"Artificial intelligences don't replace the role of the teacher": *ChatGPT* in interview

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Abstract: Artificial Intelligences have challenged educational practices, triggering the need to rethink their principles, modes of action and assessment. In the context of initial teacher training based on social constructivism, a student conducted a *ChatGPT* interview. An analysis of the questions and answers obtained from *ChatGPT* is shared, highlighting the need for a reflective teacher and the development of critical and independent thinking.

Keywords: *ChatGPT*; Initial Teacher Training; History

"Inteligências artificiais não substituem o papel do professor": ChatGPT em entrevista

Resumo: As Inteligências Artificiais vieram desafiar as práticas educativas desencadeando a necessidade de repensar os seus princípios, modos de ação e de avaliação. No âmbito da formação inicial de professores, pautada pelo construtivismo social foi realizada, por um estudante, uma entrevista ao *ChatGPT*. Partilha-se uma análise das questões e das respostas obtidas do *ChatGPT*,

destacando-se a necessidade de um professor reflexivo e o desenvolvimento de pensamento crítico e independente.

Palavras-chave: *ChatGPT*; Formação Inicial de Professores; História

"Las inteligencias artificiales no sustituyen el papel del profesor": *ChatGPT* en una entrevista

Resumen: Las inteligencias artificiales han puesto en tela de juicio las prácticas educativas, provocando la necesidad de repensar sus principios, modos de actuación y evaluación. En el contexto de la formación inicial del profesorado basada en el constructivismo social, un estudiante realizó una entrevista *ChatGPT*. Se comparte un análisis de las preguntas y respuestas obtenidas del *ChatGPT*, destacando la necesidad de un profesor reflexivo y del desarrollo del pensamiento crítico e independiente.

Palabras clave: *ChatGPT*; Formación Inicial del Profesorado; Historia

1 INTRODUCTION

With the (rapid) technological and digital evolution and the development of networked learning, all schools now benefit from the possibility of creating different and varied ways of teaching and learning. To guarantee a quality education that combines content, digital technologies, social networks, and virtual environments, it is becoming increasingly urgent to adopt new strategies and methodologies that promote emancipatory pedagogical practices, especially aimed at developing 21st-century skills (FEM, 2015) while preparing students to articulate these same skills with specific, disciplinary or interdisciplinary content.

Ausubel (2003) highlighted the importance of meaningful learning, that is, learning that builds new knowledge based on previous knowledge. The integration of digital technology and the adoption of innovative practices contribute to improving the quality of teaching and learning processes, making it possible to build this new knowledge more effectively (EUROPEAN COMMISSION, 2013).

To develop these "new educational scenarios", it's important to think about digital educational content and resources that are adaptable to everyone's needs, but it's also important that teachers and students (aware of their digital skills) take on the role of makers or prod-users[1], that is, interact, participate, produce content and develop the aforementioned transversal skills.

This approach goes beyond the physical boundaries of the classroom, mixing different geographies (real or virtual) as well as different times (synchronous and asynchronous), facilitating a complex but hopefully productive interaction between Floridi's ideas (2015) on the Onlife Society and Siemens' (2005) on connectivist education.

In addition, the use of digital devices to develop learning contributes to making students more active in the construction of knowledge, opening up the possibility of learning in places and environments other than the classroom. In this context, the pedagogical skills of the teacher are combined with the social skills of the students, and together they stimulate a teaching process that is

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1 Maker culture is based on constructivist theories of learning and, above all, on the ideas of "learning by doing" (DOUGHERTY, 2016, our translation), which, based on the possibilities of creating digital artifacts since the development of Web 2. 0, allows for the development of a participatory and collaborative culture, inviting students and teachers to create or co-create digital content from a variety of platforms and digital applications, rather than simply accessing information through analog or digital channels - to produce and use, that is, to productize (BRUNS, 2008).

both individual and collective (even if this may seem paradoxical at first), as the teacher and his students work to build more and better knowledge through active and constructivist learning (DIAS-TRINDADE, 2021).

All of these issues explain the relevance of digital systems in an educational context. In fact, schools have always taken advantage of different technological advances (not only digital ones recently) as a way to improve educational processes. As Dias-Trindade, Ferreira and Moreira (2021, p. 3) point out, "the school itself is a consequence of technological evolution, as well as a space that has always welcomed artifacts that have been considered appropriate for the teaching that takes place there" (our translation).

