# The Use of Artificial Intelligence (Ai) among Malay Language Students in Private Higher Education Institutions

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ABSTRACT: The discovery of the latest artificial intelligence chatbot technology, commonly known as AI such as Chat-GPT in early 2023, has driven significant changes in the teaching and learning (PdP) of languages. Many parties, especially students in higher education institutions, have used AI as their primary reference for information gathering related to their assignments. This has resulted in a heavy reliance on AI, which has had a significant impact on their mastery of the Malay language. These students have experienced a decline in their vocabulary mastery and this has affected their examination results. This study aims to identify the factors behind the use of AI among Malay language students in private higher education institutions (IPTS) and analyze the impact of AI usage on their mastery of the Malay language. This study is qualitative in nature and uses interviews as the main method for data collection. Interviews were conducted with four respondents consisting of two lecturers and two students from an IPTS. The study was conducted in the city of Ipoh, Perak, to facilitate data collection. Through this interview-based study, all information was gathered and analyzed to answer the research questions based on the study's objectives. The findings of the study indicate that the main factors contributing to students' over-reliance on AI are boredom with outdated teaching methods that lack technology involvement, laziness to read books, the need to maximize time efficiency in finding information, and the free access to AI services without any charges.

**KEYWORDS**: Artificial Intelligence (AI), mastery of the Malay language, IPTS students, impact of AI, factors of AI usage.

### I. INTRODUCTION

Artificial Intelligence (AI) is the ability of computers to perform tasks that are typically carried out by humans (Encyclopedia Britannica, 2021). AI has become one of the most prominent technological innovations of the 21st century. This technology not only impacts the industrial sector but also plays a significant role in shaping the global education system today. Nurul Insaniah (2023) states that the use of AI in education offers extraordinary potential in addressing issues, educational gaps, limited resources, and the challenges faced by the education system in adapting to current changes. AI is believed to be capable of driving a positive transformation in the education system (Holmes et al., 2019).

Language learning is also not immune to the influence of AI. Zucchet (2023) states that AI is no longer solely focused on science and technology; it has now integrated into every aspect of society, and one area with significant potential is language learning. In today's technology, languages are learned through the emergence of AI-based applications that replace traditional methods of teaching languages. Zuraina (2020) mentions that various AI-based applications can assist language teaching among teachers and educators. Applications such as Microsoft Cortana, Siri, and Google Now have now incorporated the Malay language as one of the command languages in their operation. This demonstrates that the Malay language is also keeping pace with the rapid

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development of AI (Salmah, 2023). Shin (2018) explains that in the fast-paced environment of the Fourth Industrial Revolution, technology is being optimized for use in teaching and learning. AI is a technology that should be introduced to language instructors, as teachers need to overcome the capabilities of AI in managing classrooms.

Therefore, a study is needed to examine the factors and effects of AI usage among Malay language students in order to determine whether the influence of AI can have a positive impact on students' mastery of the Malay language, or the opposite. A similar exploration of information is also conducted with educators to assess the capability of AI in teaching the Malay language today.

#### II. LITERATUR REVIEW

### **Artificial Intelligence in Education**

The emergence of the first-generation AI, Chat-GPT, which is easy to operate, in 2022 shocked the entire world. Various sectors, including education, have been impacted by the arrival of Chat-GPT and other AI models (UNESCO, 2023). Anders (2023) states that the emergence of Chat-GPT in education has raised concerns among various parties regarding issues of cheating in assignment preparation and learning, which could affect the academic standards of students. However, Tilli (2023) explains that initially, many universities were concerned about the effects of Chat-GPT, but eventually, they accepted Chat-GPT as one of the modern learning tools. In addition to concerns about the potential consequences of using Chat-GPT and other AI tools, schools and universities should agree to use AI in an ethical and transparent manner, as it offers more benefits than harm (Russell Group, 2023). Many studies have been conducted by researchers abroad on the impact of AI in higher education.

Alshater (2022) states that Chat-GPT can be a tool for generating ideas for a study, but it is not the right medium for conducting empirical research. This statement is supported by Aydın and Karaarslan (2022), who found that the writing produced using Chat-GPT had many gaps. The journal generated with Chat-GPT lacked proper writing structure, had inaccurate information synthesis, and was more likely to lean towards plagiarism. In contrast, Gao et al. (2022) found that their study abstract generated with Chat-GPT met the required standards and showed no signs of plagiarism. Dowling and Lucey (2023), on the other hand, found in their study that Chat-GPT could generate valuable ideas in academic writing.

Students and educators are said to be becoming increasingly lazy, with reduced thinking abilities, and security issues in education are also implications of AI usage in education. Sayed Fayaz Ahmad et al. (2023) explain that the tendency to use AI in education will result in both educators and students becoming lazier, slower in decision-making, and raise several security issues in education. Hassani and Unger (2020) support this statement by explaining that the use of AI will cause students to rely less on their cognitive abilities for thinking and decision-making. Dependence on AI will reduce the mind's capacity to think. Additionally, frequent interaction with technology will cause students to think according to AI algorithms without understanding what is being conveyed (Sarwat, 2018). Krakauer (2016) states that the use of AI in any field undoubtedly makes human tasks easier, but it indirectly leads to humans becoming lazy.

The emergence of AI in the education sector also brings many benefits. Hübner (2021) found that the presence of AI in education provides vast exploration opportunities in the field. Since the emergence of COVID-19, AI has played a crucial role in education and has indirectly influenced a shift from traditional teaching methods. Teachers, educators, and students had various teaching options through AI to continue learning sessions during the pandemic (Akram et al., 2021). Schiff (2021) states that AI applications such as chatbots, virtual reality (VR), tutoring systems, and others have helped the education sector face the challenges of future education. Tasks for educators, such as recording grades, planning lessons, and preparing learning materials, have also become easier with the use of AI (Andreotta and Kirkham, 2021). However, AI research in the field of education in Malaysia is still limited, especially in the Malay language field. Through past studies, further research on the same impact on students in Malaysia can be conducted more broadly.

