

THE IMPACT OF ARTIFICIAL INTELLIGENCE IN EDUCATION

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EXECUTIVE SUMMARY

Cognita, a global schools group, has conducted a listening exercise with students, parents, teachers, and school leaders from several countries around the world, to examine views about the potential impact of Artificial Intelligence (AI) tools like ChatGPT in education. This research piece presents a cohesive analysis of the common themes and topics shared among the groups to provide educators with insights and information that can help them make informed decisions about the integration of AI tools in their schools.

Three key themes emerged from the conversations. Firstly, AI needs to be embraced, and participants acknowledged the positive potential of AI to significantly impact education. Secondly, AI will not replace the teacher in the classroom. Rather, AI can enhance the teaching and learning experience when used responsibly and in conjunction with human oversight and guidance. Finally, adequate training and education for both teachers and students in the effective use of AI tools like ChatGPT in the classroom are essential.

In response to these findings, Cognita is taking action by providing an AI Toolkit, designed to support schools in understanding and effectively utilising AI in education. Overall, the research piece highlights the varied perceptions and attitudes towards the use of AI in education and emphasises the need for caution, openness, and innovation in leveraging AI tools to enhance the learning experience.



INTRODUCTION

As an innovative global schools group, Cognita is committed to exploring new technologies and their potential impact on education. In this research piece we aim to examine the potential impact of AI tools in education on the lives of our communities, specifically through the perspectives of four distinct groups: students, parents, teachers, and school leaders. One prominent tool has shown rapid, widescale usage reaching 100 million active users in only two months.

Introduced in December 2022, ChatGPT is an AI-powered chatbot that uses natural language processing to understand and respond to human queries. It can generate text, answer questions, and provide insights based on a vast repository of knowledge. It is an innovative technology that has the potential to revolutionise the way we teach and learn.

To accomplish our goal, we have conducted conversations with each group in several countries around the world. These conversations were designed to explore the unique perspectives and concerns of each group regarding the integration of AI in education.

In this research piece, we will present a cohesive analysis of the common themes and topics shared among the groups. Our aim is to provide educators with insights and information that can help them make informed decisions about the integration of AI tools like ChatGPT in their schools. Ultimately, we hope this will serve as a resource for educators who are interested in exploring the potential of AI and other innovative technologies in education.

This research piece is not intended as an academic report, nor does it claim to be generalisable. Rather, it serves to document and analyse the conversations that took place during a specific moment in time.

Upon analysing the transcripts of the conversations held with participants from four distinct groups across multiple different countries, three key themes have emerged that are present across all perspectives.

KEY THEME 1

Artificial intelligence needs to be embraced

“This is the first time the education system could be at the forefront of a revolutionary supporting technology rather than the late adopters.”

Andi Price - Teacher - The Royal Grammar School Guildford Dubai

The conversations with students, teachers, parents and school leaders revealed that all participants acknowledged the positive potential of AI to significantly impact education.

According to school leaders, AI is likely to disrupt classrooms, and as such, schools should be proactive in adapting to these changes. To prepare for the future, educators and students must possess a growth mindset and openness to change. Teachers and students expressed concerns that some students may use AI tools such as ChatGPT to cheat or to complete their homework without deep learning.

Parents recognised the potential benefits of AI in enhancing the way students access information. However, they expressed the need for caution when using such tools with younger children, citing potential risks like potential data collection without consent, or understanding accuracy or bias.

Teachers, on the other hand, felt that AI tools like ChatGPT have demonstrated the potential to improve students' language skills, vocabulary, and understanding of complex concepts. Moreover, these tools can assist teachers in creating lesson plans, learning tasks, and marking, and can provide personalised learning experiences.

School leaders believe that by effectively integrating AI into education, they can create a more innovative, effective, and inclusive learning environment that empowers students and educators alike. In summary, the conversations highlight the varied perceptions and attitudes towards the use of AI in education and emphasise the need for caution, openness, and innovation in leveraging AI tools to enhance the learning experience.

KEY THEME 2

AI will not replace the teacher

“If there is already a trust between the student and the teacher, then AI won’t be able to change that.”

