NEGATIVE IMPACTS ON THE USE OF ARTIFICIAL INTELLIGENCE IN ENGLISH LANGAUGE LEARNING AMONG UNIVERSITY STUDENTS AND PRECAUTIONARY MEASURES TO MITIGATE

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ABSTRACT

The emerging use of Artificial Intelligence (AI) in higher education raises concerns regarding the potential negative effects that may result from an extensive AI usage in learning English. This research aims to examine the negative impacts of long-term AI usage on English language learning, and identify the precautionary measures to reduce such adversities. This paper implements a mixed-methods approach, whereby a questionnaire consisting of 5-point Likert scale questions and open-ended questions is distributed to 150 undergraduates majoring in English to obtain their perspectives on the research topic. The data collected are analysed via descriptive analysis and thematic analysis. The main findings demonstrate that Technology Dependence and False Information are two of the most prominent adverse effects of using AI in learning English. Additionally, the findings also depict eight themes derived from the participants' responses regarding the precautionary measures, which encompass areas such as practical tasks, AI literacy, AI ethics, plagiarism, assessment modification, and cognitive skills. The main findings emphasise the importance of raising public's awareness on the potential negative consequences in using AI to learn English as well as the mitigation strategies to build a well-balanced AI-integrated teaching and learning environment.

Keywords: Artificial Intelligence; AI tools; English Language Learning; academic integrity; plagiarism; AI literacy

SUBJECT AREA

LB5-3640	Theory and practice of education
LB1050.9-1091	Educational psychology
LB2300-2430	Higher education
LC1022-1022.25	Computer-assisted education

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ABBREVIATIONS

COMPLETE TERM	ABBREVIATION
Artificial Intelligence	AI
English Language Learning	ELL

TERMINOLOGIES

TERMINOLOGIES	DEFINITION
Academic Integrity	Students' originality and honesty in academic work.
AI Ethics	Ensuring responsible use of Artificial Intelligence.
AI Literacy	An individual's knowledge about Artificial Intelligence.
AI Technology	An AI-based technology that carries out mundane tasks.
Artificial Intelligence	A computer system built to think and act like humans.
Descriptive Analysis	Organising and analysing data according to percentages.
English Language Learning	The process of learning English by non-native learners.
Flipped Classroom Approach	Providing students with materials prior to the lesson.
Mixed-Methods	A mixture of quantitative and qualitative methods.
Thematic Analysis	Analysing data by determining common patterns (themes).

CHAPTER 1: INTRODUCTION

1.1 Background of Study

The COVID-19 outbreak, which occurred several years ago in 2019, became a worldwide catastrophe that severely affected various aspects of society, including individuals' lifestyles, the global economy, the environment, etc. (Byomakesh Debata et al., 2020). Additionally, perceiving from the educational aspect, the pandemic has also undoubtedly influenced the process of teaching and learning whereby educational courses and programs were shifted from physical to online due to lockdowns and standard operating procedures established, thus significantly increasing the use of Artificial Intelligence (Abdullah Al-Bargi, 2022).

Even in the current state of the post-pandemic era we reside in, technology remains essential for adopting hybrid teaching and learning that incorporates Artificial Intelligence (AI) in providing more engaging and effective learning approaches for students (Sato et al., 2024). For instance, AI technologies such as language-learning platforms, applications, webpages, chatbots, etc., play substantial roles in assisting learners' English Language Learning capabilities and are heavily used by university students in completing tasks (Tira Nur Fitria, 2021).

However, considering that AI allows students to easily accomplish academic tasks and obtain immense amounts of information online, students' uncontrolled excessive use of technological tools raises concerns about their tendency to exploit AI (Yunus Basha, 2024). As such, in addition to the benefits of Artificial Intelligence in students' English Language Learning (ELL) process, the negative impacts of AI should also be prioritised.

1.2 Statement of Problem

Though past studies have discussed the beneficial roles of Artificial Intelligence within educational aspects in terms of enhancing students' engagement in learning as well as simplifying various academic challenges, the potential negative effects that may arise from extensive use of AI in learning for students are not sufficiently covered in research (Ivanashko et al., 2024).

Furthermore, there is an evident lack of multidisciplinary research regarding the use of AI in students' learning process, especially in higher education, which most past studies were conducted by STEM professionals, computer scientists, and data experts rather than educators themselves despite the fact that such research revolves primarily around the topic of education. As a result, the deficiency of educators' contributions and the abundance of STEM specialists' analyses in education-based studies has gravely influenced the outcomes of the studies, whereby there is an overemphasis on validity, application, and algorithm instead of impacts (Bates et al., 2020).

Besides that, considering the rapid and continuous emergence of educational technologies in society, the lack of confidence in ensuring safe and principled AI usage in language learning remains a significant issue that requires to be addressed as preparation for a complete AI-based teaching and learning environment in the future (Hockly, 2023). Therefore, this study intends to investigate not only the negative consequences of long-term AI usage on English Language Learning but also the preventive methods that can be employed to mitigate the effects.

1.3 Research Objectives

This study aims to:

1. Investigate the negative impacts of long-term Artificial Intelligence usage on English Language Learning.
2. Identify precautionary measures to reduce the negative impacts of long-term Artificial Intelligence usage on English Language Learning.

1.4 Research Questions

1. What are the long-term negative effects of Artificial Intelligence usage on English Language Learning?
2. What are the precautionary measures to reduce possible long-term negative effects of Artificial Intelligence usage on English Language Learning?

1.5 Significance of Study

According to Ivanashko et al. (2024), there is a necessity to ensure the responsible use of Artificial Intelligence due to the constant advancement of AI technology in various facets of society and the scarcity of research on the negative consequences of using AI extensively in language learning. Consequently, it is essential to provide both educators and learners with a greater understanding of the probable threats that may surface from the extensive use of AI in learning a language, hence allowing educators to help learners maintain their digital well-being while simultaneously reducing the prospects of digital disarray (Hockly, 2023).

By exploring the potential negative effects of using educational technologies in teaching and learning language, the capabilities of AI can thus be fully utilized to enhance the efficacy of AI-based educational instruments (Khawlah M. Al-Tkhayneh et al., 2023). With that being said, this study aims to raise awareness within the educational aspects about the possible risks of using AI for long-term language learning and what precautionary measures can be adopted to prevent such occurrences in the future, creating compelling and immersive learning environments accommodating to learners' diverse needs in the current era (Kamalov et al., 2023).

1.6 Limitations of Study

It is crucial to acknowledge the limitations of this study for future improvements. The focal point of this study is targeted towards university students, specifically students from Universiti Tunku Abdul Rahman (UTAR) Kampar, but there are several limitations to consider. The major limitation would be the restricted sample size in which only students from UTAR are selected for this research and none from other educational institutions, resulting in the lack of diversity in terms of perspectives. Concurrently, there is also an absence of diversity in levels of education whereby only university students are chosen instead of students from other educational levels, such as primary and secondary.

In addition, given that this study adopts a quantitative research design and is descriptive in nature, the results from the surveys collected would address the variables of this research on a mere surface-level description without any in-depth analysis due to the lack of opinionated questions in the questionnaire that seek for participants' opinions and inputs. Lastly, the insufficiency of preparation time also poses a limitation for this study, along with

limited analysis of the collected data, the tendency to overlook important data, etc., that might result in a reduced quality of findings.

1.7 Summary

To conclude, this chapter covers the areas including the background of the study, the problem statements this study aims to address, the fundamental research objectives, the consecutive research questions, the significance of this research, and the limitations of this study. In the next chapter, related past literature and research conducted will be reviewed.

CHAPTER 2: LITERATURE REVIEW

2.1 Introduction

The past literature topics covered in this chapter involve the definition of Artificial Intelligence, Artificial Intelligence in Education, Artificial Intelligence in English Language Learning, the negative impacts of using Artificial Intelligence in English Language Learning, and the precautionary measures in reducing the negative impacts. This chapter also underlines the related theories and past studies in the relevant research fields.

2.2 Definition of Artificial Intelligence

The concept of Artificial Intelligence was first suggested in the 1940s when Isaac Asimov, an American writer, published a short story titled "Runaround" that discussed the existence of robots, which heavily inspired many scientists and researchers regarding the subject of robotics and computer science as the term "Artificial Intelligence" was not yet created at the time. It was only in 1956 that the term was coined by John McCarthy and Marvin Minsky, two computer scientists who hosted a research project at Dartmouth College, thus marking the beginning of AI (Haenlein & Kaplan, 2019). Consecutively, John McCarthy was the one who initially claimed that the primary purpose of AI is to develop machines that behave intelligently (Ertel, 2024).

