Vinsers’ Initiatives: Perceptions on the use of AI in ESL Learning among Selected Grade 11 Learners

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Abstract

Artificial Intelligence (AI) is emerging as a useful tool in helping to improve the quality of education. However, studies on student perceptions of the use of AI in learning English as a Second Language are scarce (ESL). The purpose of this study is to investigate the attitudes of Vinschool Ocean Park Grade 11 students on the employment of AI in ESL in terms of orientation, use, and impact. A qualitative-descriptive method was adopted to gain in-depth insights into the perceptions of Grade 11 students. The data was gathered through semi-structured interviews, and the transcribed data were subjected to content analysis. Findings suggested that selected Grade 11 learners have a moderate level of familiarity with AI in education. The learners want to know more and have some reservations regarding the use and implications of AI. They have used only a few AI applications in their learning of ESL, with varying expectations and satisfaction levels of the outcomes. In light of the results, this research recommends a broader integration of AI in the classroom, accompanied by adequate training to improve teacher and student understanding and usage. Future studies on AI in learning ESL should focus more on student perspectives to evaluate how AI can be used to enhance educational experiences.

Keywords- Artificial Intelligence (AI), English as a Second Language (ESL), perceptions, quality, impact

I. INTRODUCTION

Learning English as a Secondary Language (ESL) has transformed over time. As such, the shift of some technological changes has impacted the way English is learned, including the rise of personal computers, the Internet, social networking, the sharing economy, and conversational user interfaces. One impact that has set the trend is the use of AI (Artificial Intelligence).

As defined by Keerthiwansha, AI is demonstrated by machines, in contrast to the natural intelligence (NI) displayed by humans and other animals. AI and its advancement have created and continuously created the next measures in education. These include new obstacles and requirements for both educators and pupils but much more on the learning process which includes what means, methods, and strategies on how to acquire the language should be adapted [5].

In a study by Mukhallafi, it was emphasized how important studies on the use of AI in ESL learning have been conducted [8]. The study of Lotze sums up that using AI applications supports language and communication skills, especially ESL skills through maximizing intelligent dialog boxes [6]. Moreover, Walker, et al. also expanded on the importance of AI in creating written texts, increasing students’ skills in structuring sentences and building up texts, and exercising writing and reading skills [10].

Thus, an impression is imposed by Yang in his study remarks that AI does not only change the way of students’ language input and output, which enables students' language learning to penetrate their daily life, but also plays a significant role in stimulating the development and change in the English learning mode [12].

Another study entitled Artificial Intelligence in EFL Classrooms: Friend or Foe? by Sumaku, et al. focuses on whether AI is detrimental or advantageous to EFL teaching and learning through the teachers’ perceptions. What teachers think regarding the implementation of AI in their EFL classrooms [9].
As the integration of AI continues to have a significant impact on the world of education, it is becoming increasingly important to understand learner perceptions and how they perceive its use in English as a Second Language (ESL) instruction.

One critical aspect of these perceptions may be their level of familiarity or orientation to AI, how they use these technologies in their language learning, and their perceived impact on the quality of their language education. While several studies on the perceptions of AI in ESL learning have been executed, the majority of these studies have tended to focus on the teachers rather than the students.

In this study, the researchers aim to investigate students' perceptions in Vietnam specifically in Vinschool Ocean Park Secondary and High School about the use of AI in learning ESL. By exploring students' familiarity and use of AI technologies and their perceptions regarding the quality of its impact, this study aims to help fill the gap in the literature on this important but understudied topic.

II. REVIEW OF RELATED LITERATURE

With an increasing number of AI technology and applications in educational practices, English as Second Language (ESL) has been primarily oriented towards infusing Intelligent Tutoring Systems (ITS), chatbots, and speech recognition mechanisms to improve students’ communicative language abilities. However, understanding the perceptions and attitudes of fellow learners towards AI incorporation in ESL education remains crucial.

