Revisiting AI in an English Classroom

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Abstract. The emergence of science and technology has brought changes to humanity. In the academe, the era of 'sage on stage' has been pragmatically replaced by 'AI on the side.' Technology, especially AI, which simulates and sometimes works even faster and more accurately than a human brain, has contributed to the advancement of English language learning and acquisition. However, it has also brought professional and ethical threats to the students, the teachers, and the teaching-learning process. Meanwhile, it is important to understand and evaluate the status quo of the ESL teaching-learning process in relation to AI at school. In a survey conducted among 84 ESL students, results showed that most students use AI applications like Google translate, speech-to-text translation, and paraphrasing apps like Quillbot in doing their writing tasks at home. Another survey among ESL teachers was conducted via Google form, and follow-up questions and clarifications were communicated through an interview. By employing thematic content analysis (TCA), the students' and teachers' responses were coded, which were categorized into themes. These themes were utilized in the identification and discussion of best practices as well as the affordances and constraints of AI in ESL classrooms. In this way, it is hoped that the results of this research can spark a dialogue that will revisit the practices and policies of using technology and AI in the classroom.

Keywords: artificial intelligence, AI affordances, ethical considerations

1 Introduction

"I can dictate my story to my device while lying down on the bed, and it writes for me." This was a response of a 6th grader when asked about his online learning experience during the COVID-19 pandemic.

This is subtle proof of the existence of artificial intelligence (AI) in society, only that it is not explicitly noticed. Although AI has been a subject of research in the academic and scientific fields, for ordinary citizens, AI is just an advertisement that pops up on social media walls or just a headline in their news feeds. Regardless of the attention that is given to this innovative invention, the fact remains that there is an AI dichotomy of cause and effect in human lives; that is, people are using it for their daily survival; AI is impacting their lives without even realizing it.

The term artificial intelligence (AI) is not a new technology fad. Allen Newell, Cliff Shaw, and Herbert Simon coined the phrase "artificial intelligence" in the Logic Theorist program.

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The Research and Development (RAND) Corporation provided funding for the application, which was created to replicate human problem-solving abilities. It was introduced in 1956 at the Dartmouth Summer Research Project on Artificial Intelligence (DSRPAI), hosted by John McCarthy and Marvin Minsky, and is widely regarded as the first artificial intelligence program [1].

According to Zhong (2006) [2], AI is a field of modern science and technology that aims to uncover the mysteries of human intelligence on the one hand and transfer as much of it as possible to machines so that they can carry out tasks as intelligently as humans can on the other. Furthermore, the UNESCO World Commission on the Ethics of Scientific Knowledge and Technology summarized AI’s distinct characteristics that make it superior to other by-products of technology. COMEST (2019) [2] described AI as "machines capable of imitating certain functionalities of human intelligence, including such features as perception, learning, reasoning, problem-solving, language interaction, and even producing creative work.

Recently, Vietnam has shown giant development in artificial intelligence (AI). In fact, in a report published by the Ministry of Information and Communication [3], Vietnam is one of the two Southeast Asian nations, together with Singapore, which is listed in the top 30 for AI research. In addition, VinAI (Vingroup) made its mark when it hit the top 20 in the Top 100 leading global companies in AI research.

Aside from Vietnam's achievements in autonomous vehicles, genetic code research, and virtual doctor assistant development spearheaded by VinAI, the local community has also shown interest especially in AI app chats very close to human intelligence. During the first week of February, AI ChatGPT became extremely popular in Vietnam, becoming the most searched keywords according to Google Trends statistics [4]. Quy's article in VN Express International states that "there are several individuals who would want ChatGPT to write them stories, poetry, or their assignments; it typically accomplishes the job well." This current societal behavior pattern manifests the people's use of artificial intelligence in learning. In a random, informal survey conducted by the researcher among ESL students, it was found that students are using some AI applications to accomplish their school tasks and projects easily and accurately. If students already utilize AI in doing their homework, should schools promote using AI applications and software in the classroom?

