



#### **ChatGPT: Changing the Way We Teach?**

~ Dr Pritha Chakrabarti



"The end of institutional education is near," expressed a friend who has been a middle school mathematics teacher for over ten years now. Another one, who teaches English to middle and high school, cuts him off and says, "You are such a Luddite! Just get on the wagon already!" The History teacher was dismissive of all: "This is just a phase, a trend, a gimmick; it too shall pass!"

All this conversation was taking place around the most trending topic these days, ChatGPT. A part of OpenAI,<sup>1</sup> ChatGPT is an artificial intelligence trained to write coherent sentences (and even essays!), generate computer codes, as well as solve science and mathematical problems. If search engines like Google were predicted to make information-based education largely redundant—replacing rote learning and memory-based assessments with analytic and creative models of education, ChatGPT now promises to take care of creativity and analysis! The noise around

<sup>&</sup>lt;sup>1</sup> OpenAI is an American artificial intelligence research laboratory consisting of the non-profit OpenAI Incorporated and its for-profit subsidiary corporation OpenAI Limited Partnership. OpenAI conducts AI research with the declared intention of promoting and developing a friendly AI.





this new tool is heightened by the fact that it comes for free (or at least some version of it), has well recognized branding and is yet to be effectively tackled by plagiarism checking tools. While GPT Zero, developed by a student from Princeton, promised to track AI generated texts, two or three rehashing of the generated text across multiple chatbots<sup>2</sup> can easily trick the tool. This also is a good time to mention that ChatGPT is not alone; soon after its launch, multiple alternatives sprouted, including the AI-powered Bing search engine and the promise of the Bard by Google.

EdTech, AR/VR, and artificial intelligence continue to be the source of much debate – yet, for so many of us, we have explored little of its potential to transform our work. The question of whether advanced digital technology, like AI, is the key to build a sustainable education system is also being mulled over and widely discussed and argued over by various stakeholders. At the recently held Oxford Forum, OUP conducted a panel discussion where some of the brightest thinkers within education and digital technology came together to discuss how we retain integrity and equality. Is there a way to embrace this technology without sacrificing the rigor needed to deliver Quality Education? The topics covered by the panel included:

- The benefits and risks of using AI in Education whilst retaining integrity and quality
- How AI should be regulated
- Practical advice for teachers and educators about using these technologies

The panelists included Professor Victoria Nash (Director, Associate Professor, and Senior Policy Fellow at the Oxford Internet Institute, University of Oxford), Ignatz Heinz (President and Co-Founder of Avallain), Wayne Press (Global Product Director at OUP), and Carmen Gould (Global Marketing Director, Education for OUP). Know our speakers and watch the full recording of the session <u>here</u>.

The response to ChatGPT from the teaching community has been a mixed one. If you look at what some educators have to say regarding ChatGPT and the implications of its use in their teaching-learning experience, one of the first reactions of institutes and organizations has been to ban it, as with all things one does not understand. But as Kevin Roose argues in his article, <u>Don't Ban ChatGPT</u> <u>in Schools. Teach With It.</u>, "The first reason not to ban ChatGPT in schools is that, to be blunt, it's not going to work." Roose argues that there will always be an alternative with every ban (as it happens with most technological innovation these

<sup>&</sup>lt;sup>2</sup> A chatbot is a computer program that uses artificial intelligence (AI) and natural language processing (NLP) to understand customer questions and automate responses to them, simulating human conversation.





days) and multiple ways to bypass the ban. Instead, Roose suggests that one should think of ChatGPT in line with the calculator to allay one's fear of students cheating. In other words, use it effectively and strategically in the classroom! Roose is not alone. There are multiple voices, albeit feeble ones in this part of the world, who are responding to ChatGPT. Professor Nash made a wonderful observation about how tools like ChatGPT, which survive precisely because of Large Language Models, are not tethered to reality and are not knowledge containing. Rather it is up to us educators to think how we might use these appropriately within our education systems. It might make us think more carefully about what writing does in education. As Ignatz Heinz pointed out in the OUP panel discussion, ChatGPT is essentially Large Language Model – by itself, it does not have any knowledge.