However, throughout the years since the creation of AI, there have been multiple definitions for Artificial Intelligence due to the anonymity of it as a concept that humans have yet to grasp the meaning of fully, such as describing it as the assimilation of algorithms that use distinct instructions to solve problems and perform calculations, a simulation generated by computers to imitate human intelligence, a technology enabling machines to impersonate complex humanistic skills, and more (Sheikh et al., 2023). Other than denotations established

by pioneers, definitions of AI also range in dictionaries, from being described as software that makes robots and computers more competent than humans to being defined as the capability of enabling machines to imitate human behaviour and intelligence (Martinez, 2019).

Taking this into consideration, though it is widely known that there are no precise definitions for AI, there remains a need for one due to the constant advancement and popularity of AI in the modern era, whereby a lack of clear definition may result in the ambiguity of AI's challenges, evaluation criteria, strengths, etc. in the future (P. Wang, 2019). With that being said, despite the lack of clear definitions for Artificial Intelligence, there are several similarities discovered from the variety of definitions that can be considered as the core features of AI, including the consideration of the environment, the ability to process information, the skill to perform complex tasks or make decisions, and the achievement of goals (Samoili et al., 2021).

2.3 Artificial Intelligence in Education

Since years ago, artificial intelligence has been acknowledged as an essential tool in the educational aspect of society in terms of supporting the teaching and learning process with its continuous technological advancements, pedagogical effects, and beneficial innovations that cumulatively established the field of Artificial Intelligence in Education, also known as AIEd for short (Chen et al., 2022). According to a study conducted by Tapalova and Zhiyenbayeva (2022), many students concluded that the integration of AIEd technologies has greatly benefitted them by increasing their levels of interest and engagement in learning, helping them to adapt to educational information based on personal requirements, enhancing their process of learning, and stimulating their mental activity as well as capability.

On the contrary, although the rapid growth of AI in education has greatly enhanced the effectiveness and individuality of learning for students, some believe that AI has the potential risk of substituting teachers in schools and ultimately resulting in an elimination of job opportunities in future educational prospects (Gocen & Aydemir, 2021). Additionally, UNESCO also emphasized several challenges in accomplishing a sustainable AIEd environment, for instance, inclusion and equity of AI technologies, teachers' preparedness in AI-based education, AI's ability to comprehend educational contents fully, comprehensive public policy or satisfaction, development of quality data, and assurance of ethical data collection (Nguyen et al., 2022). Despite the ability to imitate human behaviour and intelligence, AI technologies undoubtedly lack sentimental and empathetic functions when it comes to accommodating students' emotions, which can eventually generate emotional and social disconnection between students and teachers or peers (Tao et al., 2019).

Corresponding to the challenges mentioned, there is a need for the government to provide training programs for teachers in terms of responding to such issues caused by the use of AI in education, along with the necessity of collaboration between different segments within the education industry (Luan et al., 2020). As a consequence, other than offering training programs, educational institutions, and governmental authorities should also assess the pros and cons of using AI before incorporating AIEd technologies so that they possess sufficient knowledge to address the potential risks of AI that may occur in the future (Khawlah M. Al-Tkhayneh et al., 2023).

2.4 Artificial Intelligence in English Language Learning

With the universality of the English language on a global level and the evident development of Artificial Intelligence in the educational aspect, AI technologies are believed to have mass potential to improve learners' English proficiency levels and enhance teachers'

quality of teaching (R. Wang, 2019). In recent years, AI-based tools have been implemented into students' learning experience as a means of improving their language skills, such as the use of ChatGPT in providing ideas for writing, offering alternative sentence structures in speaking, supplying mass resources of information, and such, that contributes to learners' achievements in learning a language (Ling, 2023). Other AI platforms or applications commonly used by students in English language learning are Google Translate, QuillBot, Grammarly, ZenoChat, JenniAI, GrammarCheck, and many more, which not only enhance their language skills but also assist in completing academic tasks (Thanadun Krasaesom et al., 2023).

Research by Hou (2021) indicates that in terms of English language learning, AI technologies can help students learn complex units of the language, expand their English vocabulary, assist them in translating information for easier understanding, or even provide assessments to evaluate their English proficiency. Other than that, using AI-based tools in English language learning also amplifies learning efficiency, fosters individualized learning experiences, cultivates the ability to learn several languages simultaneously, improves accessibility to education, and increases the affordability of education (Rebolledo Font de la Vall & Araya, 2023). However, studies conducted in both Morocco and Indonesia universities presented that while AI certainly does contribute many advantages to English language learning, there is still the need for consideration towards the ethical issues and other potential risks that AI might lead to in the future (Insaf Khoudri et al., 2024).

Nevertheless, besides advancing learners' English language skills and learning experiences, it is also important to highlight several concerns regarding AI's incapability to construct learning materials independently, possible risks of cyberattacks or information theft, lack of creativity or individuality, and the destruction of humanity's nature of communication, which remain as challenges of integrating AI into students' daily lessons that

are yet to be solved (Kushmar et al., 2022). Correspondingly, rather than substituting English education, artificial intelligence should instead be a tool that cooperates with English education to prevent students' over-reliance and blind utilization of AI without employing their problem-solving and critical-thinking skills (Shin, 2018).

2.5 Negative Impacts of Using Artificial Intelligence in English Language Learning

Generally, due to the belief that Artificial Intelligence can improve students' learning experiences and provide appropriate feedback, teachers around the world are attempting to explore various approaches to utilise AI technologies in their daily lessons for easier and more efficient English language learning for students (Amal Abdul-Aziz Mohammed Al-Othman, 2024). Nonetheless, regardless of the advantages of AI, there are still limitations and adversities to consider that can cause distractions for students when using AI technologies in learning (Ramli et al., 2024). By understanding both sides of AI usage in learning English, educators and learners can view AI as complementary equipment instead of replacements, maximising AI's benefits while diminishing the potential risks (Moybeka et al., 2023).

For example, Li (2019) stated that using AI technology in learning English has the possibility of deteriorating learners' attention span and self-control, heightening the cost of learning by purchasing devices or installing broadband, and slackening students' progress in learning due to network problems, which ultimately leads to the major issue of a decline in students' learning efficiency. In addition, using AI extensively in learning English also results in limited human interaction that reduces physical face-to-face contact, overdependence on AI leading to experiences of passive learning, ethical concerns regarding privacy and data security against unauthorised data processing, and inequalities of access to AI-based education in terms of internet and devices (Eliott, 2023). Another prominent negative effect is the degeneration of students' lifelong learning skills caused by the

extensive use of AI in learning a language, such as creative thinking, critical thinking, and problem-solving skills (Pham & Le, 2024).

Aside from the perceptions of AI obtained from educators, learners, and researchers, developers of AI technologies themselves, like Elon Musk, Steve Wozniak, and Bill Gates, are also warning AI users about the probable threats while reminding society to have regulatory oversight of AI usage in their daily lives (Scherer, 2015). Conclusively, the reason for such desperate concerns from various perspectives of using AI in learning English is due to the importance of English proficiency in this day and age. Since English is perceived not only as a universal language but also as a threshold of opportunities and as a method of communication, incorporating AI into English language learning without any drawbacks would pose an ideal learning environment for non-native speakers who are learning English as a second or foreign language (Omar Ali Al-Smadi et al., 2024).

2.6 Precautionary Measures in Reducing the Negative Impacts

Considering the negative impacts of using Artificial Intelligence extensively in English language learning, a thorough evaluation of AI-based tools and innovation of approaches to mitigate such adversities while maximizing the advantages are direly required (Omer Elsheikh Hago Elmahdi et al., 2024). To do so, educational institutions, policymakers, learners, and educators must collaborate to emphasize the ethical use of AI, enhance AI literacy among users, and establish frameworks for ensuring a foolproof use of AI technologies in students' learning experiences Farrelly and Baker (2023).

With that being said, an approach that can be implemented to mitigate the negative impacts discussed is by integrating AI, the root cause of all issues, into the Flipped Learning Strategy (López-Villanueva et al., 2024). In essence, the flipped classroom approach emphasizes exposing students to the lesson materials before class is conducted, whereby class

time will mainly be used for discussion purposes, thus shifting the knowledge-provider role from the teachers to the students instead. Under this context, by incorporating AI into this strategy, the students are expected to utilize AI technologies in generating and fact-checking content actively, empowering them as co-producers of knowledge while fostering their critical thinking and problem-solving skills (Abdulmalik Ahmad Lawan et al., 2023). Besides that, some other measures that can be adopted to diminish the negative effects of AI in learning include developing individualised assessments based on students' differing needs, utilizing AI detection tools to identify plagiarism, offering training programs to enhance teachers' knowledge of AI, integrating lessons to raise awareness regarding AI-based ethics, and monitoring students' AI usage in class to prevent over-reliance (Maciel, 2024).

