

Integrating ChatGPT into English Language Teaching and Learning: Strengths and Weaknesses

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Abstract

Technologies have been all the time exerting huge influence on teaching and learning. As the latest product of fast development of technology, ChatGPT has gained much attention and the increasing studies related to it are emerging. Most studies have reported its applications in various fields, including education, and its strengths are highlighted. However, there are few related to English language teaching and learning, and any technology will have its own limitations. A lack of weaknesses exploration of using ChatGPT in teaching and learning may lead to misusing. This paper aims to study both strengths and weaknesses of using ChatGPT in English language teaching and learning to give a comprehensive picture of ChatGPT in this field. To reach this goal, a mixed-method research was conducted. Questionnaires were distributed to 260 students and 46 English teachers from three Chinese universities and later, 3 English teachers and 3 students from them were interviewed. The findings revealed that both teachers and students take positive attitude towards ChatGPT, and they use it in the whole process of teaching and learning. The greatest strengths revolve around enhancing instructional design for teachers and fostering personalized learning experiences for students. However, the weaknesses predominantly stem from an overreliance on ChatGPT, resulting in a potential loss of independent thinking skills and a lack of authentic interpersonal communication and interaction among students. Additionally, some students expressed a weak resistance to the temptation of cheating with the assistance of ChatGPT. This research is hoped to give more inspiration to both teachers and students to effectively and

appropriately use ChatGPT in English language teaching and learning practice to play its positive effect to the fullest.

Keywords: ChatGPT, English Language Teaching and Learning, Strengths, Weaknesses

Introduction

Information and Communication of Technology has been profoundly impacting teaching and learning. It helps draw students' attention, facilitates students learning, and promotes meaningful learning (Precintha et al., 2019; Yunus, 2013; Yunus et al., 2014; Yunus et al., 2019; Zakaria et al., 2016). The fast development of Information and Communication Technology brings a brand new artificial intelligence product, ChatGPT. The New York Times called ChatGPT "the next big industry disruptor" Grant & Metz (2022); Metz (2022) firmly believed it "would change the world". As a quick response to the emerging of ChatGPT, Microsoft urgently improved its search engine, Bing, and the management of Alphabet prompted a "red code" to prevent ChatGPT from replacing the dominance of Google search engine (Tung, 2023). Nonetheless, Bang et al (2023) claimed ChatGPT is "an unreliable reasoner" and it is better at deductive reasoning than inductive reasoning. It may also results in ethical and societal dangers, like social prejudice and toxicity and leaves them unresolved with the existing datasets of ChatGPT (Zhuo et al., 2023).

The ChatGPT applications in education is also rising. Studies related to using ChatGPT in teaching and learning have proposed and developed. They cover various fields of education, including medicine Kung et al (2023); Gilson et al (2022), foreign languages Hong (2023); Kohnke & Zou (2023) and engineering (Qadir, 2022). However, most of them focus on benefits of using ChatGPT, shortcomings and threat posed by ChatGPT are seldom studied. Therefore, this research will study both strengths and weaknesses of using ChatGPT in teaching and learning, which will shed light to a comprehensive understanding of its application. It is hoped that teachers and students can be inspired from the research and appropriately use the technology in practice so that the positive effect of ChatGPT will be played to the fullest.

Literature Review

Overview of ChatGPT

OpenAI, an American company, launched a Chatbot named ChatGPT on 30 November. It is a software based on artificial intelligence and can generate human-like conversations. The responses can be given within seconds whatever questions are asked. Just in one week after its launch, the number of people using ChatGPT has dramatically increased by over one million (Mollman, 2022). The Atlantic considered ChatGPT as "the generative-AI eruption" and it could change the way we work, how we think and redefine creativity (Thompson, 2022). Its huge impacts on human beings are pervasive. With enormous database, ChatGPT may help individuals and communities make advisable clinical decisions (Biswas, 2023; Kung et al., 2023); create and analyze different climate situations, thus improving the accuracy of climate predictions Biswas (2023) and promote academia and library management (Lund & Wang, 2023). Besides opportunities brought by this new technology, ethical problems caused by abusing it were stressed by many scholars Liebreinz et al (2023); Sallam (2023); Lund & Wang, (2023); DÖNMEZ et al (2023) also pointed out plundering issues and doubted its reliability in producing content.

