



ChatGPT: Examining Language Lecturers' Perspectives on Its Integration in Teaching and Learning

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ABSTRACT

In higher education, ChatGPT has proven useful for several reasons: 1) it provides access to a wealth of information for practicing language skills in a natural and interactive way, 2) it provides personalised learning and guidance for learners and 3) it provides the ability to translate from one language to another, offering a new and innovative way to learn a new language. This paper aims to examine language lecturers' perceptions of ChatGPT and its integration into teaching and learning in Malaysia through a series of interview questions using the Technology Acceptance Model (TAM), specifically Perceived Usefulness (PU) and Perceived Ease of Use (PEU). The qualitative study conducted semi-structured interviews based on the model with 16 university language lecturers from a public university in Selangor, Malaysia. Participants were chosen based on their familiarity with ChatGPT for teaching and learning purposes. The transcribed findings reveal that language lecturers would readily embrace ChatGPT, but were concerned about the excessive reliance on ChatGPT, which could lead to students' deterioration in their critical thinking and problem-solving capabilities. The results highlight the importance of recognizing the potential advantages of employing ChatGPT technology within higher education environments.

Keywords: ChatGPT; AI; language teaching and learning; Technology Acceptance Model (TAM); educational technology

INTRODUCTION

Artificial intelligence (AI) has recently captured the world's imagination, especially with its branch of natural language processing (NLP) that enables the development of AI chatbots. These chatbots have made significant progress, leveraging deep-learning methods and sophisticated algorithms to create and understand written texts in different languages and domains, similar to human capabilities (Brown et al., 2022; Khalil & Er, 2023; Schwitzgebel et al., 2023). These newly enhanced chatbots are different from traditional chatbots. Traditional chatbots, also known as rule-based chatbots, differ from these because they are only programmed to answer questions based on a predefined set of guidelines (Kohnke et al., 2023).

Essentially, the AI-driven chatbots function as computer programmes that simulate human-like conversations. This cutting-edge technology has proven its usefulness in a variety of fields, including business, law, education, healthcare, and entertainment. One of their most appealing features is their ability to engage users in intelligent interactions. Chatbots can also now learn and improve over time by gaining insights from previous conversations (Hong, 2023). This adaptability is similar to the process of human learning, and chatbots can even be used to improve language skills.

Among the available chatbots, ChatGPT is leading the pack with the most advanced generative chatbot, developed by OpenAI (Vallance, 2022). It is a state-of-the-art open source natural language processing model known as Generative Pre-trained Transformer-3 (GPT-3). GPT-3 uses a combination of a large-scale, fine-tuned supervised language model and reinforcement learning (Radford et al., 2018). This means that ChatGPT has been trained to



respond to specific dataset (Lee et al., 2018) while given the autonomy to interact with the real world to explore different possibilities and scenarios to add to their training data and capabilities (Verma & Diamantidis, 2021). This enables ChatGPT to use its rich information to maintain interactions across multiple messages and easily remember facts, making it suitable for applications such as virtual assistants and customer service bots (Hughes, 2023).

In higher education, the latest iteration of chatbots has attracted a lot of interest, especially in terms of their integration into teaching and learning methods. ChatGPT has proven useful for several reasons: 1) it provides access to a wealth of information for practicing language skills in a natural and interactive way (Hong, 2023), 2) it provides personalised learning and guidance for learners (Rudolph et al., 2023), and 3) it provides the ability to translate from one language to another, offering a new and innovative way to learn a new language (Jiao et al., 2023).

While many have recognised its potential to support education, some researchers and educators have also expressed concerns about the use of ChatGPT in the classroom due to its limitations and risks. One example is the ethical concerns that students may use this tool to cheat on exams and assessments or gain an unfair advantage (Cassidy, 2023). Another challenge that ChatGPT brings is that it can generate inaccurate or inappropriate texts that could confuse or mislead learners. An example of this is a study that found that medical information provided by ChatGPT was grossly inaccurate and falsified (Bhattacharyya et al., 2023).

While it is undeniable that ChatGPT has some potential risks and challenges that could affect student motivation and performance, it is important to remember that this tool is here to stay and will likely be integrated into the learning instruction one way or another. It is therefore important to investigate the perceptions and attitudes of educators and lecturers towards ChatGPT and its integration into teaching and learning. They are the key stakeholders who can provide valuable insights into the benefits and challenges of using ChatGPT as a pedagogical tool, as well as best practises and strategies to maximise its potential and minimise its risks or drawbacks.

To date, there is a lack of empirical research specifically on language lecturers' perspectives on ChatGPT and generative chatbots, especially in the Malaysian higher education context. Existing studies on chatbots in language education have mainly concentrated on students' experiences and results rather than lecturers' perceptions and expectations. This paper aims to fill this gap by examining language lecturers' perceptions of ChatGPT and its integration into teaching and learning in Malaysia through a series of interview questions using the Technology Acceptance Model (TAM), specifically Perceived Usefulness (PU) and Perceived Ease of Use (PEU). In addition, the study also explored other factors that influence language lecturers' views on the use of ChatGPT in the classroom, such as intentions, attitudes and previous experiences with the technology.