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#### **Artificial Intelligence in Language Learning**

Salmah (2023) states that the Malay language needs to evolve alongside AI technology so that it can stand strong and be preserved globally. According to Salmah (2023), in the field of Malay language education, the use of AI-powered speech generators can enhance speaking skills. Users can improve their speaking abilities through virtual communication practice, understand Malay authentically, and stimulate active engagement in information retrieval using AI. However, research on the use of AI in Malay language learning is still limited.

Bin Zou et al. (2023) state that their study found AI can have a positive impact on language skills. AI is seen to enhance students' reading skills and assist teachers in teaching reading to students. Qin (2022) explains that AI can help foreign language learners quickly and accurately identify language errors such as spelling and grammar mistakes. Hi Ai (2017) supports this finding through his study, which shows that AI can accurately identify grammar errors in English and help students write correct English. Ruiz et al. (2021) explain that AI can also improve vocabulary in language learning. In writing skills, various studies have proven AI's effectiveness in enhancing writing abilities. Wei-Chen and Gi-Zen (2019) state that there was improvement in online English writing learning, although this improvement still did not meet university standards.

In second language acquisition, AI also plays its role as a catalyst for language learning. Subramanian et al. (2020) explain that second language acquisition is a challenging process, but with the involvement of AI, there is promising potential in the effort to acquire a language. Agrawal et al. (2020) also argue that speakers or students who use technology show faster fluency in the language compared to those using traditional methods. AI technologies such as Natural Language Processing (NLP) and other language machines create various language learning applications, such as speech recognition and task identification capabilities (Bisson et al., 2019). Fotios et al. (2021) state that AI applications in language allow students to improve speaking skills, receive quick feedback on pronunciation and grammar, and provide a new language experience outside the classroom.

A study by Gupta et al. (2020) shows that chatbots such as Chat-GPT can provide a good language learning experience for students, as the application can respond well and quickly, meeting the speaker's needs. Asim Kumar Betal (2023) lists five roles of AI in second language acquisition: 1. Self-learning tools, 2. Speech recognition, 3. Natural Language Processing, 4. Smart facilitators, and 5. Translation and language processing. Various other studies show the positive impact of AI in language teaching. Therefore, a study on the impact of AI in Malay language teaching needs to be conducted to examine how AI's influence can enhance the Malay language skills of students and educators, especially for individuals who consider Malay as their second language.

### III. OBJECTIVE OF STUDY

Specifically, the objectives of this study are to:

- 1. Identify the factors behind the use of AI among Malay language students in private higher education institutions (IPTS).
- 2. Identify the impact of AI usage on the mastery of the Malay language among IPTS students.

#### IV. METHODOLOGY

This study is conducted with the aim of identifying the factors behind the use of AI among Malay language students in private higher education institutions (IPTS). In addition, an exploration of the effects of AI usage is also carried out to identify the influence of AI in Malay language learning among students in these IPTS. Therefore, a qualitative case study approach using interviews as the research instrument was implemented to collect data for this study. Reflective interviews involving the researcher and respondents were conducted orally (in conversation) and recorded throughout the process for transcription purposes, to obtain relevant information. This study was conducted at two private higher education institutions located

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in Ipoh, Perak. The research methods and strategies were systematically arranged to gather data and information to achieve the research objectives.

Interviews need to be reflective and able to reflect real-life situations and conditions related to a phenomenon (Denzin, 2001). The qualitative method is seen as capable of explaining the information to be obtained holistically from the appropriate sources, without any manipulation by the researcher (Merriam, 2009). Consequently, this study involves two different private higher education institutions (IPTS) located in Ipoh, Perak, referring to a single-case multiple-site study (Yin, 2012; Creswell, 2008). The following provides further explanation.

- 1. **Single Case**: Refers to the issue of AI usage among Malay language students in IPTS, based on the study location chosen by the researcher. The primary focus of this study is to explore information regarding the factors triggering the issue, the implications, and the strategies taken by the respondents to address the matter.
- 2. **Multiple Sites**: Refers to the locations of the IPTS selected by the researcher to obtain and gather study data. In this study, the researcher has chosen two private educational institutions in different locations: Cosmopoint College and the International University (UNITAR). Both of these private higher education institutions are located in Ipoh, Perak. The researcher has identified lecturers and students who are facing issues related to code-switching and code-mixing.

The selection of the sampling method aims to allow the researcher to obtain accurate, holistic, and meaningful information about the subject being studied (Merriam, 2019). The sample should align with the study's findings to achieve the research objectives. The sample is carefully chosen to meet the necessary criteria to ensure that readers can understand the results of the study. Therefore, two lecturers and two students from IPTS were selected as participants in the study based on the established criteria for the study participants.

The research instrument used to obtain data is a semi-structured interview, which is analyzed using thematic analysis. The interview questions serve as the primary instrument in the data collection process. Semi-structured questions can be modified and organized in a specific order to ensure that the study sample/participants can understand them clearly. A minimum prompting technique is used to gather further information regarding the issues discussed during the interview session. Additionally, questions may be added or removed during the interview process. The interview questions underwent a review and correction process by experts with experience in qualitative research related to the issues present at the higher education institution. Therefore, these structured interviews were conducted with two Malay language lecturers and two Malay language students at the IPTS located in Ipoh, Perak.

## V. ANALYSIS OF RESEARCH DATA

This chapter discusses the research findings by analyzing the results of interviews with two lecturers from two private higher education institutions and two students studying at the same two private higher education institutions located in the Ipoh city area, Perak. The researcher conducted interview sessions with all four respondents to gather data for this study. These four respondents were given code labels as PBM1 and PBM2 for the lecturer category and P1 and P2 for the student category. The demographics of the respondents include gender, ethnicity, age range, IPTS location, duration of service/study, and their current academic qualifications.

