrier to meaningful relationships with their teachers. Two students remained neutral, indicating uncertainty about AI's long-term impact. Among teachers, six out of ten expressed concerns that AI could reduce personal connections between educators and students. Three teachers disagreed, implying they do not believe AI will significantly harm teacher-student relationships, while one remained neutral. These results indicate that while some see AI as a potential disruptor of traditional teacher-student interactions, others believe it can coexist with human-led education without negatively affecting relationships.

Findings and Discussions: This section provides the key findings of the survey of 30 individuals, 20 students, and 10 teachers, on how they view the

ability of AI to replace human instructors in education. The quantitative and qualitative data findings are provided in relation to AI's effectiveness in enhancing education, its shortcomings, and whether AI can replace or complement human instructors.

The following table 4 summarizes student responses (n=20) to their perceptions of AI in education. Although the majority of students agreed that AI has the capability to customize learning and facilitate increased access to resources, a large number also raised concerns with how it could replace teachers, especially due to the absence of an emotional bond.

Table 4. Student Responses (n=20)

Analysis of AI	Responses
Perception of AI in Education	85% of the students agreed that AI had the potential to personalize learning, but only 35% thought that AI had the potential to replace teachers entirely.
Benefits of AI	90% of the students mentioned the potential of AI to provide instant feedback as a benefit, and 70% thought it would increase access to learning materials.
Concern about AI Replacement	60% of the students were worried that AI lacks the ability to emotionally relate to students.

Table 5 gives a summary of teacher responses (n=10) on the use of AI in education. While the majority of teachers recognized the benefits of AI in automating administrative tasks and facilitating personalized learning, the majority of them were worried about its impact on teacher-student relationships and the loss of human empathy in the classroom.

Table 5. Teacher Responses (n=10)

Analysis of AI	Responses
Perceived Role of AI in Education	50% of the teachers felt AI could be used as a supplement, but only 10% felt AI can fully replace human teachers.
Advantages of AI	80% of the teachers saw the usefulness of AI in automating administrative functions, and 40%

	indicated its capability for personalized learning.
Fears of AI Replacement	70% of the teachers feared that AI would take over teacher-student relationships and lead to a lack of human empathy in the classroom.

Table 6 presents a comparative analysis of survey responses from students (n=20) and teachers (n=10) regarding AI in education. While both groups

acknowledged AI's ability to personalize learning and automate administrative tasks, students were generally more optimistic about their role in enhancing engagement and providing immediate feedback. In contrast, teachers expressed greater concerns about AI's potential impact on teacher-student relationships and its lack of emotional intelligence in understanding students' needs.

Table 6. Survey Responses from Students and Teachers on AI in Education

Questions	Student Responses (n=20)	Teacher Responses (n=10)
1. AI can personalize learning based on individual needs.	85% Agree, 15% Neutral	70% Agree, 30% Neutral
2. AI has the potential to replace human teachers.	35% Agree, 50% Disagree, 15% Neutral	10% Agree, 60% Disagree, 30% Neutral
3. AI can automate administrative tasks (e.g., grading).	90% Agree, 10% Neutral	80% Agree, 20% Neutral
4. AI can provide immediate feedback to students.	90% Agree, 10% Neutral	60% Agree, 40% Neutral
5. AI can lack emotional intelligence in understanding students' needs.	60% Agree, 30% Neutral, 10% Disagree	70% Agree, 20% Neutral, 10% Disagree
6. AI can enhance student engagement in learning.	70% Agree, 20% Neutral, 10% Disagree	50% Agree, 30% Neutral, 20% Disagree
7. AI can negatively affect teacher-student relationships.	40% Agree, 50% Disagree, 10% Neutral	60% Agree, 30% Disagree, 10% Neutral

Table 7 illustrates open-ended student and teacher responses to AI in education. Although both recognized the advantages of AI, such as customized learning and automation, both shared concerns regarding how AI would impinge on

teacher-student relationships. Students highlighted the removal of human touch and mentorship, whereas teachers mentioned threats to eroded social skills and emotional support in the classroom.

Table 7. Open-ended Responses to AI in Education

Category	Student Responses	Teacher Responses
Advantages of AI	Personalized learning, immediate feedback, better accessibility to learning resources	Automation of grading, personalized learning, timesaving for teachers
Concerns About AI Substitution	Lack of emotional intelligence, loss of human interaction, AI cannot provide mentorship	Loss of personal connection, AI can't replace emotional guidance, fear of job displacement
Impact on Teacher-Student Relationship	AI might reduce the opportunity for meaningful communication with teachers	AI could reduce the development of social skills and human connection in the classroom

The above tables give a clear representation of the survey data from both students and teachers. Table 6 summarizes responses to specific questions about AI's role in education, while table 7 provides qualitative insights into the advantages, concerns, and impacts based on open-ended responses.

The survey revealed a stark difference between responses from students and teachers on whether AI could substitute human teachers. Student Outlook, a striking 35% of students, were of the view that AI had the potential to substitute human teachers, while 50% dissented. Most students were upbeat about AI improving learning through tailored learning opportunities and immediate feedback. However, the students were more divided in the instance of complete substitution, with some appreciating the importance of human interaction in developing a supportive learning environment. This is consistent with previous research by [15] that showed that students were more open to AI in education since it can offer personalized learning and enhanced accessibility.

