ChatGPT: Enhancing Learner Agency and Multilingual Practices in English Writing Class

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Abstract. ChatGPT is a newly developed artificial intelligence (AI) model that has the potential to improve student motivation and engagement in English writing classrooms. By using ChatGPT, teachers can create more engaging and effective writing instruction that fosters learner agency. This study explored how AI tools, such as ChatGPT, can be used to enhance learner agency and multilingual practices in English writing classrooms. The study successfully integrated learner agency theory and power dynamics theory into the specific and innovative context of ESL classrooms. The study investigated students' attitudes and experiences with the use of AI in writing classrooms. The results showed that most students had positive attitudes towards AI writing tools and believed that they could improve writing efficiency and quality.

Keywords: ChatGPT, Learner Agency, English Education, TESOL.

1. Introduction

Artificial intelligence technology has been integrated into various disciplines, and teaching and learning practices also need to be more closely related to technology to adapt to changes in the new era. In this AI + education era, when the AI tool is equipped with more capabilities of personification and interactions, it could be developed into dual teacher model, issued by UNESCO in 2019 [1]. Some researchers have already predicted some potential influence which AI could bring to education. It is also issued that the AI tool could renovate the education practices, helping the students' studying process and the analysis of students' periodical learning stage [2]. Moreover, a detailed example was raised by the previous research where a teacher could use AI-related examples to trigger students' interests in learning under a traditional educational mode [1].

English is a highly applied language subject, where writing plays a fundamental role in English education in English as the second language (ESL) context. Writing is an important language output skill with strong practicality, which can comprehensively measure students' comprehensive language ability. Thus, writing not only requires students to have high language expression and writing ability, but also requires them to have strong comprehension and thinking ability. Thus, it is argued that applied linguistics practices could strengthen the students interests together with independence in English writing [3]. Besides, among the applied linguistic practices, the interactional relation between the teacher and the students are dominant in the classroom discourse.

In November 2022, ChatGPT, launched by the American company OpenAI, caused a sensation on social media with its excellent natural language processing capabilities. Hu has generally predicted the impact of ChatGPT, which can bring individualized, efficient, revolutionary, and diversified classroom experience to both teachers and students [4]. However, the potential drawback of ChatGPT, such as information leakage, mislead information, and potential suppression of students' independent thinking must be noted by human teachers. Furthermore, Lin suggested the potential role of English teachers with the help of ChatGPT could be the "bus driver" of AI tools, where teachers must guide students to use AI, in order to build the bridge between students and vast resources of AI [5].

However, nowadays, because the invention of AI and ChatGPT is so close, most materials still stand at the position of "prediction". They only "predict" with the assertion that ChatGPT or AI tool could create a new world of English writing education, without any detailed classroom description. As a result, most educational workers still cannot find any clue of using the AI tool in their practices. Mostly, they still apply them like PowerPoints, books, or any other regular teaching materials in a

traditional teaching mode. This research will focus on the detailed classroom discourse with the use of ChatGPT, giving hints for AI use at not only the English writing class itself, but the ESL classroom or the whole educational context.

2. Theoretical Framework: Classroom Power Dynamics and Learner Agency

In classroom interaction, the teacher generally has the institutionally inscribed epistemic status and rights toward content knowledge in the subject taught [6]. In this kind of classroom context, the teacher is regarded to be responsible for pointing out errors in students' answers and set out to correct them immediately, as well as in their own work if such occasions arise. Therefore, this interaction constructed the centerpiece in classroom discourse, the IRF sequence, where the learner is invariably positioned as a respondent who assists in implementing the teacher's pedagogical agenda [7]. Under this IRF sequence, learners are constrained by the classroom discursive interactions in their pursuit of learning, due to their inequivalent epistemic power status and rights in the classroom comparing with their teacher.

Moreover, learner agency refers to the feeling of ownership and control that learners have over their own learning, which is considered as learners' individual and internal attributes affecting learning behaviors. When students believe their actions can make a difference, they become more confident, engaged, and effective learners, generating the learning initiatives [8]. Such learner agency is most clearly observed in the initiatives that learners take in the language classroom and the learner initiatives could be done to joke, display knowledge in the linguistic classroom context. However, in the IRF interactional mode, learner initiatives and students' language use and participation are greatly ignored in the pedagogical practices.