#### **Respondent Demographics**

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Variables	Details	Frequency (f)	Percentage
			%)
Gender	Male	PBM 1, P1	50%
	Female	PBM 2, P2	50%
Race	Malay	PBM 1, P1	50%
	Chinese	0	0%
	Indian	PBM1, P2	50%
	Others	0	0%
Age	20-30	PBM 1, P1, P2	75%
	31-40	PBM 2	25%
	41-50		0%
Location	UNITAR	PBM 2, P1	50%
	Cosmopoint College	PBM 1, P2	50%
Duration of service	1-10 years	PBM 1	25%
	11-20 years	PBM 2	25%
Duration of studies	Year 1	0	0%
	Year 2	0	0%
	Year 3	P1	25%
	Year 4	P2	25%
Academic	PHD	0	0%
	Master	PBM 1, PBM 2	50%
	Degress	0	0%
	Diploma		50%

Table 1: Demographic Analysis of Respondents

# FACTORS OF AI USAGE AMONG MALAY LANGUAGE STUDENTS IN PRIVATE HIGHER EDUCATION INSTITUTIONS

Bil	Factor (Theme)	Sub-theme	P1	P2	PBM	PBM
					1	2
1	Main idea	Medium for expanding				
	generator in	vocabulary	/	/	/	/
	assignment					
	writing	Idea generation for writing				
		content	/	/	/	/
		Tool for outlining				
		assignments				
2	Learning with	Easy to understand	/	/	/	/
	AI is faster and					
	easier	Assignment discussion	/	/	/	/
		Accurate and quick	/	/	/	/
3	No barriers to	Saves money and time	/	/	/	/
	accessing AI					
		Free with unlimited access	/	/	/	/
		No age barriers				

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	/	/	/	/

Table 2: Factors of AI Usage Among Malay Language Students in Private Higher Education Institutions

Thematic Analysis 1 - Factor of AI as the Main Idea Generator in Assignment Writing The following are the findings of the study for the first theme, identified through the interview transcriptions:

Respondent	Transcript	Findings
P1	"I use AI to find the main ideas when I need to do any assignment.	
	For example, when writing an essay, if I need to find the main points or	1
	key ideas"	
P2	"I also get to learn new words, and then I also use AI to find content	
	for essaysI also learn new words"	1
PBM 1	"Students typically use AI as the primary tool for drafting	
	assignments. The first application they would use is AI, like ChatGPT.	/
	Perhaps for them, AI can spark ideas for completing a particular task."	
PBM 2	"Most of my students use AI to restructure sentences in a different	
	form They use AI as the primary medium for completing assignments.	/
	The initial framework is obtained from AI."	

Table 3: Factor theme of AI usage among Malay language students and lecturers in private higher education institutions (IPTS).

Based on the transcript table 4.3 above, the researcher identified that the main factor for respondents using AI in completing their assignments is to generate ideas as a whole for a particular assignment topic. All respondents agreed that they use several AI applications, such as ChatGPT, in their daily tasks.

Additionally, the interview results also found that respondents use AI as a medium to acquire and expand their Malay language vocabulary. For example, the researcher found that respondent P2 uses AI to increase their vocabulary during the process of gathering information for assignments. In connection with this, the respondent also mentioned that AI could provide the overall content for an essay that needs to be completed. Regarding this factor, all respondents stated that they use AI comprehensively to produce essays or compositions assigned to them. According to the respondents, they generate ideas for the entire essay, starting from the introduction to the conclusion. The subsequent process after the content is provided only involves modifying the ideas.

Furthermore, based on the interview transcript above, AI is also used as the main tool or medium for drafting assignments by Malay language students at the private higher education institution (IPTS). This was agreed upon and stated by both of the Malay language lecturers (PBM). They believe that students use AI, particularly ChatGPT, to draft assignments, which is becoming increasingly popular among students. Following this, the process of correcting and restructuring sentences is also done using AI. This was mentioned by the PBM, who identified that some of their students restructure sentences in their writing to avoid plagiarism detection, using the ChatGPT AI application.

Thematic Analysis 2 - Factor of Learning with AI Being Faster and Easier The following are the findings of the study for the second theme, identified through the interview transcriptions:

Respondent	Transcript	Findings
P1	"When I use AI, I find that the way information is presented is clearer.	
	Because AI uses simple language. The content in AI can also be provided	1

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	in bullet points, making it easier to understand AI can come up with many ideas.".	
P2	"AI is such an advanced application, you know. We can ask AI to do all sorts of things. For me, I always ask AI for help AI is very fast. Then, the content is also easy to understand AI also provides clear points and explanations. It uses simple words, I mean."	1
PBM 1	"Students use AI for individual or group assignment discussions. I feel that AI is able to provide information related to the topic accurately and quickly."	/
PBM 2	"It makes it easier for students to complete their tasks. It's fast, and the content provided by AI can be considered accurate and concise. Students use AI to complete individual assignments students use AI for discussion activities and presenting short topics."	1

Table 4: Thematic Factor: Learning with AI is Faster and Easier

Based on the transcript table 4.4 above, the researcher identified that the second thematic factor for respondents using AI in their learning is that AI is faster and easier. All respondents use AI to complete their assignments. According to the respondents, AI is easier to understand with very clear delivery. They agreed that during the teaching and learning process, they also use AI, especially when working on presentation assignments. The respondents further mentioned that the sentences and explanations provided by AI are easier to understand, aligning with their level of proficiency in the Malay language.