A. Familiarity with AI

An article which investigated the impact of AI-mediated instruction on English learning achievement, L2 motivation, and self-regulated learning found that the use of AI in language instruction significantly improved English learning outcomes, increased learner motivation, and facilitated self-regulated learning. The findings highlighted the potential of AI-driven technologies to transform language education and enhance learning outcomes [11].

On the other hand, the integration of AI technology in language learning presents challenges and opportunities for learners. The "AI divide" refers to the disparities in the adoption and utilization of AI tools among language learners. To ensure a student-centered language learning environment, educators should address the AI divide by providing support and resources to help learners become more familiar and comfortable with AI technology, enabling them to benefit from personalized learning experiences and efficient assessment methods [3].

Additionally, some ESL learners may doubt whether AI technology is truly effective for language learning. To address this, educators should make more efforts to convince learners about the benefits of AI and get them excited about using it. This can be done by providing support, resources, and showing examples of how AI can help with personalized learning and better assessments. By doing so, educators can help ESL learners see the value of AI in their language learning journey [3].

The studies mentioned above emphasize the need for more AI technology awareness and education among ESL learners to encourage its more effective use for learning.

B. Application of AI

The article "New Era of Artificial Intelligence in Education: Towards a Sustainable Multifaceted Revolution" explored the potential of AI in education. It suggested that incorporating AI technology in teaching ESL can provide benefits such as real-time feedback, personalized learning experiences, and improved communication and pronunciation skills. Therefore, when AI is utilized in educational settings, students can receive immediate guidance, customized instruction, and enhanced language proficiency [4].

In addition, AI may enhance language learning and communication. A study found that learners were highly interested in AI-based self-assessment, as it helped them measure progress and identify areas of
weakness, leading to effective language proficiency improvement. The findings highlighted the potential benefits of integrating AI technology in English teaching and learning for both learners and teachers [7].

C. Quality and Impact of Using AI

Existing literature, consistently supports the positive impact of AI-assisted language learning on English language learners' overall achievement and specific language skills. These studies demonstrate that AI-powered tools offer personalized feedback, adaptive learning experiences, and targeted practice activities, effectively enhancing language acquisition and proficiency [11].

Furthermore, there is a positive influence of AI-powered language learning tools on self-regulated learning and learner motivation. These tools provide immediate feedback, progress tracking, and personalized learning paths, fostering learners' self-directed learning and effective regulation of learning strategies. Additionally, the interactive and engaging nature of AI applications enhances learner motivation and persistence through gamification elements and adaptive content [2].

Moreover, AI has a beneficial effect on the writing skills of ESL learners, particularly when integrated with intelligent tutoring systems. Research has demonstrated that AI has the capability to deliver personalized feedback tailored to individual learners' requirements, thereby aiding in the enhancement of their writing skills [1].

Overall, these studies suggest that although there are still some concerns about integrating AI into ESL education, AI can have a positive impact on learners' writing skills, however, it is important to be mindful of the risks as well.

The current literature underscores the importance of an educated and positive perception of AI incorporation in ESL education among learners. Consequently, Incorporating AI into ESL classrooms might encourage digital literacy skills, provide learners with immediate feedback, and, with intelligent tutoring systems, enhance the learners' ESL learning experience. Nonetheless, future usability testing and user acceptability studies need to be conducted.

This study, therefore, aims to address the following research questions:

1. How do select Vinschool Ocean Park Grade 11 learners define the use of AI for education?
   a. What do learners know about AI so far?
   b. What do learners want to know about AI?
2. How do selected Vinschool Ocean Park Grade 11 learners use AI for educational purposes, specifically in learning ESL?
   a. What AI applications have learners used as support?
   b. What features have learners expected using AI applications?
   c. What results have learners made after the use?
3. How do select Vinschool Ocean Park Grade 11 learners perceive their use of AI in learning ESL?
   a. What is/are their learning experience/s?

III. METHODOLOGY

This research adopted a qualitative approach to explore the phenomenon under investigation in-depth. Qualitative methods help us to understand subjective experiences better and identify patterns of meaning in perceptions and experiences.