Sabina - Student - El Limonar International British School Of Murcia, Spain

The second consistent theme that emerged from the conversations is that AI will not replace teachers in the classroom. While AI tools such as ChatGPT can assist in grading and assessment, participants emphasised the critical role of human interaction and emotional intelligence in teaching and learning.

Teachers view the integration of tools like ChatGPT as a way to enhance their teaching and optimise their time. They stressed that the use of AI tools does not diminish their role as teachers. Both teachers and parents emphasised the importance of human oversight and communication in the classroom to counteract any trust issues that may arise due to the use of AI tools. They also recognised the need for teachers to work with students to develop skills for using AI in a productive way.

Students acknowledged the impact of technology on the relationship between teachers and students. They recognised the potential for both challenges and opportunities for collaboration and mutual assistance. Overall, participants stressed the importance of human interactions, feedback, guidance, and modelling responsible use of technology. They recognised that AI can be an effective complement to human teaching, rather than a replacement. The use of AI in education requires careful consideration and preparation, including training for teachers and students on how to use AI tools productively.

KEY THEME 3

Training in AI is essential

“We cannot ignore the profound impact on how this is going to develop in the coming years. The first step to be able to incorporate it into our learning is training.”

Jorge Gustavo Ramos Astorga - School Leader - Pumahue Chicauma, Chile

The conversations that took place revealed the essential need for targeted and effective training and education for both teachers and students in the effective use of AI tools, such as ChatGPT, in the classroom. Participants, especially students, expressed concerns that inadequate training might lead to misinformation and the potential misuse of ChatGPT for cheating or avoiding deep learning. Thus, it is crucial that teachers and students receive adequate training to use AI tools like ChatGPT properly rather than a means of bypassing content creation.

Furthermore, students discussed the impact of trust on the relationship between themselves and their teachers when using AI tools, with a positive relationship enabling effective use of tools like ChatGPT, and a negative relationship potentially causing further harm. In addition, parents emphasised the importance of responsible use of technology, including ensuring accuracy, avoiding overreliance, and promoting digital citizenship.

Teachers and school leaders recognised the importance of training and adapting to technological advancements, acknowledging that the integration of AI in education can enhance the learning experience. Meanwhile, parents expressed the need for caution and staying informed on the use of AI in education. All participants agreed that ongoing training should be accessible to all and should address these concerns to ensure that AI is used effectively and ethically in the classroom.

IMMEDIATE ACTION

Throughout our research, we have listened closely to stakeholders within our global communities, including students, parents, teachers, and school leaders, to understand their perspectives on the potential impact of AI in education. Our findings underscore the importance of embracing AI as a powerful tool that can enhance teaching and learning experiences while acknowledging the challenges and ethical considerations associated with its use.

Cognita's position on AI in education is centered around a balanced approach that leverages the benefits of AI while addressing the potential risks and ethical implications. We are committed to providing excellence in holistic education for each student in our care, and effective and ethical use of technology, including AI, is a core component of this commitment.

Having carefully considered the insights gained from our global communities, we are taking immediate action by providing our schools with an AI Toolkit to support staff engagement and help them navigate the rapidly evolving landscape of AI in education. The AI Toolkit aims to ensure that all schools within the Cognita family can meaningfully engage with AI technologies and make informed decisions about their integration into the learning experience.

The AI Toolkit consists of:

- The Cognita statement on the use of AI in education, which outlines our position and principles related to AI adoption.
- A series of five short videos designed to stimulate conversation and provide guidance on various aspects of AI in education, featuring insights from our Digital Leads across the globe.
- Access to high-quality resources and information from around the world, enabling our schools to stay informed and updated on the latest AI developments and best practices.

Cognita is dedicated to ensuring that our schools and communities are well-equipped to navigate the challenges and opportunities presented by AI in education. By listening to our stakeholders and providing them with the necessary resources and support through the AI Toolkit, we reaffirm our commitment to fostering an inclusive, innovative, and ethical learning environment that empowers both students and educators to thrive in a rapidly evolving world.