# VIKSITH BHARATH 2047-AN AI BASED COMPOSITE HYBRID TEACHING-LEARNING APPROACH

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## Introduction

Viksit Bharath means "Developed India" which is the vision for India by 2047 which was proposed by our Prime Minister Sri Narendra Modiji along with our Finance Minister Smt. Nirmala Sitharaman. Several themes have been put forward keeping in mind different sections of the society for inclusive development. The lime light of this chapter is the "Empowered Indians" perspective keeping in mind the education aspect of it. Today's children are tomorrow's responsible citizens. Hence it is very important to consider them as the true wealth of our nation and bring in a new perspective of education involving Artificial intelligence as one of the integral components of their composite learning. In this chapter the context of composite learning refers to 21st century teaching learning which involves knowledge, skills and character.

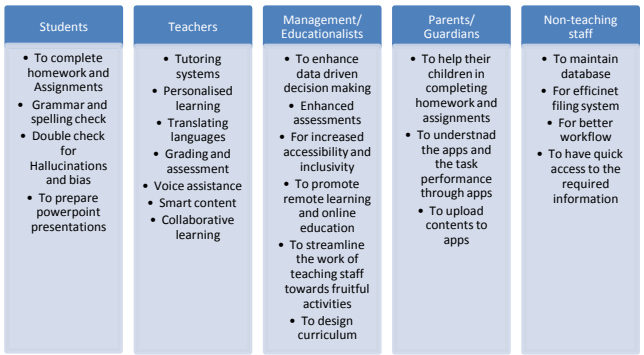
**Keywords:** Artificial intelligence, Education, Empowered Indians, Meta Learning, Visit Baath 2047.

## Introduction:

AI is considered as any technology impacting decision making, future predictions, and useful recommendations involving text, images or audio visuals. In recent years machine learning and deep learning have gained lot of importance where the machines are trained to repeat the same work which are programmed by humans through algorithmic codes.

These machines produce outputs that are adaptive, imprecise and emergent and the most important phenomenon is like a human feeling. It was way back in 2015 the Google revolutionized web each using machine learning after replacing classing hand-crafted information retrieval techniques. In the year 2020, Deep mind developed machine learning for Google maps navigation route finding and in 2022 Open AI launched generative models for creating human like text and get outputs just like human like texts through Chat GPT and also developing realistic images using DALL-E. For some of the stakeholders AI is viewed as a Funhouse Mirror however AI can have different views and dimensions so that it is very difficult to make AI as accountable or responsible for any kind of pleasant or unpleasant events as it is completely trained by human beings. So there is no good or bad aspect of AI. Experts also have the opinion that AI should be used as a complement to the teacher but not as a substitute to a good teacher. According to a statement made by Mr. Sal Khan in one of the interviews with common wealth club, "If you want me to choose between an Amazing technology and no teacher and Amazing teacher with No technology, I will definitely choose an amazing teacher with no technology". So the fact that AI replaces teachers in the future generation to come is a myth. AI finds its application in education in many areas based on the role that is performed by the AI users. Therefore the users of AI in education can be categorized into following segments:

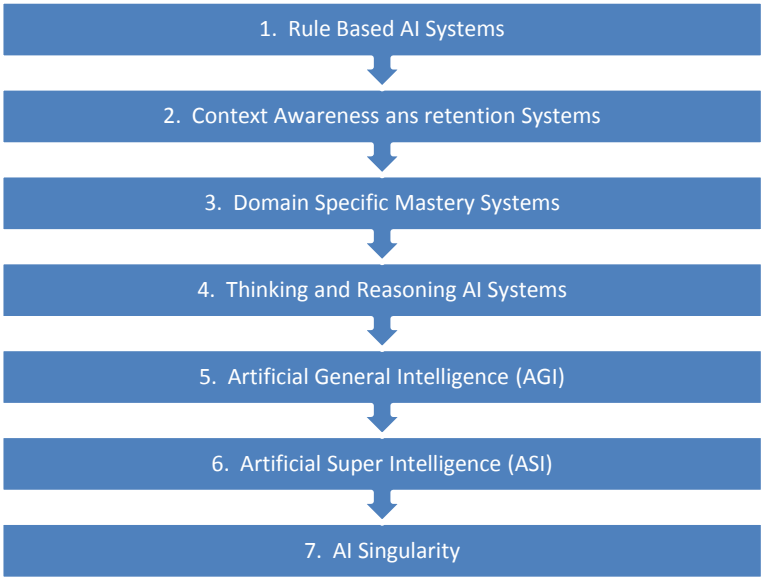
**Chart 1.1: Users of AI in Education**




**Source: From Literature Review**

AI is becoming an integral component of education day by day to either the direct stakeholders like teachers and students or the indirect stakeholders namely the management of the company, parents/ guardians and non-teaching staff. Teachers will play a significant role as they are the nerve centers of Teaching-Learning processes. As per the views expressed by Ms. Mel Parker, Former Head Teacher and Education Technology Specialist 66% of the teachers are at the receiving end of work written by AI, 56% of the teachers want a better training program in AI usage and 31% want government to better regulate the use of AI in education field. Government should have proper regulations regarding usage of AI in education as AI cannot be held responsible for any kind of mistake or the damage that is caused because of the decision made backed up by AI. When we are stressing upon the term AI let us have a basic understanding of the seven stages of evolution of AI which can be depicted in the chart below:

**Chart 1.2: Stages of AI Evolution**




**Source**:https://www.bing.com/videos/search?q=users+of+AI+in+education&view=detail&mid=1D98DEE9C0233BED0F521D98DEE9C0233BED0F52&FORM=VDMCNR&rvsmid=D8B76A9255256C742368D8B76A9255256C742368&ajaxhist=0

**1. Rule based AI systems:** These systems operate on a pre-defined set of rules given by program developers through algorithms. They generate outputs that are reliable and consistent but they have limited functions as they are completely programmable.

**2. Context awareness and retention systems:** In this stage the AI has the capability to remember the previous interaction and it will carry forward the same to the next conversation. For example if a user searches for IPL cricket score and in the next search if the user asks who won? Then AI will assume that "who" is asked in the context of a cricket team.

**3. Domain specific mastery systems:** This kind of AI will have mastery over a specific domain they such AI's are experts than the human beings which are trained in that area, may it be in playing chess or a board game.

**4. Thinking and reasoning AI Systems:** These systems try to simulate the human though process. They are capable of generating ideas, analyze market trends and also based on the analysis they suggest suitable trading strategies.

**5. Artificial general intelligence (AGI):** This is an exact replica of human intelligence in all aspects. In this the AI can perform any intellectual task a human being can. This concept remains as an unachieved task so far but not far from reality in future days to come.

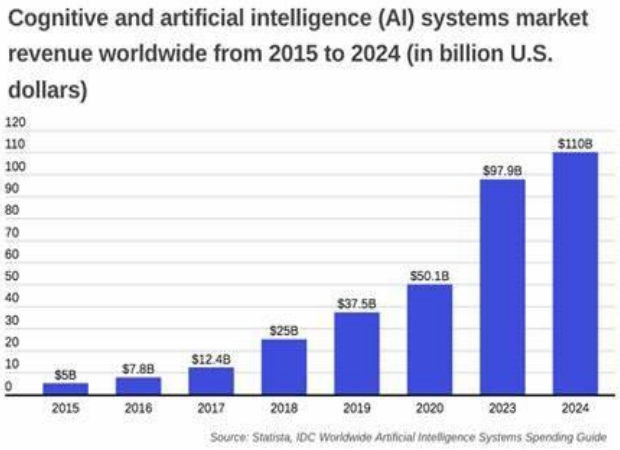
**6. Artificial super intelligence (ASI):** This is more advanced level of AI in which it becomes complicated to understand what is and is not an artificial intelligence as it can come up with better solution to problems including macro-economic problems which are sometimes better than the solutions suggested by human beings.

**7. AI Singularity:** The term singularity is derived from physics term which represents a centre point in a black hole where the rules breakdown. In AI context it refers to a stage where in AI will succeed faraway from human beings with self-improvement and self-regulation.

This concept is thought to be highly speculative and conceptual. Based on the above inputs we can easily predict that the role of AI in education is going to increase in the future days to come.

5 years down the lane it is predicted that AI will tighten the collection and collaboration between teachers and students. Of course, it is a fact that AI can never replace teachers but it can support the teachers to make them comfortable in the process of designing curriculum, teaching the way in which the students understand the concepts in a better way, evaluating and assessing the students based on their performance and the most important is giving feedback on the assessment done which is very challenging. At all these stages teachers should make sure that they retain their role when they use AI. So AI is going to increase its presence in the future days of education wherein there could be virtual classrooms that can be implemented in order to make the sessions more practical oriented and information based. Particularly after the Covid-19 pandemic the presence of IA is increasing day by day and the students can personalize their classes based of the level of input they need as per their requirement. This is the reason that the market revenue of AI start-ups are increasing year on year from the year 2015 to 2024 as given below:

**Chart 1.3: Worldwide Market Revenue of CI and AI**




**Source**:https://startupanz.com/global-artificial-intelligence-spending-surge-120-hit-110bn-2024/

From the above chart it is found that the market revenue of AI has significantly increased from $58 billion in the year 2015 to $1108 billion in the year 2024.