Additionally, AI can provide information very quickly. This was mentioned by P1 and P2, who use AI during classroom activities such as group presentation activities, where it only takes 15 minutes to find information related to the discussion topic provided by the lecturer. This saves time when using AI to gather information because it is much faster, and there is no need to read journals or books as in the past. Furthermore, the respondents also use AI for discussion and presentation assignments, both individually and in groups, during teaching and learning sessions in class. PBM 1 and PBM 2 stated that their students make AI the main medium for fast and accurate information retrieval. However, PBM 2 added to their statement by advising students to carefully review all the information obtained. Consequently, AI is capable of providing information related to topics accurately and quickly. PBM1 and PBM2 found that students were able to complete presentation assignments well and quickly with the help of AI to generalize

Analysis Theme 3 - Factor Theme: No Barriers to Accessing AI Below are the findings for the third theme statement identified through the interview transcripts:

Respondent	Transcript	Findings
P1	Because AI saves me from a lot of things. For example, before I had	
	to buy books, which required a lot of expenses AI can save time,	
	energy, and most importantly, save money, because I'm a student, so it	
	really helps AI can be accessed anytime, for as long as we want.	/
P2	I use AI a lot, and it saves me so much. I don't need to buy books or	
	refer to a lot of reading materials online. It saves time and money too.	
	What's even better is that AI is free. You just register with your email,	/
	and then you can use it. You can use it for as long as you want	
	because it's free	
PBM 1	AI can be accessed by anyone, regardless of age, whether young or	
	old. On top of that, AI is free, and there are no charges involved. It's	/
	free, and everyone can use it. Plus, there's no time limit on how long	

ideas related to the presentation topic.

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	you can use AI.	
PBM 2	Students use AI all the time without any limits. It's also free AI.	
	There's no need to buy books like before to search for additional	1
	information. AI also doesn't have any age restrictions for who can use	
	it.	

Table 5: Factor theme: No barriers to accessing AI.

This sub-theme analysis indicates that the use of AI can save both money and time, as there is no longer a need to buy books or spend long hours browsing online reading materials. This view is agreed upon by both P1 and P2, who believe that there is no need to purchase books, visit libraries, or search for online reading materials. Supporting this sub-theme, AI is also accessible for free, with no time limitations. This was also agreed upon by P1 and P2, who stated that the AI application does not have any restricted usage time. This means that AI can be accessed at any time without any time constraints. Furthermore, they mentioned that the only thing needed is to register an AI account using their email address, and then AI can be accessed. PBM1 and PBM2 also agreed with this, stating that their students increasingly use AI to complete assignments. They access AI whenever they need, whether during class sessions or outside of class.

Additionally, the fact that there are no fees charged for using AI is another factor driving its use. Students no longer need to buy books or other reading materials because all the information is obtained through AI. Both PBM1 and PBM2 confirmed that AI is freely accessible to all, and there are no age barriers to using it. All respondents agreed that people of various age groups frequently use AI. This is because AI does not impose any minimum or maximum age restrictions for anyone who wants to use it. PBM2 further mentioned that even children can use AI.

# THE IMPACT OF AI USAGE ON THE MASTERY OF THE MALAY LANGUAGE AMONG PRIVATE HIGHER EDUCATION INSTITUTION (IPTS) STUDENTS.

Bil	Theme (Effect)	Sub-theme (Effect)	PBM 1	PBM 2	P1	P
						2
1	Improving the quality of	Sharpening students' critical	/	/	/	/
	students' written	and creative thinking				
	assignments.	Problem-solving skills				
			X	/	/	/
	A 101 '					
2	As a self-learning	Enhancement of AI	,	,	,	,
	exercise to enhance technology control for	technology handling	/	/	/	/
	technology control for expanding assignment	Immediate information	/	,	,	/
	data.	retrieval process	/	/	/	,
	dutu.	retrievar process				
3	Able to enhance	Interactive and engaging	/	/	/	/
	students' motivation to	learning				
	learn the Malay language					
	more broadly.	Creative audiovisual	/	/	/	/
		learning methods				
4	Ethical issues and	Elements of cheating	/	/	X	/
	integrity in student					
	writing.	Writing that violates	/	/	/	/

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		assignment submission				
		guidelines				
5	Students are	Students do not want to read	/	/	X	/
	becoming lazier in	books/journal articles				
	their studies.	Process of copying without				
		editing	/	/	/	/

Table 6:Analysis of Theme 1 - The Impact of AI Usage on Improving Student Assignment Writing Results

The following are the findings of the study for the first theme, which can be identified through the interview transcripts:

Respondent	Transcript	Finding
P1	"I learn many new terms when using AI The main ideas and content can also be further developed when using AI it improves my essay writing."	/
P2	"The final outcome of my writing contains more solid information with various references the marks were quite satisfactory"	/
PBM 1	"Students' writing has improved with the help of AI like ChatGPT their vocabulary and word bank have become more extensive and diverse."	/
PBM 2	"Significant improvement producing a written text by summarizing and extracting key points honing critical and creative thinking solving problems."	/

Table 7: The impact of AI usage can improve students' assignment writing outcomes.

Based on the interview results above, the impact of AI is seen through the students' ability to summarize texts and extract key points in their Malay language composition writing. This was also agreed upon and acknowledged by all four respondents as they successfully drafted a well-structured composition text and summarized the entire text in more detail. As a result, students' assignments were able to achieve higher marks compared to those without the use of AI. In addition, AI is also said to help sharpen students' critical and creative thinking in comparing information and problem-solving skills. This was only mentioned by PBM 2, P1, and P2, as they believe that students' thinking has become more creative and critical when solving the given tasks. However, PBM 1 did not provide any opinion on this aspect.