Research Objectives

The primary objectives of this study are as follows:



1. To explore language lecturers' perceptions on the potential benefits and challenges associated with integrating ChatGPT in language teaching.
2. To assess language lecturers' attitudes towards the integration of ChatGPT in language teaching using the Technology Acceptance Model (TAM).
3. To identify the factors influencing language lecturers' perceptions and intentions regarding ChatGPT integration in language teaching within the TAM framework.

LITERATURE REVIEW

Technology Integration in Education

Technology integration refers to the utilization of technological tools and resources in educational settings with the aim of enhancing the learning experience and attaining instructional objectives (Ghavifekr & Rosdy, 2015; Johnson et al., 2016; Haleem et al., 2022). Educators have the capacity to integrate various technological tools, such as computers, cellphones, virtual reality devices, and other new instruments, into the learning process to facilitate students' acquisition of knowledge. As Mdhlalose and Mlambo (2023) state, efficient integration of technology serves to enhance the current curriculum and constitutes a component of the educational process, alongside conventional instructional approaches and collaborative activities.

According to Dr Robert Puentedura, there are four (4) levels of technological integration (Tunjera & Chigona, 2020):

1. Substitution

At the substitution stage of technological integration, educators have the potential to substitute a conventional instrument with a digital counterpart, while maintaining the original objectives of the lesson or activity that the tool facilitates. An example of technology substitution can be observed when educators permit students to utilize word processing software for composing their essays. This aligns with Sindi-Alivi's (2019) assertion that a group of students collaboratively writes an essay using ICT tools like Google Docs, which facilitate real-time collaboration on the task.

2. Augmentation

At the augmentation level of technological integration, technology is employed to enhance existing features or resources. For instance, this can involve adding spell-checking and grammatical correction capabilities to a word processing program. While the core objectives and instructional strategies of a lesson plan remain unchanged, the use of technology augments the learning experience by providing students with additional resources. As an illustration of augmentation, students can utilize Padlet to craft digital portfolios. This dynamic platform empowers them to construct multimedia presentations, offering a versatile array of options to showcase their comprehensive grasp of a given topic (Zainuddin et al., 2020). This not only aids



in content creation but also enriches the educational process by leveraging technology to supplement and enhance traditional teaching methods.

3. Modification

The next phase of technology integration involves modification, where educators possess the flexibility to adjust specific aspects of an activity to align with the functionalities offered by a technological medium. A concrete example of modification is when students opt to craft an informative video presentation instead of the traditional oral presentation format (Best, 2020). In doing so, they can harness the power of their voices in conjunction with a broader spectrum of creative multimodal elements.

4. Redefinition

At the pinnacle of technological integration lies the stage of redefinition, when an educator employs technology to craft instructional activities and mold lesson plans. This level is suitable for educational settings in which learners possess equitable access to digital resources and educators possess substantial expertise in utilizing technology for instructional purposes. For instance, as highlighted by Hoi and Hang (2021) and Alshaye et al. (2023), students can elevate their engagement by posting their written productions on a class blog and sharing them across social networks such as Twitter or Facebook. The use of hashtags on Twitter streamlines the process, making it easier for both teachers and students to discover tweets related to specific topics.

Relating ChatGPT to these levels, it becomes apparent how ChatGPT can serve as a valuable tool in each stage. It can act as a convenient and user-friendly tool in academic writing (Ho, 2023) substituting traditional writing tools, augment content generation and revision, support modified assignments, and contribute to the redefinition of collaborative and technology-enhanced learning experiences.

Capabilities of ChatGPT

As aptly put by Haleem et al. (2022), the integration of technology in language education has undergone a significant transformation throughout history, keeping pace with the evolving educational landscape. It has evolved from traditional language labs equipped with audio recordings to the digitization of language learning materials and the emergence of sophisticated Learning Management Systems (LMS) that streamline educational processes. However, the latest wave of innovation has been driven by Artificial Intelligences (AI), which is now the leading technological frontier in language education (Haleem et al., 2022; Alafnan et al., 2023).

In recent years, Artificial Intelligence (AI) has emerged as the latest technological frontier, offering new tools and methodologies that hold immense promise in the field of language education. Among these cutting-edge AI-driven tools stands ChatGPT, a remarkable creation developed by OpenAI. ChatGPT represents a significant leap forward in personalized language instruction.



ChatGPT's capabilities are truly groundbreaking. It possesses the capacity to engage learners in interactive dialogues, simulating real-life conversations with an AI entity (Kohnke et al., 2023). This feature is particularly valuable for language learners, as it provides a dynamic and immersive language learning experience. Learners can engage in conversations with ChatGPT, practicing their speaking and listening skills in a risk-free environment. Through these interactions, learners receive instant feedback on their pronunciation, grammar, and vocabulary usage, allowing them to pinpoint areas of improvement promptly (Javaid et al., 2023).

Moreover, ChatGPT's ability to adapt to individual learning styles is a crucial feature that sets it apart in the realm of language education (Grassini, 2023). It can tailor its responses and teaching methods based on the learner's specific needs and preferences. For instance, if a learner prefers a more structured grammar lesson, ChatGPT can provide targeted exercises and explanations (Ouh et al., 2023). Conversely, if a learner seeks a conversational partner to enhance their speaking skills, ChatGPT can engage in open dialogues.