To be specific, based on the AI technology known as ChatGPT that is frequently used for academic purposes, educational institutions and policymakers can develop ethical guidelines to ensure the responsible use of Artificial Intelligence, invest in training programs for potential victims of job displacement caused by the integration of AI, and balance AI-based learning with appropriate human judgement to prevent compromising the educational quality (Evans et al., 2023). Henceforth, as the evolvement of AI technologies continues to expand and the prominence of AI's role in education proceeds to amplify, there will be a need for constant thorough evaluations and development of mitigation strategies in responding to the risks that follow the large usage of AI (Parsakia, 2023).

2.7 Related Theories

A theoretical framework often discussed in past studies is the Self-Determination Theory (SDT). This theory revolves around human motivation, well-being, and development, and it has been successfully employed in various language-learning contexts with its ability

to influence learners' motivation in learning (Du & Alm, 2024). Based on this theory, learners have three primary psychological requirements that empower their motivational level and self-initiated behaviour: autonomy, relatedness, and competence (Le et al., 2024). Consecutively, according to Nagaletchimee Annamalai et al. (2023), autonomy is a student's need for control over their actions that uses the appeal for independence as a motive force to increase their class participation, relatedness refers to the connection students share with their peers that develops an environment of supportive learning, while competence is defined as the mastery of specific skills that acts as a motivator to enhance students' engagement cognitively. As such, while AI becomes a necessity in holistic education, diversity and inclusion can be accomplished by enhancing students' level of engagement and motivation in learning to ensure the achievement of AI-based education (Xia et al., 2022). Consequently, integrating principles of SDT into blended learning, whereby both online materials and traditional approaches are used, can also advance students' overall learning outcomes (Wu et al., 2024).

Another theoretical framework that researchers use in their studies is the Theory of Planned Behaviour (TPB), which was initially established to interpret humans' varying behavioural patterns in different settings with their attitude, perceived control, and subjective norms as the three main antecedents (Wang et al., 2022). By implementing principles of TPB into research, scholars can observe and analyze how the three components mentioned affect AI users' perspectives of applying AI to learning (Bali et al., 2024). To be specific, a previous study conducted by Rahimi and Tafazoli (2022) on university teachers exemplifies how the three components are used; for instance, the attitude element refers to teachers' optimistic and pessimistic views of using AI, behavioural control relates to their perceptions of capability in incorporating AI into lessons, and subjective norms describe their impression of demands from students or staff in AI-based education. Moreover, within the subject of AI-

based learning, this theory is used to investigate individuals' perceptions of using Artificial Intelligence in learning regarding the benefits, risks, potential challenges, etc., because it considers not only learners' perspectives but also their social exposure and past learning environment (Wang et al., 2024).

2.8 Past Studies

Both studies conducted by Chea and Xiao (2024) [paper A] and Moybeka et al. (2023) [paper B] imply that although Artificial Intelligence has been rapidly advancing and is now recognized as an essentiality in education, there remains insufficient investigation on the specific use of AI in English language learning. In this case, despite both papers focusing on exploring the interaction of AI with learning English, there are several differences to note. Firstly, paper A's objective is to prioritize how AI learning improves learners' language skills, particularly reading skills, whereas paper B's objective is to emphasise how AI application influences learners' motivation in learning English rather than enhancing language abilities. Besides that, both papers adopt different research instruments in their mixed-method approach to collect data from the participants, whereby the former uses experimental studies, semi-structured interviews, and surveys, while paper B uses questionnaires and previous literature studies instead.

Furthermore, according to Eliott (2023) [paper A] and Turky Alshaikhi and Mohamad Ahmad Saleem Khasawneh (2023) [paper B], considering the continuous advancement of Artificial Intelligence in the educational segment, especially when learning English, it is significant for AI users to take into account the potential risks and drawbacks of integrating AI in learning. In contrast to both papers' similarity in exploring the advantages and disadvantages of AI usage in English language learning, paper A focuses on Japanese university students only, whilst paper B focuses on not only postgraduate students but also AI

professionals and university lecturers in Saudi Arabia for diverse results. However, because the papers are conducted in different geographic locations, the cultural, economic, or lifestyle differences may result in varying research execution processes and outcomes.

Based on the research by Filipović (2024) and Pisica et al. (2023), where the main objectives are to scrutinize the positive and negative impacts of using Artificial Intelligence in English language learning, the papers show similar findings. For example, some prominent potential adverse effects of AI usage in learning English presented consist of data security concerns, ethical issues, lack of empathy, fear of job displacement, risk of addiction, over-reliance, decreased emotional intelligence, etc., whereby both papers call for desperate measures to mitigate such adversities. Correspondingly, in terms of investigating mitigation approaches to diminish the negative effects, findings by Evans et al. (2023) and Maciel (2024) also suggested several strategies, such as offering training programs for teachers, developing ethical guidelines, ensuring human-machine balance, implementing lessons about AI ethics, supervising students' AI usage, and more.

CHAPTER 3: METHODOLOGY

3.1 Introduction

This chapter focuses on the methodologies for this research, including the research design that will be adopted, the samples and sample size of target participants, the research instruments that will be used to collect data, the data collection procedures, and the data analysis methods that will be utilized.

3.2 Research Design

This research will adopt a quantitative study approach, which is a research design used to describe and explain specific phenomena by analyzing the numerical data obtained from a group of participants to form the interpretation of findings (Sukamolson, 2007). This approach is ideal because it allows the study to answer the research questions and accomplish the research objectives by exploring participants' perceptions of the negative effects of using Artificial Intelligence in English language learning and their opinions on the precautionary measures that can be executed to mitigate the adversities. Semi-structured questionnaires will be used to collect quantitative data from the participants to achieve this design.

Additionally, this study will be descriptive in nature, implying that all data collected from a given population will be described systematically based on the characteristics, frequencies, or associations of certain situations, which in this case would be the negative impacts of using AI in learning English and the mitigation strategies (Dulock, 1993). Also,

considering the restricted time for the preparation of this research and the nature of this study, a cross-sectional approach will be used to concentrate on the data obtained from the participants at the same point in time, whereby connections between multiple outcomes and exposures can also be examined (Pandis, 2014). Specifically, this approach emphasizes collecting information regarding a specific phenomenon by selecting a cross-section of the population to become the targeted participants of the study (Cummings, 2017).

On the contrary, this study does not adopt a qualitative approach because the data collected will require statistical analysis techniques, such as identifying, correlating, generalizing, etc., which do not align with the purposes of a qualitative method. Besides, since this study intends to answer questions like "What are the negative impacts of AI usage on learning English?" and "What are some mitigation strategies to diminish the adversities?", it is only liable to use quantitative research methods whose main purpose is to determine the presence of particular events, for example, negative effects and preventive measures in this context. Lastly, the longitudinal approach is not implemented because the aim of this study when determining the adversities and mitigation strategies is to focus on the current emerging era of AI learning as it does not require gathering data over a prolonged timeline.

3.3 Samples

Due to the nature of the study, the target population for this study will be students from Universiti Tunku Abdul Rahman (UTAR) Kampar majoring in English courses like English Education and English Language. This population is selected because this research intends to investigate the potential negative influences of using Artificial Intelligence in English language learning among university students. Naturally, the study participants should

be students who frequently use AI to learn and enhance their English language skills or complete English-based assignments. However, students in UTAR Kampar majoring in other degrees who are taking English for Specific Purpose (ESP) courses are not selected because while English major students' learning contents include in-depth language studies, non-English major students learn English to improve skills related to their specific professions of science, engineer, marketing, etc. rather than for advanced language use. Hence, non-English major students might not be able to contribute accurate responses to this study.

Other than that, tertiary education students are chosen for this study because they have a higher chance of exposure and contact with using Artificial Intelligence in their daily lives for various contexts compared to those of older age who prefer sticking with traditional methods, especially for academic purposes. Consecutively, selecting older participants may result in an inaccurate analysis of the data collected. Similarly, primary and secondary education students were also not chosen for this research due to the possibility that they might lack the comprehensive ability and in-depth perception of the potential risks of using AI in learning English to complete the questionnaire provided, thus influencing the analysis of the findings later in the study.

Considering that only English major students from UTAR Kampar are selected, particularly English Education and English Language students, this study will employ a purposive, non-probability sampling method. Choosing participants based on specific characteristics of university students majoring in English indicates the selection is intentional and focused on a defined group. To further elaborate, the purposive sampling method poses significance in deciding on the participants according to criteria of professional knowledge in particular subject areas, which will best assist in achieving the research objectives and answering the research questions (Rai & Thapa, 2015). With that being said, taking into

account that only English major students will be involved in this research, the targeted sample size will be approximately 150.