According to Larsen–Freeman [9], there are multiple practices enhancing learner agency. Teachers can maximize conditions for language learning, help students to enact and enhance their agency with embodied actions. Or support learners to deploy their semiotic resources to position themselves in the classroom and in a multilingual world. With mentioning some scenarios of learner agency enhancement practices, using AI tool in the linguistic classroom context could be a perfect presentation and application for the learner agency, breaking the IRF interactional mode and the teachers' epistemic power status. First, equipped with the AI tool optimizing the learning condition, students are offered an opportunity to take on a new identity and voice. Second, the AI tool could be a source of student – initiated feedback, breaking the traditional IRF interactional mode of the classroom. The students could enact and enhance their learner agency by transferring what they learned into AI tool. Third, the use of translanguaging between AI and human in the classroom could cultivate the multilingual practices of students' linguistic knowledge.

Therefore, this research successfully incorporates the learner agency theory, the power dynamics theory into a concrete and innovative context of ESL classroom. The newly-invented AI tool offers huge renovation to the materialism of the classroom, which lead to the pioneer of AI-era language education. Moreover, this research tests the assumptions about future education from numerous researches before, together with guiding the further linguistic pedagogy development.
The graph below in Figure 1presents the theoretical framework of this research.

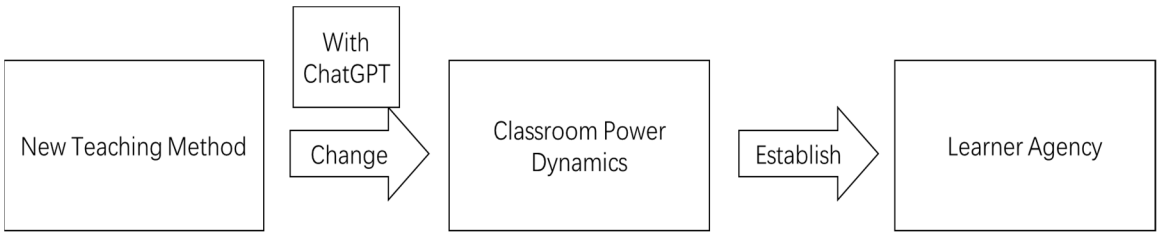


Fig 1. Theoretical framework of this research.

3. Research Design

3.1. Research Question

1) Are students more interested in the writing class with the AI tool?
2) Can students become autonomous and independent in writing the novel at class with the help of AI?
3) Can students reach the teachers' teaching objective of writing class?

3.2. Research Participants

One English Teacher and Twelve Students at Nanjing Longre English Training Center, in Nanjing, Jiangsu, China, in 2023. The teacher used both Mandarin and English in this bilingual classroom. The students were all native-Chinese at the age of around 16-18. The students' average IELTS level is about 6.0 (composite). All the students might study abroad in the future, avoiding taking the Chinese college entrance exam. In twelve students, six are males, and six are females.

3.3. Designed Class Plan

Here is the designed class plan with a detailed agenda and procedure, using the AI tool like ChatGPT, including three parts.

3.3.1. Teaching Objective

To make students understand the basic structure and framework elements in the novel. To help students follow the appropriate structure to write an English novel.

3.3.2. Class Setting

The English Writing class is a spatial class with 12 students, a teacher, and abundant empty seats. All the participants have the electronic equipment to use AI tool and to present their work.

3.3.3. Teaching Agenda

The instructional agenda portion of the designed curriculum plan, as shown in Table 1:

Table 1. Teaching Agenda.

Teaching Agenda	Activity	Time	Effect
Stage One	The teacher will reintroduce the AI novel structural knowledge, which was lectured in previous courses.	5 min	Student will manage the basic elements of novel, "Plot, Atmosphere, Character, Theme, Setting".
Stage Two	the teacher will present how to use multiple AI tools like ChatGPT to write a novel.	10 min	Student will explore multiple AI writing tools including ChatGPT
Stage Three	The students will try to use AI tool to write a full novel or a basic structural plot of a novel (depends on the uncertainty of the novel), and they will value the outcome on their own, trying multiple times to reach their ideal result.	20 min	Student will experience the AI writing in order to manage novel writing
Stage Four	The students will present their outcome to the whole class one by one, and the whole class will try to identify the structural elements of the novel and to evaluate the English novel in the discussion.	30 min	Student will actively communicate about their experience and feeling after using AI tool with others.