ChatGPT in Teaching and Learning

For students and teachers to be capable of lifelong learning and teaching in this new technological era, they must be outfitted with technical capabilities (Rajendran & Yunus, 2021; Said et al., 2013; Yunus & Salehi, 2012; Yunus, 2012). Like any other technology, ChatGPT, since its advent, has triggered a large discussion in education. A few studies paid attention to how to effectively use ChatGPT in teaching and learning. According to Rospigliosi (2023), right questions should be asked in a right way so that ChatGPT can be applied to promote students' learning. Mhlanga (2023) emphasized that requirements in appropriately using ChatGPT include respect for privacy, fairness, non-discrimination and transparency. Tlili et al (2023) used a case of ChatGPT to examine its response quality, usefulness, etc. More studies in the applications of ChatGPT in teaching and learning focus on its strengths and weaknesses.

Strengths of Using ChatGPT in Teaching and Learning

Chinonso et al (2023) presented that ChatGPT can rapidly and instantaneously respond search queries, produce automatic text that is similar to the conversation response, which can be quickly used in teaching and learning. Williams (2023) stated that ChatGPT can provide a summary or extension of the text and adapt the text to reflect a different point of view. ChatGPT can offer language translation, personalized and interactive learning. (Arif et al., 2019; David & Leticia, 2023; Lim et al., 2021; Nair & Yunus, 2021). Hong (2023) agreed and added that ChatGPT allow great opportunities for teachers to improve language teaching and assessments. Soka & Hengb (2023) explored more strengths, including improving teaching practice, creating a plan and brainstorming ideas.

Weaknesses of using ChatGPT in teaching and learning

Despite strengths, a few weaknesses were also revealed in some studies. Qadir (2022) noted that ChatGPT can raise prejudice problem, even create and disseminate misinformation. In addition, ethical problem also existed in the area of teaching and learning. Students tend to use it unethically or dishonestly. Another disadvantage is the unreliability of its response because of a lack of citation and reference (Chinonso & Aduke, 2023). From the above, it can be seen that the applications of ChatGPT in various aspects of human being's life have been studied by many within less than half of a year. Its application in teaching and learning cover how advisably use it and strengths and weaknesses of using it, but mainly about the latter. Plus, more strengths have been discovered than weaknesses. Therefore, it's imperative to continue exploring weaknesses of using ChatGPT in teaching and learning so as to facilitate more effective use of it in practice.

Research Questions

1. How do teachers and students use ChatGPT in English language teaching and learning?
2. What are the strengths and weaknesses of using ChatGPT in English language teaching and learning?

Methodology

Research Design

This study adopts a mixed-method research approach. In order to investigate the research questions, questionnaires were initially administered to a sample of 260 undergraduate students (using the students' questionnaire) and 46 English teachers (using the teachers'

questionnaire) from three universities in China. In the second stage, in-depth interviews were conducted with a total of three teachers and three students selected from the previous participants, aiming to provide a triangulation of the research findings. The survey consists of distinct questionnaires designed for teachers and students, each encompassing four aspects: the frequency of ChatGPT usage, patterns of ChatGPT utilization by teachers and students, strengths of incorporating ChatGPT, and weaknesses of using ChatGPT in teaching and learning. The interview questions revolved around how teachers and students utilize ChatGPT in teaching and learning respectively, and their more specific opinions on strengths and weaknesses of using ChatGPT. Interview sessions were done with non-participants before the participants were interviewed in order to determine the interview guide's shortcomings. The researcher revised the interview guide and fixed the flaws found based on the outcomes of the pilot sessions. And the research questions were addressed by generalizing their answers from the in-depth interview.