This adaptability addresses a common challenge in language education where it can cater to the diverse learning styles and paces of individual learners. Ingkavara et al. (2022) mention that traditional classroom settings often struggle to provide personalized instruction to a large and varied group of students. In contrast, ChatGPT can offer a customized learning experience, ensuring that each learner receives content and feedback tailored to their proficiency level and goals (Malik et al., 2023).

Exploring the Integration of ChatGPT in Education Through Technology Acceptance Model (TAM)

Below is the model framework used to outline the interview questions for the methodology section of this study:

1. Perceived Usefulness: Enhancing Language Learning

One of the pivotal components of the TAM is perceived usefulness, which evaluates how users perceive the technology's ability to improve their tasks and activities (Alsyouf et al., 2023). In the context of ChatGPT in education, perceived usefulness refers to how educators and students view the AI tool's potential to enhance the language learning process. Research and practical experience have demonstrated that ChatGPT can significantly contribute to education by providing personalized language practice, instant feedback, and adaptability to individual learning styles (Haleem et al., 2022). When educators and students perceive ChatGPT as useful in improving language skills and learning outcomes, they are more likely to embrace its integration into educational settings especially in the higher education sector (Rasul et al., 2023).

2. Perceived Ease of Use: User-Friendly Integration

Another critical facet of TAM is the perceived ease of use, which gauges how users perceive the simplicity and user-friendliness of a technology (Al-Adwan et al., 2023). For ChatGPT to be effectively integrated into education, it must be user-friendly for both educators and students. If educators find it easy to incorporate ChatGPT into their teaching methodologies, and students



find it intuitive to interact with the tool, the likelihood of successful integration increases. User-friendly interfaces, clear instructions, and seamless integration into existing educational platforms are essential to ensure that ChatGPT aligns with the perceived ease of use component of TAM.

3. Attitudes Toward ChatGPT Adoption

The attitudes of educators and students toward ChatGPT adoption are pivotal in its successful integration into education. TAM recognizes that attitudes are influenced by perceived usefulness and ease of use (Al-Adwan et al., 2023). When educators and students perceive ChatGPT as a valuable and user-friendly tool for language learning, their attitudes toward its adoption become positive (Kasneji et al., 2023). Conversely, if they encounter difficulties or perceive it as less useful, their attitudes may turn negative, hindering the adoption process.

4. Behavioral Intention to Use: Willingness to Engage

TAM further considers the behavioral intention to use technology, which refers to the willingness of educators and students to actively engage with the tool in their teaching and learning activities (Al-Adwan et al., 2023). When perceived usefulness and ease of use align positively with attitudes, educators and students are more likely to intend to use ChatGPT as an integral part of language instruction and practice.

5. Actual Usage: Impact on Educational Outcomes

The final step in the TAM model is actual usage, influenced by behavioral intention. Successful integration of ChatGPT into education results in its active usage by educators and students (Javaid et al., 2023). This, in turn, can impact educational outcomes by enhancing language learning, improving proficiency, and providing valuable insights into areas of improvement (Kohnke et al., 2023).

The Integration of AI in Language Education: Educators' Perspectives

Many educators readily embrace ChatGPT as a complementary tool in their teaching methodologies (Alafnan et al., 2023; Haleem et al., 2022; Javaid et al., 2023; Kohnke et al., 2023). They recognize AI as a pathway to extend the learning experience beyond the confines of the traditional classroom, enriching students with additional opportunities for language practice and real-world language exposure. Educators are particularly appreciative of ChatGPT's potential in addressing a persistent challenge faced by language learners: proficiency plateaus (Li et al., 2023).

However, educators concurrently express reservations about the integration of AI into language education (Seo et al., 2021; Goodwin-Jones, 2022). These concerns, although multifaceted, are interlinked and converge on the pivotal issue of maintaining the overall quality of education. A notable concern centers around the potential for students to excessively rely on AI-driven tools like ChatGPT, which could lead to a deterioration in their critical thinking and problem-solving capabilities (Iskender, 2023; Sallam et al., 2023; Thurzo et al., 2023; Kasneji et



al., 2023). As students increasingly depend on AI for language tasks, there's a legitimate worry that their ability to think critically, analyze language nuances, and solve linguistic challenges independently might decline. This concern is echoed by Alafnan et al. (2023), who have voiced concerns that ChatGPT might discourage writing, impact student learning and development, and pose challenges in assessing learning outcomes.

Simultaneously, a distinct set of concerns, as raised by Atlas (2023), pertains to the risk of plagiarism, proper attribution, workforce displacement, and reskilling. These concerns underscore the need for educators to instill not only language skills but also a strong sense of academic ethics and integrity. They must prepare students for a world where AI-generated content coexists with human-authored work.

Furthermore, educators also express apprehensions regarding the limited scope of human interaction, ChatGPT's potential lack of a nuanced understanding, biases in training data, limitations in creativity, a deficiency in contextual comprehension, restricted personalization of instruction, and concerns about privacy (Choi et al., 2023). These concerns are interconnected as they collectively highlight the potential erosion of the human touch in education due to overreliance on AI. Educators worry that if AI becomes the primary mode of instruction, the richness of human interaction and nuanced understanding of language and culture might diminish.