There has been an ongoing discussion in the academic world about whether or not schools and universities should embrace students' use of AI. In Deakin University Australia, a lecturer found out that cheating by means of using AI in assessments is widespread. However, Charles Darwin University AI expert Stefan Popenici said that accepting the use of AI is "the only way" [5]. As a solution, three universities in Australia have adjusted their policies to allow AI use under strict controls. Vitomir Kovanovic, a senior lecturer at the University of South Australia, said that all universities should allow AI, and students should be taught how to use it. Kovanovic in Shepherd [5] emphasized:

You cannot stop it; even if you could, it is a temporary solution. The next one you won't be able to. It's futile. And you shouldn't be doing it, you should be teaching them how to use it – they're going to use it in the workplace anyway.

The respondents of this research, the ESL teachers, have seen that when students are allowed to compose their written work at home or in class with permission to utilize their devices, they do so with significantly better diction, well-expanded sentences and paragraphs, and a sharper writing
style. In a survey, a teacher said that while AI tools like Grammarly and Google Translate can correct students' mistakes, it is unclear whether or not the pupils comprehend the reasoning behind the corrections. The question is, is machine translation ethical? This question is partially discussed by Zemach [6] using the analogy of using a calculator in solving Math problems and referencing a bilingual dictionary in writing. In Math, teachers only allow using calculators when students have understood the fundamentals of an equation. In English classes, the use of a dictionary is taught as a study skill. This implies that using Google Translate to translate a word is equivalent to looking up its definition in a dictionary. What about placing a whole essay into Google Translate? There will be many English teachers who would scream in protest in this scenario. Rachelle Meilleur in [6] of the Kyoto University of Foreign Studies asked, "If using MT is fine, then what is the point of language learning or teaching?"

This paper aims to explore how teachers and students utilize AI in teaching and learning. It also aims to understand their perceptions and opinions, especially on the limitations of AI when used as a tool in the classroom. The results of this study could spark a productive dialogue for the school to develop a policy and guidelines on the proper and safe implementation and application of AI in the language classroom. Specifically, it aims to answer the following questions:
1. What AI apps are being utilized by ESL teachers and students in doing their tasks and projects?
2. What are the affordances and constraints of AI in the ESL classroom from the perspectives of the teachers and the students?
3. What are the ethical considerations in using AI in teaching and learning?

2 Theoretical Background

This paper is based on the assumption that students are using AI to create their English class outputs with ease and accuracy. Meanwhile, teachers restrict the students use of AI, especially in accomplishing their writing tasks, because they believe that AI would not allow the students to showcase their real writing ability, especially in terms of spelling, vocabulary, and grammar. It would also lead to students’ over-dependence on technology, resulting in mediocrity and complacency. It is anchored on two theories from different fields; one from the interactionist theory of second language acquisition (SLA), and the other one is from social psychology.

2.1 The Activity Theory

This theory, which emphasizes that socially constructed L2 knowledge is a necessary condition for interlanguage development, was introduced by the Russian psychologist Lev Vygotsky. According to Vygotsky, interaction is the bedrock of acquisition. The activity theory postulates two constructs – motive and internalization.

While motive explains the active way in which an individual sets his own goals and decides what to attend or not to attend, internalization concerns how a novice comes to solve a problem with an assistance of an expert who provides scaffolding and internalizes the solution. The concept of the zone of proximal development (ZPD), also known as the zone of potential development, was developed by Vygotsky. It describes the range of abilities that a person may execute when under the instruction of an expert but cannot yet perform alone [7]. He argues that children learn through interaction with adults. The zones of proximal development are created through interaction with more knowledgeable others. Eventually, children learn to control a concept without the assistance of others. Thus, it is concluded that development manifests itself first in social interaction and only
later inside the learner [8]. In order to support the learner as they are guided through the zone of proximal development, the instructor or a more competent peer provides scaffolding. Similar to how a scaffold is removed from a building during construction, support is tapered down (i.e., withdrawn) as it becomes unnecessary. The student will then be able to complete the task again independently [9]. In simple language, the zone of proximal development refers to the difference between what a learner can do without help and what he or she can achieve with guidance and encouragement from a skilled partner. As a result, the term "proximal" denotes abilities that a learner is "near" to acquiring [9].

![Fig. 1. An illustration of Vygotsky’s zone of proximal development adopted from [9].](image)

Vygotsky believed that when a student is in the zone of proximal development for a particular task, providing appropriate assistance will give the student enough of a "boost" to achieve the task [9]. McLeod specifies the implication of ZPD in the teaching-learning process:

Educators are urged to concentrate on three crucial elements that support the learning process in order to help a person advance through the zone of proximal development:

- The presence of someone with greater experience and expertise than the learner, such as a more knowledgeable person or technology like artificial intelligence (AI).
- Social interactions with a knowledgeable mentor who gives provides the learner the chance to practice and observe their skills.
- Scaffolding, or supported activities offered by the teacher or a peer who is more qualified to help the learner as they are guided through the ZPD.

