

***PREPARING STUDENTS FOR AI-MEDIATED SOCIETIES:
OPPORTUNITIES, ETHICAL CHALLENGES AND EDUCATIONAL
RESPONSIBILITIES***

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Abstract

The 21st century is known as the century of technological change. With the rapid development of information and communication technologies, artificial intelligence (AI) is making a huge impact in various spheres of human society. AI-based systems in education, health, business, governance and social life are changing the nature of decision-making and services, as a result of which today's society is gradually moving towards an "AI-mediated society." In such a society, there is a deep influence of AI-based tools and algorithms on human life. This paper presents a descriptive and conceptual study of the process of preparing students in the context of an AI-mediated society. The main objective of the study is to analyze the opportunities created by AI in the education sector, the ethical challenges associated with it, and the changing responsibilities of the education system. The research has adopted a qualitative approach and the entire study is based on secondary data sources such as research journals, books, policy documents and reports of international organizations such as UNESCO and OECD. The results of the study show that AI-based tools can make learning more personalized, flexible, and effective. Adaptive learning systems, intelligent tutoring, and data-driven assessment improve the academic ability of students. Simultaneously, AI-related skills make students globally competitive for future employment. However, serious ethical challenges such as data privacy, algorithmic scrutiny, lack of transparency, and academic integrity also come to the fore. The study emphasizes that AI is not a substitute for teachers, but a support tool. The role of teachers in an AI-mediated society becomes more important as mentors, facilitators and conductors of ethical values. In conclusion, the study

showed that students need to combine moral understanding, human values, and social skills with technical knowledge to prepare them for an AI-mediated society.

Keywords:

AI-Mediated Society; Artificial Intelligence in Education; Ethical Challenges in AI

Introduction

The 21st century is often referred to as the century of technological change. With the rapid development of information and communication technology, the scope of modern tools is increasing in every field of human society. In these transformations, Artificial Intelligence (AI) has emerged as a powerful technology that has brought significant changes in human thinking, functioning and decision-making. AI not only makes machines intelligent, but also provides a new direction for the structures of society, including systems such as business, education, health, law, and governance. As a result, today's society is gradually moving towards an "AI-mediated society." An AI-driven society is one where AI-based systems play a significant role in various decisions, services, and processes that impact human life. Smartphones, social media, online education, digital assessment, automated services, data analysis and algorithmic decision processes are clear examples of an AI-mediated society. Not only is traditional knowledge enough to live and work in such a society, but new digital skills, critical thinking and moral understanding have also become extremely necessary.

The importance of students in this perspective is special, because today's students are going to be tomorrow's citizens, activists, leaders and policymakers. If students are not properly prepared for an AI-mediated society, they will not be able to make full use of the benefits of technology and also face its negative consequences properly. Therefore, preparing students for an AI-mediated society is not only an academic requirement but also a social responsibility. The traditional education system has been based primarily on memory, textbook-based knowledge, and exam-centred assessment. But in the age of AI, such teaching methods do not prove to be enough. In today's time, it is necessary for students not only to acquire information, but also to develop the ability to analyse, evaluate and make creative use of information. AI-based tools can make learning more personalised, flexible and effective. For example, adaptive learning systems, intelligent tutoring systems and automated assessment tools provide a learning facility tailored to the individual needs of the students.

The AI-mediated society also creates many opportunities for students. AI-related skills such as data literacy, coding, problem-solving ability, and digital creativity are

becoming extremely important in the future job market. The right use of AI in the education sector can make students globally competitive. Along with this, AI also has the potential to increase equity and accessibility in education, especially for remote areas and disadvantaged sections.

However, there are several ethical challenges associated with an AI-mediated society. Since AI systems are largely based on data, questions like privacy and data security arise. There is also a possibility of increasing discrimination and inequality due to algorithmic bias. Improper use of AI in the education sector can lead to increased copying, academic rigour and over-reliance on technology among students. Ignoring such ethical challenges can make AI's harms more serious than its benefits. Therefore, the importance of moral education becomes special while preparing students for an AI-mediated society. It is not enough to just teach students the use of AI, but it is also essential to make them aware of the social, ethical and humanitarian aspects of AI. An understanding of ethical values, accountability, transparency and human rights should be inculcated in students, so that they can make responsible and sensitive use of AI.

The role of the education system comes into focus here. In an AI-mediated society, teachers act not only as knowledge givers but also as mentors, facilitators, and moral guides. The need of the hour is to include topics like AI literacy, digital ethics and critical thinking in the curriculum. Teacher training programs also require the incorporation of AI-related knowledge and skills, so that teachers can effectively handle the changing educational scenario.