A quick glance across the discourses surrounding this topic in the Indian digital space and its impact on education can be broadly categorized into these three groups:

- The Naysayer
- The Excitable
- The Fence-sitter

## The Naysayer

Expectedly, the Naysayers are panicking. One of the key concerns is that students will easily misuse the tool to cheat now. Still reeling under the effects of the pandemic and unforeseen transition to online education, teachers are battling to find the right assessment method which will not allow students to "copy-paste" and yet enable teachers to rightly evaluate and assess. Many have come up with innovative solutions, asking school students to write analytical essays or engage in creative assignments. The descent of ChatGPT into their lives at this juncture has once again thrown them off their game, forcing them to re-evaluate their assessment methods.

## The Excitable

An early <u>survey conducted by Impact Research</u> among K-12 teachers in the USA shows that most of the teaching community falls into this category – the Excitable. Released on March 1, the research found "51% majority of teachers report using ChatGPT. This includes 40% of teachers who use it weekly and 10% who use it







almost every day." While there is yet to be a systematic survey as such in India, there is a chance that at least some teachers have realized the importance of this invention.

#### **The Fence-Sitter**

The Fence-Sitters, as the name suggests, are those who look at most things as 'just another thing'. From the calculator to the printing press, from the computer to the internet, there has historically been a section of the population who have been 'late to the party'. The safe players, as one may call them, often take time to understand the long-term implications and the larger picture before jumping on the innovation wagon. This may be a wise decision considering the rapid speed at which the world around us is changing. Saying that there is no harm in exploring the possibilities of ChatGPT and which is what we will be doing today.

#### **ChatGPT in Indian classrooms**

If you are a teacher in a country like India, chances are that there are very few school students who have unsupervised access to the internet, thanks to the otherwise problematic digital divide. But as a teacher with access to the various applications and tools available on the Internet, ChatGPT can prove to be useful at various stages of classroom education for making classroom interactive and effective. In fact, a look at some of the comments by teachers in the Oxford Forum panel discussion shows that such concerns as well as positive responses are coming from across the globe. It is no secret that the schoolteacher community in India faces tremendous pressure to fulfill many of the tasks, many of them being institutional/formal requirements, that ChatGPT could make simpler. It is obvious that ChatGPT can make the lives of teachers easier. However, awareness is crucial – teachers will have to address the question of plagiarism when using an AI-based tool like ChatGPT.

It is not difficult to guess that ChatGPT has immense potential to generate multiple ideas all at once, which can come handy in planning class activities or preparing learning materials. However, one must be very careful about fact checking the content that ChatGPT generates, since at the end of the day the teacher is a better expert of any subject than the tool. So, while it can reduce a teacher's load significantly in terms of class preparation, every bit of content generated by the tool should be crosschecked for factual errors. Another essential area one must keep in mind is that the bot functions based on the kind of prompts. This means not just the questions you ask but also the additional information you provide to your question. Otherwise, it would take its own scope of knowledge as the foundation for generating results. This is crucial when you are using AI to create assessment





questions. As users, you must be extremely cautious of the information that you are feeding into the bot as part of the prompt. Your prompts must not contain any content that is again taken from any copyrighted source.

Nevertheless, one can't deny that Chat GPT can be a very good place to start. As according to Professor Victoria Nash, "...we can find ways of ensuring that we are using these technologies and tools to support our writing rather than on knowledge creation – then that might be an effective use. We can't ignore these tools. We can't keep them out of education. So, the challenge is accepting what they can and can't do, what their limits are, and then finding ways of embracing them to improve current practice." This is not to say that there will not be resistance against this, or criticism. But there is no denying the fact that this frees up your time for more important work.

This raises a fundamental question: *If it is okay for teachers to use the bot, why is it wrong for the student*? It might be useful here to rethink the existing teaching-learning process in a world where ChatGPT usage becomes a norm and not an exception. Would that mean we will not teach students how to write sentences? This is where Roose's comparison of the bot with the calculator becomes highly relevant. Did the invention of the calculator stop teachers from teaching generations of students how to add, subtract, multiply, and divide? Or did we find new ways to teach students the logical reasoning behind calculations using proverbial mathematical problems? Instead of just asking what is 2+2, there is an entire section in every mathematics test paper where we tell students stories:

You have 2 apples and Madhu has 2 mangoes. How many fruits do you both have between yourselves?