Analysis of Theme 2 - As a self-learning exercise to improve technology management. Below are the findings of the study for the second theme statement, identified through the interview transcription:

Respondent	Transcript	Findings
P1	Improving the way AI is managed using technology. Learning new	/
	and more advanced ways to search for data and reference sources	
	instant information	
P2	My ICT proficiency is improving	/
PBM 1	Students' ICT skills are greatly enhanced while learning the	
	Malay language	/
PBM 2	practicing ICT skills within themselves. The information obtained	
	instantly was found	1

Table 8:The effect of self-learning training in improving technology management to develop task

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#### data.

The analysis of the subtheme shows that the use of AI technology has successfully improved technology management skills. According to all four respondents, it can be concluded that the students' ICT skills have been enhanced through learning the Malay language using AI. Additionally, PBM 2 mentioned that as students are exposed to various AI applications, they are increasingly eager to explore these applications and learn how the AI technology can help improve their proficiency in the Malay language. Furthermore, the chat space in AI applications is used to obtain information quickly.

All four respondents have knowledge of how to use AI. They explained that the chat space in AI applications is fully utilized to gather information related to the assignment topics.

# Analysis of Theme 3: Ability to Increase Students' Motivation to Learn Malay More Widely The following are the findings for the third theme, identified through the interview transcripts:

Respondent	Transcript	Finding
P1	It became a booster for me My motivation to learn the Malay	
	language increased in the form of audio-visual is more interesting	1
P2	Can explore various fields of knowledge I became excited and	1
	motivated to learn	
PBM 1	Students are more motivated when Malay language learning is	
	conducted in an audio-visual format	1
PBM 2	Through interactive and engaging learning sessions helps teachers	
	to conduct lessons in a more engaging and interactive audio-visual	1
	format	

Table 9: The impact of AI is able to increase students' motivation to learn the Malay language more extensively

This subtheme analysis details the impact of AI on increasing students' motivation to learn the Malay language, as the learning process using AI is more engaging and interactive. All four respondents stated that they felt more motivated when various elements were integrated into learning through AI. Additionally, AI has a positive effect on increasing students' motivation to learn Malay, as audiovisual learning is more engaging. This is because AI can generate information in both audio and visual formats. For students who prefer visual learning, they are more enthusiastic and motivated to study the Malay language in greater depth when the delivery method differs from the traditional approach. This view was also supported by all four respondents.

Analysis of Theme 4 – The Impact of Ethical Issues and Integrity in Student Writing Below are the findings of the study related to the fourth theme, identified through interview transcriptions:

Respondent	Transcript	Finding
P1	I tend to produce unethical writing, violating the assignment	
	submission requirements. Sometimes, I also break these rules	/
P2	Elements of deception in student writing unethical writing because	
	it violates assignment submission requirements. Students tend to copy	/
	and paste entirely	
PBM 1	Students nowadays are increasingly prone to plagiarizing AI	
	sources	/
PBM 2	Many students engage in dishonest practices in their writing,	

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	violating the guidelines	/
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Table 10: The impact of ethics and integrity in student writing

This subtheme elaborates on the issue of plagiarism in students' final written work. P2, PBM1, and PBM2 expressed their views on plagiarism in student writing. P2 acknowledged that they had engaged in this practice while completing their assignments. However, P1 disagreed, stating that this was not cheating, but rather using AI as a reference. Additionally, this issue highlights violations of assignment submission guidelines, particularly regarding plagiarism. PBM1 and PBM2 expressed their disappointment when students copied entire content and information provided by AI without making any edits. As a result, it was found that students violated assignment submission guidelines because the level of plagiarism exceeded the allowed percentage.

**Analysis of Theme 5 - Issues of Students Becoming Lazier** The following are the findings from the study regarding the fifth theme, which can be identified through the interview transcripts:

Respondent	Transcript	Finding
P1	It makes students today lazier students simply copy everything	
	without going through the editing process	/
P2	Students no longer want to read books or journal articles They	
	only refer to AI and simply copy everything without editing	/
PBM 1	Students are becoming lazier in searching for reference materials	
	they rely entirely on AI students do not change the sentence	/
	structure they copy the information in full	
PBM 2	They are lazy to read books and published journals they only rely	
	on AI copying everything without going through the editing process	1

Table 11: Factor of Ethics and Integrity Issues in Student Writing.

This subtheme is detailed on the negative effects of students becoming increasingly lazy in reading books and published articles as primary reference sources when completing their assignments. This is agreed upon by P2, PBM1, and PBM3. However, P1 stated that they still refer to materials such as books and journals as additional references during their assignments. Furthermore, students are becoming lazier by committing plagiarism outright without editing the material provided by AI. Their excessive dependence on AI has led to a lack of effort to learn in the proper way.

#### VI. DISCUSSION

Factors of AI Usage in Malay Language Learning Among Students and Lecturers in Private Higher Education Institutions.

The interview findings show that respondents use AI as a medium to acquire new vocabulary, with the vocabulary derived from the assignment topics accessed through AI. This statement is supported by S. Ruiz, P. Rebuschat, & D. Meurers (2021), who state that AI can enhance vocabulary among students. Furthermore, AI usage is also employed as a tool for generating ideas about the topics discussed by respondents. The interview results indicate that AI is effective in providing ideas based on the assignment requirements. Respondents tend to use AI by stating the essay or assignment title, and AI generates responses based on the given topic. However, both respondents do not fully accept the ideas generated by AI, as they make slight modifications to the ideas obtained. This supports the statement by Dowling and Lucey (2023), who found in their study that Chat-GPT can produce insightful ideas in academic writing. Both lecturers agree that students use AI to generate ideas for their writing. The lecturers also mention that

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students tend to use AI to create assignment frameworks and avoid plagiarism when completing their tasks. The lecturers also observe that AI helps reduce writing errors and correct sentence structures. This finding aligns with Qin (2022), who explains that AI can help foreign language speakers quickly and accurately identify language mistakes, such as spelling and grammar errors.

