

Chat, copy, change: prospects and risks of ChatGPT in the teaching and learning process

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ABSTRACT. This study aimed to determine the perception of teachers on the prospects and risks of ChatGPT in the teaching and learning process from the lens of three dimensions: cognitive, affective, and ethical. This study adopted a narrative approach, an appropriate theoretical basis with Braun and Clarke's Approach to Thematic Analysis for qualitative data analysis to uncover relevant themes. Cognitive benefits included aiding students to summarize, translate statements, strengthen art of questioning, and develop critical thinking. The risks include simply accepting ideas, direct copy-pasting of content; finding shortcuts to answer, becoming more reliant on technology, and unable to generate creative ideas. The teachers agreed that students' confidence can improve in complying with deadlines and enhancing their grammar. However, the confidence in submitting quality work may not be strengthened. Teachers agreed that students are aware of the consequences of their actions when using ChatGPT but these can be vague when schools do not have rules involving the use of ChatGPT. For teachers' prospects, ChatGPT is helpful finding lesson plan ideas and practical activities. Overall, AI tools can provide enormous potential to learners and teachers and if utilized effectively with appropriate guidelines, it can make the teaching and learning more engaging and productive.

Keywords: artificial intelligence; opportunities; drawbacks; cognitive; affective; ethical.

Chat, copiar, mudar: perspectivas e riscos do ChatGPT no processo de ensino e aprendizagem

RESUMO. Este estudo teve como objetivo determinar a percepção de professores sobre as perspectivas e os riscos do ChatGPT no processo de ensino e aprendizagem sob a ótica de três dimensões: cognitiva, afetiva e ética. Adotou-se uma abordagem narrativa, com base teórica apropriada na Abordagem de Análise Temática de Braun e Clarke para análise qualitativa de dados, a fim de revelar temas relevantes. Os benefícios cognitivos incluíram auxiliar os alunos a resumir, traduzir afirmações, fortalecer a arte de questionar e desenvolver o pensamento crítico. Os riscos incluem simplesmente aceitar ideias, copiar e colar conteúdo diretamente; encontrar atalhos para responder, tornar-se mais dependente da tecnologia e incapacidade de gerar ideias criativas. Os professores concordaram que a confiança dos alunos pode aumentar no cumprimento de prazos e no aprimoramento da gramática. No entanto, a confiança na entrega de trabalhos de qualidade pode não ser fortalecida. Os professores concordaram que os alunos estão cientes das consequências de suas ações ao usar o ChatGPT, mas estas podem ser vagas quando as escolas não possuem regras que envolvam o uso do ChatGPT. Para os professores, o ChatGPT é útil para encontrar ideias de planos de aula e atividades práticas. No geral, as ferramentas de IA podem oferecer um enorme potencial aos alunos e professores e, se utilizadas de forma eficaz com diretrizes adequadas, podem tornar o ensino e a aprendizagem mais envolventes e produtivos. (conferir versão em português)

Palavras-chave: inteligência artificial; oportunidades; desvantagens; cognitiva; afetiva; ética.

Chat, Copiar, Cambiar: Perspectivas y Riesgos de ChatGPT en el Proceso de Enseñanza y Aprendizaje

RESUMEN. Este estudio tuvo como objetivo determinar las percepciones de los docentes sobre las perspectivas y los riesgos de ChatGPT en el proceso de enseñanza y aprendizaje desde tres perspectivas: cognitiva, afectiva y ética. Se adoptó un enfoque narrativo, con una base teórica adecuada al Enfoque de Análisis Temático de Braun y Clarke para el análisis de datos cualitativos, para revelar temas relevantes. Los beneficios cognitivos incluyeron ayudar a los estudiantes a resumir, traducir enunciados, fortalecer el arte de cuestionar y desarrollar el pensamiento crítico. Los riesgos incluyen la simple aceptación de ideas, copiar y pegar contenido directamente; encontrar atajos para responder, una mayor dependencia de la

tecnología y la incapacidad de generar ideas creativas. Los docentes coincidieron en que la confianza de los estudiantes en el cumplimiento de los plazos y la mejora de la gramática puede aumentar. Sin embargo, la confianza en la entrega de trabajos de calidad puede no verse reforzada. Los docentes coincidieron en que los estudiantes son conscientes de las consecuencias de sus acciones al usar ChatGPT, pero estas pueden ser imprecisas cuando las escuelas carecen de políticas sobre el uso de ChatGPT. Para los docentes, ChatGPT es útil para encontrar ideas para la planificación de clases y actividades prácticas. En general, las herramientas de IA pueden ofrecer un enorme potencial a estudiantes y profesores, y si se utilizan de manera efectiva con las pautas adecuadas, pueden hacer que la enseñanza y el aprendizaje sean más atractivos y productivos. (conferir versão espanhol)

Palavras chave: inteligencia artificial; oportunidades; desventajas; cognitiva; afectiva; ética.