From the big blackboard to the ballpoint pen, from the overhead projector to the digital projector, from the desktop computer to the virtual or augmented reality glasses, education has changed over the decades based on needs, but also based on the technological possibilities that, as we have said, are emerging. The difference that perhaps makes these changes more apparent today is that digital technology brings new developments much more quickly than was the case 50 or 100 years ago. Sometimes this speed makes teachers (and sometimes students) feel unable to keep up with technological developments and to understand how they can be used to good effect by the School.

In recent years, virtual assistants and chatbots based on artificial intelligence have become increasingly common in various industries, such as customer service, e-commerce, financial services, and education. Major technology companies such as Apple, Amazon, Google, and Microsoft have launched their virtual assistants (we can't forget Microsoft Office's Clippy, which appeared in the late 1990s and attempted to assist users in various activities) and continue to invest in research and development to improve these resources. Although the history of these resources is not continuous, it is safe to say that the last decade has witnessed significant growth in their application in various fields and technological advances, driven by advances in artificial intelligence research and computer processing power (TEGMARK, 2017).

Recently, the emergence of artificial intelligence (AI)-based language models that interact with users through text conversations, providing answers and relevant information, has put the discussion of artificial intelligence on the agenda (to name a few examples: FLORIDI, 2023; ARKOUDAS, 2023; HALEEM, JAVAID, SINGH, 2022).

The most famous AI-based language models are currently GPT3, ChatGPT (Chat Generative Pre-Trained Transformer), and Bard (which fell into disrepute

after providing incorrect information during its first demonstration in early 2023), and have led teachers, among others, to question how to proceed from here, given the myriad possibilities that these models can offer in the field of education. Lo (2023) analyzed 50 papers published between January 2022 and February 2023 on ChatGPT in education and concluded that the majority of them emphasized

> o desempenho variado do *ChatGPT* em diferentes domínios disciplinares e os seus potenciais benefícios como assistente para os professores e como tutor virtual para os alunos. No entanto, a sua utilização suscita várias preocupações, como a geração de informações incorretas ou falsas e a ameaça que representa para a integridade académica[2] (p. 12).

Aware of this reality, we believe it is relevant to analyze an interview conducted on ChatGPT to understand how this AI-based language model can be used in the classroom, especially in the subject of history, and how it can be used in teacher training, especially for those undergoing initial training. We will begin by explaining the context of initial history teacher training in Portugal, followed by a presentation of the context in which the interview of a future history teacher was conducted. Finally, the interview itself will be analyzed in order to respond to the objectives identified above.

2. INITIAL TRAINING FOR HISTORY TEACHERS IN PORTUGAL

History teacher training in Portugal, in the first decade of the 2000s, had to adapt to the premises established by the Declaration and the subsequent Bologna Process, in which the ministers responsible for higher education in 29 European countries, including Portugal, committed themselves to implementing the European Higher Education Area. The European Higher Education Area is designed so that students can move freely and have fair and unhindered access to European higher education. It consists of two cycles of study: a first cycle related to the bachelor's degree, which lasts three years and has a set of curricular units (subjects) that make up 120 European Credit Transfer and Accumulation System (ECTS) points, reflecting the working time that students have to devote to studying each scientific field and curricular unit.

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[2] Our translationa. Original text: "ChatGPT's varied performance across different subject domains and its potential benefits when serving as an assistant for instructors and as a virtual tutor for students. However, its use raises various concerns, such as its generation of incorrect or fake information and the threat it poses to academic integrity."

In this context, the initial teacher training model in Portugal was modified by Decree-Law 43/2007 on February 22. Since 2008/2009, teacher education has consisted of two cycles: the first, a three-year Bachelor's degree; the second, a two-year Professional Master's degree, with a total of 120 ECTS credits.

Currently, teacher training in Portugal is defined by Decree-Law No. 79/2014, which establishes the legal framework for professional qualifications for teaching. In the case of history teacher training, it is necessary to have an undergraduate degree equivalent to a total of 180 credits, as well as professionalization in history teaching, which is currently achieved through the Master's in History Teaching in the 3rd cycle of basic and secondary education (CEB). Access to the Master's Degree in History Teaching requires a Bachelor's degree and 120 credits in the scientific field of History, as well as a test of oral and written command of the Portuguese language (Decree-Law 79/2014). The Master's Degree in History Teaching in the 3rd Cycle of Basic and Secondary Education consists of two years. The first year of the Master's Degree focuses on professional learning in the scientific areas of Education, History Teaching, History, and Professional Practice, corresponding to the various curricular units.