Additionally, the interview results also revealed that respondents believe learning with AI is faster, quicker, and easier to understand. Both P1 and P2 mentioned the same factors in choosing AI as a facilitator in learning the Malay language. The interview transcripts show that students tend to use AI because of its speed in generating information. Compared to traditional methods, such as searching for journals, AI is more accessible to students. Besides providing quick and accurate information, the information generated by AI is easier to understand and aligns with students' needs. Therefore, students can save time and obtain accurate information by using AI.

Furthermore, respondents agree that there are no barriers to accessing AI, as the main challenges students face when seeking information are time and cost. The interview found that both students use AI because it provides information for free and quickly. There are no time limitations, unlike borrowing books from libraries, which have time constraints for loans. Additionally, students can save money because they do not need to buy physical books to obtain information. Following this, both PBM 1 and PBM 2 in the interview also stated that AI can be easily accessed regardless of cost, time, and the student's age. They further mentioned that AI can be accessed by children, as AI is available for free through the internet. As a result, AI provides a new learning experience for students of all ages.

Furthermore, the interview findings indicate that lecturers believe AI is capable of providing information quickly and accurately. It was found that students use AI in group activities. Students are also able to deliver presentations with accurate information within the time allocated by the lecturer when using AI as a tool to gather information. However, lecturers recommend that the information obtained be evaluated first according to the students' existing knowledge and experience to ensure that the information shared is accurate and of high quality. The teaching process also proceeds as planned by the lecturers, as students do not spend excessive time merely searching for information. This finding is supported by Zuraina Ali's (2020) study, which shows that AI creates an effective and efficient learning environment.

# The Impact OfAI Usage On The Mastery Of The Malay Language Among Private Higher Education Institution (IPTS) Students.

All four study participants agreed that AI has a positive impact on their mastery of the Malay language. P1 and P2 mentioned that their writing has improved with the help of AI. Through AI, P1 and P2 were able to learn new terms based on the information generated by AI. The sentences produced by the students were more engaging due to the use of a broader vocabulary along with well-suited ideas. PBM 1 and PBM 2 also confirmed that the students' writing appeared better compared to before using AI. The vocabulary used by the students was not repetitive and was more extensive. The ideas produced also met the requirements of the assignments. The definition of concepts could also be made effectively using AI. All four participants agreed that AI is able to synthesize main ideas and draw conclusions from the provided texts. As a result, students were able to complete their assignments according to the task requirements while also gaining new language learning experiences.

AI also sharpens students' critical and creative thinking. This statement contradicts the claim made by Nikita (2023), who found that AI's capabilities could lead individuals to become lazy in thinking, not utilizing their cognitive abilities optimally, and thus resulting in a decline in their decision-making skills. Students were asked to compare and contrast the information obtained from AI with what they already know. PBM 2 stated that students have become more creative in completing tasks by processing the information obtained from AI. This finding supports the research by Liang et al. (2021), which emphasizes the need for students to refine or filter the outputs generated by Chat-GPT to gain the real benefits from using AI.

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In addition, the findings of the study show that all participants stated that AI can be used as a self-learning tool to enhance knowledge related to ICT and technology. Exposure to AI requires both students and instructors to deepen their understanding of ICT to ensure that the knowledge of instructors keeps pace with that of the students, who are often more advanced. PBM 1 stated that the rapid development of AI has made him ready to follow technological advancements so as not to fall behind the students. Instructors can also integrate AI into their teaching to create more interactive and digitally literate educational experiences.

The respondents also stated that the tendency to use AI will create an interactive and engaging learning environment. As a result, student motivation will be fostered through an enjoyable learning process that meets their needs. The generation of information from AI can be produced in both audio and visual formats. The use of audio and visual elements can capture students' attention. This is also supported by Denty Marga Sukma (2017), who stated that videos and audio can stimulate students in the classroom. Munoz et al. (2023) also found in their study that the use of AI or Chat-GPT can increase student motivation in learning a second language.

However, it cannot be denied that the use of AI also raises issues related to ethics and student integrity. The use of AI in education often brings up concerns regarding integrity and ethical violations. The Malaysian Qualifications Agency (MQA) in ADVISORY NOTE NO. 2/2023 explains that it is important for students to use Generative AI wisely, responsibly, and with integrity, in line with the academic standards set by higher education institutions, ensuring they master the necessary skills and knowledge in their studies. The culture of plagiarism is increasing, as some students copy the entire content generated by AI. This clearly violates integrity and ethics as students. Students' interest in seeking references from journals and academic writings also begins to diminish as they rely entirely on AI to gather information.

### VII. CONCLUSION

AI needs to be accepted as one of the current learning mediums in addressing the rapid pace of technology in education. The implications of this study prove that AI offers numerous benefits to students in learning the Malay language. The use of AI should be conducted with caution to ensure no ethical violations occur, thus optimizing the advantages of AI. However, increasing the existing knowledge among students and lecturers must also be emphasized to enable appropriate judgments when accepting the outputs generated using AI. Relevant parties should also improve the guidelines for using AI to ensure that students use AI ethically and responsibly. Additionally, relevant parties must stay ahead to ensure students' actions are still controlled, even in a world without boundaries. In the case of the Malay language, language development must be swift and in line with technological advancements. The lack of AI in the Malay language requires immediate action to ensure that the Malay language generated by AI uses standard and correct language. This is crucial as AI has now become the primary choice for students in seeking current information and references. Relevant authorities must take immediate action to develop as many AI-based applications as possible that can fulfill all the language needs of students in the Malay language.