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Introduction

Artificial intelligence is a form of modern technology with a huge processing capability. It includes an adaptive behavior that enables it to possess human mental processing and operating abilities that enhance communication and interaction (Chen et al., 2020). With that, there is no doubt that Artificial Intelligence (AI), a rapidly flourishing area of technology, has the immense potential to revolutionize various fields in a way the world has never seen before. One major field where AI has been so impactful is the academe where the use of artificial intelligence has become a hot topic (Cotton et al., 2024). As mentioned by Chris Dede, a senior research fellow at the Harvard Graduate School of Education (Anderson, 2023), AI has raised the bar by modifying the learning platform by creating major shifts in the way we teach and learn as well as possessing a greater capability to develop risks and potentialities for both learners and teachers.

In the context of education, integration of AI has been evident in different forms such as Thinkster Math, an online Math tutoring website; Grammarly, grammar correction platforms; and Turnitin, a plagiarism checker. While these previously mentioned AI-generated tools have been rapidly utilized by schools, learners, and teachers; a new language processing tool developed by OpenAI was launched recently – ChatGPT. It is a modernized chatbot with the ability to understand and interpret statements, answer questions, and generate responses with a huge resemblance to natural human language (Lund, 2023). According to Chen et al. (2020), AI such as ChatGPT may encourage dishonesty and ruin academic integrity because it may lead students to use paper mills platforms. With that, it is vividly evident that Artificial Intelligence tools, particularly, Chat GPT, offer both prospects and risks in the academe. This is supported by Zhai (2022) as stated in Ali et al. (2023). who argued that the capabilities of ChatGPT may hugely affect learning objectives, activities, outcomes, assessment, and evaluation.

This phenomenon of extensive Artificial Intelligence dominion in the form of ChatGPT poses a question on the extent of the prospects, risks, and overall implications of ChatGPT in the teaching and learning process. The use of this new technology in education, particularly in classrooms has caused strangeness, concerns, and possibly more questions than answers (Valdemarin & Monteiro, 2020). In a short period, although there have been numerous studies conducted about ChatGPT in the context of education, a focus on specific student dimensions from the secondary teachers' point of view has not been explored yet. Keeping in mind the massive influence that AI, particularly, ChatGPT can have on learners, it is imperative to investigate the potential prospects it offers and risks it poses to learners in a more extensive and detailed aspect to gain a comprehensive understanding of its pedagogical implications.

In less than a year since the launch of ChatGPT in November 2022 (Ali et al., 2023), there has been extensive use of this AI-powered technology in various fields, particularly in the academe that has been both promising and alarming for people in this field. In order to address this issue at hand, it is highly essential to discuss and explore these prospects and risks in the learning process through the lens of three precise dimensions of student development: cognitive, affective, and ethical dimensions; and in the teaching process with a focus on instructions and assessments. Therefore, this study aims to investigate and explore the perceptions of teachers about the risks (drawbacks) and prospects (opportunities) of ChatGPT in the teaching and learning process since the time this technological tool was launched in late 2022. The prospects and risks were investigated from the lens of three dimensions: cognitive, affective, and ethical – from the perspective of the teachers who have direct interaction to learners utilizing ChatGPT.

Specifically, this study aims to:

- Determine the prospects (opportunities) and risks (drawbacks) in learning based on the teachers' perceptions of students who are using ChatGPT. The prospects and risks will be investigated in the following student dimensions: cognitive, affective, ethical
- Identify the prospects (opportunities) and risks (drawbacks) of ChatGPT in the teaching process as perceived by the teachers. The prospects and risks will be investigated in the following aspects: instruction, assessment

Significance of the study

The results of this study can be beneficial to different stakeholders, specifically, the teachers for class instructions, tasks, and assessments being given to students. Also, the outcome of the study may provide the academic leadership team with reliable feedback on the current extent of learners' use of artificial intelligence, particularly ChatGPT, and hence, would enable them to adapt an effective educational intervention or measures to ensure academic integrity and improve student competencies and learning outcomes in the era of AI. The study may also be beneficial to students by raising awareness and strengthening accountability to ensure that academic honesty is maintained while complying with their academic requirements. This may also serve as a reference to future researchers who would also be interested in conducting a study about the impact of Artificial Intelligence on students and teachers. Future researchers may opt to study any of the recommendations of this research or investigate a related issue in the future.