A. Design

This study used an ethnographic design involving immersion in a particular culture or community to gain an insider perspective. It allowed the researchers to understand the experiences and meanings of people in the AI usage context.
B. Approaches and Instruments

A Google form with semi-structured questions was sent out to the selected Grade 11 learners. After answering the Google form, one-on-one interviews were scheduled and conducted to collect data on their experiences, attitudes, and beliefs related to the phenomenon under investigation. Qualitative observation was used to observe and record behaviors, patterns, and interactions of study participants in their natural settings.

C. Participants

The study involved selected Grade 11 learners of 3 ESL classes from Vinschool Ocean Park Secondary and High School. The participants were chosen based on their willingness to participate and their availability. The term “selected” was used to tag the participants. This is a scheme to establish trust and credibility in the study as the term "selected" implies that participants were carefully chosen even if they volunteered.

D. Data Analysis

The data were analyzed through a process of qualitative content analysis. The data was reviewed and discussed to identify overarching themes and patterns emerging from the participant responses and observation notes. The themes were then used to draw conclusions and inform recommendations for future studies which are set to identify the attitudes, beliefs, and cultural norms of a particular group by observing and engaging in the activities of the group.

E. Ethical Consideration

Before administering the interviews, a consent letter to conduct the study was sent to the School Principal and the participants. After the approval, a briefing was given to the learners regarding the research’s intent, and they were invited to participate voluntarily after consenting upon the receipt of their approval. The personal information of the participants is kept confidential and secure.

Note: Intentional spacing has been included in the text to allow for clear segregation between tables, figures, and discussion.

IV. RESULTS AND DISCUSSION

This section presents the perceptions of selected Grade 11 learners regarding the use of AI in ESL in terms of orientation (familiarity), use (application), and impact (quality). These perceptions (1) describe the orientation level of the selected Grade 11 learners of AI, (2) explore the scope of AI usage and application in learning ESL, and (3) explain the impact on the quality of learning ESL using or not using AI based on learner’s perceptions.

1. Definition and Orientation of AI

<table>
<thead>
<tr>
<th>Responses from Grade 11 Learners</th>
<th>Quantity</th>
<th>Emerged Themes</th>
</tr>
</thead>
<tbody>
<tr>
<td>The simulation of human intelligence processes by machines, especially computer systems.</td>
<td>4</td>
<td>Intelligence Simulation</td>
</tr>
<tr>
<td>A machine or software programmed to think and imitate like a human being</td>
<td>3</td>
<td>Human-like Thinking</td>
</tr>
<tr>
<td>The kind of intelligence created by humans and trained using data sets provided to them.</td>
<td>2</td>
<td>Data-Driven Intelligence</td>
</tr>
<tr>
<td>The ability to see, understand, and translate spoken and written language, analyze data, make recommendations, and more. It</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>
Responses from Grade 11 Learners | Quantity | Emerged Themes
---|---|---
*can be organized in several ways, depending on stages of development or actions being performed.* | 1 | Functional Capabilities

AI is a system or something about a technology or computer science | 1 | Technological Perspective

Table 1 shows the learners’ perceptions of AI. Different themes emerged after analyzing the learners’ responses. The first and most evident theme is the simulation of human intelligence processes by machines, especially computer systems. Almost all the definitions in the given data revolve around this idea of machines imitating human intelligence.

Another important theme is the programming of machines to think and imitate human beings. This idea points to a conception of AI as an attempt to replicate human cognition.

AI also possesses the kind of intelligence created by humans and trained using data sets provided to them. This theme points to the importance of the data used to train AI algorithms.

The next theme is the capability of AI to analyze data, make recommendations, understand, and translate spoken and written language among other things. The primary focus, therefore, is on the functionalities that AI can perform.

Lastly, it revolves around the idea that AI is a system or something about technology or computer science. This theme highlights the importance of AI as a product of technological innovation and computer science.