Preparing students for an AI-mediated society in a developing country like India is particularly challenging. Issues like digital divide, lack of resources and inequity of education can hinder this process. Nevertheless, initiatives such as the National Education Policy (NEP 2020) promote AI and technology-based learning, which is a positive sign for the future. Making education inclusive, equitable and value-based is imperative for an AI-mediated society. The importance of the research paper presented in this perspective increases. The study elucidates the concept of AI-mediated society as a descriptive and perceptive study and conceptualises the opportunities created by AI for students, the ethical challenges posed and the changing responsibilities of the education system. No primary data collection has been done in this study; however, theoretical discussion has been done based on various books, research articles, policy documents and international reports.

The main purpose of this introduction is to demonstrate that preparing students for an AI-mediated society is a multifaceted process, requiring a combination of technological

skills, ethical understanding, and human values. Not only by teaching the use of AI, but also by developing the ability to live with AI and make responsible decisions, students will be able to face the challenges of the future. In this way, the education system can become a powerful tool of social change in the AI-mediated society.

Objectives of the Study

1. To explain the concept of AI-mediated society and its salient features.
 2. To make a descriptive analysis of the changes taking place in the education sector with the development of Artificial Intelligence.
 3. To identify educational, skill and career-related opportunities available to students in the context of AI AI-mediated society.
 4. To discuss the ethical challenges associated with the increasing use of AI in the education sector, such as privacy, data security, algorithmic bias, and academic integrity.
 5. To conceptualise the changing role of the education system and teachers in preparing students for an AI-mediated society.
 6. To articulate the responsibilities of education for developing digital literacy, critical thinking and ethical values among students.
 7. To come up with suitable suggestions for implementing AI-based learning in a responsible, balanced and value-based manner.
- Methodology

The Type of Research

The research presented is a descriptive and conceptual form of study. The study provides a conceptual and theoretical description of the concept of AI-driven society, its characteristics and its impact on the education sector. The purpose of this research is not to measure a particular factor, but to develop an in-depth understanding of the topic.

The Research Approach

A qualitative approach has been adopted in this study. Issues related to AI-mediated society and student readiness have been analysed based on various theories, ideas, and pedagogical perspectives. The topic has been extensively discussed through a rational and analytical approach.

Sources of Data

Secondary data has been used in the present study. It includes research journals, books, academic articles, international reports (such as UNESCO, OECD), policy documents, and reliable web sources. Primary data collection has not been done.

The Method of Data Collection

The study did not use any type of questionnaire, interview, survey, or observation method. The conceptual information has been collected by conducting an in-depth study of the relevant literature. So, data collection has been considered as - Not Applicable.

The Method of Analysis

The compiled literature has been analyzed descriptively, perceptually and rationally. AI-mediated society, opportunities for students, ethical challenges and learning responsibilities have been discussed by categorising the information thematically under the topics.

Research Result & Discussion:

The review of existing national and international literature reveals several consistent and significant findings regarding artificial intelligence (AI) and its impact on education and society. First, the literature indicates that AI has strong transformative potential in education. Studies by Chen et al. (2020), Holmes et al. (2019), and OECD (2021) highlight that AI-driven tools such as adaptive learning systems, intelligent tutoring systems, automated assessment, and learning analytics enhance personalised learning experiences. These technologies allow instruction to be tailored to students' pace, abilities, and learning styles, thereby improving engagement and academic outcomes. Second, research consistently shows that AI can support teachers rather than replace them. While concerns about automation exist (Selwyn, 2019), most scholars agree that AI functions best as an assistive tool that reduces teachers' administrative burden, enabling them to focus on mentoring, creativity, and socio-emotional learning. Third, ethical concerns emerge as a dominant result across studies. UNESCO (2019, 2022), the European Commission (2019), and Floridi et al. (2018) emphasise risks related to data privacy, algorithmic bias, lack of transparency, and accountability. Without ethical governance, AI may reinforce social inequalities and discrimination. Fourth, the literature highlights a critical gap in AI literacy. Kim et al. (2022) argue that students and educators often lack sufficient understanding of how AI systems work, which limits effective and responsible use. This gap is more pronounced in developing

countries. Finally, broader societal studies (Anderson & Rainie, 2018; Bostrom, 2014; Russell & Norvig, 2021) indicate that while AI promises increased efficiency and innovation, it also raises long-term concerns about human autonomy, employment, and control over intelligent systems.