Scope and limitation of the study

For the cognitive dimension, this study focused on ChatGPT's effect on the student's critical thinking skills. For affective dimension, it focused on learners' self-efficacy in doing their tasks while for the ethical dimension, the concentration was on how students differentiate right and wrong actions and decisions when using ChatGPT. As part of investigating its implication on teaching, the selected teachers also shared their perceptions about the prospects and risks of ChatGPT in the teaching process: first, focusing on instructions which referred to a plan of teaching and learning activities in which learning is organized and second, assessment which referred to gathering and interpreting information about student level of attainment of learning goals (Brown, 1990; Yambi & Yambi, 2020). The participants were selected teachers at Sekolah Global Indo-Asia (SGIA) in Batam, Indonesia for the Academic Year 2022- 2023: Languages, Humanities, Sciences, and Mathematics. The teachers who participated in this research were also aware of ChatGPT's function and how it is being used by their students.

On the other side, the participants in this study were selected based on the extent of how ChatGPT generates responses for questions and tasks related to the abovementioned subjects, but did not include subject teachers of Arts and Physical Education which could have generated more perspectives. Moreover, the teachers who participated in this research were aware of ChatGPT's function and how it is being used by their students. Through the initial conversations with them by the researcher, the number of subject teachers listed above affirmed that they were familiar with ChatGPT as they have used and explored it as well as their students. However, this study did not involve teachers who have not known ChatGPT and have not tried using or exploring it. Additionally, the participants did not have the same level of knowledge and experience with ChatGPT which could affect their point of view regarding its prospects and risks. Furthermore, this study also utilized online Focus Group Discussion and not individual interviews, hence acknowledging the possible downsides compared to in-person interview.

Methodology

Framework/ Approach for qualitative research

The main source of information for this research study was the subject teachers' perceptions about the prospects and risks of ChatGPT in the teaching and learning process as they observed from their students. This involved a careful analysis of the narrative of the lived experience of the teachers from their classroom contexts and an in-depth understanding of their perspectives about the rampant use of ChatGPT by learners in their respective subjects. Given the direction of this study, the narrative approach focusing on the meaning

and realization of individuals attached to a specific experience by sharing his/ her experience/observation (Tomaszewski et al., 2020) is indeed an appropriate theoretical basis for this research. Narrative research allows for understanding, describing, and acting within the context of individual experiences and the story shared is how we make sense of the phenomenon from the lens of the participants (Clandinin & Connelly 2000).

In the context of this research, the selected subject teachers were from Sekolah Global Indo Asia. This approach focused on the consciousness and perceptions of participants about the phenomenon of the ChatGPT, an artificial intelligence Chatbot, that has shown widespread adoption by learners. It is believed that through the narrative approach, participants will share their perceptions through an interview or focus group discussion. These raw data gathered from the participants will be “[...] systematically and methodically analysed so that the implicit or explicit meanings contained in them [...]” (Giorgi, 1995, p. 39-40) were grouped into predetermined themes or into new themes that emerged from the study.

Thematic Analysis identifies the major themes from the data gathered (Naeem et al., 2023). The principles of the thematic analysis technique involve coding of data, searching for themes, refining the themes, and reporting the findings (Naeem et al., 2023). This study employed Braun and Clarke’s Approach to Thematic Analysis which is an easily accessible and theoretically flexible interpretative approach to qualitative data analysis that allows for the identification and analysis of patterns or themes in a given data set (Braun & Clarke 2012).

Conceptual framework

This study focused on the perceptions of subject teachers about the prospects (opportunities) and risks (drawbacks) of ChatGPT to students from the lens of three dimensions: cognitive, affective, and ethical; and to teachers based on instruction and assessment. The prospects and risks were investigated from the perception of the teachers who have direct interaction with learners utilizing ChatGPT. Hence, by knowing the prospects and risks, an overall implication of ChatGPT in the teaching and learning process in different subject groups can be determined. The conceptual framework of the study is shown on Figure 1.