3.4 Research Instrument

In this study, semi-structured questionnaires consisting of 18 items in total will be distributed to the English major students of Universiti Tunku Abdul Rahman (UTAR) Kampar as a means of collecting quantitative data to identify the negative impacts of using Artificial Intelligence in English language learning and determining the precautionary measures to alleviate such risks. This questionnaire involves three sections encompassing the research objectives and research questions of this study: Section A, Section B, and Section C. With that being said, the different sections in the questionnaire ensure a thorough inclusion of all variables in this research and allow an in-depth understanding of the issues discussed, enabling an insightful discussion and analysis of the information gathered.

The first section, Section A, includes three close-ended demographical questions inquiring about respondents' age group, whether they are "18-20 years" or "21 years and above", their year of study ranging from "Year 1" to "Year 2", and their frequency of using AI for academic purposes based on the 5-point Likert scale from "very rarely" to "very frequently", mainly to build the foundation before proceeding to the variables. Next, the second section, Section B, consists of 13 close-ended items about the respondents' perspectives on the negative effects of using Artificial Intelligence in English language learning. In this section, 12 questions are categorized under six subgroups, whereby five of them are the specified negative impacts, such as "false information", "technology dependence", "limited customization", "personal disconnection", and "increased screen

time", along with the remaining question being categorized under the subgroup "general". In particular, the 12 questions under the six varying subgroups are based on the 5-point Likert scale, in which respondents are required to rate to what extent they agree that the negative effects influence their English language learning process, within options ranging from "strongly disagree" to "strongly agree". The purpose of the differentiated subgroups of questions is to elicit specific responses from the respondents regarding their perceptions of the adverse effects mentioned, providing valuable and appropriate findings for the analysis later in this research. Last but not least, Section C, the third section, involves two open-ended questions asking the respondents their opinion on what precautionary measures can be adopted to diminish the negative impacts indicated in Section B. The questions involve seeking the respondents' viewpoints on the most effective measure to prevent the adversities in the extensive use of AI to learn English and their outlooks regarding the specific strategies to reduce potential risks of AI usage in learning English as stated in Section B.

Essentially, the questionnaire that will be used for this research is adapted from the research conducted by Azizah Binti Abd Rahman et al. (2023). In the original survey, there were only two sections, the first for demographics and the second for the negative effects of incorporating AI in education. Although there were initially five demographical questions in the original survey, the adapted version did not include all five because there is no need for questions like "faculty" since this study already focuses on English major students and "gender" considering that the intentions of this research are not to depict according to gender. In the second section, however, the adapted survey followed the original survey's motive of separating the items into varying subgroups to elicit accurate and particular responses. Though the types of questions and motives of categorization are similar, the last question under "general" in Section B of the adapted survey is present in the original survey not as a question but as an overall view but was adapted accordingly as an item enquiring

respondents' perspective regarding the highest possibility of the negative effects indicated. Additionally, given that the objectives of the research for the original survey did not involve identifying preventive measures, Section B of the adapted survey is self-developed.

As such, the ethical considerations of the semi-structured questionnaire used in this study will also be regarded with utmost significance to guarantee the protection of the respondents' rights and welfare throughout their participation. Prior to proceeding with this research, the study will be conducted with the respondents' complete informed consent, whereby they will be fully aware of the procedures, objectives, types of questions, etc. included. Furthermore, the respondents will also possess the right to withdraw at any given time if they wish to or if there are any questions they refuse to answer. Naturally, this study will remain anonymous and retain the respondent's identity, personal information, and data to protect their privacy and security safety.

3.5 Data Collection

With the use of semi-structured questionnaires, the data will be collected via both online and physical distribution. Primarily, the URL for the questionnaires, in Google Form, will be distributed to the participants through Microsoft Teams, an online communication platform widely used in UTAR. To achieve this method of data collection, the email addresses of the English major students in UTAR Kampar will be requested using two main methods, one is with the help of lecturers or staff in the Department of Language and Linguistics (DLL), and the other is visiting classes of English Education and English Language students, with permission from lecturers, to introduce my research topic and seek for volunteers. In this case, students interested in participating in this research will be provided with the necessary contact details, such as phone number or email address for

further enquiries or the QR code for the Google Form. Also, the initial timeframe for the availability of the questionnaire will be two weeks, giving the students and respondents sufficient time to participate while considering appropriate responses to the items in the questionnaire. However, if there are insufficient responses within the 2-week period, then the Google Form will remain open for another two weeks to receive responses.

Before participating in the research, the students will be briefed on the objectives and procedures of the study, the duration of the questionnaire, and the participants' rights and informed consent. The respondents will also be instructed to answer each item in the questionnaire with the highest honesty and deepest comprehension of their perception of the issues discussed. Nevertheless, if the respondents have not responded to the Google Form distributed after two weeks, a message will be sent to their email or phone number as a gentle reminder for their participation. Similarly, if the questionnaire responses do not align with the requirements and objectives of the study, the questionnaire design will be reviewed concerning the visual appearance of the design, clarity of the questions, comprehension of the respondents, etc., which will be modified accordingly based on respondents' feedback. As an alternative, collaborations with student organizations may also help increase the extent of my search for participants, specifically English major students, through clubs and societies in UTAR Kampar by reaching out to the committee members.

3.6 Data Analysis

The data collected from the semi-structured questionnaires will be analyzed using two analytical approaches, namely descriptive statistical analysis and thematic analysis. Due to its nature of organizing and describing data, descriptive statistical analysis is best suited for studying the demographic information of respondents in a questionnaire because it can

calculate means, percentages, frequencies, and such conveniently (Fisher & Marshall, 2009). Likewise, the questions in Section B that require respondents to select options based on the 5-point Likert scale can also be analysed using the same method to calculate the means, medians, or ranges of numerical data, especially for the contrast between the highest and lowest values obtained regarding specific negative impacts stated in the questionnaire. Since the data will be collected using Google Forms, the data can also be generated into visual representations, including pie charts and graphs, according to the statistics gathered from the questionnaire, which will facilitate the analysis process. Consequently, after the data is visualized, the information collected will be described and interpreted, whereby the discussions will highlight the key findings, emphasize the unique observations, correlate the findings to the initial aims, and explain the significant insights.

Other than descriptive statistical analysis, thematic analysis will also be applied to analyze data collected in Section C of the questionnaire, which comprises two open-ended questions. According to Clarke and Braun (2016), thematic analysis is an approach fundamentally used to identify, interpret, and analyze patterns of themes or meaning in data, which is extremely flexible not only in terms of sample size but also in data collection methods, research questions, objectives, and more. Researchers commonly use this approach to investigate participants' perspectives, feelings, emotions, etc., about an emerging issue or phenomenon. For this method, there are several procedures to follow in analyzing the data. Firstly, the data collected on the respondents' opinions will be familiarized to thoroughly understand the information before being broken down into smaller parts for further analysis. Secondly, the broken-down chunks of data will then be organized into differing categories, such as the similarities between the precautionary measures suggested by the respondents, which will be grouped together into themes. Thirdly, the themes developed in the previous stage will be reviewed and validated, ensuring no repetitions or overlapping of categories

before beginning to define them. Ultimately, the last step after the varying groups of data is developed is to discuss the findings by connecting them with the research questions and relevant support from past studies.

The combination of the two analytical approaches mentioned will present the respondents' diverse perceptions on the use of Artificial Intelligence in English language learning and the preventive measures, providing valuable insights into the various outcomes of the findings. Therefore, the consolidation of both methods of analysis will enhance a greater understanding of the data obtained and further clarify the validity of the findings.

3.7 Summary

To summarize, the research designs to achieve the objectives of the study, the samples required for this research, the instruments needed for data collection, the step-by-step procedures of collecting data from respondents, and the approaches to analyse the information obtained from the study.

CHAPTER 4: DATA ANALYSIS

4.1 Introduction

This chapter emphasises on the findings and discussions of this research based on the data collected from the questionnaire distributed. To elaborate, the data obtained for both research questions are interpreted and discussed in this section with the assistance of tables and descriptions.

4.2 Findings and Discussions

The questionnaires that were distributed received a total of 106 responses, which is relatively less than the initial target expected, 150 responses. In this case, the possible reasons for this occurrence might be due to the limited number of students majoring English in the selected university, or perhaps due to the students' lack of interest in participating.

However, within the 106 responses received, there were sufficient information and perspectives obtained from the respondents to achieve the goals of this research. As a start, the data collected were analysed and interpreted using two types of analytical methods, namely descriptive statistical analysis and thematic analysis. The former analytical method is used to analyse the data from Section A and Section B in the questionnaire that require respondents to answer the questions using a 5-point Likert Scale ranging from Strongly Disagree to Strongly Agree. In contrast, the latter is utilised to analyse the data obtained from Section C of the questionnaire, whereby respondents need to provide their opinions and perspectives by answering open-ended questions.