Thus, students learn that numbers are after all mere symbols to help solve real-life problems. This helps to contextualize mathematics, while also reminding students that both apples and mangoes belong to one category – fruits. Now at its most basic level, what a bot like ChatGPT does is produce contextual coherent sentences and organize these sentences into a narrative. Does this mean that we stop teaching students the parts of a sentence or how to construct one? *No*. But maybe at a more advanced stage, say in middle school, you may allow students to use the bot, albeit under supervision. Unlike a calculator, which only demands feeding the numbers and what you want to do with them using the most abstract level of signs (+, -, \*, /), ChatGPT demands that its user put in effort and thought in formulating prompts. And this could just be a new skill that we now begin to teach our students: to not just learn how to answer questions, but also understand how to ask them. As Nash





in the Oxford Forum states, "If we think about children at the school level, it's really vital that we are educating them what these models are and what their constraints are. So as a part of media literacy, critical understanding that we are turning out students who know what the place of these technologies in the world is."

What this article tries to capture is the place of AI and AI-based tools like ChatGPT in teaching-learning experience. This is not to say that ChatGPT is flawless and as it has been stressed upon earlier, it is in no way a bigger authority on your subject knowledge than you. But what it may do is help you and your students, just like a calculator in a Mathematics classroom. What must be kept foremost in mind is that the veracity of the information provided by ChatGPT is not guaranteed. ChatGPT is well known for being riddled with factual errors. Teachers should be well warned to be cautious about trusting content where they don't know the data source or quality. Hence, let us look at ChatGPT for what it is: a tool, and nothing more. It depends on the user of the tool to determine its usage. It is not an omniscient, omnipotent entity that is here to "end" the education system. It is here to be a part of our lives since our students are bound to access it. But rather than viewing it as a stranger or an enemy, it would be wise to engage with it along with your students. What could always come in handy is a healthy culture of acknowledgement and higher education is already coping with this as MLA and APA citation systems have introduced the correct way to cite responses generated by ChatGPT. Perhaps this is a training that needs to begin even earlier. Let us not only demystify this technology but also learn about its possible strengths and weaknesses. We can only then find out to what extent, ChatGPT and similar freely available bots can really help and where it might become the proverbial snake in the grass.

As Wayne Press in the Oxford Forum said, "What excites me is that these technologies, and AI particularly, are disrupting the way that we think about education and creating various forums to discuss. It is getting us to question current approaches and thinking. New ways of working with tools out there is also an interesting opportunity that is quite exciting with emerging technologies."

We leave you all with this thought here. You may listen to the complete recording of the panel discussion with Carmen Gould, Wayne Press, Ignatz Heinz, and Professor Victoria Nash <u>here</u>.





Like what you have read so far? Do you agree with the author and some of the panelists? Write to us at <u>OTTIndia@oup.com</u> to share your thoughts until we come with some new ideas on this topic in some future issues.

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# Pastiche



## Pronunciation: / pæ'stif, pa- /

## Meaning:

- 1. An incongruous combination of materials, forms, motifs, etc., taken from different sources; hodgepodge.
- 2. A literary, musical, or artistic piece consisting wholly or chiefly of motifs or techniques borrowed from one or more sources.

**Origin and additional information:** The word originated in the early eighteenth century, between 1700-10. French *pastiche*, Italian *pasticcio*, literally: piecrust (hence, something blended), from Late Latin *pasta*.

**Word section:** Pastiche, at the end of the day, is essentially a work of art (visual, literary, theatrical, musical, architectural) that imitates the style of one or more artists as a means to pay homage to the work. It must not be confused with parody where the purpose of the work is to mock. In literature, the term denotes a technique that is jocular while being respectful. Given its usage, the word has also come to imply a lack of originality, comprising an imitative jumble. Pastiche





brings together multiple styles – a sort of hodgepodge or a potpourri of ideas and techniques – within a single work of art.

Is pastiche and "appropriation" the same? Appropriation is the recontextualizing of existing ideas, while pastiche is a form of adaptation without necessarily borrowing whole passages or ideas. However, this does not make appropriation fall under plagiarism as long as the original author is acknowledged. Fan fiction is a form of pastiche.

### Usage:

- He tentatively suggested that the text is a pastiche compiled by a modern forger with an elementary grasp of Coptic.
   (Source: <u>The 'Gospel of Jesus's Wife' is still as big a mystery as ever</u>, Candida Moss, April 13, 2014, Daily Beast)
- The clothes, however, were a chaotic pastiche of fur and glitter assembled in inelegant ways.
  (Source: 'Paris Fall Fashion Week Ends with Vuitton and Kanye', Robin Givhan, March 7, 2012, Daily Beast)
- To restore it is to annihilate the work of centuries, to recompose an ordinary pastiche with no clat.
  (Source: '<u>How France Built Her Cathedrals</u>', Elizabeth Boyle O'Reilly)