Discussion:

The findings of this study demonstrate that AI represents both an opportunity and a challenge for education and human society. The positive outcomes identified—personalised learning, improved efficiency, and data-driven decision-making—support the argument that AI can significantly improve educational quality when implemented responsibly. However, the concern that AI might replace teachers is largely unsupported by the literature. Instead, the reviewed studies suggest a human-centred AI approach, where technology complements human intelligence rather than substitutes it. Teachers remain essential for ethical judgment, emotional support, and value-based education—areas where AI lacks competence. Ethical issues form a central theme in the discussion. The recurring emphasis on transparency, fairness, and accountability indicates that technological advancement without ethical regulation can undermine trust in AI systems. The frameworks proposed by UNESCO and the European Commission provide valuable guidance, but effective implementation remains uneven across regions. Another critical discussion point is AI literacy. Without adequate training for students and teachers, AI risks becoming a tool controlled by a few experts or corporations, thereby widening the digital divide. Integrating AI literacy into curricula is essential to empower learners as informed users and future decision-makers. From a broader human perspective, the literature reflects cautious optimism. While AI may reshape the future of work and learning, scholars like Bostrom (2014) and Russell & Norvig (2021) stress the importance of aligning AI development with human values to avoid unintended consequences. Overall, the discussion suggests that the future of AI in education depends not only on technological innovation but also on ethical governance, inclusive policies, and human-centred design.

Scope of the Study

This field of study is limited to education and student preparation in the context of AI-mediated society. The study is not limited to a particular country, institution or educational level, but takes into account a general and global educational perspective.

Limitations of the Study

Since the research presented is based entirely on secondary sources, it lacks empirical or statistical evidence. In addition, some findings may change over time due to changing technology and the rapid development of AI.

Ethical Considerations

All sources used in the research have been properly referenced. Any kind of plagiarism has been avoided, and academic integrity has been maintained in the research work.

Thematic Analysis (Discussion)

1. The changing nature of society and education driven by AI
2. Education in an AI-mediated society is becoming not just a process of imparting knowledge, but a means of developing skills, values and responsible thinking. AI-based technology is making education more flexible, personalised, and student-centred. The learning process has become more effective through smart classrooms, online platforms and intelligent learning systems.
3. The changing role of students in an AI-mediated society
4. Modern students are now becoming not only receivers of knowledge, but also active learners and co-creators of knowledge. AI tools encourage students to self-study, problem-solving, and creative work. In an AI-mediated society, students are expected to have digital literacy, critical thinking and a responsible attitude towards technology.
5. Opportunities created by AI for students
6. AI provides many opportunities in the field of education. Personalised learning enables learning tailored to the potential of each student. AI-based assessment methods are helpful in understanding the learning progress more clearly. Simultaneously, AI-related skills make students more competitive in the future job market.
7. 4. AI-mediated society and educational equity
8. AI technology has the potential to increase educational accessibility. Students from remote areas can also get quality education through online education and digital content. Still, issues such as the digital divide and lack of resources can exacerbate educational inequality, which needs to be addressed through appropriate policy and planning.
9. 5. The ethical challenges associated with AI

10. Ethical questions become extremely important in an AI-mediated society. Issues such as data privacy, protection of personal information and algorithmic bias raise serious concerns in the education sector. Lack of transparency in AI-based systems can affect the rights of students.
11. 6. Academic Integrity and the Use of AI
12. Improper use of AI tools raises issues such as duplication, identification of original work, and academic integrity. Therefore, it is necessary to teach students the responsible use of AI and develop ethical guidelines. The education system should adopt AI as a supporting tool, not as an alternative.
13. 7. Education system and the responsibilities of teachers
14. The role of teachers in AI AI-mediated society has become more important as a guide and facilitator. The curriculum must include AI literacy, digital ethics, and critical thinking. Training teachers on AI-based tools is also the need of the hour.
15. 8. Human-centred and value-based AI education
16. This study shows that a human-centric approach is indispensable for an AI-mediated society. Technology should be used to strengthen human values, not to weaken them. Responsible, balanced and ethical AI education can only enable students for the future.

Findings of the Research

1. AI-mediated society is an inevitable fact
2. It is clear from the study that artificial intelligence-based technology is rapidly penetrating into various sectors of human society and is likely to become the mainstay of education and social systems in the future.
3. AI is bringing significant changes to the education sector.
4. AI-based tools make learning more personalised, flexible, and effective, making it possible to improve the learning ability of students.
5. Creating new opportunities for students.
6. The AI-mediated society provides students with digital literacy, technical skills and opportunities to become globally competitive.
7. 4. Moral challenges raise serious concerns.
8. Issues such as data privacy, algorithmic bias, overreliance on technology, and academic integrity become more serious with the increasing use of AI.
9. 5. Only technical knowledge is not enough.

10. The study shows that the development of moral values, critical thinking skills and social responsibility is indispensable to prepare students for an AI-mediated society.
11. 6. The role of teachers is changing.
12. Teachers now act not only as knowledge givers, but also as mentors, facilitators, and moral guides.
13. Need to revamp curriculum
14. The traditional curriculum does not meet the needs of an AI-mediated society; it must include AI literacy, digital ethics, and future skills.
15. A balanced and value-based approach is required.
16. A key finding of the study is that only responsible, human-centred, and value-based AI education can prepare competent and sensitive students for the future.