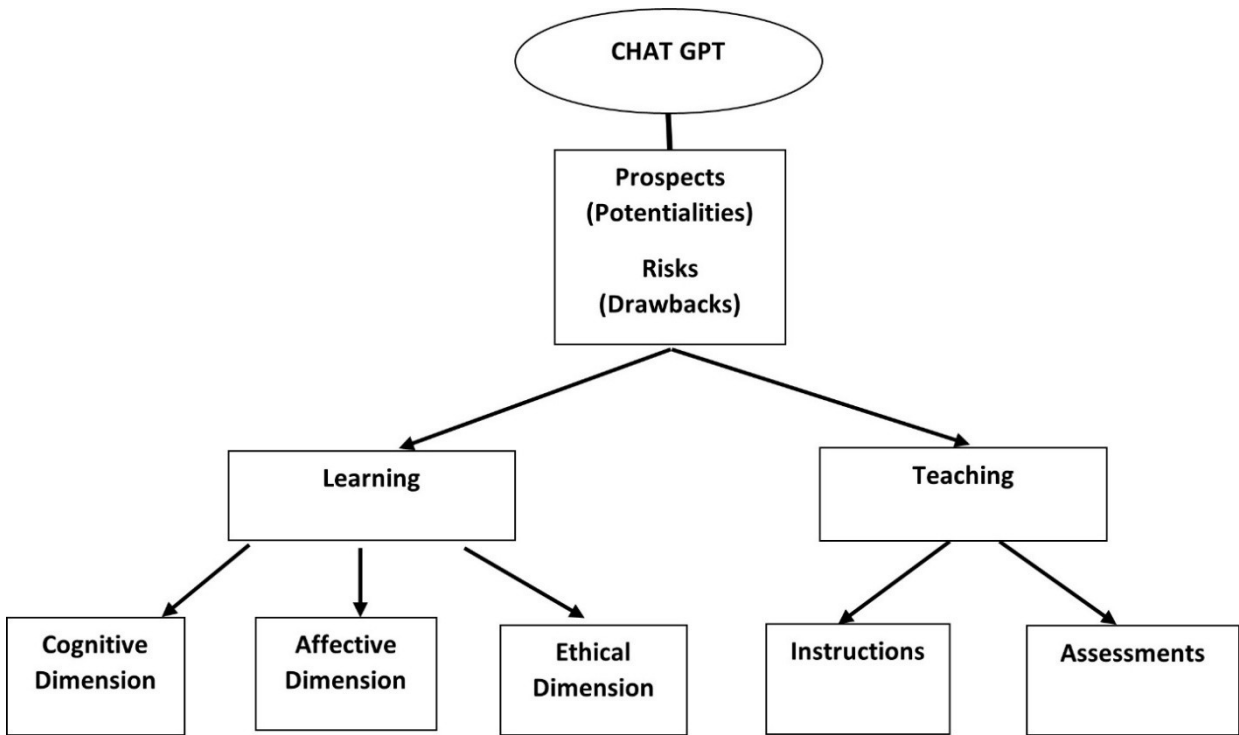


Figure 1. Conceptual Framework showing the Prospects and Risks of ChatGPT (AI) in the Teaching and Learning Process.

Research design

This study focused on the AI tool - ChatGPT, a chatbot developed by OpenAI that generates human-like text in a conversational style (Cotton et al., 2024). Since its launch, it has been utilized by millions of users and has captured massive attention as it can hasten the preparation of essays and other scholarly documents (Lund et al., 2023). This breakthrough in AI is viewed by many as a tool to enhance learning and reduce

teacher workload. As mentioned earlier by Silva and Rodríguez Jerez (2020), in the context of education, humanity faces the need to break with the established paradigms, to effect changes in the teaching and learning processes and influenced of digitalization that transforms pedagogical processes into a more complex scenario. Contradictorily, others consider it a danger to rectitude which opens the door to cheating and plagiarism (Cambridge, 2023). Thus, ChatGPT showcases potential values and limitations. To further understand the genuine influence of ChatGPT, it is essential to look at how it affects students in different dimensions. Kong and Zhang (2021) has identified dimensions that are key to AI literacy. According to their study, AI literacy can be achieved by looking at the public's cognitive and affective dimensions. Kong and Zhang (2021) defined the cognitive dimension as the individuals' mental processing, hence critical thinking skills while the affective dimension refers to their self-efficacy. Based on that, it can be inferred that using AI-generated tools such as ChatGPT poses implications on the cognitive and affective dimensions of users. Aside from these two aspects, there have also been concerns raised about the ethical considerations involved in using ChatGPT as users may be involved in copyright and plagiarism issues (Kasneji et al., 2023). Thus, for this study, the research also aimed to know how the AI tool affected the ethical dimension of users which referred to determining the right and wrong in decision making.