Another facet of concern, highlighted by Choi et al. (2023), revolves around ChatGPT's occasional failure to generate sufficient detail, potential misunderstandings of terms, and deviations from the intended material. This concern underscores the importance of maintaining high standards in content generation and ensuring that AI tools align closely with educational objectives.

In summary, these multifaceted concerns raised by educators collectively emphasize the need for a balanced and cautious approach to integrating AI, like ChatGPT, into language education. While AI can enhance language learning, educators must carefully consider these concerns to ensure that students receive a well-rounded education that combines the benefits of AI with the irreplaceable value of human instruction and ethical education. This dual perspective, one that recognizes the immense potential of ChatGPT while also highlighting the importance of judiciously integrating AI into language education, underscores the ongoing discourse surrounding the role of AI in shaping the future of language instruction.

METHODOLOGY

This study utilized a qualitative research methodology to gain an in-depth understanding of language lecturers' perceptions regarding the integration of ChatGPT in teaching and learning. This approach is consistent with the recommendation by Creswell and Guetterman (2018) that qualitative methods enable researchers to gather comprehensive information and profound insights from individuals. Through this approach, the study incorporated semi-structured interviews, following the guidance of Fontana and Frey (1994), who emphasized its effectiveness



as a powerful strategy for exploring the viewpoints of individuals.

Participants of This Study

Vasileiou et al. (2018) emphasized that achieving code saturation for interview data required 9 interviews, while meaning saturation necessitated at least 16 interviews. In line with this insight, the current study conducted semi-structured interviews with 16 university language lecturers from a public university in Selangor, Malaysia. Participants were chosen based on their familiarity with ChatGPT for teaching and learning purposes. This criterion was crucial to enable a comprehensive exploration of its benefits and drawbacks.

Instrumentation

The interview questions primarily focused on the constructs of the Technology Acceptance Model (TAM), specifically Perceived Usefulness (PU) and Perceived Ease of Use (PEU). Additionally, the study explored other factors influencing language lecturers' perspectives on using ChatGPT in the classroom. Based on the study, interview questions were adapted and organized into five dimensions for convenient data labeling: (1) Perceived Usefulness, (2) Perceived Ease of Use, (3) Factors Influencing Attitudes, (4) Integration and Intentions, and (5) Prior Technology Experiences. These instruments underwent cross-checking and validation by a qualified researcher before being used for the study:

1. Perceived Usefulness:
How do you envision ChatGPT being used in language teaching? Could you describe potential benefits you foresee for both educators and students?
2. Perceived Ease of Use:
Considering your teaching experience, what challenges, if any, do you anticipate in integrating ChatGPT? How might these challenges impact its potential usefulness in teaching?
3. Factors Influencing Attitudes:
Could you share your thoughts on the alignment between ChatGPT integration and your current teaching methods? How might this alignment influence your attitude toward using it?
4. Integration and Intentions:
Based on your understanding of ChatGPT and its integration potential, what are your intentions regarding its use in your language teaching practices? How do you see it fitting into your overall teaching approach?
5. Prior Technology Experiences:
How do your prior experiences with technology in education influence your perception of integrating ChatGPT? Specifically, how might your familiarity with technology impact your ease of use and willingness to adapt it for teaching?

Data Analysis

Once the instruments were checked and validated, the interviews were conducted over a period of 14 days during August, 2023. Participants were contacted via calls for notification of the interview sessions which took about 20 to 30 minutes each. The questions were given to the participants via the WhatsApp platform of which the participants answered in voice notes form. The answers were then transcribed and analysed. The transcripts were coded according to a thematic approach based on Braun and Clarke (2006) six-phase model for thematic analysis.

RESULTS AND DISCUSSION

Overall, the findings of this study indicate that the majority of participants view the use of ChatGPT in teaching and learning (T&L) favourably. The majority of participants responded that ChatGPT would be beneficial for students, especially in fostering independent learning. Additionally, they believed that ChatGPT would assist them in preparing teaching materials and exercises for language instruction. In addition, participants expressed their appreciation for having to use ChatGPT to make the T&L as engaging as feasible.

Despite this positive attitude, some participants expressed reservations about the use of ChatGPT in certain contexts, such as cheating on assignments and/or exams, which would make students lazier and more dependent. In addition, they reported that the authenticity of the information on ChatGPT as dubious. The interviews yielded the following subthemes:

Table 1. Themes and Subthemes

Themes	Subthemes
Perceived Usefulness	a) Time Saving b) Guidance & Assistance c) Personalised Exercises / Practices d) Interactive Feedback
Perceived Ease of Use	a) Plagiarism b) Information Accuracy c) Overreliance & Dependency d) Lack of Participation & Laziness
Factors Influencing Attitudes	a) Teaching & Learning Tool b) Interactive Feedback c) Time Saving d) Guidance & Assistance e) Independent Learning
Integration and Intentions	a) Guidance & Assistance b) Personalised Exercises / Practices
Prior Technology Experiences	a) Tech-Savvy Background



1. Perceived Usefulness

The four subthemes that emerged from the interviews in relation to perceived usefulness were time saving, guidance and assistance, personalised exercises/practices, and interactive feedback. The majority of participants believed that ChatGPT would add genuine T&L benefits or values to their classrooms and could even be beneficial. Some even believed it would facilitate independent student learning.