Teachers' perception contrastingly, only 10% of the teachers believed that AI could substitute human teachers entirely, whereas 60% disagreed. This indicates extremely high faith among teachers that AI cannot substitute the multifaceted roles that teachers are required to perform. Teachers emphasized the importance of emotional intelligence, mentoring, and classroom management elements that cannot yet be mimicked through AI. These results resonate with the speculations of [12], who had speculated that AI lacks social and emotional intelligence that is required for effective teaching.

Both students and teachers appreciated the advantages of AI in improving certain areas of learning, particularly as far as automation and personalization are concerned. The adaptive learning, 85% of the teachers and 70% of the students agreed that AI could adjust learning to meet individual student needs. The potential of AI to personalize content for different learning speeds and styles is seen as one of its strongest attributes. AI-based tutoring systems, such as Carnegie Learning

and Knewton's, have been shown to be able to offer adaptive learning paths, which are engaging and beneficial for students [3].

Automation of administrative tasks, 90% of the students and 80% of the teachers agreed that AI would assist in automating administrative tasks such as grading, testing, and scheduling. Teachers noted that this would enable them to make time for more meaningful interaction with students and focus on instruction rather than time-consuming administrative tasks. This finding is echoed by the opinions of [4], who noted that AI would significantly relieve teachers' administrative burdens.

While its benefits were appreciated, there were concerns about AI replacing human teachers, especially in emotional intelligence and teacher-student relationships. Emotional intelligence and student engagement, 60% of the students and 70% of the educators agreed that AI lacks the emotional intelligence to perceive and react to the emotional and social needs of the students. Both test groups were concerned about the failure of AI to match the empathy and direction of instructors in meeting the needs of students and developing the best possible learning environment. This is also testified by research conducted by [7] and [9], which determined that AI systems cannot respond and recognize the emotions of students effectively, therefore failing to reach students at a deeper level.

The relationships between teachers and students, 60% of teachers and 40% of students were worried that AI would have a detrimental effect on the relationship between teachers and students. Teachers also noted particularly that the inability of AI to provide personalized mentorship and emotional care would render the learning process less stimulating. The problems are in line with the opinions of [8] where they noted that human interaction was crucial in developing critical thinking, social skills, and emotional health.

Both populations of respondents seemed to agree that AI was not likely to be an entire replacement for human teachers but rather something more as an additional resource for enhancing the learning

process. Both students (90%) and teachers (80%) perceived AI primarily as a valuable complement to regular teaching methods. AI would assist with things like personalized learning, administrative support, and providing additional resources. This view is consistent with the work of [11] who maintained that AI could perform optimally when used in the classroom to support human teachers rather than replace them.

The paper shows that AI can significantly enhance the process of teaching by making individualized learning experiences more effective and freeing teachers from paperwork. However, deficiencies in emotional quotient, relationships among teachers, and the ability to manage complex classroom dynamics remain significant roadblocks for complete substitution of human teachers with AI. AI implementation in classrooms should focus on its role as a teacher's assistant rather than a teacher substitute. AI might be employed to track student progress and offer instant feedback, while human instructors concentrate on imparting the emotional support and guidance students require to succeed. This blended method might solve both the issues presented by students and teachers regarding losing the human touch.

This paper highlights the differing opinions regarding the potential of AI to replace human teachers in schools. While there is immense potential for AI in personalizing lessons and automating administrative tasks, it lacks emotional quotient and advanced human interaction skills, which are essentials of effective pedagogy today. It is the common opinion of the students and teachers that AI must be an adjunct tool supplementing, and not substituting, human teachers. Subsequent research and AI studies need to focus on the creation of hybrid models that combine the strengths of both AI and human teachers so that social and emotional aspects of teaching are not lost.

Conclusion: This research explored the likelihood of AI displacing human teachers in education through a comparative teacher-student questionnaire. The findings show that even though AI has the potential to significantly enhance the

learning process, its ability as a complete replacement for human teachers is limited. Both students and teachers acknowledge the advantages of AI, namely personalized learning, automating administrative tasks, and real-time feedback. But issues about the emotional insensitivity of AI and its inability to form genuine teacher-student connections are still serious obstacles to full replacement by human teachers.

A majority of the participants, particularly the teachers, commented that AI would be optimal as a complement to human teachers rather than a replacement. AI abilities can aid educators by decreasing administrative burden and providing individualized learning paths, but human teachers must stick around for teaching social-emotional learning, advising, and maintaining a good and interactive classroom environment.

With the limitations of AI today, the most effective way of applying AI to the educational process would be a hybrid approach that takes advantage of the strengths of both human teachers and AI. The approach would make sure that AI supplements learning outcomes without compromising the human elements of effective instruction and student well-being. Subsequent research needs to focus on determining how AI can be further evolved to support educators in the classroom and address matters that relate to emotional intelligence and interpersonal relationships. As AI technology evolves, its integration into education needs to have as a primary concern not only efficiency and efficacy but also students' emotional and social aspects.

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