Taking into account the various syllabi of the Professional Masters in History Education and the proposals of Gago (2018), who analyzed the syllabi of the curricular units in the scientific area of History Didactics, it can be seen that there is a link between the epistemology of history and History Education in the syllabi of the Masters at the University of Coimbra, the University of Minho, the New University of Lisbon and the University of Porto (SOLÉ; GAGO, 2021). Research studies in History Education appear in all programs, but in a more specific way at the Universities of Coimbra, Lisbon, and Nova de Lisboa, and in a more explicit and operationalized way in the programs of the curricular units at the University of Minho, where the curricular units themselves are named differently compared to other universities - History Teaching Methodology I and II.

2.1 Specific Educational Context of the ChatGPT Interview

The History Teaching Methodology I and II courses, which are part of the Master's Degree in History Teaching in the 3rd Cycle of Primary and Secondary Education at the University of Minho, are held every semester. They are planned and structured holistically, taking into account the scientific field in which they are integrated, and have the following learning objectives:

● to equate the learning and teaching of history with current concerns and demands, both from research in history education and from epistemological reflection on history and education, and their implications for educational practice;

● to reflect on curricular proposals and tools in relation to the epistemological principles proposed by history education;

● to develop proposals for educational experiences, with a view to the application of proposals for history education in the history classroom;

● to promote, in a sustainable way, an investigative practice that takes into account the proposals of history education: from theory to practice and evaluation.

These learning objectives are aligned with a teaching professionalism that is complex, transformative and democratic, and not just cumulative (KORTHAGEN, 2004; DAY, 2012; FLORES, 2019). Teachers are considered to have discretionary and professional judgments about teaching, curriculum, and pedagogical action, governed by moral and social purposes in a culture of collaboration and heteronomy, recognizing the complexity of the teaching profession.

In a logic of consistency, it is considered that the Master's students should experience the concrete operationalization of these proposals, articulated in process, theory, research, and pedagogical practice. In this sense, the pedagogical sessions of the History Teaching Methodology I and II courses include: a) a survey of previous ideas, needs, and interests of the master's students, in different ways and moments, in a metacognitive process; b) moments of debate and problematization of shared key ideas and potential applications of theory; c) design of pedagogical experience(s) in the classroom, taking into account research in history education, in collaborative work; d) presentation of pedagogical experience(s) and written reflection on the pedagogical experience(s); individual reflective portfolio on the learning process. Thus, assessment is based on all personal work of a diagnostic, qualitative, and metacognitive nature. Summative and quantitative assessment is also based on the individual portfolio, which should reflect on what they have learned, how they have learned it, and what the teacher's educational intentions are, as well as explaining how they can mobilize the learning they have done for their professional practice.

Digital resources appear in the educational environment described, in initial teacher training, in different ways: their use by Masters students to develop their learning, the debate about their

potential and challenges for the classroom, and the construction of challenges and materials for the history classroom that can go digital.

The ChatGPT interview presented and analyzed here was created as part of an individual portfolio for a first-year master's student at the University of Minho.

3 CHATGPT INTERVIEW: ARTICULATION OF ICTS IN THE EDUCATIONAL PROCESS

As already mentioned, the subject of this text is an interview with ChatGPT by a teacher in initial training. The first part explains the motivation for this interview and then highlights some of the key ideas that emerged from this "conversation" regarding the relevance that an AI-based language model such as ChatGPT can have both in the history classroom and the training activity of a student/teacher-in-training.

3.1 The concerns of a teacher in initial training

In the 2022-2023 school year, OpenAi's ChatGPT was launched on November 30, 2022. In this way, chatbot functionality has been reconciled with the large multimodal language model. As an artificial intelligence system, ChatGPT provides virtual dialogues that more closely resemble face-to-face conversations.

However, the potential of ChatGPT is not without controversy and challenges. Countries such as Italy, Germany, Ireland, and France, as well as schools and universities around the world, have testified to the need for restrictions on use, citing the risk of plagiarism, copyright infringement, privacy, and data protection.