The majority of participants regarded ChatGPT as a teaching tool that would assist them in developing lesson plans and language-learning exercises, according to the study.

“It can assist language instructors – with suggestions for interesting classroom activities.” – P4

“Teachers can use it to make learning fun and personalized.” – P12

Others shared the same view that ChatGPT is time saving as it provides immediate feedback to the students and participants.

“It will help speed up the process of doing tasks that are tedious.” – P1

“Secondly, ChatGPT can help students search for information for class discussions more effectively in a short time.” – P13

2. Perceived Ease of Use

Four subthemes were found in regard to perceived ease of use and they are plagiarism, information accuracy, overreliance & dependency and lack of participation & laziness. Majority of the participants showed their concerns over the use of ChatGPT particularly among the students.

Some believed that the use of ChatGPT among students would lead to plagiarism. This causes the students not to be able to produce original works in completing their exercises and assignments.

“Fully utilizing the information given by Chatgpt without any alteration done (paraphrasing) to the information (copy paste) – a lot of lifting.” – P4

“First, students could plagiarise the work of others by copying and pasting text from ChatGPT without acknowledging the source.” – P14

Another concern shown by the participants was that the accuracy of information that the ChatGPT has.

“A hurdle that comes with incorporating ChatGPT into education is its possible deficiency in comprehending context, which may result in inaccurate or unsuitable replies.” – P6



“This is because ChatGPT is known to have inaccurate and outdated information.” – P13

In addition, all participants expressed their apprehensiveness towards the use of ChatGPT among students in relation to overreliance and laziness:

“The impact includes – laziness and lack of motivation, learning does not make an impact since students did not do their work on their own (learning for the sake of passing), will not take their education seriously.” – P4

“Students may find it too convenient for them to rely on chatgpt to do their assignments.” – P11

“They might also become lazy and disengaged in their learning, knowing that the AI can do the work for them.” – P13

3. Factors Influencing Attitudes

Another four subthemes appeared under the main theme factors influencing attitudes. Under this theme, the majority of participants reiterated that the use of ChatGPT can be a good teaching and learning tool, provide interactive feedback, serve as guidance and assistance as well as inculcate independent learning.

Some participants believe that the ChatGPT will help to complement the teaching and learning experience in the classroom, especially for the lecturers:

“So I think in terms of teaching methods it wouldn’t affect us drastically because it works almost like a search engine like Google. It just will be more personalized and organized.” – P1

“The alignment depends on viewing ChatGPT as a complementary tool, not as a replacement. It is vital to remember that the usage is merely to aid educators.” – P2

“This alignment significantly impacts my perception of ChatGPT as a useful tool that complements active learning and the development of skills, while still recognizing the importance of human guidance and genuine communication in the learning journey.” – P6

Others felt that the ChatGPT is vital for students as it fosters independent learning particularly in providing immediate and interactive feedback.

“I can also encourage autonomous learning using ChatGPT such as encouraging my students to learn more about grammar using the software as they can easily get the explanations needed before we discuss further in class.” – P9

“And thirdly, it can also provide feedback on the students’ solutions.” – P13

“It can provide interactive feedback on students’ work, which can help them identify and correct their mistakes and improve their skills.” – P14

4. Integration and Intentions

Two subthemes emerged under the integration and intentions and they are guidance and assistance as well as personalised exercises/practices.

All participants seemed to have a shared understanding on the use of ChatGPT in guiding and assisting not only the lecturers but also the students.

“My intention is to use it as a supplement to language lessons, providing instant language assistance and encouraging interactive practices.” – P2

“ChatGPT is not a tool to replace educators. Instead, the technology helps students in their learning with better hands-on resources.” – P5

“Students can use it to practice speaking and writing whenever they want.” – P12

The participants also felt that the use of ChatGPT would benefit them the most particularly in creating personalized exercises and practices:

“In my understanding, the only potential that I can see in how it fits into my teaching approach is that it really helps the educators create supplementary materials.” – P8

“I could use ChatGPT to develop creative practice activities. I can use it to complement my existing activities that I have had for years.” – P14

5. Prior Technology Experience

One common subtheme arises from the analysis of prior technology experience and it is tech-savvy background.

All participants shared the same view on the importance of prior technology experience in integrating the ChatGPT in teaching and learning.