Participants

For data collection, a total of 260 undergraduate students and 46 English teachers from three universities in China willingly participated in this research. These universities are located in different regions of China, namely the northern, southern, and central parts. University N, located in the north, is a prominent provincial-level university. University S, situated in the south, is a standard provincial-level university, while University C, in the central part of China, is a prestigious institution. Among the participants, there were 14 teachers, 44 science majors, and 44 arts majors from University N. Similarly, University S had 16 English teachers, 43 science majors, and 43 arts majors, and University C followed the exact same distribution. This deliberate selection of participants ensures a comprehensive research outcome to a significant extent.

Data Collection and Analysis

Two research questions were addressed by employing a mixed method. Both the teachers' and students' questionnaires consist of 13 items. These include one item related to the frequency of using ChatGPT, three items concerning the use of ChatGPT, four items evaluating the strengths of using ChatGPT, and another four items assessing the weaknesses of using ChatGPT in English teaching and learning. The questionnaires use 5-point Likert scale with the response varying from "Never" to "Always" for the first four, and the rest, from "Strongly Disagree" to "Strongly Agree".

Before being distributed, the reliability and validity of both teachers' questionnaire and students' questionnaire were tested. The questionnaires were conducted with 5-level Likert scale with good reliability (Cronbach's Alpha=0.907>0.8 for student version and Cronbach's Alpha=0.906>0.8 for teacher version) and validity (KMO=0.876>0.5, $p = 0.000 < 0.05$ for student version and KMO=0.865>0.5, $p = 0.000 < 0.05$ for teacher version). 260 students' questionnaires were 258 were finally collected. A total of 46 teachers' questionnaires were distributed and all collected. The questionnaire response rate reached 99%.

With approval of 6 participants, semi-structured interviews were conducted in text form through social media WeChat and QQ (two chat applications mainly used in China), and the interview language is English (All of these 6 participants are capable of using English.). At the end of each interview, participants were asked for feedback on the quality of the text and whether additions, deletions, or revisions were needed. Plus, interviews have been formally

approved by the participating schools to conduct this research. The interview sessions were taped and completely transcribed for additional thematic analysis.

Results

The Quantitative Results

As indicated in Table 1, both teachers and students frequently utilize ChatGPT. More than half of the students and nearly half of the teachers always use it in their teaching and learning activities. Interestingly, it is noteworthy that none of the respondents selected "Rarely" or "Never" options, implying that ChatGPT has become an integral tool for both teachers and students in their daily teaching and learning practices.

Table 1

Frequency of Using ChatGPT in Teaching and Learning

Item		Always	Often	Sometimes	Rarely	Never
Frequency of using ChatGPT	Teacher	47.83%	45.65%	6.52%	0%	0%
	Student	56.20%	42.64%	1.16%	0%	0%

Regarding the usage of ChatGPT in teaching and learning, teachers primarily prefer to use it before class, accounting for 80.43% (43.48% for "Always" and 36.95% for "Often"). This is followed by 63.04% (39.13% for "Always" and 23.91% for "Often") who use it after class, and 60.86% (30.43% for "Always" and 30.43% for "Often") who use it in class. Conversely, students predominantly prefer to use it after class (72.09%: 39.53% for "Always" and 32.56% for "Often"), while the lowest proportion of students (66.28%: 31.01% for "Always" and 35.27% for "Often") utilize it in class (as indicated in Table 2).

Notably, all teachers employ ChatGPT in class, as depicted in Table 2, where the percentage of "Never" usage is 0%. Consequently, students are required to use it in class (0% for "Never"). Overall, both teachers and students utilize ChatGPT throughout the entire teaching and learning process, including before class, in class, and after class.