**Benefits of using AI in Education:** Artificial Intelligence (AI) has significant potential to address challenges in education, innovate teaching practices, and accelerate progress toward Sustainable Development Goal 4 (SDG 4). Here are some insights related to AI in education:

**UNESCO's Perspective:**

- UNESCO recognizes the transformative power of AI in education and aims to guide its application with core principles of inclusion and equity.
- Their publication, "Artificial Intelligence and Education: Guidance for Policy-makers," fosters readiness among education policy-makers.
- UNESCO emphasizes a human-cantered approach, ensuring that AI doesn't widen technological divides.

**Microsoft's Survey:**

According to a recent survey by Microsoft:

- 47% of education leaders use AI daily.
- 68% of educators have used AI at least once or twice.
- 62% of students have also used AI.

**AI Implementation in Education:**

- AI tools include intelligent tutoring systems, data analytics platforms, and virtual assistants.
- Educators leverage AI to enhance student engagement, personalize learning experiences, and provide timely feedback.

**Positive Impact of AI:**

- AI-powered textbooks level the educational playing field in countries like South Korea.
- AI can positively impact educational outcomes by enhancing teaching and learning processes.

**Disadvantages of using AI in Education:** While there are advantages to using artificial intelligence (AI) in education, there are also some disadvantages to consider:

**Bias:**

- AI systems can perpetuate biases if trained on biased data.
- Students might receive biased responses or grades based on their race, gender, or other factors.

**Errors:**

- AI may generate misinformation due to errors in the data it draws from.
- Information provided by AI should not be assumed to be accurate without verification.

**Cheating:**

- Students can use AI tools to write essays, answer questions, or complete homework.
- Some AI programs can detect AI-generated content, but false positives may occur.

**Reduced Human Interaction:**

- Overreliance on technology may reduce human interaction, impacting social and emotional development.

**Digital Divide:**

- Some students may struggle to adapt to AI in the classroom, creating a digital divide.

**Strategies to promote responsible use of AI in education:** Here are some strategies to promote responsible use of AI in education:

- Educate about AI Ethics and Responsible Use:
- Introduce students to the ethical implications of AI, including privacy, bias, accountability, and transparency.
- Encourage discussions and critical thinking to foster awareness of the challenges associated with AI in education.

**Foster Digital Literacy:**

- Help students develop the skills needed to navigate AI tools effectively.
- Teach them how to evaluate information, recognize biases, and make informed decisions.

**Promote Transparency and Explain ability:**

- Be transparent about the use of AI tools in the classroom.
- Explain how these tools work and their impact on learning outcomes.

**Emphasize Responsible Data Use:**

- Teach students about data privacy, consent, and responsible data handling.
- Encourage them to use AI tools ethically and responsibly.

**Encourage Ethical AI Design:**

- Discuss the importance of designing AI systems that align with ethical principles.
- Explore how AI can benefit society while minimizing harm.

**Explore Real-World Examples:**

- Share case studies and examples that highlight both positive and negative aspects of AI in education.
- Help students understand the real-world implications of AI technology.

**Promote Collaboration and Teamwork:**

- Encourage students to work together, discuss AI-related topics, and learn from each other.
- Collaborative learning fosters responsible AI use.

**Encourage Critical Thinking and Reflection:**

- Prompt students to reflect on their own use of AI tools.
- Help them consider the impact of AI on their learning experiences and broader society.

**Conclusion:**

Finally we can conclude that AI holds promise for education, but it's essential to balance technological advancements with equity and inclusivity.

If calls for integrating with organizations like UNESCO and exploring innovative solutions for leveraging AI for education. Responsible AI use involves not only understanding the technology but also considering its ethical implications. In summary, AI holds immense promise for education, but responsible implementation is crucial to maximize its benefits which are an integral component of good governance in this Amrit Kal.

**References:**


- Artificial Intelligence in Education Promises and Implications for Teaching and Learning by Wayne Holmes, Maya Bialik, Charles Fadel
- Global AI Spending To Surge 120%, Hit $110 billion by 2024 – startupanz.com
- The 7 Stages of AI - Bing video