In the teaching-learning process, may it be inside the classroom or outside, the role of the teacher as the "expert" or knowledgeable other is undeniable. In the absence of the teacher, artificial intelligence (AI) can provide assistance in the learning process, which manifests the scaffolding process in every person-to-person or person-to-intelligent machine interaction.

### 2.2 Technology Acceptance Model (TAM)

To forecast how individuals will use and accept information systems and technology, Davis created the Technology Acceptance Model (TAM) in 1989. TAM postulates that *ease of use* and *perceived*
usefulness are the most critical determinants of actual system use [10]. According to the research, an individual's decision to engage in a behavior is the result of an evaluation of the benefit they anticipate gaining from the behavior in relation to the effort and cost invested in engaging in the behavior (Johnson & Payne, 1985; Payne, 1982) in [11]. The definition of perceived usefulness was given as the individual's estimation of how much using a particular technology enhances performance. This construct was conceptualized using Bandura's (1982) idea of outcome judgment, which talks about how a person's expectation of a favorable outcome might cause behavior to be triggered. On the other hand, the degree to which someone perceives a system to be simple and effortless is known as perceived ease of use (Davis, 1989) in [11].

![Fig. 2. Technology Acceptance Model [11].](image)

The diagram shows that technology acceptance is a three-stage process wherein external elements (system design characteristics) set off cognitive reactions (perceived usefulness and ease of use), which, in turn, create an affective response (attitude toward utilizing technology/intention), influencing use behavior [11]. In this study, the respondents, both teachers and students, express the utilitarian function of artificial intelligence (AI). Their actual use of AI to accomplish their academic tasks, such as doing writing and presentations is due to their cognitive reactions that AI apps can help them find the exact words to express themselves, check their errors, and even suggest ways to improve their outputs (perceived usefulness) in just one click of their mouse (perceived ease of use).

3 Methodology
Thematic content analysis (TCA), which is a descriptive presentation of qualitative data, was used in this research. Gbbrich (2007) in [12] asserts that content analysis can be used to both qualitatively and quantitatively assess data. Since the researchers aimed to explore the affordances, constraints, and ethical issues of AI in the English classroom, a qualitative approach in studying, collecting, and analyzing data deem appropriate since "qualitative approaches share a similar goal in that they seek to arrive at an understanding of a particular phenomenon from the perspective of those experiencing it" [12, p. 398]. According to Anderson [13], qualitative data may take the shape of interview transcripts gathered from research participants or other identifiable texts that reflect experientially on the issue of inquiry. In this study, the primary data were taken from an open-ended survey designed
to gather responses from teachers and students about their use, experiences, and perceptions of artificial intelligence (AI).

In this study, there are two different types of data: teacher responses and student survey responses. A Google Form was used to gather responses from the ESL instructors. The teacher-researchers shared a survey with their classes and a few other instructors’ classes in order to obtain data from the students. NVivo 10 was employed to code these data. The survey asks both teachers and students about their opinions on the use of AI in the classroom. The questions include the following:

a. Typical AI applications utilized for academic tasks;
b. Educational and learning applications of each AI software;
c. Assessment of the value of AI in education;
d. Benefits of artificial intelligence for improving English language skills
e. Views and opinions on the application of AI in the classroom.

In analyzing the data, the researchers adapted the Elo and Kyngäs model of content analysis (2008) in [12]. In this research, thematic content analysis (TCA) is used as a qualitative approach to understand personal experiences of the both teachers and students which are mostly expressed in writing via Google Form. Thematic content analysis (TCA), as defined by McClelland [14], is a sort of qualitative content analysis in which themes are representative—or at the very least closely related to—a type of narrative within the data. This method is employed by the researcher based on the research question, types of data, and the research goals. Since the focus of this research is to explore students' and teachers' experiences, perceptions, and understandings of the employment of AI in the teaching and learning process, TCA fulfills that purpose. Additionally, the data were text-based and were generated by inductive coding and analysis. Thus, TCA was chosen as the research methodology for this reason. TCA model consists of three steps: preparation (choosing the unit of analysis, deciding whether to analyze manifest or latent content), organization (open coding and creating categories, grouping codes under higher order headings, and developing a broad description of the research topic through creating categories and subcategories as abstracting), and reporting through models, conceptual systems, conceptual map or categories, and a storyline.