The information regarding the prospects and risks of ChatGPT to learning were determined through the lens of the cognitive, affective, and ethical dimensions of users from the perceptions of subject teachers. Likewise, the prospects and risks of ChatGPT to teaching, particularly in instruction and assessment, were determined by the teacher participants. Lumpkin (2020) identified in her study that good instructional strategies and assessments are manifestations and steps to attain effective teaching and learning processes. This study is qualitative research that follows a descriptive method to gather, analyze and interpret the data. According to Sutton and Austin (2015), the focus of this study aids researchers to know the thoughts and feelings of participants, which provides an avenue to understand the meaning that people relate to their experiences. It is also important to note that a qualitative study does not in any way aim to generalize the results to a bigger population. Rather, it can serve as a tool to understand deeper people's feelings and thoughts. Specifically, this study was anchored on a qualitative study with a narrative approach. The questions to be asked are arranged based on concepts or themes gathered from the existing related literature as shown in the conceptual framework. Data collection technique was a focus group discussion using open-ended ended-questions and conversational discussions which permitted the respondents to share their experiences and perceptions.

Instrumentation

A set of interview questions was used to determine the perceptions of the participants regarding the prospects and risks of ChatGPT in the teaching and learning process. Part I was composed of questions to know the extent of their familiarity with ChatGPT. Part II was about gathering the prospects and risks of ChatGPT that teachers perceive in the learning process based on the cognitive, affective, and ethical dimensions of students. Part III focused on questions about the prospects and risks of ChatGPT that teachers perceived in the teaching process, particularly on instructions and assessments.

Methods of data gathering

The researcher gathered data thru focused group discussion involving the 15 participants. Verbal permission was also asked from the subject teachers whether they were willing to be part of a research study about ChatGPT. Then, a formal letter of information and request to the Head of School and Principal was submitted to ask for official permission to interview the teachers for this research. An individual formal letter of invitation/request was also sent to each subject teacher participant. As with the ethical and confidentiality considerations of this research study, qualitative researchers acknowledge that ethical considerations are vital for doing any research work especially when direct human involvement is present. The protection of human participants through following appropriate ethical principles is vital in any research study, particularly in a qualitative study, where ethical considerations should be given ample attention (Arifin, 2018).

With that in mind, in doing research, is it important to be conscious of multiple roles, follow informed-consent rules, and respect the confidentiality and privacy of participants (Smith, 2003). The study was first submitted to the University Ethics and Research Committee for approval. The participants' consent to participate in the study was sought and secured. Everyone was assured that the data gathered from this study

would be used for research purposes only, and their confidentiality would be respected during the study. The Focus Group Discussion were conducted via zoom in one continuous recording and the whole online session was recorded with the participants' permission. The volume was moderate and the voice was loud and clear. Afterwards, the recording was transcribed and analyzed.

Methods of data analysis

Transcriptions of interviews were subjected to thematic analysis based on the predetermined concepts or themes as shown in the conceptual framework Figure 1. The analysis also involved newly emerged themes/concepts that came out from the Focus Group Discussion (FGD). The initial part of transcriptions was the preliminary data about the participants' responses to the questions. The second part of the data analysis includes arranging it into themes by gathering and organizing the content of the data in an orderly manner to categorize it. The transcripts were assigned with a code for each research question. Third, the codes gathered were arranged into categories to easily determine the participants' collective accounts. The codes were organized for possible emerging themes. The fourth phase of analysis is coming up with emerging themes, then, the themes gathered and reviewed were organized. In the fifth phase of the analysis, the themes were organized, categorized, named, and connected to form a coherent and overall analysis of the data gathered. Lastly, the relevant themes based on perceptions were finalized and reported. Overall, the data analysis in qualitative research entailed making sense of large descriptive information by determining patterns or themes, and eventually drawing meaning from data and subsequently forming a logical chain of evidence (Paton, 2002 apud Wong, 2008).

Results and discussion

Familiarity with ChatGPT

Table 1 shows that majority of the participants had known ChatGPT in the 1st and 2nd quarter of 2023 when they heard it directly from their students who have been using it already.

Others have learned it from colleagues who have found out about it through the students as well. Twelve of the participants mentioned that they have tried using ChatGPT mainly to know how it works and out of curiosity to determine how it can affect the students' output. There was also one participant who mentioned that he used ChatGPT to explore ways on how options in a written test can be further explained to the students. However, it is important to note that although most of the participants have shared that they tried using ChatGPT to know more about it, eventually, four participants have confirmed that they eventually used it for lesson purposes when they found out how it can provide good ideas such as teaching strategy or activity for class teaching.