As a result, the use of the AI platform has raised heated questions about the role of teachers, as well as students and their families, in the learning process. Is the role of the teacher in jeopardy? Can artificial intelligence eventually replace the teacher? Or, on the contrary, can AI platforms and teachers coexist articulately and cooperatively? What is my role as a teacher of the future? Should I adapt AI in my teaching practice? Should I avoid incorporating such tools?

In the Portuguese context, the launch of ChatGPT also coincided with the teachers' strikes for improvements in the teaching profession. The strikes in

December 2022 will last until the end of the school year and are already expected to continue into the next school year. Furthermore, at a time when the country is facing a significant shortage of teachers, the aim is to solve the problem of teacher shortage coherently.

This framework provided the context for the interview. On the one hand, we started from the assumption, strongly rooted in common sense, that the use of technology endangers teaching practice. On the other hand, criticizing this fatalistic notion, we tried to find out more about the improvement that technological resources bring. It follows that the problem does not lie in the use of different digital and technological proposals (in particular artificial intelligences such as ChatGPT), but rather in the way in which their combined use is reflected in the classroom context.

The following four points were identified as the guiding dimensions of the interview:

● To understand, in short, how the use of technology is more auspicious the more thoughtfully it is used;

● Understanding the importance of an informed and articulated pedagogical practice that promotes the use of technological resources (especially the ChatGPT platform) in the classroom, given the risk of careless use;

● Attesting to the AI platform as a "means" with educational intent, so that its use does not correspond to the purpose of the learning process;

● The use of ChatGPT as a way of organizing information, confirming possibilities and at the same time warning of possible risks.

The four dimensions of the interview were based on the SAMR model (PUENTEDURA, 2013), which is a diagnosis of the use of technology in the learning process. The acronym SAMR combines the English words substitution, augmentation, modification, and redefinition. It shows that the more integrated the use of technology, the greater the scope and transversal nature of learning.

The SAMR model identifies two levels: enhancement and transformation. At the enhancement level, technology serves the purpose of substitution and augmentation, signaling functional and procedural improvements. At the second level, the effect is one of modification and redefinition, where technology becomes the foundation from which the learning process is enhanced.

3.2 Analyzing the vision of an AI-based language model on the role of digital technology in education: ChatGPT

Regarding the use of digital technologies in an educational context, the concern of this teacher in initial training was mainly related to the importance of not subordinating the teaching activity to indiscriminate use of technology, and he, therefore, tried to find out from ChatGPT how this issue could be addressed. In this sense, it is interesting to note that the ChatGPT, at the end of its instructions on how digital technology can improve teaching practices in the context of history education, points out that

> technology and artificial intelligence do not replace the role of the teacher in History Education. Rather, they complement pedagogical practice by expanding learning opportunities and providing new tools for students to explore the past in engaging and meaningful ways (PAULO, 2023, p. 124, our translation).

The emphasis on teachers interacting with - rather than replacing - digital technology is consistent with what many authors have said. Acemoglu and Restrepo (2020), for example, note that the opportunities created by artificial intelligence and its ongoing development "would also increase the demand for human labor in the classroom - we would need more teachers with diverse skills to deliver individualized instruction, even with the help of AI software and other technologies" (p. 5, our translation). This is also the recognition of the Organization for Economic Cooperation and Development OECD (2023), which points out that education systems have not changed much in the last 200 years, which partly contributes to the idea that it is possible to replace teachers with AI systems. However, as this organization points out, if AI is used to understand how students learn and thus adapt teaching to the specificities of each student, not only could students learn better, but (as also noted by Acemoglu and Restrepo, 2020) the need for teachers to accompany different ways of learning would increase (OECD, 2023, p. 119). Naturally, these possibilities also open up new training needs for teachers themselves.

This issue was also raised in the interview with ChatGPT, which mentioned the importance of teacher training, especially in "understanding the possibilities and limitations of technology, strategies for its effective integration, ethical guidelines, and supervisory practices" (PAULO, 2023, p. 132, our translation). Faced with such a rapid evolution of technology that brings more and more possibilities to the world of education, it is natural that some fears exist, but the fact is that it is from adequate

training (which, as mentioned in the interview, involves schools, teachers, students, and families) that changes in practices can occur effectively (OCDE, 2023; FELIZARDO, 2019; REDECKER, 2017; ALBION *et al*., 2015)..