In the coding process, the researchers worked together to discuss and compare the categories of each response. The responses of both teachers and students served as the raw data, from which the themes were inductively generated as they emerged. To identify themes, the researchers studied each response in detail and looked for patterns in the meaning of the data. For peer-debriefing, a qualitative data analysis professional was also sought out to examine the coding and analysis procedure and the themes generated. This is carried out to guarantee the validity and reliability of the process and the results.

4 Results and Discussion
This section presents the data coded and analyzed from the students and the teachers' responses to a survey. The data are presented according to two main categories - the students' responses and the teachers' responses. Meanwhile, the research questions stipulated above will be addressed by making a comparison of the responses of the two groups.
Students
There were 83 Stage 9 and Stage 10 students enrolled at Vinschool Secondary, Times City (T37 campus) during the school year 2022-2023 who participated in the survey. Their responses were used as one of the sources of data in this study.

ESL Teachers
The respondents of this study were 12 secondary ESL teachers in Vinschool Times City (T37 campus) who have been teaching for three months to three and half years at Vinschool.

4.1 AI apps used in teaching and learning
The generated themes from the coded responses of the teachers and students reveal that Google Translate and Grammarly are the top 2 AI apps being used in accomplishing their various language-related tasks. Tables 1 and 2 below summarize the sub-themes generated from each group.

Table 1. Students and Teacher Responses on AI apps used to accomplish English-related tasks

<table>
<thead>
<tr>
<th>*Apps</th>
<th>Students (n = 83)</th>
<th>*Apps</th>
<th>Teachers (n = 12)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>f</td>
<td>%</td>
<td>f</td>
</tr>
<tr>
<td>Google Translate</td>
<td>60</td>
<td>72.29</td>
<td>9</td>
</tr>
<tr>
<td>Grammarly</td>
<td>37</td>
<td>45.58</td>
<td>4</td>
</tr>
<tr>
<td>Quillbot</td>
<td>18</td>
<td>21.69</td>
<td>3</td>
</tr>
<tr>
<td>ChatGPT</td>
<td>2</td>
<td>2.41</td>
<td>2</td>
</tr>
</tbody>
</table>

*multiple responses

Table 1 shows that most students and teachers use Google Translate and Grammarly to accomplish English-related tasks. This result is similar to what Dewi et al. [15] found in their study that students can use AI-based apps like Duolingo, Google Translate, and Grammarly to help them learn English assignments in writing and listening, and speaking (especially pronunciation). Based on the results of this study, AI’s role in learning can affect how well humans communicate. Students can use apps, websites, and other tools that use artificial intelligence (AI) to help them understand hard words, put together sentences, improve their writing and listening skills, and learn other language skills. AI-based learning is an important area that educational institutions may want to focus on to improve performance and creativity.
Table 2. Students and teacher responses on AI apps perceived as beneficial in teaching and learning

<table>
<thead>
<tr>
<th>*Apps</th>
<th>Students (n = 83)</th>
<th>*Apps</th>
<th>Teachers (n = 12)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>f</td>
<td>%</td>
<td></td>
</tr>
<tr>
<td>Google Translate</td>
<td>74</td>
<td>89.16</td>
<td>Google Translate</td>
</tr>
<tr>
<td>Grammarly</td>
<td>56</td>
<td>67.47</td>
<td>Grammarly</td>
</tr>
<tr>
<td>Quillbot</td>
<td>23</td>
<td>27.71</td>
<td>Plagiarism Detector</td>
</tr>
<tr>
<td>ChatGPT</td>
<td>14</td>
<td>11.62</td>
<td>Quillbot</td>
</tr>
</tbody>
</table>