Table 2

Using ChatGPT in Teaching and Learning

	Item	Always	Often	Sometimes	Rarely	Never
Teacher	Before class	43.48%	36.95%	13.04%	4.35%	2.17%
	In class	30.43%	30.43%	34.78%	4.35%	0%
	After class	39.13%	23.91%	28.26%	6.52%	2.17%
Student	Before class	36.82%	34.88%	20.16%	7.75%	0.39%
	In class	31.01%	35.27%	29.07%	4.65%	0%
	After class	39.53%	32.56%	20.16%	6.98%	0.77%

As shown in Table 3, 82.6% of teachers (52.17% strongly agree and 30.43% agree) believe that ChatGPT can provide them with instant access to a vast amount of information. The same percentage of teachers (82.6%: 54.34% strongly agree and 28.26% agree) express their

agreement that ChatGPT can assist in generating resources such as discussion prompts, quiz questions, or examples, while fostering a creative and engaging learning environment. This capability is unanimously considered a strength by all teachers (0% strongly disagree). Another strength agreed upon by 67.39% of teachers (45.65% strongly agree and 21.74% agree) is that ChatGPT can serve as a language tool for them to practice and improve their own language ability. However, when it comes to relying on ChatGPT for quick answers and assistance to student queries, nearly 20% of teachers (10.87% disagree and 8.70% strongly disagree) hold negative attitudes.

For students, the greatest strengths of ChatGPT in their learning are personalized learning (99.22%: 56.58% strongly agree and 42.64% agree) and enhanced engagement (98.04%: 53.48% strongly agree and 44.56% agree). Almost all students believe that ChatGPT can adapt to different learning styles, pace, and levels of understanding, while engaging them through interactive conversations and prompts, thereby making learning more dynamic and enjoyable. They also acknowledge the immediate assistance provided by ChatGPT (95.74%: 50% strongly agree and 45.74% agree). However, when considering whether ChatGPT can serve as a valuable tool for language practice and feedback, a lower percentage of students (75.58%: 38.76% strongly agree and 37.82% agree) hold positive attitudes, and 17.44% of students have reservations.

Table 3

Strengths of Using ChatGPT in Teaching and Learning

	Item	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
Teacher	Instant access to information	52.17%	30.43%	10.87%	2.17%	4.35%
	Resource generation	54.34%	28.26%	13.05%	4.35%	0%
	Quick answers and assistance	36.95%	23.91%	19.57%	10.87%	8.70%
	Language practice & modeling	45.65%	21.74%	24.92%	6.52%	2.17%
Student	Personalized learning	56.58%	42.64%	0.39%	0.39%	0%
	Immediate assistance	50%	45.74%	3.10%	1.16%	0%
	Enhanced engagement	53.48%	44.56%	0.39%	0.39%	0.39%
	Language practice & feedback	38.76%	36.82%	17.44%	3.88%	3.10%

The limitations of ChatGPT may become apparent when working with students who require specialized support, such as those with learning disabilities or those in need of behavioral interventions. According to Table 4, 93.48% of teachers agree with this statement, with 67.39% strongly agreeing and 26.09% agreeing. As an Artificial Intelligence product, 80.44% of teachers (54.35% strongly agree and 26.09% agree) assert that ChatGPT lacks emotional intelligence to provide the motivation or guidance that human teachers can offer. Surprisingly, teachers do not consider the lack of pedagogical expertise as the primary weakness of ChatGPT. Only 36.96% of teachers agree with this statement, with 26.09% strongly agreeing and 10.87% agreeing, while a similar number of teachers (28.26% disagree and 13.04% strongly disagree).

For students, the greatest weakness of ChatGPT is the absence of human connection, which is often a crucial aspect of the teacher-student relationship. A significant 95.73% of students (87.21% strongly agree and 8.52% agree) express concerns about this negative impact. Additionally, a higher proportion of students (85.27% and 89.14%) agree that ChatGPT lacks the ability to fully understand the context and nuances of a classroom environment, as well as providing inaccurate information.

It is worth noting that both teachers and students recognize the dependence on ChatGPT as one of the biggest barriers when it is used as an assistance in teaching and learning. 91.3% of teachers (78.26% strongly agree and 13.04% agree) and 96.91% of students (77.52% strongly agree and 19.38% agree) hold this viewpoint.