“I have some prior experience with educational technology and that may enhance my comfort and ease of use when adopting new tools like ChatGPT.” – P2

“My knowledge and experience with technology give me confidence in seamlessly adopting this platform.” – P6

“I have utilised a lot of technological tools in my teaching before the existence of ChatGPT, since I found the integration of technology in classroom is inevitable and most of the time, necessary.” – P7

According to the responses from this study, most language lecturers are open to the use of ChatGPT in their classrooms. The perceptions of the language lecturers were positive overall. In terms of usefulness, most expressed that ChatGPT could facilitate in both students' own learning



and in lecturers' material development for T&L in class. This concurs with previous studies done by Ho (2023), Haleem et al. (2022), and Rasul et al. (2023). However, in terms of the ease of use, most of the participants were concerned that students would take advantage of ChatGPT by plagiarizing and producing unauthentic works despite the simplicity and user-friendliness of ChatGPT and this is consistent with studies by Iskender (2023), Sallam et al. (2023), Thurzo et al. (2023), and Kasneci et al. (2023). On the other hand, the factors that influenced the language lecturers' attitudes toward ChatGPT were all deemed as beneficial to the lecturers as they perceive the integration as an upgrade to the teaching and learning process in whole which reinforces Kasneci et al.'s (2023) statement that positive perception of technology leads to positive acceptance. On another encouraging note, all lecturers agreed on the same intention to integrate ChatGPT to assist lecturers in supplementing their teaching materials and guide students in their task completion. Finally, the language lecturers' prior technology experience justifies their favourable attitude towards the integration of ChatGPT in their classrooms.

CONCLUSION AND RECOMMENDATIONS

The findings of this study indicate that educators generally exhibit a favourable disposition towards ChatGPT. The majority of the participants indicated that they perceived ChatGPT as a valuable tool for both themselves and their students. Incorporating ChatGPT at various levels of technological integration empowers educators and students to harness the capabilities of AI-driven tools for improved learning outcomes. It not only simplifies tasks but also fosters creativity, critical thinking, and collaboration, ultimately transforming the educational landscape into one that is dynamic, engaging, and technology-enhanced. As educators and technology developers continue to collaborate and innovate, ChatGPT and similar AI-driven tools are poised to become invaluable assets in the ever-evolving landscape of language education.

The results of this study carry significant implications for university lecturers and management of faculties as the key stakeholders. It highlights the importance of recognizing the potential advantages of employing ChatGPT technology within higher education environments. Moreover, it underscores the necessity of developing approaches to capitalize on the technology's advantages in teaching and learning and minimizing its drawbacks. Faculty management should enhance lecturers' skills through ChatGPT training workshops, webinars, seminars, and other AI related build-up programs. By gaining a deeper comprehension of the most responsible methods for utilizing ChatGPT technologies, lecturers can make knowledgeable choices about its integration and application within their educational settings.

As previously stated in the Introduction, the lack of empirical research on language lecturers' perspectives on ChatGPT and generative chatbots, especially in the Malaysian higher education context prompted this research to be conducted. However, the limitation of this research is the small number of participants based in only one local public university. It should be in the best interest of future researchers to conduct a study involving a larger scale of students using the quantitative method or a mixed method approach to investigate awareness of the rise of AI technology in higher education and its importance in implementation.



REFERENCES

- Al-Adwan, A. S., Li, N., Al-Adwan, A., Abbasi, G. A., Albelbisi, N. A., & Habibi, A. (2023). Extending the technology acceptance model (TAM) to predict university students' intentions to use metaverse-based learning platforms. *Education and Information Technologies*, 28(11), 15381-15413. <https://doi.org/10.1007/s10639-023-11816-3>
- Alafnan, M. A., Dishari, S., Jovic, M., & Lomidze, K. (2023). ChatGPT as an educational tool: Opportunities, challenges, and recommendations for communication, business writing, and composition courses. *Journal of Artificial Intelligence and Technology*, 3(2), 60-68. <https://doi.org/10.37965/jait.2023.0184>
- Alshaye, I. A., Tasir, Z., & Jumaat, N. F. (2023). A critical analysis of the effects of Twitter on student engagement and grades. *Contemporary Educational Technology*, 15(3), 1-11. <https://doi.org/10.30935/cedtech/13277>
- Alsyouf, A., Lutfi, A., Alsubahi, N., Alhazmi, F. N., Al-Mugheed, K., Anshasi, R. J., Alharbi, N. I., & Albugami, M. (2023). The use of a technology acceptance model (TAM) to predict patients' usage of a personal health record system: The role of security, privacy, and usability. *International Journal of Environmental Research and Public Health*, 20(2), 1347. <https://doi.org/10.3390/ijerph20021347>
- Atlas, S. (2023). *ChatGPT for Higher Education and Professional Development: A Guide to Conversational AI*. College of Business Faculty Publications. https://digitalcommons.uri.edu/cba_facpubs/548
- Bhattacharyya, M., Miller, V. M., Bhattacharyya, D., & Miller, L. E. (2023). High rates of fabricated and inaccurate references in ChatGPT-Generated Medical Content. *Cureus*, 15(5), Article e39238. <https://doi.org/10.7759/cureus.39238>
- Best, J. (2020, October 9). The SAMR Model Explained (With 15 Practical Examples). *3P Learning*. <https://www.3plearning.com/blog/connectingsamrmodel/>
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77-101. <https://doi.org/10.1191/1478088706qp063oa>
- Brown, H., Lee, K., Miresghallah, F., Shokri, R., & Tramèr, F. (2022, June 21-24). *What does it mean for a language model to preserve privacy?* [Conference paper]. 2022 ACM Conference on Fairness, Accountability, and Transparency, Seoul Republic of Korea. <https://doi.org/10.1145/3531146.3534642>
- Cassidy, C. (2023, January 10). Australian universities to return to 'pen and paper' exams after students caught using AI to write essays. *The Guardian*. <https://www.theguardian.com/australia-news/2023/jan/10/universities-to-return-to-pen-and-paper-exams-after-students-caught-using-ai-to-write-essays>
- Choi, J. H., Hickman, K. E., Monahan, A., & Schwarcz, D. B. (2023). ChatGPT goes to law school. *Journal of Legal Education*, 71(3), 387-400. <https://doi.org/10.2139/ssrn.4335905>
- Creswell, J. W., & Guetterman, T. C. (2018). *Educational Research: Planning, Conducting, and Evaluating Quantitative and Qualitative Research* (6th ed.). Pearson.
- Fontana, A., & Frey, J. (1994). The Art of Science. In N. A. Y. L. Denzin (Ed.), *The Handbook of Qualitative Research* (pp. 361-376). Sage Publications.
- Ghavifekr, S. & Rosdy, W.A.W. (2015). Teaching and learning with technology: Effectiveness of ICT integration in schools. *International Journal of Research in Education and Science*, 1(2), 175-191. <https://doi.org/10.21890/ijres.23596>