*multiple responses

Table 2 shows that the majority of the student respondents believe that Google Translate is the most practical AI application. In contrast, the majority of the teacher respondents almost equally agree that both Grammarly and Google Translate are beneficial in teaching and learning. Fitria [16] found that AI is a valuable resource for learning English. For example, Google Translate, Text to speech (TTS), English Able, Orai, Elsa, Chatbot, Duolingo, Neo platforms, and many more can simulate intelligence and make decisions the same way people do. It has much power to make a personalized environment where learners can use their senses and practice English skills simultaneously, depending on their current English level, job needs, or interests. Grammarly has a lot of potential as a valuable educational tool that can make up for problems with teacher feedback and help students improve their written grammar. Nevertheless, it is still too soon to say that Grammarly can completely replace teacher feedback because it misses some mistakes (about 35% of the time) and can't find mistakes in certain categories. Students should exercise caution when using Grammarly in English writing activities because the tool's feedback is not always reliable. Teachers should make smart choices about when and how to use Grammarly based on a clear understanding of its strengths and weaknesses.

In a study conducted by Bailey and Lee [17] to compare error types and frequency, and complexity, they found out that after using Grammarly corrections, social network-based writing achieved clarity by employing shorter sentences and simpler word choice. Bailey and Lee emphasized that Grammarly was more appropriate for local surface-level errors (e.g. articles, preposition, and verb-noun agreement) while instructors are needed for issues related to awkward wording and cohesion. This only means AI such as Grammarly has limitations and that it only can auto-correct surface-level structures. In terms of organization and cohesion of ideas, the teacher plays a vital role especially in teaching students and in evaluating whether or not students’ writings have achieved the main purpose of writing, that is, communicating meaning in a specific context. A similar study conducted in Indonesia found that Grammarly has is effective in reducing errors in diction, grammar, spelling, and punctuation; however, it is less effective in improving content and organization of the students’ writing [18].
4.2 Affordances and constraints of AI in an ESL classroom

James J. Gibson, a psychologist, first noticed affordances and wrote about them in his 1977 article The Theory of Affordances. In that work, he introduced the notion that an object's affordances are its functional characteristics [19]. The Cambridge dictionary [20] defines affordances as a use or purpose that a thing can have that people notice as part of the way they see or experience it. In this research, affordances refer to the tasks AI can perform, making the teaching-learning process easy, fast, and convenient. On the other hand, constraint is defined as something that controls someone by having a particular limit [21]. In this study, constraints are situational limitations that affect attitudes, personal attributes, and motivation which are manifested in behaviors and performance of the teachers and the students.

Table 3. Affordances and constraints of AI in an ESL class as perceived by the students

<table>
<thead>
<tr>
<th>Affordances</th>
<th>Students (n = 83)</th>
<th>Constraints</th>
<th>Teachers (n = 12)</th>
</tr>
</thead>
<tbody>
<tr>
<td>It can check grammar in writing outputs in an efficient way.</td>
<td>25</td>
<td>It can induce overdependence on machines for learning and problem-solving.</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>30.12</td>
<td></td>
<td>75.00</td>
</tr>
<tr>
<td>It can provide answers to questions and solve problems in the fastest manner.</td>
<td>16</td>
<td>It needs to be regulated and used in the right way.</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>19.28</td>
<td></td>
<td>75.00</td>
</tr>
<tr>
<td>It can translate ideas from one language to another.</td>
<td>6</td>
<td>It can incite students to cheat.</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>7.23</td>
<td></td>
<td>33.00</td>
</tr>
<tr>
<td>It can search information in a smart and convenient way.</td>
<td>5</td>
<td>It cannot replace human beings.</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>6.02</td>
<td></td>
<td>25.00</td>
</tr>
</tbody>
</table>

*multiple responses

Table 3 shows that the majority of the students perceived AI as helpful in checking grammar in writing outputs in an effective way and providing answers to questions and solving problems in the fastest manner. However, the majority of the respondents agree that AI needs to be controlled and used in the right way as it can induce overdependence on machines for learning and problem-solving. Keerthiwanasha [22] similarly suggested the same result that AI can save time and energy that would have been spent on paperwork and put them toward teaching and learning instead. This leads to coined term AIEd, a fun and active tool to learn. It doesn't use the traditional lecture method; instead, the ESL teacher helps the student learn on his or her own. Since the students have access to personalized lessons, they can see their growth records and most common mistakes, they can talk...
to teachers and others when they need help, and they can learn the lesson even without the teacher. But in order for this AIEd method to work, both ESL teachers and students should know how to use a computer well. Each student should also have a computer with an internet connection, and the AIEd system should be maintained by experts.