Table 1. Reasons for Using Chat GPT.

a.	Out of curiosity
b.	Translation purposes
c.	Teaching strategies
d.	Assessment preparation

There was even a participant who mentioned that he used it together with his students during class when they were revising answers for a past paper question for an external assessment. They used ChatGPT to help the students get ideas on how they could rephrase their answers to prepare for the exams. Another Science teacher mentioned that she tried using ChatGPT to get ideas for her practical or experiment activities with the students as the AI tool provides relevant suggestions that can be used for the experiment. Two participants also mentioned that they used ChatGPT to check the translation of Bahasa Indonesia or Mandarin to English and vice versa. Furthermore, two teachers used it to verify if their students' answers were from ChatGPT.

Table 2 shows that twelve of the participants confirmed that their students were using it and that it is through the students they found out about ChatGPT. As shared by the participants, students mostly used it due to several reasons. One reason was to complete their school work or tasks easier and faster as ChatGPT can easily generate the answers for them which may give them better grades. The second reason is that students use this to search for

information for their research works. This is particularly applicable to higher-level students who were working on their Internal Assessments, a type of research work, in the IB Diploma Programme.

Table 2. Reasons why students use ChatGPT.

a.	Search for answers easily and quickly
b.	Research for ideas/topics
c.	Translation purposes
d.	Summarize ideas/paraphrase statements

The Math teachers mentioned that students used ChatGPT to search for possible good topics for their Internal Assessments or research. Additionally, the Economics teacher mentioned that students use it to summarize data or information that they gathered because as long as you encode the right question or instruction, ChatGPT would do the work or generate answers for you. Other students also used it for translation from Bahasa Indonesia to English and vice versa. Another reason was that they used it as a tool to get ideas for their school work whenever they experienced a difficult time organizing their thoughts and finding the right answers. This was commonly noted in subjects that require writing tasks such as English, Global Perspectives, Bahasa Indonesia, and History. However, Table 3 shows that the teachers of Math, Sciences, and Economics have noted that ChatGPT was commonly being used by their students when they wanted to find ideas for their Internal Assessments.

Table 3. Perceived Limitations of Chat GPT.

a.	Inaccuracies
b.	Mathematical and Scientific notations, formulas and symbols
c.	Diagrams or Graphs and computations

However, ChatGPT cannot give the students the exact text for their essays because ChatGPT cannot generate the exact formula and mathematical notations needed for Math, but it can give them explanations in words. The same case applies to teachers of Sciences (Biology and Chemistry) which involve certain computations or symbols that cannot be generated by ChatGPT. This was also supported by the Economics teachers who mentioned that students use ChatGPT to look for possible answers to case study problems but are not successful in answering diagrams, graphs, and calculations that are commonly needed in Economics. Additionally, our Mandarin teacher also shared that for Mandarin, students may not fully benefit from ChatGPT because the Mandarin characters were not accurately generated by the AI tool.

Part II (Learning)

Table 4 shows that the teachers believe that ChatGPT has both benefits and risks for the cognitive development of the students. For the benefits, all teachers agreed that there were benefits although each teacher mentioned specific benefits based on their respective subject. The Mandarin teacher shared that students can benefit from summarizing their ideas as the AI tool can synthesize their ideas quickly and it can help them translate from English to Mandarin and vice versa, although there are inaccuracies. This also applied to the Bahasa Indonesia teacher who stated that ChatGPT helps students to generate ideas for their Bahasa Indonesia writing tasks.

Table 4. Cognitive Opportunities and Risks in Using ChatGPT.

Opportunities		Risks	
a.	Summarization	a.	Reliance on technology to find answers
b.	Generating ideas	b.	Deteriorate critical thinking skills (analysis, synthesis, creativity)
c.	Research	c.	Deteriorating writing skills
d.	Enhance analytical /argumentative skills		

The same point of view was expressed by the Math, Biology, Economics, History, Chemistry, Global Perspectives, English, and Business teachers. Generating ideas was mainly the main benefit of students from ChatGPT which they can use to improve and develop further for their tasks and research. In this way, students can analyze the ideas they got from ChatGPT and modify them based on the requirements of the task. In

addition to that, the History teacher also mentioned another benefit of ChatGPT which was it helped to enhance students' ideas in answering past exam paper questions for practice exercises by inputting their planned answers in ChatGPT to help them rephrase them. Moreover, the English and History teachers stated that if the students input the right and more specific questions, ChatGPT can help students generate more specific responses which would aid them to strengthen their ideas further. This means that students can enhance their art of questioning to research and find the right answers that they genuinely need. Furthermore, the Global Perspectives teacher also added that in a way, ChatGPT can help students to be more critical thinkers if they are more selective of the information that ChatGPT provides them.