Question	Frequency		
Age Group	**18 – 20 years**	**21 years and above**	
	35 (33%)	71 (67%)	
Year of Study	**Year 1**	**Year 2**	**Year 3**
	26 (24.5%)	25 (33%)	45 (42.5%)

Table 1 Demographic Data of Respondents

Prior to the questions that answer Research Question 1 and 2 within the questionnaire, two simple demographic questions were included in Section A to briefly identify the respondents' age group and year of study. According to *Table 1*, it is perceived from the data obtained that majority of the respondents are aged 21 years and above, with a total of 67%, whereas the remaining 33% of respondents fall under the age group of 18-20 years. As for their year of study, the responses showed that 45 out of 106 respondents are Year 3 students (42.5%), which has the highest percentage among all three groups. On the other hand, the distribution of the respondents' year of study in the remaining two groups are relatively balanced, with 26 respondents from Year 1 (24.5%), followed by 25 respondents from Year 2 (33%).

4.2.1 Research Question 1 – What are the long-term negative effects of Artificial Intelligence usage on English Language Learning?

To answer Research Question 1 (RQ1) regarding the long-term negative impacts of using Artificial Intelligence on English language learning, 14 questions in total were asked in the questionnaire under Section B. This section includes questions asking for respondents' frequency of AI usage in education, along with their opinion on questions encompassing various areas of potential negative impacts in using AI extensively, such as false information, technology dependence, limited customisation, personal disconnection, and increased screen

time. Moreover, as a concluding question for Section B, respondents were also asked which of the five areas mentioned would most likely occur from an excessive use of AI in English language learning.

No.	Question	SD	D	N	A	SA
1.	How frequent do you use AI technologies for educational purposes? (e.g. ChatGPT, Quillbot, Grammarly, Jenni AI, etc.)	5 (4.7%)	4 (3.8%)	11 (10.4%)	**36 (34%)**	**50 (47.2%)**
2.	I have experienced receiving inaccurate or misleading information when using Artificial Intelligence to complete academic tasks or enhance my language abilities.	2 (1.9%)	18 (17%)	19 (17.9%)	**37 (34.9%)**	**30 (28.3%)**
3.	False information provided by Artificial Intelligence will result poorly in my academic performance.	5 (4.7%)	12 (11.3%)	17 (16%)	**35 (33%)**	**37 (34.9%)**
4.	Using Artificial Intelligence for an extensive period has caused me to become overly reliant on it for language enhancing.	4 (3.8%)	8 (7.5%)	20 (18.9%)	**33 (31.1%)**	**41 (38.7%)**
5.	The frequent use of Artificial Intelligence has affected my	5 (4.7%)	18 (17%)	21 (19.8%)	**38 (35.8%)**	**24 (22.6%)**

	critical thinking and problem-solving skills.				
6.	Artificial Intelligence does not help me much with my problems on specific concepts, theories, or skills in English language learning.	**14 (13.2%)**	**35 (33%)**	23 (21.7%)	20 (18.9%)	14 (13.2%)
7.	I feel like excessive use of Artificial Intelligence diminishes my creativity and individuality in enhancing my English or completing my tasks.	6 (5.7%)	20 (18.9%)	17 (16%)	**34 (32.1%)**	**29 (27.4%)**
8.	Using Artificial Intelligence causes learning to become less engaging, motivating, and interesting for me.	10 (9.4%)	26 (24.5%)	17 (16%)	**31 (29.2%)**	**22 (20.8%)**
9.	The growing use of Artificial Intelligence in learning English made it more difficult for me to engage in communication with lecturers and peers.	**24 (22.6%)**	**34 (32.1%)**	20 (18.9%)	13 (12.3%)	15 (14.2%)
10.	Artificial Intelligence decreases my opportunities in collaborating with my course	**22 (20.8%)**	**33 (31.1%)**	23 (21.7%)	15 (14.2%)	13 (12.3%)

	mates in group discussions or projects.				
11.	My screen time rapidly increased along with my extended usage of Artificial Intelligence to complete academic tasks or enhance my English.	4 (3.8%)	12 (11.3%)	13 (12.3%)	**42 (39.6%)**	**35 (33%)**
12.	The increase in my screen time reduces my attention span, making me less capable of focusing on one task.	10 (9.4%)	17 (16%)	17 (16%)	**32 (30.2%)**	**30 (28.3%)**
13.	The increase in my screen time also deteriorates my mental health, implicitly influencing my ability to do well academically.	8 (7.5%)	30 (28.3%)	19 (17.9%)	**31 (29.2%)**	**18 (17%)**

Table 2 *Frequency Data of Negative Effects*

Based on *Table 2*, the data collected for Question 1 regarding the respondents'
frequency of using AI technologies for academic purposes indicate that out of 106
respondents, a total of 86 of them were inclined towards the positive side of the spectrum.
The statistics show that 50 of the respondents voted for Strongly Agree (47.2%) while 36 of
them voted for Agree (34%), which makes up 81.2% of the total respondents. Next,
examining the first area of negative impacts, false information, is the issue of inaccurate
information provided by Artificial Intelligence that would confuse students' understanding of

a topic and result in poor academic performances. With that being said, this leads to Question 2 about the respondents' experience of receiving false information when using AI for educational intentions. The results demonstrate that 67 respondents (63.2%), which takes up more than half of the total respondents, either agreed or strongly agreed that they have experienced receiving false information. Particularly, 37 among of 67 respondents agreed (34.9%), and 30 of them strongly agreed (28.3%). Moving on is Question 3, enquiring respondents' stance on the matter that AI-provided information that are false will lead to poor academic performances. The statistics for this question display that among the 106 respondents, majority of them were keen on the fact that inaccurate information from AI will affect their academic performances poorly (72%). To be specific, 37 of them voted for Strongly Agree (34.9%), while 35 of them voted for Agree (33%). Thus, considering the frequencies of data for Question 2 and 3, it is implied that most of the respondents agree that false information is a potential negative impact that would occur from an excessive use of Artificial Intelligence in learning English.

Furthermore, investigating into the second area of negative impacts is technology dependence, to which aims to explore the possibilities of over-reliance on Artificial Intelligence that might cause a major decrease in an individual's higher-order thinking skills. Correspondingly, this directs to Question 4 asking for respondents' perspective of whether an extensive usage of AI causes over-reliance for language enhancing, by which 74 out of 106 respondents leaned towards agreeing, with a total of 69.8%. Among these 74 respondents, there are 41 that strongly agreed (38.7%), while the remaining 33 agreed (31.1%). As for Question 5, the data depicts that more than half of the respondents, 62 of them to be exact, conform that the frequent use of AI has impacted their problem-solving and critical thinking skills (58.4%). Analysing it in detail, 38 of the 62 respondents agreed (35.8%), and the other 24 respondents strongly agreed (22.6%) on this subject matter. Hence, the numerical data

accumulated for Question 4 and 5 illustrates that majority of the respondents' perspectives are inclined towards conforming that technology dependence is a major negative consequence resulted from using Artificial Intelligence extensively in English language learning.

In addition, the third area of negative consequences in this research also includes limited customisation, the occurrences of diminishing creativity, engagement, motivation, etc. in learning English which stems from a lack of customisation in Artificial Intelligence. The numbers obtained from Question 6 indicate that 46.2% of the respondents' answers were negatively aligned on the viewpoint that AI does not provide much assistance in solving problems with concepts, theories, or skills in learning English. Specifically, 35 of the respondents chose Disagree (33%), and 14 of them chose Strongly Disagree (13.2%). Contrarily, in Question 7, whereby respondents are asked in terms of whether excessive AI usage has depleted their creativity and individuality in completing tasks and enhancing their English, there were 63 of them who displayed a positive inclination (59.5%). Among these 63 respondents, 34 of them chose Agree (32.1%), whereas 29 of them chose Strongly Agree (27.4%). Also, the statistics for Question 8 demonstrate that 53 respondents, which is exactly half of the total 106, displayed a positive tendency on the fact that AI usage leads to less engaging, motivating, and interesting learning (50%). To elaborate, 31 of them agreed on the stance (29.2%), and 22 of them strongly agreed (20.8%). As such, concluding the results from Question 6 to 8 insinuates the vast majority of responses with positive tendencies towards limited customisation as one of the negative effects in using AI excessively for English language learning.