Table 4. Affordances and constraints of AI in an ESL class as perceived by the teachers

<table>
<thead>
<tr>
<th>* Affordances</th>
<th>Students (n = 83)</th>
<th>* Constraints</th>
<th>Teachers (n = 12)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>f</td>
<td>%</td>
<td></td>
</tr>
<tr>
<td>It can check spelling mistakes.</td>
<td>10</td>
<td>12.05</td>
<td>It can limit human interaction.</td>
</tr>
<tr>
<td>It helps students in their writing and presentation vocabulary.</td>
<td>7</td>
<td>8.43</td>
<td>It is harmful to the developing language competence.</td>
</tr>
<tr>
<td>It can create personalized materials for students.</td>
<td>4</td>
<td>4.82</td>
<td></td>
</tr>
<tr>
<td>It can track progress and evaluate performance.</td>
<td>3</td>
<td>3.24161</td>
<td></td>
</tr>
<tr>
<td>It can give students vast access to information.</td>
<td>2</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*multiple responses

Table 4 shows that most teacher respondents perceived AI helpful in checking spelling mistakes in writing outputs and enhancing students' vocabulary, especially in preparing their presentations. Furthermore, AI can help teachers plan, put plans into action, and evaluate students' work. AI helps them figure out what their students need so they can plan the best learning content and activities for them. With the help of AI, teachers can keep an eye on their students during activities like group projects and give them immediate feedback. These benefits make teachers' jobs easier and allow them to focus on important things like timely intervention and assessment [23].

Nevertheless, some teachers also pointed out that AI limits human interaction, which may hinder the development of language competence. It is crucial to remember that education is a human-driven process and that the person is the center and key to education. Artificial intelligence can be an excellent teaching assistant when it comes to identifying patterns and problems, providing practice and answers, and facilitating engaging, interactive classroom discussions to maximize student learning. It can make teaching and learning easier, more accessible, accurate, complete, fun, and individualized [24]. However, AI can never replace the teacher's knowledge and socio-emotional support to students.
4.3 Ethical considerations in using AI in an ESL class

The use of AI in teaching and learning has sparked a debate among teachers, students, parents, school managers, and other benefactors. People have varied opinions regarding the advantages and disadvantages of AI. The themes in Table 5 are coded from the responses of students and teachers when asked about their thoughts about AI in education.

Table 5. Ethical issues with using AI in teaching and learning

<table>
<thead>
<tr>
<th><em>Students’ views</em></th>
<th>Students (n = 83)</th>
<th><em>Teachers’ views</em></th>
<th>Teachers (n = 12)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Students are too dependent on AI that it curtails their creativity and problem-solving skills.</td>
<td>9</td>
<td>10.84</td>
<td>Students and teachers need to understand the use of AI in teaching and learning.</td>
</tr>
<tr>
<td>It can improve equality but must be controlled and regulated.</td>
<td>9</td>
<td>10.84</td>
<td>It has negative impacts on identity and human experience.</td>
</tr>
<tr>
<td>It is beneficial, but it can be used by some people to cheat.</td>
<td>4</td>
<td>4.82</td>
<td>There should be clear policies and guidelines to make sure that students are not too dependent on AI.</td>
</tr>
</tbody>
</table>

*multiple responses

Table 5 shows that the majority of the student respondents agreed that AI is beneficial in learning as it curtails creativity and problem-solving skills and can improve equality. However, it must also be controlled as it may encourage cheating among students. The research by Katsnelson [25] made a similar observation, pointing out that machine-learning tools can correct grammar and offer advice on presentation style and tone, but they must be used carefully. According to Gayed et al. [26], the human evaluation of their writing can provide researchers with complete knowledge of participant performance. Not that machine evaluation is completely absent, however. According to research, there is proof of a positive correlation between human and automated assessment. However, these studies also point to areas where human evaluation can fill the gaps left by automated computer scoring. Machine evaluation tends to prioritize surface errors (grammar, spelling) over contextual errors and can overlook writing characteristics that are not expressly tested for. Apparent organizational mistakes that human evaluators can quickly spot.