3.4. Methodology

3.4.1. Conversation Analysis

Video or audio recordings offer the materials of interactions in the English-language classroom. From the recording, the researcher will be easier to identify the specific speech acts about evaluation of AI outcomes in various speech events. Moreover, as Borba (2015) shows, the interactional discourses may shape the indexicality of the participants from the broad socio-historical context. The video/audio recordings will present the materials about the students' attitudes toward various AI novel writing results, and the enregisterment of the indexicality about the power dynamics between among the students, the teacher and the AI tool in the classroom.

The researcher has transferred the recording data into the transcripts in the research, while the video recordings still help the researchers to identify the meaningful part of the interactions. As a result, transcription will be another methodology of the research, which requires the careful selection of the verbal discourses and non-verbal features of the interaction, and careful arrangement of the materials [10].

The recordings were mainly the real English classroom, in order to find more clues in the interaction about the research questions.

3.4.2. Interview

Interviews offer the researchers the access to the people's experiences, and qualitative interviews provide the coherence, depth and density of the data among the participants in the TESOL in China [11]. This research conducted qualitative interviews with the English teachers in China.

This research conducted formal interviews with specific interview questions for teachers. The researcher scheduled and conducted 10-minute interviews with the students in the break of working time or in the holidays. The interviewees were told about the topics and questions of this research, together with the purpose of the interviews and the fact that the interviews will be recorded. In the interviews, the researcher asked about four basic interview questions. After the interview, the researcher wrote a basic 100-word description for the interview within one day. Here are some sample interview questions:

Q1: Rank between 1 to 5 (1 the least), how do you like the writing class with the help of AI?

Q2: When you are using AI in the class independently without the teacher's influence, compare this with your IELTS writing class. Which course are you more interested in? Rank your preference between 1 to 5 (1 as the writing class with AI, 5 as the traditional IELTS writing class). Why?

Q3: Do you think AI novels are superior to any level of human-wrote novels? If yes, can AI novels be compared with about which level of human-wrote novels?

Q4: Do you think it is easier to follow and continue AI novel's framework to complete your own novels than totally writing a novel on your own? If yes, how do you identify and follow the elements in the AI novel? If not, do you think AI tool help you understand the novel's elements?

Q5: Rank between 1 to 5 (1 the least), how do you like to use AI in your future writing?

4. Data Analysis

This research recorded the class with the designed class plan mentioned above. Here are the analysis of class recording transcript and the interview result.

4.1. Class Video Transcript and Analysis

4.1.1. Excerpt 1

Student A: [Smile with hands covering her face]
Student A: [Touching Student B to invite watching her AI]
[Ten seconds later]
Teacher: [to the whole class] you should offer some basic settings to AI tool.
Student A & B: [Laugh while teacher talking]

Teacher: What happened?

Student A & B: [Laughing, looking at the teacher]

Teacher: Very good. If you have some interesting experience of AI Writing, you can share with your classmates.

Student B: The heroine become a plaything

Teacher: It can happen that the AI tools offer some non-logical plot.

Student B: That's amazing

Student A: It is even going on!

Student A & B: [go back to closely watch, then keep laughing for ten seconds]

This laughter scenario happens at stage two and stage three. In this excerpt, one student found a funny result of AI writing, then shared it with other students. In this excerpt, there are a lot of laughter moments, hinting that the class undergoes a pleasant atmosphere. Moreover, the teacher is still talking about how to use AI tools to the whole class, but student A directly began to use AI tools to start her AI writing, which reflected that AI writing is exciting and attractive. After hearing the basic manipulation guidance, some students can start using AI on their own, although their conduct could be regarded as a "violation of the class disciplines".