This training, properly designed and implemented - which is essential in initial teacher training - is a space where constructivist learning can be put into practice. This is where ChatGPT comes in: a platform, a language model that can help teachers complement their practice. ChatGPT suggests that teachers use this technology to plan activities that complement each other and put students in touch with information, collaborate with each other, and use the possibilities of digital technology to enhance their learning processes. It is interesting to analyze ChatGPT's response to the teacher's request on how to introduce a technological element in a lesson plan that includes a debate or a collaborative dynamic since the response organizes a set of activities that not only promote the learning of the defined scientific content but also of various transversal skills.

First, he suggests preparing a presentation that includes interactive resources that students can explore; then he suggests using digital mapping tools that students can explore and discuss their content; then he suggests using virtual reality platforms that contribute to an immersive experience - and here he suggests introducing the dramatic dynamic. He ends with two suggestions for students to work on, encouraging them to research more information - the teacher should recommend a list of reliable websites - and finally to hold a debate (the other dynamic suggested by the teacher) using virtual platforms, thus suggesting the extension of students' work outside the physical walls of the classroom, The interconnection of built and virtual spaces, as referred to in the United Nations Educational, Scientific and Cultural Organization (UNESCO) document, taking advantage of and expanding the educational opportunities that occur throughout life and in different cultural and social spaces, carefully exploiting the best potential of each (UNESCO, 2021, p. 4). This proposal places the student at the center of educational action and challenges the teacher to develop educational proposals that, instead of uncritically accessing (more) information through artificial intelligence, develop students' critical and independent thinking so that they can unravel the contexts, motivations, intentions, and explicit and implicit interests of the information present in different sources and articulated by AI.

ChatGPT assists educators in forming course outlines and curricula, generating lesson plans with objectives, activities, and assessments, producing exercises, quizzes, discussion questions, and multiple-choice exams, and drafting meticulous solutions to problems (OCDE, 2023, p. 173). It is the

responsibility of educators to effectively integrate digital resources into their teaching practices and enhance the learning experience, foster critical thinking, facilitate collaboration, expand research possibilities and access to information, and prepare students for a constantly evolving digital society.

However, ChatGPT acknowledges that while these assignments promote autonomy among students, it does not imply working without supervision. When asked whether students could complete the proposed activities without teacher supervision, the importance of "providing clear instructions, monitoring progress, offering constructive feedback, guiding discussions, promoting critical analysis, and evaluating student learning" is emphasized (PAULO, 2023, p. 127, our translation). He also notes that "technology is a useful resource, but as a teacher, it is your responsibility to ensure that students are truly learning history and meeting the intended educational goals" (PAULO, 2023, pp. 123-128, our translation).

This reflection, along with the indication that teachers should be cautious when using technology and integrating it into their practices, aligns with the concept of digital fluency: "the development of a comprehensive skill set includes the ability to go beyond critical thinking to generate new knowledge and confront novel obstacles. Additionally, proficiency in "what to do" and "how to do it" must be complemented by an understanding of "when" and "why,"" as emphasized by Dias-Trindade and Ferreira (2020, p. 172, our translation). In terms of teaching identity, this refers to the professional development of teachers who exercise discretionary judgment, reflect on student learning and how their educational practice should be organized, and make research-based decisions to more effectively guide their students' learning.

This digital fluency, this advanced level of digital literacy, can also be developed through the pedagogical use of digital technology as a strategy to improve the educational act, specifically, in the context of this interview, the promotion of historical thinking. As Isabel Barca says,

> to be able to 'read' information, debate, and select messages in an informed way, one must be able to interpret sources, analyze and select points of view, communicate in a variety of ways, and invest in methodologies that engage students in the act of thinking historically (BARCA, 2007, p. 6, authors' emphasis, our translation).