On the contrary, Table 5 further shows that the majority of teacher respondents concurred that both students and teachers need to understand how AI is used. There is a need to have clear policies and guidelines to prevent students from becoming overly dependent on AI, which
has detrimental effects on identity and the human experience. Ilkka [27] concluded that ethical considerations become extremely important when AI is used in society or educational settings. The ethics of AI is a general policy issue, but it has a particular bearing on educational policies. Therefore, raising educators' and policymakers' awareness of AI technologies and their potential effects is a general policy issue. It is critical for educators and decision-makers to comprehend AI in the framework of the overall future of education. A greater understanding of how to use AI for learning in educational settings and other application domains would be made possible by the mutual interaction between learning sciences and AI research. Learning sciences may have much to give AI research. It is crucial to keep humans involved in the decision-making process because creating AI systems that can explain their behavior and choices may be subject to fundamental theoretical and practical limitations.

5 Summary and Conclusions

This study explored the experiences and perceptions of teachers and students on the use of artificial intelligence (AI) in an ESL classroom. It employed a thematic content analysis of the data gathered through a survey and an interview.

Results showed that teachers and students have similar views and practices in the utilization of artificial intelligence (AI) in English. Both teachers and students use AI apps such as Google Translate and Grammarly to accomplish their English-related tasks (see Table 1). They find Google Translate, Grammarly, and Quillbot beneficial in teaching and learning.

In terms of affordances, students find artificial intelligence (AI) helpful, fast, and convenient in checking grammar errors, solving problems, translating ideas, and searching for information. Meanwhile, students find AI’s constraints in terms of its characteristics to induce overdependence on machines for learning and problem-solving, the need to be regulated and used in the right way, and to incite students to cheat.

Teachers consider AI a helpful tool to help students check spelling mistakes and enhance writing and presentation vocabulary. It can also help them create personalized materials for students, track progress, and evaluate their performance.

Students believe that in utilizing AI as a tool in teaching and learning, teachers and schools must put into consideration that if not controlled, students might be too dependent on AI that it can limit their creativity and problem-solving skills. They acknowledge that it can bring equality in education, but its use must be controlled and regulated. Another issue must be addressed is that students can use AI to cheat during assessments.

For ESL teachers, they believe that there is a need for both students and teachers to understand the use of AI in teaching and learning. They also highlight the negative impacts of AI on identity and human experience. Thus, there should be clear policies and guidelines to ensure that students use AI apps in their learning correctly.

6 Recommendations

While most of the constraints mentioned by ESL teachers and students are ethical rather than technical, the academe faces pedagogy issues necessitating the creation of the recommendations below.

First, teachers and students believe AI apps can induce cheating during formative and summative assessments. For instance, students can produce well-written essays with the use of AI apps but can hardly communicate in a face-to-face conversation. It is imperative that the school would
specify in its institutional policy what constitutes cheating, plagiarism, and their disciplinary consequences.

Next, since the use of AI has become unstoppable and inevitable in English classes, teachers must be trained on the features of some AI apps to maximize their potential in the teaching and learning process. In turn, the teachers can also train the students how to use AI correctly.

Third, due to the infancy of using AI in education, many teachers need to be open to the idea of utilizing AI in the classroom. To ensure that teachers understand the features of AI, they have to undergo training to experience and realize AI’s potential to reduce teachers' workload, especially in preparing and administering assessments and providing progress reports and feedback.

Fourth, teachers should engage in reflective practice in using AI in class in order to assess their professional knowledge and improve teaching and learning quality. It was also suggested that teachers interact and share best practices and classroom techniques, especially with AI tools.

Finally, the school must ensure ethical, inclusive, and equitable use of AI in education by creating a system-wide vision of AI and education policies. The researchers would like to adapt the policy recommendations of UNESCO in [2, p. 31], which emphasizes that "the primary purpose of applying AI in education should be to enhance learning, enabling every learner to develop their potential, which policies should reflect and support."

7 Research Limitations
This is a small-scale classroom-based study with 84 student participants and 12 ESL secondary teachers. Although AI’s impact on education is a global concern, the study’s response does not represent the larger environment. Meanwhile, the study focuses only on the affordances, constraints, and ethical issues of using AI in an ESL classroom.

Although the respondents were ESL students and teachers, no attention was paid to the components of language acquisition and learning, particularly language skill development. As a result, future study on the impact of AI on language learning, particularly listening, reading, speaking, and writing is possible. Furthermore, more in-depth research on AI's impact on student's progress and English proficiency is advocated.

References


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