- Goodwin-Jones, R. (2022). Partnering with AI: Intelligent writing assistance and instructed language learning. *Language Learning & Technology*, 26(2), 5-24. <http://doi.org/10125/73474>
- Grassini, S. (2023). Shaping the future of education: Exploring the potential and consequences of AI and ChatGPT in educational settings. *Education Sciences*, 13(7), 1-13. <https://doi.org/10.3390/educsci13070692>
- Haleem, A., Javaid, M., Qadri, M. A., & Suman, R. (2022). Understanding the role of digital technologies in education: A review. *Sustainable Operations and Computers*, 3(3), 275–285. <https://doi.org/10.1016/j.susoc.2022.05.004>
- Ho, C. C. (2023). Learning to paraphrase with ChatGPT. *Journal of Creative Practices in Language Learning and Teaching*, 11(2), 85-105. <https://doi.org/10.24191/cplt.v11i2.21723>
- Hoi, V. N., & Hang, H. L. (2022). Student engagement in the Facebook learning environment: A person-centred study. *Journal of Educational Computing Research*, 60(1), 170-195. <https://doi.org/10.1177/07356331211030158>
- Hong, W. C. H. (2023). The impact of ChatGPT on foreign language teaching and learning: Opportunities in education and research. *Journal of Educational Technology and Innovation*, 5(1), 37-45. <https://doi.org/10.61414/jeti.v5i1.103>
- Hughes, A. (2023, January 4). ChatGPT: Everything you need to know about OpenAI's GPT-3 tool. *BBC Science Focus Magazine*. <https://www.sciencefocus.com/future-technology/gpt-3/>
- Ingvavara, T., Panjaburee, P., Srisawasdi, N., & Sajjanroj, S. (2022). The use of a personalized learning approach to implementing self-regulated online learning. *Computers and Education: Artificial Intelligence*, 3, Article 100086. <https://doi.org/10.1016/j.caeai.2022.100086>
- Iskender, A. (2023). Holy or unholy? Interview with open AI's ChatGPT. *European Journal of Tourism Research*, 34, 1-11. <https://doi.org/10.54055/ejtr.v34i.3169>
- Javaid, M., Haleem, A., Singh, R. P., Khan, S., & Khan, I. H. (2023). Unlocking the opportunities through ChatGPT Tool towards ameliorating the education system. *BenchCouncil Transactions on Benchmarks, Standards and Evaluations*, 3(2), 100115. <https://doi.org/10.1016/j.tbench.2023.100115>
- Jiao, W., Wang, W., Huang, J., Wang, X., & Tu, Z. (2023). Is ChatGPT a good translator? Yes with GPT-4 as the engine. *ArXiv (Cornell University)*. <http://doi:10.48550/arXiv.2301.08745>
- Johnson, A. M., Jacovina, M. E., Russell, D. E., & Soto, C. M. (2016). Challenges and solutions when using technologies in the classroom. *Adaptive Educational Technologies for Literacy Instruction* (pp. 13-30). Routledge. <https://doi.org/10.4324/9781315647500-2>
- Kasneci, E., Sessler, K., Küchemann, S., Bannert, M., Dementieva, D., Fischer, F., Gasser, U., Groh, G., Günemann, S., Hüllermeier, E., Krusche, S., Kutyniok, G., Michaeli, T., Nerdel, C., Pfeffer, J., Poquet, O., Sailer, M., Schmidt, A., Seidel, T., & Kasneci, G. (2023). ChatGPT for good? On opportunities and challenges of large language models for education. *Learning and Individual Differences*, 103, Article 102274. <https://doi.org/10.1016/j.lindif.2023.102274>
- Khalil, M., & Er, E. (2023). Will ChatGPT Get You Caught? Rethinking of Plagiarism Detection. In P. Zaphiris & A. Ioannou. (Eds.), *Learning and Collaboration Technologies*. Springer. https://doi.org/10.1007/978-3-031-34411-4_32



