

ARTIFICIAL INTELLIGENCE

[Artificial Intelligence](#) (AI) is characterised by machines that possess specific aspects of human intelligence, and encompass capabilities such as perception, learning, reasoning, problem-solving, language interaction, and even creative output. Over the past decade, AI has been integrated into the education space. It is being used to [streamline](#) students’ performance data in schools. For example, in Uttar Pradesh, the [Nipun Assessment Test](#) (NAT) is leveraging AI to assess the skills of 1.6 crore students across grades 1 to 8. AI also allows [translation](#) from one language to another, and [provides](#) individualised learning tools to students.

In the last year or so, a subset of AI—generative AI—has been gaining traction. Generative AI uses deep learning to analyse existing sets of data to create new outputs. Unlike its predecessors, generative AI also has reasoning capabilities. [ChatGPT](#), which can produce human-like responses to text prompts, and [DALL-E](#), which can create images and artworks from text prompts, are popular examples of generative AI.

The rise of generative AI has raised curiosity and piqued interests. It’s early days and there’s no clear verdict, but its potential has opened up many possibilities. This article looks at some of these possibilities and highlights how generative AI can be effectively adopted in the education sector.

Generative AI in education

Generative AI can help bridge many gaps in a country like India that has vast cultural and social differences and barriers of inequality. It can be beneficial to various sets of stakeholders in the education system, be it students, teachers, or parents.

Recognising the importance of developing AI skills for children, [CBSE has introduced](#) AI as a skill module in [classes 6–8](#) and as a skill subject in [classes 9–12](#). Additionally, there are several organisations that are creating virtual assistants for students, teachers, and parents to enable them to learn and teach better. Many such initiatives are now being seen across a diverse set of use cases.

Here are some potential ways in which generative AI can be used:

1. Parents can leverage virtual assistants to figure out activities they can do with their child to help enhance their reading and comprehension skills. For example, parents can narrate stories generated by the AI to the child or get the child to read aloud a story. This can be especially useful for parents who aren’t literate but want to be involved in their child’s education.
2. Generative AI can help teachers follow the prescribed guidelines for teaching in an efficient way without spending hours going through multiple reading materials. A virtual assistant built on generative AI can assist a teacher in planning unique and engaging classroom activities by referring to a selection of carefully chosen documents and expert insights and suggesting methods that may work in a class setting.
3. This technology can adapt to the unique needs of a child and so, under the assistance of a caring adult (teacher, parent, or community member), it can be extremely helpful in early childhood education where learning pace and approaches vary from one child to another. It can be useful in developing foundational literacy and numeracy and teaching basic language skills.