

ARTIFICIAL INTELLIGENCE IMPACTS YOUTHS TO GET A KNOWLEDGE

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Abstract. *In this article, you will learn about “Artificial intelligence”, which has been very global topic in worldwide in these days. In the article, you can know about:*

1. what is artificial intelligence and its history.

a) At first who used it and when

b) how it was created.

2. Effect to our society. it is good or not

3. Impact on getting knowledge of young generation.

You can obtain about that topic during the reading article.

Key words. *Artificial intelligence (AI), enhance efficiency and automation, privacy and data security, Elon Mask, Data as the Lifeblood of AI, The Erosion of Privacy, Mitigating Privacy Risks, The Path Forward*

The 21st century is witnessing an unprecedented surge in the development and integration of artificial intelligence (AI) across various sectors. From personalized learning platforms to sophisticated educational tools, AI is rapidly transforming the landscape of knowledge acquisition, particularly for youth. This generation, born into a world intertwined with technology, interacts with AI in ways unimaginable just a few decades ago. While traditional educational methods still hold value, AI presents novel opportunities and challenges for young learners navigating the complexities of the information age.

By critically examining the impact of AI on youth knowledge acquisition, this article seeks to contribute to the ongoing discourse on the future of education and empower young learners to navigate the evolving technological landscape effectively.

What is artificial intelligence and about its history.

Artificial intelligence (AI), as a field of scientific inquiry, endeavors to imbue machines with cognitive abilities analogous to human thought processes. This pursuit manifests in the development of systems capable of performing tasks traditionally considered within the purview of human intellect. Unlike their biological counterparts, AI technologies exhibit a remarkable capacity for processing vast quantities of data, facilitating the identification of intricate patterns, the formulation of nuanced decisions, and the execution of judgments that mirror human reasoning. The realization of such capabilities necessitates the integration of extensive datasets into these systems, enabling them to learn and evolve.

Artificial intelligence (AI) embodies the ambitious endeavor to replicate the multifaceted cognitive processes of human intelligence within the framework of computational systems, particularly those based on digital computers. This encompasses the faculties of learning, reasoning, and self-correction, which collectively underpin intelligent behavior.

While the conceptual roots of AI can be traced back to antiquity, its contemporary incarnation emerged in the mid-20th century. The nomenclature "artificial intelligence" was formally introduced in 1956 by John McCarthy, one of the field's founding figures alongside luminaries such as Alan Turing and Herbert Simon. Their pioneering efforts laid the groundwork for AI's trajectory, with initial applications primarily confined to the realms of academic research and military endeavors.

The genesis of AI can be attributed to a confluence of advancements across multiple disciplines, including computer science, mathematics, and cognitive psychology. Early AI systems relied predominantly on symbolic reasoning and rule-based logic paradigms. However, the advent of neural networks and machine learning algorithms marked a significant paradigm shift, enabling AI systems to glean insights from data and progressively enhance their performance through experiential learning. Today, the relentless march of AI progress continues unabated, fueled by breakthroughs in deep learning, natural language processing, and a myriad of other specialized subfields.

Effect to our society. it is good or not.

Artificial intelligence (AI) is rapidly transforming our world, weaving its way into the fabric of our daily lives and reshaping entire industries. While it offers a plethora of benefits, it also presents complex challenges and potential drawbacks. Understanding both sides of this technological coin is crucial as we navigate the evolving landscape of AI. One of the major benefits is to enhance efficiency and automation. AI automates repetitive tasks, freeing up human time and resources for more creative and strategic endeavors. This boosts productivity and efficiency across various sectors, from manufacturing and logistics to customer service and healthcare.

I can add that AI helps to improve decision-making. AI algorithms can analyze vast amounts of data to identify patterns and trends, enabling more informed decision-making in fields like finance, marketing, and healthcare. This leads to better outcomes and optimized resource allocation. Moreover, it focuses on safety and security advancements. AI-powered systems enhance safety in various domains, from self-driving cars and traffic management to fraud detection and cybersecurity.

Just like there are two sides of coin, there are drawbacks of using artificial intelligence. First of all, by developing artificial intelligence, it causes to job displacement. Even the experts of IT field express about artificial intelligence. Take an example, Elon Musk, who is the CEO of several companies such as SpaceX, Tesla, said "AI is a fundamental risk to the existence of human civilization. If AI has a goal and humanity just happens to be in the way, it will destroy humanity as a matter of course without even thinking about it...It's just like, if we're building a road and an anthill just happens to be in the way, we don't hate ants, we're just building a road. Robots will be able to do everything better than us...I am not sure exactly what to do about this. This is really the scariest problem to me."¹ This stark statement underscores Musk's belief that AI poses an existential threat to humanity if not developed and managed responsibly. According to Elon Musk's sentences, a lot of people have troubles with finding job. As a result, unemployment starts to spread among individuals. One other IT expert, Stephen Hawking, gave an opinion that: "The development of full artificial intelligence could

spell the end of the human race... It would take off on its own, and re-design itself at an ever-increasing rate. Humans, who are limited by slow biological evolution, couldn't compete, and would be superseded.”² Bill Gates, the Microsoft co-founder and billionaire, commented about AI. He said that "Even in the next 10 problems like vision and speech understanding and translation will be very good," he wrote. "Mechanical robot tasks like picking fruit or moving a hospital patient will be solved. Once computers/robots get to a level of capability where seeing and moving is easy for them then they will be used very extensively.”³