Moreover, the fourth area of negative impacts in this analysis concerns personal disconnection, emphasising on issues related to AI users' ability to socialise and work collaboratively, which results from a lack of interpersonal interaction. In Question 9, when

asked about whether the increasing use of AI hinders one's capability in communicating with peers and lecturers, 58 of the total respondents exhibited decisions that leaned towards the negative side of the spectrum (54.7%). Particularly, 34 of them disagreed on the stance (32.1%), while 24 of them strongly disagreed (22.6%). Following that, Question 10 pursues respondents' perspectives on the standpoint that AI diminishes one's collaborative opportunities in group tasks. For this question, the numbers from the data collected illustrate that slightly more than half of the respondents, 55 of them (21.7%), are on the negative side of the scale. Specifically, 33 of the respondents voted for Disagree (31.1%), whereas the remaining 22 out of the 55 voted for Strongly Disagree (20.8%). After surveying the responses as a whole for Question 9 and 10, it is perceived that majority of the respondents do not consider personal disconnection as a negative impact of using AI excessively.

Additionally, the fifth and also the last area of negative effects is increased screen time. This area primarily mentions the consequences that follow after an increase in users' screen time, which include the prospects of a reduction in attention span, deterioration in mental health, and indirect influence on academic abilities. Starting with Question 11, respondents were asked to choose a stance on the matter that there is an increase in their screen time that ensues along with the extensive use of AI in completing tasks or enhancing English. In this case, most of the respondents displayed positive tendencies, with a total of 77 of them who chose Agree and Strongly Agree (72.6%). To be precise, occupying the highest number of votes would be 42 respondents for Agree (39.6%), followed by the second highest number of votes, 35, who voted for Strongly Agree (33%). Moving on to Question 12 is the subject that an increase in the users' screen time depletes their attention span, and eventually negatively influences their ability to focus on solely one task as well. Under this circumstance, out of the 106 respondents, 62 of them showed positive inclinations (58.5%), with 32 of them who chose Agree (30.2%), and 30 of them who chose Strongly Agree

(28.3%). Other than that, Question 13 also seeks for respondents' perspective on the deterioration of an individual's mental health and implicit influence on their academic abilities that stem from the increase in screen time. In this question, there were more respondents who inclined towards the positive side of the spectrum rather than the negative, which comes up to a total of 49 respondents (46.2%). To elaborate, 31 of them chose Agree (29.2%), while 18 of them chose Strongly Agree (17%). Henceforth, the numerical figures demonstrated in Question 11 to 13 depicts that a significant number of responses acknowledges increased screen time as a potential negative effect of using AI excessively in English language learning.

14. Which of the following negative effects do you think are most likely to occur from an extensive and excessive use of Artificial Intelligence in English Language Learning?	Frequency
False Information	**60 (56.6%)**
Technology Dependence	**86 (81.1%)**
Limited Customisation	29 (27.4%)
Personal Disconnection	**13 (12.3%)**
Increased Screen Time	24 (22.6%)

Table 3 Frequency Data of Five Areas in Negative Effects

Last but not least, the final question in Section B of the questionnaire, Question 14, intends to scrutinise respondents' general perspectives on which of the five areas of negative effects aforementioned in the previous questions have the highest possibility of occurring from using AI extensively in learning English. According to *Table 3*, among the five areas, the one with the greatest number of votes falls to technology dependence with a total of 86 out of 106 respondents (81.1%), followed by false information with the second highest number of votes with a total of 60 respondents at 56.6%. On the contrary, the negative impact

with the lowest number of votes is personal disconnection, in which only 13 out of 106 respondents voted for (12.3%).

4.2.2 Research Question 2 – What are the precautionary measures to reduce possible long-term negative effects of Artificial Intelligence usage on English Language Learning?

To address Research Question 2 (RQ2) in terms of the precautionary measures to reduce possible long-term negative effects of Artificial Intelligence usage on English language learning, 2 open-ended questions were included under Section C in the questionnaire distributed. In this section, respondents are required to provide their opinions on what are the effective methods or strategies to implement in order to mitigate the negative impacts discussed in the previous section. The data collected for this RQ are analysed using thematic analysis method and categorised into 4 different themes for each question in accordance with the keywords or phrases discovered among the responses obtained.

THEMES
Plagiarism Detection Tools
Practical Activities and Classroom Tasks
Assessment Personalisation and Adaptation
AI Literacy and Controlled Usage

Table 4 Categorisation of Themes for Question 1

Through a thorough analysis of the responses received from Section C (open-ended questions) in the questionnaires distributed, *Table 4* presents the four themes from the responses under **Question 1**, including Plagiarism Detection Tools, followed by Practical Activities and Classroom Tasks, Assessment Personalisation and Adaptation, along with AI Literacy and Controlled Usage.

THEME	RESPONSES
Plagiarism Detection Tools	**Participant 7:** AI checker such as copyleaks AI and turnitin might prevent negative impacts of it.
	Participant 9: Plagiarism detection tools like turnitin to check our work mistakes.
	Participant 18: Plagiarism detection tools, because it can help detect the AI involvement in the work…
	Participant 25: Using plagiarism checker is effective to prevent negative impacts of using A.I in English language learning…
	Participant 36: Plagiarism detection tools…
	Participant 38: I believe plagiarism detection tools would be suitable in preventing negative impacts of using AI excessively…
	Participant 44: We can limit our AI usage by using plagiarism detection tools…
	Participant 49: plagiarism detection tools.
	Participant 51: Plagiarism detection tools
	Participant 54: Plagiarism detection tools
	Participant 55: Develop more plagiarism detection tools to ensure students double-check their work even if they utilize AI…
	Participant 57: Plagiarism detection tools as it can directly tell us which part of the text is AI generated.
	Participant 59: Plagiarism detection tool
	Participant 62: Plagiarism detection tools…
	Participant 75: Plagiarism, because people can change the mistake of AI during plagiarism

	Participant 83: plagiarism tools as well as creating assignments that do not allow for the easy use of AI to answer the questions. **Participant 88:** Plagiarism detection tools would be most suitable because it can detect the frequency in terms of AI usage… **Participant 92:** Plagiarism detection tools are effective. It can detect users' AI usage in their work… **Participant 93:** The reinforcement of plagiarism detection tool in detecting AI writing… **Participant 106:** Use turnitin or quilbot. These tools can detect the Ai generated texts in a short time in every written assessment.

Table 5 First Theme of Question 1 (Plagiarism Detection Tools)

Examining into Question 1, the themes fixed aim to encompass the respondents' various opinions on the most effective measures in preventing negative effects of using AI excessively in English language learning. First and foremost, looking into **Plagiarism Detection Tools** in *Table 5*, it is understood that this theme demonstrates the suggestion of using plagiarism detection tools such as Turnitin, Quillbot, Copyleaks, and more, to check students' usage of AI. By doing so, it is believed that students would be more aware of their excessive usage in AI and realise that their works are lacking in terms of individuality and originality, especially considering that much of the information are possibly generated by AI. Among the responses categorised under this theme, some of the common keywords or phrases that appear involve the use of "plagiarism detection tools", "AI checker", "plagiarism checker", "Turnitin/Quillbot", etc., which highly suggests the presence of AI detection mechanisms or tools. For example, one of the more prominent responses provided by the participants on this matter is the recommendation "*Plagiarism detection tools would be most suitable because it can detect the frequency in terms of AI usage…*" as submitted by

Participant 88. In this response, they key phrase "plagiarism detection tools" is mentioned mainly for its function in detecting users' frequency of AI usage and notifying them about the lack of originality in their works. With this, it is implied that through attaining awareness of one's lack of individuality in their works, the chances of their continuation in using AI extensively to complete tasks might be diminished. Additionally, another prominent response is by Participant 25 who reckons that "*Using plagiarism checker is effective to prevent negative impacts of using A.I in English language learning...*". Similarly, this response depicts utilising plagiarism checkers to acknowledge an individual's percentage in AI usage for them to know to what extent they rely on AI in completing work. Subsequently, this implicitly reduces learners' frequency of AI usage and encourages them to enhance their English appropriately without exploiting AI, thus mitigating the over-dependence on Artificial Intelligence.