Table 2 shows what the learners want to know about AI. More of the responses suggest queries about the proper application of AI including how it is created and how it will be working.

Further, themes were identified. First, developing AI focuses on the trajectory of the AI industry and the innovations and advancements that are expected to occur. Meanwhile, understanding AI relates to the explanation of how AI technology works, including its components, functions, and features.

Creating AI on the other hand is concerned with the process and tools necessary to develop AI, such as programming languages, algorithms, and software. Gaining from AI means the benefits to get which lead to the various advantages that AI can provide in different areas of life, including education, healthcare, and business. The theme of comparing AI and human intelligence involves a comparison between AI and human intelligence, including similarities and differences in terms of cognitive abilities, decision-making, and learning.
As such, each of the abovementioned themes reflects different areas of inquiry about AI, and understanding these themes can help individuals to be more informed about AI and its role in the future -especially in learning not only in ESL but in other fields, too.

2. Use of AI

Table 3: What AI applications have learners used as support in learning ESL

<table>
<thead>
<tr>
<th>Responses from Grade 11 Learners</th>
<th>Quantity</th>
<th>Emergent Themes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grammarly</td>
<td>5</td>
<td>Language Analysis and Correction</td>
</tr>
<tr>
<td>Quillbot</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>ELSA Speak</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Duolingo</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Chat Sonic</td>
<td>2</td>
<td>Interactive Communication</td>
</tr>
<tr>
<td>Google Translate</td>
<td>2</td>
<td>Language Translation</td>
</tr>
<tr>
<td>Quizlet/Quizizz</td>
<td>1</td>
<td>Interactive Learning</td>
</tr>
<tr>
<td>Khan Academy</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Chat GPT</td>
<td>1</td>
<td>Language Comprehension</td>
</tr>
<tr>
<td>One AI</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>

Table 3 shows that most learners have used Grammarly and Quillbot as support in learning ESL. Moreover, several themes were interpreted regarding the use of AI applications in ESL learning.

The first detected motif is associated with the employment of AI technologies such as Grammarly, Quillbot, Duolingo and ELSA Speak that provide language analysis and corrective feedback for language learners. These tools help learners to improve their grammar, sentence structure, and pronunciation.

Another theme focused on is interactive communication through AI tools such as Quizizz Chat and BoChat Sonic that allow for real-time interaction with native speakers or AI-based chatbots. This form of engagement can assist students in practicing their language abilities in a more true-to-life communicative setting.

The third theme is related to language translation using AI tools such as Google Translate. These tools allow learners to quickly and easily translate text or speech when communicating with others in their non-native language.

Interactive learning through AI-based tools is also highlighted. These tools are Khan Academy and Quizlet which offer interactive learning experiences for language learners. These interactive tools allow learners to practice and reinforce their language skills in a variety of ways.

Lastly, the use of AI-based language comprehension tools such as Chat GPT and One AI provides learners access to comprehensive extensive language databases, thus strengthening their grasp of the language.

AI-based tools have facilitated the process of ESL learning in several ways, including providing language analysis and correction, interactive communication, language translation, interactive learning experiences, and language comprehension tools.
Table 4: What features have learners expected using AI applications?

<table>
<thead>
<tr>
<th>Responses from Grade 11 Learners</th>
<th>Quantity</th>
<th>Emergent Themes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recommendation of topics to practice speaking, and adding ideas for writing</td>
<td>2</td>
<td>Personalization</td>
</tr>
<tr>
<td>Ability to talk to the learners as nicely as humans through conversations</td>
<td>2</td>
<td>Natural language processing and conversation AI</td>
</tr>
<tr>
<td>Ability to ingest large-scale data and natural language processing</td>
<td>2</td>
<td>Scalability</td>
</tr>
<tr>
<td>AI’s adaptability when evaluating users based on their abilities</td>
<td>6</td>
<td>Flexibility</td>
</tr>
<tr>
<td>Free with more tools</td>
<td>3</td>
<td>Affordability</td>
</tr>
<tr>
<td>Learning everywhere with Wi-Fi</td>
<td>2</td>
<td>Mobility</td>
</tr>
</tbody>
</table>

Table 4 reveals that learners expect AI to communicate with and focus on the user, from that, making appropriate recommendations. Certain themes were also seen after analyzing the given data.