In addition, not only student A's first try of the AI tool could be a violation of class rules, her sharing AI writing result to student B, and student A and B's laughter afterwards could also be the violation. So, under the pleased atmosphere, students were not worried about class rule violation. The students' strong willingness to share results with others could reflect how interesting the AI tool is, and the student's role tend to become more active in this interaction with the help of AI.

In the class recording, laughter is the most apparent embodiment enactment in the classroom interaction. AI tool could significantly enhance the learner agency with changing the traditional IRF interactional mode in the classroom, reflected in the laughter moments in the class. These laughter moments not only show the students conducted and are familiar with the evaluation process, but also construct a more inclusive classroom atmosphere with the help of AI tool. The students begin to actively try writing without the teacher's requirements or even at the moments of violating the teacher's instruction, pointing out the total conversion of students from the student passive role into the students' learner agency. The traditional IRF mode, the "teacher initiation – student response – teacher feedback", was transferred into the student initiation – AI response – student evaluation. Student initiation is valued as the learning incentive in the learner agency theory, with a better effect of studying at present or even in the future. AI response is both random and regular due to its close bound to the key words offered by the students representing regulation and its potentially non-logical or funny results defining random. Student evaluation means students will have a clear idea about the AI writing without taking it for granted. Students in Excerpt 2 even actively hinted to the whole class the nonsense of AI writing.

4.1.2. Excerpt 2

[Student C is presenting her AI writing to the whole class]

Teacher: Let's see. Your novel is a traversing novel. Travel to the new world.

Student C: Yes.

Teacher: Here, why does the hero "die from a train accident"? [Most of the part in this novel is dying from a truck accident]

[The whole class smile or laugh]

Student C: [Smile] Truck, truck! I wrote a wrong word

Teacher: Here if you offer a wrong word to AI, the AI may…

Student C: The whole story will become totally different, right?

Teacher: Yes.

Student C: I will change it later.

Teacher: Well, going on, it's OK

[After ten seconds of presentation]

Teacher: Is it end here? End in the middle?

Student C: [smile] Yes, so …
Teacher: [Simultaneously] doesn't it fizzle?
Student C: …… AI novel can make this kind of mistakes.

This laughter scenario happens at stage four. When the students share the AI writing results, the teacher questions students' order. Student C here used a smile and laughter when the teacher made corrections or feedback in the scenario. This embodied enactment of smile and laugh conveyed students' admission of making mistakes, showing the potential apology and willingness to pass this correction procedure to continue the following part.

Later, the students began to laugh together, which showed that the student all get the interactional meaning between the teacher and student C, and most of the students found that this part of student C's AI writing result is funny, which shows that most students can evaluate AI writing results.

At last, the student showed that the AI writing example finished at the middle, without any clues to give an end to the story. Here, the teacher asked, and then student C smiled to answer that the AI tool can make this mistake, which shows that students fully acknowledge the drawbacks of AI writing. The student purposefully presented this no-end story to the whole class, and smiled to show that the whole class felt the same as student C, that is, the AI writing tool is untrustworthy.

According to the traditional understanding, students in the Chinese-dominated ESL classroom devote the majority of their energy to subjecting to authority, with no confidence in their fellow's feedback. However, in class, the students actively share the AI results with their classmates. This process illustrates the total establishment of the learner agency without the entire and only faith in the teacher. In this process, the students will find that they are more powerful, and superior to the AI tool in the class. As the evaluator, the students will believe in their fellows with similar abilities to handle AI writing.

4.2. Interview Analysis

4.2.1. Questions about whether the class is interesting

The result shows that most students consider the class as very interesting. But in the interview, some students mentioned that this class offered chances and thinking time. This is very intriguing, for most people tend to believe that if students use the AI tool or search on the Internet, they may rely on them without their personal thinking devoted to the writing. However, in the interview, students said the writing class with the AI tool offered more chances and time to think. When they compare the class with AI tool and the traditional English writing class, most students acknowledge that the course of AI writing tends to be more interesting and helps broaden their writing thoughts. Some students said that the traditional writing class sometimes performs a more helpful role with explicit instructions, guidance, and correction for students' writing.