THEME	RESPONSES
Practical Activities & Classroom Tasks	**Participant 1:** Practical activities like group discussions, role-plays, and games help students use English in real situations… **Participant 8:** Students can be evaluated through tasks that AI cannot easily help with, such as oral presentations where students need to demonstrate their language proficiency on the spot… **Participant 20:** Use AI only for specific purposes that do not require measurability: (1) suggestive prompts for Word Chain games/quizzes… **Participant 22:** Practical and creative activities as it enables teachers to gain students' attention… **Participant 30:** The most effective measure is incorporating practical, interactive classroom activities alongside AI tools…

	Participant 32: Implement more of on the spot task without the use of any technological devices.
	Participant 33: More practical activities during lessons…
	Participant 35: Can use AI detectors and provide practical activity to track down students' academic performance…
	Participant 36: Plagiarism detection tools. Apart from that, students can be asked questions on the spot after a particular lesson to ensure they understand…
	Participant 42: Practical activities would be best…
	Participant 45: I think practical activities would be efficient because we would be motivated to complete hands-on activities…
	Participant 56: The most effective measure is integrating project-based practical activities such as presentation
	Participant 66: These tasks, like role-plays or group discussions…
	Participant 70: Practical activities. Because they require students' creativity and personal input…
	Participant 71: I think integrating hands-on activities such as group works, language games, paper-based projects, etc…
	Participant 73: Incorporate Practical, Creative Output Tasks Regularly…
	Participant 76: Group work. Have discussion with other to solve problems
	Participant 86: Incorporating practical activities can help prevent technology dependence…

	Participant 89: Practical activities, especially group activities…
	Participant 90: Practical activities would be the most effective measure…
	Participant 91: Practical tasks that focus on learners' creativity skills such as designing, drawing, imagining, etc…
	Participant 95: AI Reflection Journals with Peer Feedback. Students write weekly reflections…
	Participant 96: We can have AI free challenge days. Designate specific days where students complete tasks or projects without any AI tools…
	Participant 97: Practical Activities. As a student, I sometimes rely too much on AI when I'm stuck…
	Participant 99: Practical Activities. As a freshman still learning the basics, I often turn to AI because I'm unsure of myself…
	Participant 100: Suggestion: AI-Free Challenge Days Explanation: Designate regular "AI-Free Challenge Days" where students complete tasks—like storytelling, debates, or journaling—without any digital aid…
	Participant 102: Suggestion: Incorporate Practical and Collaborative Learning Activities…
	Participant 103: Suggestion: Spontaneous Writing Prompts. Explanation: Give surprise in-class writing tasks with limited time and no device access…
	Participant 105: Provide more practical activities or excersise…

Table 6 *Second Theme of Question 1 (Practical Activities and Classroom Tasks)*

Other than that, exploring the theme of **Practical Activities and Classroom Tasks** in *Table 6* highlights the recommendation of conducting practical activities and tasks within the classroom itself to encourage learners' hands-on execution. This prevents the over-reliance on AI technologies to generate ideas and answers promptly without learners' own contributions. This is because activities or tasks that require learners' personal input, opinions, perspectives, and experiences would be effective not only in reducing over-reliance on AI but also fostering practical language use, critical thinking, and creativity. Under this theme, there are several keywords or phrases that commonly appear in the respondents' answers, such as "practical activities", "interactive classroom activities", "on-the-spot tasks", "project-based activities", "hands-on activities", and more that are essentially similar. For instance, one of the responses that stands out the most is "*Practical activities like group discussions, role-plays, and games help students use English in real situations…*" by Participant 1. This response emphasises the practicality of activities in terms of its relevance and efficacy in real-life scenarios where learners are required to carry out the language skills on the spot without the assistance of AI. Moreover, Participant 1 also mentioned about how the execution of practical activities can induce a fun learning environment and significant confidence boost for the learners. Besides that, Participant 91 also submitted a notable response, "*Practical tasks that focus on learners' creativity skills such as designing, drawing, imagining, etc…*", whereby it focuses on learners' engagement and motivation in learning rather than the relevance of skills itself. In this case, it is insinuated that creative skills like drawing, designing, imagining, etc. that learners express in practical tasks is an effective method in reigniting their level of engagement to learn. As such, this provides the indication that practical tasks that allow learners to express themselves creatively not only promotes originality but also encourages them to take control of their learning process.

THEMES	RESPONSES
Assessment Personalisation & Adaptation	**Participant 2:** One effective measure is using personalised assessments. This helps teachers evaluate students…
	Participant 6: Increasing the bar of assessment equally while not banning the use of artificial intelligence…
	Participant 8: Students can be evaluated through tasks that AI cannot easily help with, such as oral presentations where students need to demonstrate their language proficiency on the spot. They can also be given personalised assessments based on their abilities or personal interests…
	Participant 10: One of the most effective measures to prevent the negative impacts of excessive AI use in English language learning is personalised assessments…
	Participant 11: I think personalised assessments, like written exams without any assistance from artificial intelligence…
	Participant 12: One of the most effective measures to prevent the negative impacts of excessive AI use in English language learning is personalised, teacher-led assessments…
	Participant 17: Implement personalised assessments that require learners to apply language skills in authentic, context-based tasks…
	Participant 26: One of the most effective measures to counterbalance the negative consequences of excessive dependence on AI in English language acquisition is the

	implementation of AI-proof tests that emphasize higher-order thinking skills…
	Participant 27: One effective measure is the use of personalized assessments that require critical thinking and creativity…
	Participant 29: Have exams where students cannot use AI, and therefore will still require to study independently.
	Participant 31: One of the best ways to prevent the negative effects of relying too much on AI in English learning is through personalised assessments.…
	Participant 34: A practical approach to mitigating the drawbacks of excessive AI use in learning English is implementing personalized assessments…
	Participant 37: I think personalised assessments would be the most effective way…
	Participant 40: Physical lessons and assessments where the students are unable to use Artificial Intelligence…
	Participant 46: Personalised assessments. They encourage original work and reduce AI overreliance…
	Participant 47: I think personalised assessments would be most efficient…
	Participant 50: Personalised assessments are most effective, as they require individual responses…
	Participant 52: Personalised assessments help ensure originality…

	Participant 58: Plagiarism detection is reactive—it only catches issues after they happen. But personalised assessment is proactive…

Participant 60: Personalised assessments help reduce overreliance on AI…

Participant 61: Personalised assessments require learners to demonstrate their understanding…

Participant 63: Personalised assessments. Require students to produce original responses…

Participant 64: Use personalised assessments to check real understanding. They show true skills, not AI-generated work.

Participant 68: meaningful questions; if AI can answer the question, it probably isn't worth asking

Participant 69: Personalised assessments would be most effective…

Participant 77: Personalised assessments. It gives each students a suitable assessment for them to do without relying on Ai.

Participant 82: I believe personalized assessments could be an effective way to reduce everyone's dependence on AI…

Participant 85: Personalised assessments. They encourage original thinking and reduce over-reliance on AI…

Participant 87: Personalised assessments would be effective. Learners are required to provide original work… |

	Participant 98: Personalised Assessments. As a final-year student who often excels, I believe personalised assessments are the most effective measure…
	Participant 101: Personalised assessments are one of the most effective ways to prevent the negative impacts of excessive AI use in English language learning…
	Participant 104: Personalised Assessments. Explanation: Personalised assessments reduce overreliance on AI…

Table 7 *Third Theme of Question 1 (Assessment Personalisation and Adaptation)*

Furthermore, there is also a theme labelled as **Assessment Personalisation and Adaptation** in ***Table 7***, to which displays the implication of utilising personalised and modified assessments in the way that does not require any use of AI technologies. This is because the excessive use of AI reflected by learners are going against the traditional methods and values of assessments, which require their independent thinking and language skills. As such, assessments should be personalised and adapted so that learners are able to produce unique and original answers rather than generic and sometimes inaccurate answers generated by AI. For this category of responses, the keywords or phrases that correspond with the fundamental elements of the theme are "personalised assessments", "teacher-led assessments", "AI-proof tests", "meaningful questions", and such. As an example, an eminent recommendation proposed by Participant 17 is "*Implement personalised assessments that require learners to apply language skills in authentic, context-based tasks…*", underscoring the personalisation of assessments in terms of evaluating learners' language skills under relevant, authentic, and contextual tasks that necessitate some sort of personal input. Assessments such as creative writing, portfolios, and oral presentations that are heavily based off learners' individual experiences, opinions, and self-expression can undoubtedly

help them explore into their own perspectives and ideas without the reliance of AI technologies. Other than that, it is also mentioned in the response that teachers may also offer meaningful feedback that is tailored to learners' individual needs as this also fosters a holistic and authentic learning process. Moving on, another noteworthy response is "*Personalised assessments are one of the most effective ways to prevent the negative impacts of excessive AI use in English language learning…*" by Participant 101. In contrast to the previous response, rather than concentrating on learners' opinions and experiences, this theme reckons tailoring assessments based on their diverse backgrounds, interests, and learning profiles. By doing so, it demotivates the learners in using AI as a means of generating answers or ideas because it would require much of their own creativity, original thinking, and authentic language use instead. As a result, likeliness of high plagiarism content and over-dependence on AI can be eventually diminished across time while also fostering learners' originality in assessments.

THEMES	RESPONSES
AI Literacy & Controlled Usage	**Participant 3:** Use AI develop ideas instead of copying everything. Double check the information given by AI **Participant 4:** read and cross check before using information provided by AI to prevent wrong information **Participant 5:** …Instead, he or she should think and learn more from both aspects to ensure their own effective learning. **Participant 13:** use AI purely just to understand a topic, rather than asking it to answer the question directly **Participant 14:** rather than ban AI, I believe that constructing activities which allow the use of AI but with rulesets would prevent the negative impacts of AI usage. **Participant 16:** Control the usage of AI.