Primarily, the AI assistant is expected to recommend personalized topics for practicing speaking and suggest writing ideas to the learners. This theme indicates that learners today prioritize personalized learning experiences, which could help them improve their communication and writing skills.

Learners expect AI applications to be able to talk to them as nicely as humans through conversations. This theme suggests that these learners may prefer an AI assistant that can understand and respond to them naturally, which requires advanced natural language processing (NLP) capabilities.

Scalability, with an emphasis on the ability to ingest large-scale data, is also considered. This theme highlights learners’ eagerness to harness the power of big data to learn better and implies a need for AI applications that can analyze massive amounts of data quickly and efficiently.

It is also highlighted that learners want an AI assistant that can evaluate their abilities and adjust their learning pace to match their needs. This theme indicates that learners today are looking for flexible learning applications that can be customized to suit their learning style.

Affordability, with a preference for free and more tools, is emphasized, too. This theme underscores the fact that not all learners have access to expensive learning tools or resources. They preferred a cost-effective tool that offers meaningful learning opportunities.

Finally, learning everywhere with Wi-Fi, pointing to mobility. This implies that learners today want an AI assistant that they can access even when they are on the go, working remotely, or not within the traditional classroom setup. They are looking for learning tools that offer a high degree of flexibility and mobility.

Overall, these themes suggest that learners today want personalized and scalable learning applications that are affordable, convenient, adaptive to their learning pace, portable everywhere with wifi, and have a natural language and conversation AI capability.
Table 5 shows results learners have made from using AI. Further, the following themes that can be associated with the learners’ results after implementing the use of AI were identified.

The use of AI tools allows learners to search for the definitions of words they do not know, search for tests and tasks to practice, and focus on highlighting essential information from reading materials. As such, vocabulary enhancement highlights the importance of developing vocabulary skills using AI tools’ functionalities.
Writing progression is evident as the perceptions indicate the use of AI tools in grammar corrections, writing skills, and paraphrasing. This theme demonstrates how AI technologies may assist students in honing their writing ability.

AI tools also allow learners to practice listening skills by providing tests and scripts. Learners can also use AI tools to access English easily through music, short videos, and language exercises. Therefore, the enhancement in listening comprehension highlights how AI helps learners to practice their listening skills even without the support of native speakers.

Speaking Abilities Development is clear when AI tools are used in controlling pronunciation, accent, and vocabulary, which helps in developing speaking abilities. This theme highlights the creative usage of AI tools to improve English-speaking skills.

In a nutshell, the above themes illustrate how AI tools are instrumental in aiding learners' success in developing and enhancing critical English learning skills.

Table 6: What is/are learner/s’ learning experience/s?

<table>
<thead>
<tr>
<th>Responses from Grade 11 Learners</th>
<th>Quantity</th>
<th>Emergent Themes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Learning about common grammar mistakes made and receiving real-time feedback on a writing output</td>
<td>3</td>
<td>Grammar Correction</td>
</tr>
<tr>
<td>Learning grammar and writing skills in a structured manner through the application's video lectures and practice exercises</td>
<td>2</td>
<td>More Exposure to the Language</td>
</tr>
<tr>
<td>Generating writing prompts or dialogue scenarios to practice creative writing skills</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Improving pronunciation and accent by recording yourself speaking and having the app analyze some speech for errors</td>
<td>3</td>
<td>Better Pronunciation</td>
</tr>
<tr>
<td>Practicing conversation skills with an AI chatbot that responds to you in real-time</td>
<td>3</td>
<td>Personalization</td>
</tr>
<tr>
<td>Communicating with an AI language tutor to receive personalized language learning support and feedback</td>
<td>3</td>
<td>Interactive Feedback</td>
</tr>
</tbody>
</table>

Table 6 shows the multiple learning experiences of the selected Grade 11 learners in using AI in ESL and certain themes associated with them.