It could be partly attributed to the fact in the class that the students will experience vast resources of writing without the arduous and redundant time of really writing it. With this spare time, students can get more chances of plotting different stories, which bring them quick, huge, and vast experience and sense of achievement because they finish writing novels. Moreover, the AI writing tend to be more random, and some students like the easier way to accept the instruction. To give AI orders and to break the traditional IRE/IRF interactional mode is not preferred at the time by these students.

4.2.2. Questions about whether students can learn much in the class

The result of these questions diversified a lot. Some students argue that although AI writing is interesting, its assistance toward their writing is not obvious, adding that the AI novel will sometimes write "illogical nonsense". Other students said that the AI tool helped a lot, offering a clear and easy framework for students to follow. It could become "an inspirational fountain" for students own writing.

This result could be rooted in the randomness of AI writing. Because nobody knows what AI writing will write about, some students find it difficult to follow and catch AI's thought. Thus, they may think they still need to independently work on the writing, since AI could only be a extraction in

the writing process. Although class with AI writing tools is interesting, some students don't consider it as informative as traditional English writing classes.

It must be noticed that in the interviews, multiple student's states that AI novels cannot be superior to human-wrote novels. Most students mentioned that the human novels will incorporate more "emotions", tending to become more emotional and touching. It could be because students' experience in this class is ask AI tool to write novels. The AI novel is full of the plot description without detailed depiction of the scenery or the character. Thus, the AI novel become "emotionless", which could be compared to a plot only. It proves that the students get the evaluation ability so that they can evaluate AI writings.

5. Conclusion and Discussion

5.1. Conclusion

This research incorporates the learner agency and power dynamics theory in the classroom, with the newly-invented AI tool such as ChatGPT, and specifically designed a class for the application of the technology use in the second-language linguistic education classroom context. This research examines the change of interactional mode in the classroom with the help of AI tool, leading to the establishment of students' learner agency and higher learning incentives. Here are the results of this research:

1) Students will be very interested in the writing class with AI tool use, and are pleased in the new interactional mode in the class.

2) Students will become very initiative and active when they can utilize the AI tools.

3) Students can use the AI tool to boost the efficiency of their learning process, accomplishing teachers' requirements.

4) The randomness of AI tools like ChatGPT may sometimes restrict students' devotion to the class learning process.

5.2. Discussion

5.2.1. The Great Potential of ChatGPT in Education

ChatGPT and similar AI tools nowadays has shown great potential in the educational field. In the linguistic education field, the AI tool, previously predicted as a more vivid form of books, offers educators more innovative skill and knowledge transmission. The educators can utilize various technological materials to establish students' learning environment and tools. Students will can now practice their newly learned skills and knowledge quickly into practice and even quickly into a result of learning, which build students sense of achievement.

However, the AI tool's randomness should be considered in the pedagogy, together with the prerequisite knowledge and the materials students need to finish the class. As shown in the class, some students argued in the interview that they doubt the ability of AI writing, for it will randomly offer the non-available materials for students to think and judge. Moreover, the AI writing sometimes seems unattractive or "emotional". The future writing class which incorporates AI or other technological tools should take the potential result into consideration.

5.2.2. Some Other Possible Factors in ChatGPT Classroom

The students' socioeconomic conditions and computer skills might influence the effect of writing classes with AI tool. As shown in the class, some students may begin to manipulate the AI tools while others still need more instructions about manipulation. Familiarizing the novel material in the classroom may significantly affect students' immersion and interests in the classroom, because the arduous and random interaction with AI may restrict students' willingness to participate attentively and self-initiate in the school. In addition, needless to say the socioeconomic background of students can determine the validity of students'-owned AI tool to participate in the classroom. If students'

socioeconomic condition does not allow some students to use their own AI devices, teachers may need to offer or lend some alternative AI tool for students.

5.2.3. Technological Classroom's Prospect

In the future, since the technology keeps moving forward, more tools can be deployed in the classroom. Materialism in the school will significantly affect students' learner agency and classroom interactions. Coping with the randomness and diversity of the technology, educators and pedagogy researchers must keep exploring the materials that could be utilized in the classroom to improve students' learning efficiency and cultivating students learning habits.

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