However, the challenge presented by using ChatGPT was that not all students may be able to scrutinize the information they receive, but rather, just simply accept the ideas given to them. This now becomes part of the risk since there were cases wherein students use ChatGPT to easily access information and simply copy the content. This was proven by the Bahasa Indonesia teacher who shared that she had one student who used ChatGPT to find answers for homework and just simply copied and pasted it for submission. She found out about it because she knew the capability of the student, but then the student's submission was very impressive and beyond the Bahasa Indonesia writing skills of the student based on the previous assessments. Eventually, the student admitted that indeed, he copied his exact and full submission from ChatGPT. Additionally, the majority of the teachers also agreed that ChatGPT may encourage students to find shortcuts in answering their homework or accomplishing their tasks easily without completely understanding what they are submitting. It poses the risk for students to be more reliant on technology to find answers to the questions and may not be able to generate their creative ideas if they are accustomed to using ChatGPT. Another negative effect that Science and Math teachers mentioned was that the information presented by ChatGPT is not fully accurate which means that it could mislead students to generate falsified or insufficient information. Furthermore, a highlight from the teacher's responses was that the potentials and risks of ChatGPT sometimes depend on the students themselves. If the student is a critical thinker who will use ChatGPT to support and strengthen his or her ideas, then it would be a benefit. On the other hand, for students who simply use ChatGPT to make tasks easier for them, using it becomes a risk for skill development.

In relation to the affective aspect of learners, particularly on their confidence, Table 5 shows that teachers agreed that students' confidence may or may not improve through ChatGPT.

It can improve in terms of complying with submission deadlines since they can accomplish their work faster and easier. On the other contrary, confidence in terms of submitting quality work may not be strengthened especially since the information generated by ChatGPT is not fully accurate based on the observation of the teachers particularly in certain subjects such as Economics, Sciences (Biology and Chemistry) as well as Mathematics.

Table 5. Affective opportunities and risks in using ChatGPT.

Opportunities	Risks
a. Confidence improvement	a. Weakened confidence

Moreover, students who also did not fully understand the content they copied from ChatGPT will not help to enhance their confidence in explaining the content since the ideas are not fully from them. It becomes challenging for them to justify their ideas. On the other side, participants observed that students who utilized ChatGPT to refine their ideas such as using it to improve sentence construction, grammar, or paragraph writing in English, Bahasa Indonesia, and Mandarin, feel more confident in submitting and explaining their works. This is because their works were well written with the help of AI which is more common for students who are second language speakers of English.

As for the ethical aspect of the students, Table 6 shows that teachers agreed that their students were aware that there might be consequences of their actions when using ChatGPT but these consequences can be vague for them when schools do not have specific rules about the use of ChatGPT. With that, teachers agreed that without clear-cut guidelines of the school about the use of ChatGPT, the ethicality of whether using it as right or wrong will remain unclear for students especially that AI-generated tools is easily accessible and can be used by anyone in this era. The recommendation of the teachers was to set school policy or guidelines in using ChatGPT for students to understand the parameters of when or how to use ChatGPT for school related works and the penalty for using it beyond the permitted guidelines.

Table 6. Perceived ethical aspect using ChatGPT.

a.	Right or wrong remains vague
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Part III (Teaching)

For teaching, Table 7 shows that four of the participants responded that they used ChatGPT for teaching particularly in searching for ideas for their lesson plan activities. They have confirmed that ChatGPT offers good ideas for teaching strategies or activities for class teaching. The History teacher mentioned that aside from lesson planning, he used it together with his students during class when they were revising answers for a past paper question for an external assessment. They used ChatGPT to help the students get ideas on how they can rephrase their answers for exams.

Table 7. Reasons why teachers are using ChatGPT in teaching.

a.	Lesson Planning
b.	Refining answers for practice exams
c.	Laboratory experiments
d.	Translations

Moreover, one of the Science teachers added that she tried using ChatGPT to get ideas for her practical or experiment activities with the students as it provided good ideas for the laboratory activity while the Language teachers used ChatGPT to check the translation of Bahasa Indonesia or Mandarin to English or vice versa. With assessment, the History teacher used it for revising answers for past papers while the Economics teacher has used it to determine explanations for multiple-choice questions. Other than that, FGD participants have not used it for other assessment preparation. The teachers believed that AI generated tools such as ChatGPT can provide enormous benefits to learners and teachers. For learners, it offered a platform to improve their grammatical and sentence constructions, provided an avenue to discuss certain issues through conversations as the AI (ChatGPT) served as a research tool to find responses to their questions. FGD participants agreed that if ChatGPT is used effectively, it can be very beneficial to the learning process of students. Effective use means clear guidelines are given to students on what they can and cannot do when using ChatGPT. This can be better implemented when the school gives an official policy about the use of AI-generated tools as well as teachers' guidelines also when giving tasks to their students who will most likely be using ChatGPT for completion.