Table 4

Weaknesses of Using ChatGPT in Teaching and Learning

	Item	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
Teacher	Lack of pedagogical expertise	26.09%	10.87%	21.74%	28.26%	13.04%
	Inability to address student needs	67.39%	26.09%	4.35%	2.17%	0%
	Lack of emotional intelligence	54.35%	26.09%	10.87%	6.52%	2.17%
	Dependency on technology issues	78.26%	13.04%	8.70%	0%	0%
Student	Limited contextual understanding	54.26%	31.01%	11.63%	2.32%	0.78%
	Lack of real human interaction	87.21%	8.52%	1.94%	1.94%	0.39%
	Potential for inaccurate information	63.95%	25.19%	8.53%	1.55%	0.78%
	Dependency on technology issues	77.52%	19.38%	2.32%	0.78%	0%

A. The Qualitative Results

a) Demographic Information

Table 5 shows the basic information about interviewed teachers. It can be seen that these English teachers come from three different Chinese universities respectively and their teaching experiences range from 3 years to 11 years. And all of them have been employing ChatGPT since its dawn.

Table 5

Basic information about interviewed teachers

University	Name	Gender	Age	Teaching experience(year)
S	Jiang	Female	33	3
N	Sheng	Male	38	7
C	Wang	Female	42	11

Table 6 shows the basic information about interviewed students. Like teacher participants, students were selected from different universities and diverse majors, encompassing both arts and science disciplines. They are typically young netizens who excel at using Internet technology. Hence, ChatGPT is very familiar to them.

Table 6

Basic information about interviewed students

University	Name	Gender	Age	Major	Network experience(year)
S	Zhang	Male	19	Network Engineering	10
N	Zhao	Male	18	English	11
C	Liu	Female	20	Accounting	12

Results of the Teachers' Interview**The Integration of ChatGPT in Teaching**

When asked when they usually used ChatGPT, as teachers with more than 5 years of teaching experiences, all of them mentioned that it can be used though the whole teaching process, including three stages: before-class, in-class and after-class. As regards to how they used ChatGPT in each stage, Wang, with almost 10 years of teaching experiences stated that:

I usually give the list of teaching objectives and main content to students in advance. Then Students can submit their questions to ChatGPT in the preview period. Answers and references can be provided in this way. In class, when teachers and students have some different ideas, ChatGPT can be used to give its own answer as well as explanations. After class, ChatGPT is apparently a good private teacher to offer personalized tutoring to students.

The other two teachers agreed and Jiang, another teacher from southern part of China with 5 years of teaching experiences, supplemented that she also used ChatGPT for teaching preparation before class. Sheng laughed and added that:

ChatGPT is a chat robot, I often use it as a tool to improve my own language skill and this is also what I encourage my students do.

It can be seen from teachers' response that they did their utmost to use ChatGPT in teaching. It supports the findings by Wong & Yunus (2023) that teachers are positive in using technological tools in teaching and they show high level of willingness and readiness to use them.

Strengths and Weaknesses of Using ChatGPT in Teaching

Teachers' answers to the research question vary. But nearly all of them mention both strengths and weaknesses of using ChatGPT in teaching. Wang believed ChatGPT can help optimize teaching design by generating numerous resources such as providing some useful pictures, information and text during the PPT creation process, and offering brilliant class activities so as to help better present the teaching content. However, she stated that

Over-reliance on ChatGPT can affect teachers' teaching independence, thus losing the opportunity to think and explore, and they may become more dependent on machines.

What's more, she also worried that ChatGPT may weaken students' independent thinking and problem-solving skills and make their understanding and application of learning content and methods mechanical and superficial. Sheng believed that ChatGPT can provide accurate and timely language to help teachers be more authentic in language teaching and improve their language delivery skills. Most importantly, assessment can be done very efficiently with the help of ChatGPT. Nonetheless, Sheng said, the drawbacks of using ChatGPT was also obvious. It may not fully understand the teacher's intentions and needs, resulting in less precise or relevant answers being provided. Furthermore, Sheng expressed his concern:

ChatGPT may suffer from lagging, network disconnection, and information loss due to the limited technical and network conditions, thus affecting both teaching and learning effectiveness and experience.