When teaching history, integrating analog and digital strategies, it is possible to take advantage of the possibilities of ChatGPT and also to build knowledge and historical thinking based on the methodology of history in interaction with ChatGPT. According to his answers, he suggests that the interconnected use of these strategies (analog and digital) can help develop critical thinking skills, or

historical interpretation and contextualization, through critical analysis of historical sources, interpretation, and contextualization, access to a wide range of sources and perspectives. On the other hand, it adds the fact that it is a language model limited to its potential and therefore can even serve as a starting point for deepening scientific skills. For example, he states that his answers are "fast, but not always necessarily precise or complete" (PAULO, 2023, p. 143, our translation). For this reason, he suggests that students "question the information provided by ChatGPT, analyze different historical perspectives, and develop critical thinking skills. This includes assessing the reliability of sources, identifying possible biases, and understanding the context in which historical events took place" (PAULO, 2023, 143, our translation). It also notes their inability to "facilitate complex discussions and debates in the classroom" (PAULO, 2023, 143, our translation), so it will be up to the teacher to "create an active learning environment, promoting structured discussions, debates, and collaborative activities that allow students to explore different points of view, formulate reasoned arguments and develop historical communication [skills]" (PAULO, 2023, 143, our translation).

This awareness that ChatGPT, combined with a planned, thoughtful, and constructivist teaching practice, can be an asset in learning history, providing access to a variety of historical sources, different simulations and immersive experiences, data analysis and collaborative work, it adds positive points to what other authors have said about previous developments in digital environments, suggesting that it promotes the development of critical capacities in students, the development of communication skills, as fundamental activities for the construction of quality historical thinking (DIAS-TRINDADE; CARVALHO, 2019; COHEN; ROSENZWIEG, 2006; MATTA, 2001).

4 CONSIDERATIONS

Educational action, whether designed and implemented for the early years or as part of initial teacher training, should be based on the proposals of social constructivism, focusing on the students, their contexts, needs, and interests, and based on the analysis of this prior world, the teacher should design classroom challenges to be solved by the students in class under the guidance of the teacher, and on which both the students and the teacher should reflect in a logic of metacognitive process. Technology appears as another resource that can be used, but which must be articulated with the students' previous world, the teacher's pedagogical intentions, and the methodology of the science in

which the educational action takes place (in this case, history and the methodology of teaching history). The articulation and dialogue between the different dimensions mentioned at this point can only be carried out by the teacher.

The four guiding questions of the interview highlight the progressive proposals of the SAMR model (PUENTEDURA, 2013), with awareness of the mediated and articulated use of technology. Thus, the four points listed above deepen metacognition concerning the use of technological resources in the classroom. It requires a critical sense on the part of users (students and teachers) to reflect on their impact on learning. In this way, both students and teachers reinforce their centrality in the educational process. Technological tools are seen as a mere instrumental resource that enhances learning, but never as an end in itself. If we include ChatGPT, its use becomes more valuable the more thoughtful and critical it is. This recognizes the autonomy of users in the process of selecting information.

When ChatGPT is used to meet immediate needs, the risks involved must be considered. It is therefore urgent to clarify the educational intentions behind these practices from the outset. He accuses the uncritical use of the platform of a certain prevailing culture of facilities, which may require preventive and/or training measures on the part of school institutions. This type of use could reinforce traditional teaching practices, where only the transmitter of information has changed (previously the teacher, now the AI), and create an illusion of autonomy for the student, who is left to navigate an immensity of information without a guiding compass (the teacher).

Having explained the previous points, technological resources are reinforced as a means of enhancing learning, allowing a more varied and creative interaction with the reality being studied. In the case of artificial intelligence, students and teachers can ask questions according to the assumptions they consider most appropriate.

Finally, the AI platform stimulates the improvement of research through its selective, organized, and cumulative component of information, which encourages constant user interaction with the content. Based on these criteria, ChatGPT must be used in conjunction with other available tools and resources to enhance its use.

Once these points have been made, it is confirmed that proper use will never be a threat to teaching practice. On the contrary, it enhances it, thus enabling the level of transformation proposed by the SAMR model.

Therefore, the use of AI does not mean that the role of the teacher has become secondary. Rather, their centrality in the learning process is invoked. Thus, prior training programs are suggested to elucidate conscious and ethical use, which should involve family members and communities. In other words, more education for better education.

We can therefore conclude that ChatGPT does not in itself mean the extinction of the role of the teacher. On the contrary, it allows teachers and students to develop their critical and independent thinking and judgment when accessing a vast amount of information, sometimes complementary, sometimes contradictory, to build a broader, multi-perspective and well-founded knowledge. However, how it can be used is challenging and its consequences are unpredictable. But one thing seems clear at this point. The more structured and thoughtful the use of the platform, the more the teacher's place will be secured and the more valuable ChatGPT's contributions will be as a mediating resource in the learning process.

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