Grammar correction. AI-based grammar checkers and feedback tools that can highlight grammar errors and suggest corrections can help learners systematically develop language structures.

More exposure to the language. AI language learning programs based on speaking and writing play a vital role in providing added practice exposure to the language even beyond class hours.

Better pronunciation. Pronunciation is often a tough area for ESL learners. An AI application that uses speech recognition can help learners improve their pronunciation by offering feedback and corrections.

Personalization. AI-powered software that evaluates personal proficiency levels and adjusts learning materials to match individual learner needs.

Interactive feedback. Interactive exercises and personalization tools supported by AI technologies allow learners to receive instant, personalized feedback that will supplement their learning in many diverse ways.
In conclusion, AI applications have vast potential to enhance the learning experience of ESL learners in multiple ways. Grade 11 ESL learners could explore AI-powered roles beyond their digital benefits to personal development and accessible language immersion.

V. CONCLUSION

Following the investigation, it was discovered that selected Vinschool Ocean Park students in Grade 11 have a rudimentary grasp of AI. They know what AI is but still have many questions regarding AI and its applications in the ESL education sector. With regards to AI applications, students have used applications such as translation software, language tutor software, grammar-checking software, and vocabulary builder applications to aid ESL learning. These applications have greatly benefited students in terms of improving their language abilities.

The pupils' impressions of AI have been beneficial since it has improved their understanding of the English language. The student's learning experience with AI has been favorable overall. However, students were also concerned about the accuracy of the AI application and how it would improve further in the future.

VI. RECOMMENDATION

To improve students' understanding of AI in ESL learning, it is recommended that educators and institutions develop teaching materials to incorporate AI into the curriculum. Seminars and training sessions can also be arranged to help both teachers and students to better understand AI starting with the study's environment, Vinschool Ocean Park Secondary and High School.

Education institutions should also provide students with access to the latest AI applications to enhance their learning experiences in ESL. It is recommended that students are encouraged to use AI applications as part of their studies to augment their understanding of the subject matter.

Finally, more research should be conducted in Vietnam's education system to better understand the perceptions of AI in learning ESL from the student's perspective. This will help educators and institutions to develop teaching materials, curricula, and AI applications that comply with their pupils' requirements and desires.

VII. ACKNOWLEDGEMENT

We would like to acknowledge and express our sincere appreciation to Vinschool Ocean Park Secondary, our school, for providing us with the essential resources and support to complete our research paper.

We extend our gratitude to Dr. Sa Thị Lan Anh, our school principal, for her unwavering support and guidance throughout the research project. Her leadership has inspired us to strive for excellence and achieve our goals.

Our heartfelt appreciation also goes out to Ms. Sherin Campos, Ms. Nguyễn Hồng Nhung, and Ms. Trần Thị Hoàng Anh, our school vice-principals, for their constant support and motivation. Their insightful feedback and encouragement have been invaluable to us.

We extend our heartfelt thanks to Mr. Ruseller Malinao, the Head of the ESL Department together with Ms. Nguyễn Thị Ngọc Huỳnh and Ms. Nguyễn Thị Phương, ESL coordinators, for their priceless support, mentorship, and aid in every phase of our research paper. Their expertise and commitment have been extremely valuable to us.

We thank the teachers from the ESL Department for providing us with the necessary skills and knowledge to conduct our research. Their patient guidance has been instrumental in helping us complete our research paper.

We are grateful to the Grade 11 students from 11E3, 11E4, and 11E5 classes (A.Y 2022-2023) for their participation and valuable insights during the research process. Their contributions have enriched our research and helped us achieve our objectives.

Finally, we would like to extend our gratitude to all other subject teachers and staff for their technical support. Their assistance has been crucial in ensuring the success of our research project.
VIII. REFERENCES