Jiang emphasized that ChatGPT can help optimize the design of the teaching process, provide more teaching materials and ideas, and allow teachers to teach more efficiently. But he doubted that ChatGPT can provide the latest answers. He said:

Database update is not timely, resulting in sometimes the authenticity of the answer is questionable and the reliability of the data is greatly discounted.

In general, teachers are open to ChatGPT and willing to use the tool in teaching, believing that it can help teachers improve course design, beautify PPT making and improve language application ability. However, there are also many weaknesses, including the loss of independent thinking ability, unable to provide accurate information and affect the teaching experience.

Results of the Students' Interview

The Integration of ChatGPT in Learning

When it comes to how students used ChatGPT in learning, Zhao, who has been surfing on the internet when he was just 9 years old, said that

In the past, when the teacher gave the list for preview, I found it difficult to follow because there were always something I couldn't understand. Now, with ChatGPT, I can ask questions when I preview the text before class. It helps me better understand and remember the content of the lecture.

In agreement with Zhao, Liu, who has 10 years of network experience, added that:

In class, I feel very motivated and excited when the teacher use ChatGPT to offer different opinions. And after class, it also gives me much help, for example, it can help check spelling, grammar and logical errors in written assignments. So it can significantly improve the quality of my written skill.

Zhang, with almost 7 years of Internet experience, stated that she almost used ChatGPT in each stage of learning, including before-class, in-class and after class. To sum up, students are more open-minded for using ChatGPT and find it really helpful. They use it both in and after class and also expect teachers to use it more in class so that they can become more active and engaged.

Strengths and Weaknesses of Using ChatGPT in Learning

Unlike teachers, the interviewed students mostly stated strengths of using ChatGPT in learning. Zhang said that:

ChatGPT can automatically adapt and adjust the provided content and learning paths based on user input and feedback, thus better meeting individualized learning needs and preferences.

According to Zhao, *ChatGPT* can be used anytime and anywhere via devices such as the Web or cell phones, without special software or hardware devices, and with very fast speed and response time. Liu agrees that *ChatGPT* can provide multiple forms and types of learning materials and exercises, including voice, image, video, and text formats, thus better facilitating integrated learning and thinking. However, he added that:

Although ChatGPT can simulate conversation and communication, it still lacks real human interaction and communication experiences, thus making it difficult to meet students' emotional and social needs in the learning process. What's worse, it's difficult to resist the temptation to cheat, like directly copying answers in the examination or when the deadline of assignments comes.

To sum up, for students, the strengths of using ChatGPT outweighed the weaknesses, and they were eager to have an in-depth experience with it

Discussion

According to the results of questionnaires and interviews, both teachers and students are positive about using ChatGPT to facilitate the teaching and learning. Furthermore, there are both strengths and weaknesses of using ChatGPT in teaching and learning.

Strengths of Using ChatGPT in Teaching

In terms of strengths, teachers can use various forms and types of learning materials and exercises provided by ChatGPT to better promote students' comprehensive learning and thinking. What's more, ChatGPT can also help teachers provide more accurate and timely language, make it more realistic in language teaching, and improve language transmission ability. In addition, ChatGPT can help teachers optimize the design of teaching processes, provide more teaching materials and teaching concepts, thus making teaching more efficient. It proves again that technologies exert positive effects on teachers' English teaching (Tan & Yunus, 2023). Another advantage of using ChatGPT in teaching is that ChatGPT helps improve teaching efficiency and facilitate assessment. This is aligned with what Soka & Hengb (2023) stated in the study that ChatGPT provides significant opportunity for teachers to enhance second/foreign language instruction and evaluations.