- Kohnke, L., Moorhouse, B. L., & Zou, D. (2023). ChatGPT for language teaching and learning. *RELC Journal*, 54(2), 537-550. <https://doi.org/10.1177/00336882231162868>
- Lee, C., Panda, P., Srinivasan, G., & Roy, K. (2018). Training deep spiking convolutional neural networks with STDP-based unsupervised pre-training followed by supervised fine-tuning. *Frontiers in Neuroscience*, 12, 435. <https://doi.org/10.3389/fnins.2018.00435>
- Li, B., Kou, X., & Bonk, C. J. (2023). Embracing the disrupted language teaching and learning field: Analyzing YouTube content creation related to ChatGPT. *Languages*, 8(3), 1-18. <http://dx.doi.org/10.3390/languages8030197>
- Malik, A., Khan, M. L., & Hussain, K. (2023). How is ChatGPT transforming academia? Examining its impact on teaching, research, assessment, and learning. *SSRN Electronic Journal*. <http://dx.doi.org/10.2139/ssrn.4413516>
- Mdhlalose, D., & Mlambo, G. (2023). Integration of technology in education and its impact on learning and teaching. *Asian Journal of Education and Social studies*, 47(2), 54-63. <https://doi.org/10.9734/ajess/2023/v47i21021>
- Ouh, E. L., Gan, B. K. S., Jin Shim, K., & Wlodkowski, S. (2023). ChatGPT, can you generate solutions for my coding exercises? An evaluation on its effectiveness in an undergraduate Java Programming Course. *Proceedings of the 2023 Conference on Innovation and Technology in Computer Science Education V. 1* (pp. 54-60). <https://doi.org/10.1145/3587102.3588794>
- Radford, A., Narasimhan, K., Salimans, T., & Sutskever, I. (2018). Improving language understanding by generative pre-training. OpenAI, 1-12. <https://hayate-lab.com/wp-content/uploads/2023/05/43372bfa750340059ad87ac8e538c53b.pdf>
- Rasul, T., Nair, S. R., Kalendra, D., Robin, M., Santini, F. D., Ladeira, W. J., Sun, M., Day, I., Rather, R. A., & Heathcore, L. (2023). The role of ChatGPT in higher education: Benefits, challenges, and future research directions. *Journal of Applied Learning & Teaching*, 6(1), 41-56. <https://doi.org/10.37074/jalt.2023.6.1.29>
- Rudolph, J., Tan, S., & Tan, S. (2023). ChatGPT: Bullshit spewer or the end of traditional assessments in higher education? *Journal of Applied Learning and Teaching*, 6(1), 342-363. <https://doi.org/10.37074/jalt.2023.6.1.9>
- Sallam, M., Salim, N., Barakat, M., & Al-Tammemi, A. (2023). ChatGPT applications in medical, dental, pharmacy, and public health education: A descriptive study highlighting the advantages and limitations. *Narra J*, 3(1), 1-14. <https://doi.org/10.52225/narra.v3i1.103>
- Schwitzgebel, E., Schwitzgebel, D., & Strasser, A. (2024). Creating a large language model of a philosopher. *Mind & Language*, 39(2), 237-259. <https://doi.org/10.1111/mila.12466>
- Seo, K., Tang, J., Roll, I., Fels, S., & Yoon, D. (2021). The impact of artificial intelligence on learner-instructor interaction in online learning. *International Journal Education Technology in Higher Education* 18, Article 54. <https://doi.org/10.1186/s41239-021-00292-9>
- Sindi-Alivi, J. (2019). A review of TPACK and SAMR models: How should language teachers adopt technology? *Journal of English for Academic and Specific Purposes*, 2(2), 1-11. <https://doi.org/10.18860/jeasp.v2i2.7944>
- Thurzo, A., Strunga, M., Urban, R., Surovková, J., & Afrashtehfar, K. I. (2023). Impact of artificial intelligence on dental education: A review and guide for curriculum update. *Education Sciences*, 13(2), 1-14. <https://doi.org/10.3390/educsci13020150>



Tunjera, N., & Chigona, A. (2020). Teacher educators' appropriation of TPACK-SAMR models for 21st century pre-service teacher preparation. *International Journal of Information and Communication Technology Education*, 16(3), 126-140. <https://doi.org/10.4018/ijicte.2020070110>

Vallance, C. (2022, December 7). ChatGPT: New AI chatbot has everyone talking to it. *BBC News*. <https://www.bbc.com/news/technology-63861322>

Vasileiou, K., Barnett, J., Thorpe, S., & Young, T. (2018). Characterising and justifying sample size sufficiency in interview-based studies: Systematic analysis of qualitative health research over a 15-year period. *BMC Medical Research Methodology*, 18, 1-18. <https://doi.org/10.1186/s12874-018-0594-7>




Verma, P., & Diamantidis, S. (2021, April 27). What is reinforcement learning? *Synopsys*. <https://www.synopsys.com/ai/what-isreinforcement-learning.html>

Zainuddin, N. M. M., Azmi, N. F. M., Yusoff, R., & Shariff, S. A. (2020). Enhancing classroom engagement through Padlet as a learning tool: A case study. *International Journal of Innovative Computing*, 10(1), 49-57. <https://doi.org/10.11113/ijic.v10n1.25>



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