As for the teaching process, ChatGPT can provide support in planning the lessons and activities as it offered suggestions that can help deliver the lessons to students, whether it is for regular class discussion or experimental activity. This can also help teachers detect whether the works submitted by their students are taken from AI directly. However, to be able to maximize the benefits of AI such as ChatGPT, teachers should also be familiar with how it works so that its potential can be maximized for the benefit of learners. This idea is an emphasis of the findings of Arguelho and Paniago (2021) which stated that curiosity and interest in technology also appeared in the teachers' narratives and the creation of new pedagogical strategies', 'acceptance of technologies by teachers are needed to integrate new technologies in the learning process.

The participants also agreed that ChatGPT can be detrimental to teaching when it is used ineffectively by teachers for class purposes, for example, allowing the students to use it freely without even setting any guidelines or parameters to support them. This can also be detrimental if teachers rely on it fully for their lessons, but this was not the case at SGIA since the participants have not used it for the construction of assessment. As for the learning process, it can be detrimental when students are left unchecked on how to utilize ChatGPT because it can lead to the decline of their analytical thinking skills as well as correct research and writing skills. Furthermore, it can make students lazier and more reliant on technology to find answers for their questions.

Final considerations

After conducting this study, it has been concluded that ChatGPT offers prospects or opportunities for learners in both their cognitive and affective dimensions. It serves as a platform to improve their grammatical and sentence construction and discuss certain issues through conversations using AI (ChatGPT). It also provides responses to their questions, raises questions, challenges assumptions, supports their writing

structure, and improves the grammar and sentence structure in their writing. It also helps them to summarize their ideas, generate or research new idea, and enhance their argumentative skills in certain ways. In relation to their affective dimension, ChatGPT enhances their confidence in submitting their work as they can mostly accomplish the task earlier or based on schedule with good quality. Teachers agreed that when ChatGPT is used effectively with clear guidelines, it can yield benefits to the learning process of students. On the contrary, ChatGPT also poses risks or drawbacks to learning process when students are left unchecked on how use utilize ChatGPT as it can lead to the decline of their cognitive aspect (analytical thinking skills, research and writing skills), affective skills (deterioration of self-efficacy due to reliance on technology) and for ethical aspect, learners tend to disengage from the concept of right and wrong especially when there are no specific rules applied.

In addition, ChatGPT offers prospects or opportunities for instructions and assessments. ChatGPT can provide support when planning the lessons and activities as it offered suggestions and ideas for instruction and generated possible ideas for certain assessment activities. Likewise, ChatGPT also helps teachers to detect whether the works submitted by their students for their assessments are taken from AI directly. AI-generated tools such as ChatGPT can provide enormous potential to learners and teachers. On the other hand, ChatGPT can also be detrimental to teaching when it is used ineffectively by teachers for class purposes, such as allowing the students to use it freely without even setting any guidelines or parameters to guide them well.

It is important to take note that the participants in this study were selected based on the extent of how ChatGPT generates responses for questions and tasks related to the abovementioned subjects, but does not include subject teachers of Arts and Physical Education which could have generated more perspectives. Moreover, the teachers who participated in this research were aware of ChatGPT's function and how it is being used by their students. This study did not involve teachers who have not known ChatGPT and have not tried using or exploring it. However, the participants do not have the same level of knowledge and experience with ChatGPT which could affect their point of view regarding its prospects and risks. Furthermore, this study also utilized online Focus Group Discussion and not individual interviews, hence acknowledging the possible downsides compared to in-person interview.

Recommendation

- Further research should be conducted on schools that have issued or implemented official policies or guidelines for the use of AI-generated tools such as ChatGPT
- Future research about Artificial Intelligence can focus on the perspectives of students on why they used ChatGPT for their academics and how it impacted their learning process
- Research can concentrate on the long-term benefits for teachers who extensively used ChatGPT for instruction and assessments
- Conduct studies to gather suggestions from school leaders and other members of the academe on how ChatGPT and other AI tools can be utilized effectively at school while minimizing their consequences

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