Weaknesses of Using ChatGPT in Teaching

According to the results of teacher interview, weaknesses of using ChatGPT are also obvious. One of most serious problem caused by using ChatGPT in teaching is over-reliance on ChatGPT, which will make teachers lose the ability to think independently. Furthermore, ChatGPT cannot fully understand the intentions and needs of teachers and may provide inaccurate or irrelevant answers. This is aligned with what DÖNMEZ et al (2023) found that the content provided by ChatGPT is unreliable. Moreover, ChatGPT may also have limitations in technical and network conditions, such as jams, network disconnection, information loss and other problems, which will affect the teaching and learning effect and experience of teachers. As a matter of fact, the latter two weaknesses fully prove that teachers should not rely too much on ChatGPT in teaching, or it will not only lead to losing independent thinking ability but also give students wrong information and unpleasant learning experience.

Strengths of Using ChatGPT in Learning

For students, ChatGPT is a powerful artificial intelligence language model that can provide them with various forms and types of learning materials and exercises, and can automatically adapt and adjust content and learning paths according to students' input and feedback to meet personalized learning needs and preferences. It resonates with the finding of Qadir (2022), in which he reported that by giving students tailored feedback and explanations, ChatGPT has the ability to provide individualized and successful learning experiences. Furthermore, it was reported by students that ChatGPT can be used anytime and anywhere through devices such as the Web or mobile phones, which is fast and easy to use. More importantly, students believed that their general language proficiency, motivation and adaptability can be enhanced by using ChatGPT. It is consistent with what Zainuddin & Yunus (2022) have found. In general, using ChatGPT can be really valuable for students and can help them learn better.

Weaknesses of Using ChatGPT in Learning

Two weaknesses were reported by students using ChatGPT in learning. They find it difficult to have real interpersonal interaction and communication with teachers and other students. The other one is that students can't help cheating in examinations or finishing assignments. It is in accordance with unethical or dishonest problem generated by ChatGPT pointed out by (Qadir, 2022). This proves that, ChatGPT, like other technologies, can inadvertently lead to dishonest behavior of human beings, which requires students to have good self-control and moral management. To conclude, both strengths and weaknesses are found in using ChatGPT in teaching and learning but strengths are reported more than weaknesses especially by teachers, indicating that in teaching practice, it is necessary for teachers to strengthen the guidance of students in this aspect, and help them appropriately and reasonably use ChatGPT, so as to give full play to its positive effects.

Conclusions and Recommendations

This paper explored strengths and weaknesses of using ChatGPT in teaching and learning. The findings showed both teachers and students take positive attitude towards ChatGPT and they use it in the whole process of teaching and learning. Strengths for teachers include useful auxiliary tools provided for teaching and the design of teaching processes optimized with its assistance, thus improving teaching effect as well as making language instruction more realistic and accurate for students. However, it cannot replace the main role of teachers

especially due to its three weaknesses reported by teachers, namely, a lack of reliability of the information provided by ChatGPT, the limitations in technical and network conditions and the over-reliance on ChatGPT leading to the loss of independent thinking ability. Strengths for students fall into a personalized learning experience and various forms and types of learning materials provided by ChatGPT. Whereas, the weaknesses are also clear. Their emotional need for the real face-to-face interaction cannot be fully met by ChatGPT. And ChatGPT makes it harder for them to control their desire to cheat and thus engage in dishonest behavior.

Admittedly, as a language processing tool based on artificial intelligence technology, ChatGPT has great potential for educational applications. But it is strongly suggested that teachers should always maintain the ability to think and judge independently rather than relying entirely on machines. Additionally, teachers need to fully weigh the strengths and weaknesses of ChatGPT and give students timely and advisable suggestions so as to play the greatest role of ChatGPT. And for students, they should recognize its limitations and combine other learning resources for comprehensive learning.

The qualitative method of interviews was employed in this research as to gain in-depth understanding of participants' opinions, but the representativeness of the sample may be insufficient: there are too few samples. Another factor is that students' answers may be not serious enough: students see fewer shortcomings, which may affect the accuracy of the survey results. Therefore, in the future study, the samplings should consider to be expanded to cover a wider geographical and cultural areas to increase the representation of samples.

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