## **REFERENCES**

- [1] Ahmad, S.F., Han, H., Alam, M.M. et al.2023 Impact of artificial intelligence on human loss in decision making, laziness and safety in education. *Humanit Soc Sci Commun* 10, 311. https://doi.org/10.1057/s41599-023-01787-8
- [2] Anders, B. A. 2023. Is using ChatGPT cheating, plagiarism, both, neither, or forward thinking? Cambridge, Cell Press. Available at: <a href="https://doi.org/10.1016/j.patter.2023.100694">https://doi.org/10.1016/j.patter.2023.100694</a>
- [3] Aydın, & Karaarslan, E. 2022. OpenAI ChatGPT Generated Literature Review: Digital Twin in Healthcare. *SSRN Electronic Journal*.
- [4] Agrawal, R., Biswas, G., & Hall, M. 2020. Intelligent tutoring systems for second language acquisition: A systematic review and meta-analysis. Computers & Education, 144,
- [5] BARON NS.2023.Even kids are worried Chat GPT will make them lazy plagiarists, says a linguist who

- studies tech's effect on reading, writing and thinking. Fortune. <a href="https://fortune.com/2023/01/19/what-is-chatgpt-ai-effectcheating-plagiarism-">https://fortune.com/2023/01/19/what-is-chatgpt-ai-effectcheating-plagiarism-</a> laziness-education-kids-students/
- [6] Bisson, M. J., Goldberg, A. M., & Zhang, S. (2019). Artificial intelligence applications in computer-assisted language learning: A research synthesis. *Language Learning & Technology*, 23(2), 20-42.
- [7] Betal, Asim. 2023. Enhancing Second Language Acquisition through Artificial Intelligence (AI): Current Insights and Future Directions. *Journal for Research Scholars and Professionals of English Language Teaching*.
- [8] Braun, V. & Clarke, V. 2006. Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2): 7–9
- [9] Denzin, N.K. (2001). *Handbook of qualitative reseach* (2nd ed.). Thousand Oaks, CA: Sage Publications Ltd.
- [10] Dowling, M., & Lucey, B. 2023. ChatGPT for (Finance) research: The Bananarama Conjecture. Finance Research Letters, 53, 103662. Retrieved 2023-03-28, from https://linkinghub.elsevier.com/retrieve/pii/S1544612323000363 doi: doi: 10.1016/j.frl.2023.103662
- [11] Elinor Zucchet (2023) ,*How artificial intelligence is revolutionizing language learning* diakses daripada <a href="https://www.berlitz.com/blog/artificial-intelligence-ai-language-learning">https://www.berlitz.com/blog/artificial-intelligence-ai-language-learning</a> pada 25 Januari 2024.
- [12] Gupta, A., Gopal, R. P., & Sathiya Kumaran, V.2020 Automated conversational chatbot for enhancing second language learning. *Interactive Learning Environments*, 28(4), 527-544.
- [13] Group Media TFO. 2017. Emergency for The World Of Education: Adapting To The Digital Revolution. https://www.groupemediatfo.org/wpcontent/uploads/2017/11/7235 tfo li vre\_blanc\_FR.pdf.
- [14] Gao, C. A., Howard, F. M., Markov, N. S., Dyer, E. C., Ramesh, S., Luo, Y., & Pearson, A. T.2022. Comparing scientific abstracts generated by ChatGPT to original abstracts using an artificial intelligence output detector, plagiarism detector, and blinded human reviewers.
- [15] Chua Yan Piaw, 2014. *Kaeadah Penyelidikan (3rd ed.)*. Mc Graw Hill Education (Malaysia) Sdn.Bhd. hlm.,139 -140
- [16] Creswell, J.W. 2008. Educational Research: Planning, Conducting and Evaluating Quantitative and Qualitative Research. 2nd Edition. New Jersey: Pearson Education
- [17] Franscisco, M. 2018. Uncertainty and Promising Prospects: The Global Landscape of Highe Education. AACRAO, Bulls Eye Resources, World Bank 1.
- [18] Karandish D.2021.7 Benefits of AI in education. The Journal <a href="https://thejournal.com/Articles/2021/06/23/7-Benefits-of-AI-in-Education.aspx">https://thejournal.com/Articles/2021/06/23/7-Benefits-of-AI-in-Education.aspx</a>
- [19] Hassani H, Unger S 2020 Artificial intelligence (AI) or intelligence augmentation(IA): what is the future? AI 1(2). <a href="https://doi.org/10.3390/ai1020008">https://doi.org/10.3390/ai1020008</a>
- [20] Holmes W, Bialik M, Fadel C 2019)Artificial intelligence in education. Promise and implications for teaching and learning. *Center for Curriculum Redesign*.
- [21] Hussien, A. & Norizan, A.R. 2018. English Language Teachers' Readiness For The Application Of Technology Towards Fourth Industrial Revolution Demands. Asia Pacific Journal of Information Technology and Multimedia 7(22): 89-98
- [22] Idroes, Ghazi & Noviandy, Teuku Rizky & Maulana, Aga & Irvanizam, Irvanizam & Jalil, Zulkarnain & Lensoni, Lensoni & Lala, Andi & Abas, Abdul & Tallei, Trina & Idroes, Rinaldi. 2023. Student Perspectives on the Role of Artificial Intelligence in Education: A Survey-Based Analysis. *Journal of Educational Management and Learning*. 1. 2023. 10.60084/jeml.v1i1.58.
- [23] Krakauer D (2016) Will AI harm us? Better to ask how we'll reckon with our hybrid nature. Nautilus. <a href="https://nautil.us/will-ai-harm-us-better-to-ask-how-well-reckon-with-our-diakses">https://nautil.us/will-ai-harm-us-better-to-ask-how-well-reckon-with-our-diakses</a> pada 23 Januari 2024.
- [24] Marshall, C. & Rosmann, G.B. (2006). *Designing Qualitative Research. 4th Edition*. Thousand Oaks, CA: Sage Publications
- [25] Merriam, S.B. 2009. Qualitative research and case study applications in education. San Francisco:

- Jossey-Bass Publisher
- [26] Merriam, S.B. (2001). Qualitative Research and Case Study Applications in Education: Revised and Expanded from Case Study Research in Education. San Francisco: Josey-Bass Publisher.
- [27] Miao, Fengchun & Holmes, Wayne (2023), Guidance for generative AI in education and research
- [28] Liang, Y., Meng, F., Zhang, Y., Chen, Y., Xu, J., & Zhou, J. (2021). Infusing multi-source knowledge with heterogeneous graph neural network for emotional conversation generation. Proceedings of the AAAI Conference on Artificial Intelligence, 35(15), 13343-13352.
- [29] Mantello P, Ho M-T, Nguyen M-H, Vuong Q-H (2021 Bosses without a heart:socio- demographic and cross-cultural determinants of attitude toward Emotional AI in the workplace. AI Soc 1–23. https://doi.org/10.1007/s00146-021-01290-1
- [30] Muñoz, Sonia & Gayoso, Giovanna & Huambo, Alberto & Domingo, Rogelio & Tapia, Cahuana & Incaluque, Jorge & Nacional,...et.al(2023). Examining the Impacts of ChatGPT on Student Motivation and Engagement. *Przestrzeń Społeczna (Social Space)*. 23.
- [31] Nikita (2023) Advantages and Disadvantages of Artificial Intelligence. Simplificant. <a href="https://www.simplilearn.com/advantages-and-disadvantages-of-artificialintelligence-">https://www.simplilearn.com/advantages-and-disadvantages-of-artificialintelligence-</a> article
- [32] Nurul Ihsaniah Omar (2023) Impak AI terhadap pendidikan negara dipetik daripada <a href="https://malaysiagazette.com/2023/07/24/impak-ai-terhadap-pendidikan-negara/">https://malaysiagazette.com/2023/07/24/impak-ai-terhadap-pendidikan-negara/</a> diakses pada 26 Januari 2024.
- [33] Putri, A. R., & Muzakki, M. A. 2019. Implemetasi Kahoot Sebagai Media Pembelajaran Berbasis Digital Game Based Learning Dalam Mengahadapi Era Revolusi Industri 4.0. In Prosiding Seminar Nasional Universitas Muria Kudus: 1-7.
- [34] Qin Y, Luo Y & Zhai Y.2023.French error type annotation for dictation: A platform with automatic error type annotation for French dictation exercises. *Front. Psychol.* 13:1075932. doi: 10.3389/fpsyg.2022.1075932
- [35] Schiff D 2021 Out of the laboratory and into the classroom: the future of artificial intelligence in education. AI Soc. https://doi.org/10.1007/s00146-020-01033-8
- [36] Rahman , M., Terano, H. J. R., Rahman, N., Salamzadeh, A., Rahaman, S. 2023. . ChatGPT and Academic Research: A Review and Recommendations Based on Practical Examples. *Journal of Education, Management and Development Studies*. 3(1). 1-12.
- [37] Rebolledo Font de la Vall, Roxana & Gonzalez Araya, Fabian. 2023. Exploring the Benefits and Challenges of AI-Language Learning Tools. *International Journal of Social Sciences and Humanities Invention*.
- [38] Shin M. H. (2018) How to use artificial intelligence in the English language learning classroom. Indian Journal of Public Health Research & Development, 9(9), 557-561.
- [39] Subramanian, A., Rajendran, VI, Anand, A., & Sharma, P. 2020. Adaptive personalized learning using machine learning for language learners. *IEEE Tenth International Conference on Technology for Education* (T4E) (pp. 164-169). IEEE.
- [40] Salmah Jan Noor Muhammad. 2023.Bahasa Melayu dalam Era Teknologi Kecergasan Buatan (AI) diakses dari <a href="https://dewanbahasa.jendeladbp.my/2023/12/01/11191/">https://dewanbahasa.jendeladbp.my/2023/12/01/11191/</a> pada 24 Januari 2024
- [41] Sarah Alia Mohamed Faisal & Nor Hafizah Adnan (2021), Tahap Kesediaan Dan Penerimaan Guru Dalam Mempraktikkan Penggunaan Teknologi Digital RI 4.0 Sebagai Bahan Bantu Mengajar Dalam Pendidikan Rendah, *International Journal of Advanced Research in Islamic Studies and Education (ARISE)* 01, (3)
- [42] Sukma, Denty. (2017). The Effect of Audio-Visual Media on The Students' Participation in English Classroom. Pancaran Pendidikan. 7. 10.25037/pancaran.v7i1.129.
- [43] Son, J., Ružić, N. & Philpott, A. 2023. Artificial intelligence technologies and applications for language learning and teaching. *Journal of China Computer-Assisted Language Learning*. https://doi.org/10.1515/jccall-2023-0015
- [44] Wayne Holmes/ Maya Bialik/ Charles Fadel, Artificial Intelligence in Education, The Center for

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- Curriculum Redesign, Boston, 2019, 151-180.
- [45] Wei-Chen Hsu, Gi-Zen Liu, Genre-based writing instruction blended with an online writing tutorial system for the development of academic writing, *Digital Scholarship in the Humanities*, Volume 34, Issue 1,100-123, <a href="https://doi.org/10.1093/llc/fqy021">https://doi.org/10.1093/llc/fqy021</a>
- [46] Yin. R.K. (2012). *Applications of Case Study Research. 3th Edition*. Thousand Oaks, California: Sage Publication
- [47] Zou B, Reinders H, Thomas M & Barr D.2023 Editorial: Using artificial intelligence technology for language learning. *Front. Psychol.* 14:1287667.
- [48] Zuraina Ali. 2020. Artificial Intelligence (AI): A Review of its Uses in Language Teaching and Learning. IOP Conference Series: Materials Science and Engineering. 769.012043. 10.1088/1757-899X/769/1/012043