Another disadvantage side for society is that it is caused to privacy concerns. The extensive data collection required for AI development raises concerns about privacy and data security. The remarkable capabilities of artificial intelligence are fueled by vast amounts of data. This insatiable hunger for information, while driving innovation, raises significant concerns about privacy and data security. Let's delve deeper into the complexities of this issue: **Data as the Lifeblood of AI:**

AI algorithms, particularly those based on machine learning, require massive datasets to learn and improve. This data can include personal information, behavioral patterns, preferences, and even sensitive data like health records or financial transactions. The more data AI systems have access to, the more accurate and effective they become. This creates a constant demand for more data, often collected from various sources, including online activities, mobile apps, and even IoT devices.

The Erosion of Privacy:

The extensive data collection practices employed for AI development can lead to a loss of privacy and control over personal information. Individuals may not be fully aware of what data is being collected, how it is being used, or who has access to it. Data breaches and leaks can expose sensitive information, putting individuals at risk of identity theft, financial fraud, and other harms. The interconnected nature of data ecosystems amplifies these risks, as a single breach can have cascading effects. AI-powered surveillance technologies raise concerns about government overreach and the potential for mass surveillance, chilling free expression and privacy rights. Facial recognition, gait analysis, and other biometric technologies can be used to track individuals without their knowledge or consent.

Mitigating Privacy Risks:

- **Data Minimization:** Collecting and retaining only the data that is essential for the specific purpose of the AI system.
- **Anonymization and De-identification:** Stripping data of personal identifiers to protect individual privacy while still enabling analysis.
- **Transparency and User Control:** Providing clear information about data collection practices and giving users control over their data, including the right to access, rectify, or delete it.
- **Robust Security Measures:** Implementing strong cybersecurity protocols to protect data from unauthorized access and breaches.
- **Regulation and Oversight:** Establishing comprehensive data protection laws and regulatory frameworks to govern the collection, use, and storage of data for AI development.

The Path Forward: A Delicate Balance

Balancing the benefits of AI with the protection of privacy requires a multifaceted approach. Individuals, organizations, and governments must work together to ensure responsible data practices, promote transparency, and establish robust safeguards for privacy in the age of AI. Ultimately, the goal is to harness the power of AI for progress while upholding fundamental human rights and ensuring that technology serves humanity, not the other way around.

Affect to get knowledge of young generation.

The rapid advancement of artificial intelligence (AI) is reshaping the landscape of education, offering both exciting opportunities and daunting challenges for the younger generation. AI-powered tools have the potential to democratize access to knowledge and personalize learning experiences, but concerns remain about their impact on critical thinking, creativity, and overall cognitive development. AI tutors and adaptive learning platforms are revolutionizing education by tailoring content and pace to individual needs and learning styles. Platforms like Khan Academy, Duolingo, and Coursera provide personalized feedback and support, catering to diverse learning abilities. Additionally, AI translation tools and text-to-speech software break down language barriers and make educational resources accessible to students with disabilities, promoting inclusivity. AI also facilitates global learning opportunities by connecting students with experts from around the world and immersing them in different cultures through VR and AR experiences. However, there are potential drawbacks to consider. Overreliance on AI-driven tools may hinder the development of critical thinking skills, turning students into passive recipients of information. Digital distractions and information overload can impede focus and knowledge retention. Algorithmic bias in AI systems can perpetuate inequalities in education, leading to discriminatory outcomes for marginalized groups. Ethical concerns surrounding data privacy and the influence of algorithms on young minds also pose significant challenges. To strike a balance for the future, AI should be viewed as a complementary tool to traditional education methods rather than a replacement. It is essential to integrate activities that promote critical thinking, problem-solving, and creativity alongside AI-driven tools. Educating young people about responsible technology use, digital literacy, and online safety is crucial in the digital age. Addressing ethical concerns, ensuring transparency in AI algorithms, mitigating bias, and safeguarding student data privacy are paramount. Equipping educators with the necessary skills to effectively integrate AI tools into teaching practices is vital for successful implementation.

In conclusion, the AI revolution in education presents a unique opportunity to personalize learning, democratize knowledge access, and prepare young people for the challenges of the 21st century. By navigating potential drawbacks and fostering a balanced approach that combines AI with human guidance, we can ensure that AI empowers rather than hinders the development of young minds.

BIBLIOGRAPHY.

1. <https://www.supplychaintoday.com/elon-musk-on-artificial-superintelligence/>
2. <https://www.supplychaintoday.com/elon-musk-on-artificial-superintelligence/>

3. <https://www.washingtonpost.com/news/the-switch/wp/2015/01/28/bill-gates-on-dangers-of-artificial-intelligence-dont-understand-why-some-people-are-not-concerned/>
4. "Artificial Intelligence and Education: Promises and Pitfalls" by Neil Selwyn
5. "The Impact of Artificial Intelligence on Education" by Rose Luckin et al
6. "AI in Education: A Critical Review and Future Directions" by Benedict Du Boulay
7. "The Promise and Peril of AI in Education" by Justin Reich
8. "Artificial Intelligence and Education: Opportunities and Challenges" by Ronghuai Huang et al