Conclusion

The descriptive and conceptual studies presented have comprehensively exposed the need, opportunities and challenges of preparing students in the context of an AI-mediated society. Artificial intelligence has become not only a technological tool in today's society but also a powerful means of social and educational change. The increasing use of AI in the education sector is making the learning process more personal, flexible and effective, which is proving to be important in developing students' abilities. The study makes it clear that preparing students for an AI-mediated society is not limited to the development of technical skills alone. Although digital literacy, AI-related knowledge, and future professional skills are indispensable, the development of ethical values, critical thinking skills, and social responsibility is equally important. The ethical challenges associated with AI-based systems, such as data privacy, algorithmic bias, and academic integrity, are driving the education system to become more vigilant and accountable. This study has further demonstrated that the education system and the role of teachers are fundamentally changing in an AI-mediated society. Teachers now act not only as knowledge givers, but also as mentors, facilitators, and moral guides. It has become the need of the hour to include elements like AI literacy, digital ethics and critical thinking in the curriculum. At the same time, it is also imperative to provide proper training to teachers for AI-based teaching methods.

Preparing students for an AI-mediated society is particularly challenging in the context of a developing country like India, as issues such as the digital divide and inequality of resources are present. However, with the right policy, inclusive approach and value-based education, these challenges can be turned into opportunities. By adopting AI with a human-

centric approach, the education system can promote both social equity and quality. In conclusion, the study's conclusion suggests that the process of preparing students for an AI-mediated society should be balanced, accountable, and value-based. Only by establishing a synergy between technology and human values can capable, sensitive and responsible citizens be prepared for the society of the future. In this way, the education system can become a major tool of positive social change in the AI-mediated society.

Suggestions

1. Incorporating AI Literacy in Curriculum
2. The curriculum of schools and higher education should include AI literacy, digital skills, and a basic understanding of technology, so that students are properly prepared for an AI-mediated society.
3. Emphasis on moral and value-based education
4. Students must be guided on ethical issues associated with the use of AI, such as privacy, data security, transparency, and accountability. Digital ethics should be made an important part of the curriculum.
5. Vocational training programmes for teachers
6. Teachers should be given regular training on AI-based tools, new pedagogical methods and technology integration, so that they can effectively handle the changing educational needs.
7. 4. Responsible and balanced use of AI
8. In the education sector, AI should be adopted as a supporting tool, not as a substitute for human judgment and thinking power. There needs to be a balance between technology and human values.
9. 5. Policy measures to reduce the digital divide
10. The government and educational institutions should play an active role in making digital tools, internet facilities and training available to students in rural and deprived areas.
11. 6. A clear guide to academic integrity
12. Clear rules and guidelines regarding the use of AI tools should be created to prevent duplication, inappropriate use and academic malpractice.
13. Promoting a human-centred AI approach
14. AI education should focus on human values, social sensitivity and responsible citizenship, so that technology becomes useful for human welfare.

15. A guide to future research
16. Future research should more deeply analyse the educational impact of AI AI-mediated society through empirical and empirical studies.

Limitations of the Study

1. The present research is purely descriptive and conceptual in nature and does not involve primary data collection.
2. Studies are based on secondary sources such as books, research journals, reports, and policy documents, which is why the findings are not supported by experience-based evidence.
3. Since AI technology is changing at an extremely fast pace, some of the ideas and perspectives discussed in the study may need improvement in the future.
4. This study is not limited to a particular country, state, educational institution, or academic level; therefore, the results are general in nature.
5. Actual experience and opinions of students, teachers or institutions are not included, which limits the practical depth of the study.

Scope For Future Research

6. In the future, the opinions, experiences and attitudes of students and teachers can be analysed by conducting empirical or experimental research on this topic.
7. The influence of AI-mediated society can be explained by comparative studies at different educational levels (school, higher education, professional education).
8. Comparative research can be done on the impact of AI-based learning between rural and urban areas.
9. There is a huge potential for specific and in-depth studies on the ethical aspects of AI, especially data privacy and algorithmic bias.
10. Policy-based and case study-based research on the integration of AI in teacher training programmes can be undertaken.
11. A special study can be done on the relationship between the National Education Policy (NEP 2020) and AI education in the context of India.

Research Gap

1. Although there are studies on the topic of AI and education in the available literature, there appears to be a lack of holistic perceptual studies on the process of preparing students for an AI-mediated society.
2. Most research has focused on the technical aspects of AI, while limited attention has been paid to the ethical, humanistic, and value-added aspects.
3. In the Indian context, especially in the Gujarati language, there is very little available research literature on the subject of AI-mediated society and education.
4. There are gaps in the perceptual analysis of the changing responsibilities of the education system and the role of teachers.
5. Research on educational strategies to strike a balance between the benefits and challenges of AI is limited.

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