	Participant 19: Reduce the frequency of utilising artifical intelligence tools while doing work in relation to creativity…
	Participant 21: Conducting AI literacy workshops. Teaching students how to use AI responsibly…
	Participant 23: Try writing down on a piece of paper about ideas that you want to brainstorm about…
	Participant 24: Universities/Schools should have a strict guidelines regarding using Artificial Intelligence in English language learning…
	Participant 28: Increase learners' awareness about using AI so that they are aware of the potential issues…
	Participant 39: We can expand our knowledge on AI ethics. While it is okay for us to use AI in helping us…
	Participant 41: Having ethical guidelines and frameworks
	Participant 43: …This way, we can rely on ourselves instead of AI to complete writing tasks.
	Participant 48: workshops on how to use AI effectively (eg, how to give good prompts)…
	Participant 53: Don't too rely on any AI apps
	Participant 65: Cross check the info given by AI tools
	Participant 67: Suggestion: Promote digital literacy and AI awareness. Explanation: Teaching students how AI works…
	Participant 72: AI users need to set boundaries on AI usage…
	Participant 74: Have workshops on the ethical way of using AI
	Participant 78: Only use AI for ideas but not detailed works

	Participant 79: Proper education and exposure to AI. Instead of limiting, we should work towards appropriate…
	Participant 80: Communicate face-to-face and avoid any electronic equipment while talking.
	Participant 81: Always check all the resources manually
	Participant 94: Spread the awareness of the possibility of false information provided by AI…

Table 8 Fourth Theme of Question 1 (AI Literacy and Controlled Usage)

Lastly, the final theme for the responses under Question 1, **AI Literacy and Controlled Usage**. Based on *Table 8*, this theme features suggestions of both learning about AI literacy regarding the principles, knowledge, and necessary information, along with controlling the use of AI in terms of the frequency, duration, and intensity. Under this circumstance, the former indicates that users of AI should be aware of how to utilise AI responsibly and appropriate without exploiting it; whereas the latter implies that users should limit themselves on how much AI to use, especially when completing academic tasks or enhancing their English language. In accordance with the core elements in this theme, some of the keywords and phrases that frequent in the responses obtained include "cross-check information", "AI with rulesets", "control usage", "AI literacy workshops", "increase awareness", "digital literacy", "set boundaries", and much more. Looking specifically into the subject on AI literacy under this theme, a prominent example response is "*Conducting AI literacy workshops. Teaching students how to use AI responsibly...*" by Participant 21. This participant mentions the purpose of AI literacy workshops that mainly impart knowledge onto learners or major AI users on the responsible ways to use AI, and the benefits or potential drawbacks that follow from using AI extensively. It is also believed that through such knowledge and AI literacy education, AI users can gain a comprehension about using AI

as a supportive tool and not a substitution in learning. Next, focusing on the controlled usage part of the theme, it is accurately depicted by Participant 72's response, "*AI users need to set boundaries on AI usage. They need to understand that AI can be used for brainstorming for ideas…*", in which users are urged to set boundaries with themselves when using AI to complete tasks. While it is understandable to use AI as an assistive tool in brainstorming and obtaining ideas, the content along with the justifications should remain majorly contributed by the learners themselves. This is due to the fact that many irresponsible AI users utilise AI technologies to generate content and solve problems without any of their individual input into the works, which results in the over-reliance and unethical usage of AI. With that being said, by encouraging users to limit their AI usage, they are compelled to insert their own thoughts, perspectives, and opinions into completing tasks, and eventually, this can promote various skillsets like critical thinking, problem solving, self-expression, and more.

THEMES
AI Literacy and Ethical Usage
Practical and Human-Centred Activities
Controlled Usage of AI
Independent Thinking and Creativity

Table 9 Categorisation of Themes for Question 2

On the other hand, as for **Question 2**, the responses collected were analysed and four separate themes were also derived from the total responses. In *Table 9*, the four themes involve AI Literacy and Ethical Usage, Practical and Human-Centred Activities, Controlled Usage of AI, as well as Independent Thinking and Creativity.

THEME	RESPONSES
AI Literacy & Ethical Usage	**Participant 1:** Teachers can explain when and how students are allowed to use AI tools, like for checking grammar or getting ideas… **Participant 4:** encouraging youth to read more and cross check more **Participant 6:** Proper ways of using Artificial Intelligence should be instructed in schools… **Participant 19:** …we as human have to differentiate whether the information we were provided are true or false and is it usable in our academic work. **Participant 20:** Use prompts like "proof of validation" from an uploaded referenced source… **Participant 23:** Increase more ai detectors that can be used by both students and teachers **Participant 24:** Heavy punishment towards teachers/lecturers and students who abuse Artificial Intelligence in English language learning classes… **Participant 25:** Paraphrasing my sentences would be effective because paraphrasing changes the sentence structrure without changing the original meaning of the sentence. **Participant 28:** …This can raise learners' awareness about how to use AI appropriately without exploiting it **Participant 29:** Provide awareness to students regarding the potential side effects. **Participant 33:** Educate students on AI literacy in terms of the limitations and potential errors that AI may produce…

	Participant 36: Develop more AI detection tools such as "Turnitin"
	Participant 37: For inaccurate information, we can check the credibility of information generated by AI. By ensuring the reliability of the source…
	Participant 41: Teach the public understanding and dialogue around AI's potential impacts.
	Participant 42: Increase our knowledge about the advantages and disadvantages of AI. While it is good to use AI every now and then…
	Participant 51: Use plagiarism detection tool so that even if people uses AI, they still need to think on how to paraphrase and stuffs
	Participant 55: Come up with more paraphrasing
	Participant 58: …This builds digital literacy and encourages ethical usage. Plus, when teachers are actively involved in guiding AI usage, students are less likely to rely on it blindly.
	Participant 62: Students should try to understand contents from sources and paraphrase it so that they can avoid plagiarism.
	Participant 70: For the problem of false information, we can always double check the information generated by AI with reliable sources…
	Participant 71: Incorporate AI literacy education to AI users, teaching them how to critically evaluate information generated by AI…
	Participant 74: Schools can adopt a stricter AI detector system to prevent students for over relying on AI
	Participant 78: Discover ways to utilize AI in command prompt instead of blindly asking for all the answers.

	Participant 79: The endorsement of self-monitoring ethic. To teach the people the appropriate and proper ways to utilize AI, towards discipline and self-control.
	Participant 81: For me, I will always check online such as Google or Google scholar to make sure that the data from AI is accurate…
	Participant 87: For misinformation, we can learn to double check information provided by AI with reliable sources.
	Participant 90: Raise awareness about AI literacy, we need to understand that we can use AI as a supportive tool…
	Participant 91: Learn about both the benefits and drawbacks of using too much AI. This can help us understand how to appropriate use AI…
	Participant 92: Cross check information given by AI with credible sources instead of relying completely on AI.
	Participant 98: Encourage Critical Reflection Before Submission. As a high-performing final-year student, I find it helpful when lecturers ask us to include short reflections explaining our thought process. This strategy discourages blind use of AI by requiring us to demonstrate personal understanding, which maintains academic integrity and supports real learning.
	Participant 105: Teach some literacy of AI in learning. Learners should be taught about the role of Ai in learning…

Table 10 *First Theme of Question 2 (AI Literacy and Ethical Usage)*

Subsequently, the four themes under **Question 2** involve the respondents'
recommendations on the strategies to adapt in reducing the potential negative impacts
mentioned under the analysis of data for RQ1. Beginning with the first theme, **AI Literacy**

and Ethical Usage in *Table 10*, it reflects two separate areas under the same theme. Firstly, it reflects the measures in terms of learning how to use AI accountably and adequately without taking advantage of it, and secondly, it also involves learning how to use AI ethically. The former implies expanding one's knowledge about AI by learning the proper ways to use AI technologies, determining accuracy of AI-generated information, understanding AI's potential drawbacks, and more; whereas the latter indicates the ethical use of AI regarding issues such as plagiarism, AI abuse, paraphrasing, etc. Among the responses, some of the most commonly observed keywords and phrases are "AI detectors", "abuse AI", "raise awareness", "potential side effects", "digital literacy", "ethical usage", "academic integrity", and more. For the first area known as AI literacy, the most appropriate response is "*Educate students on AI literacy in terms of the limitations and potential errors that AI may produce…*" by Participant 33 that emphasises educating learners on the potential errors and limitations of AI regarding the information it generates. This includes teaching them the correct measures in cross-checking AI-generated information with reliable sources to determine the accuracy and quality of the information. This is because while it is true that AI generates information much easier and much more convenient in comparison to searching for it through the vast internet database, it is also essential to take into account that information provided by AI might not be accurate or up-to-date, which may significantly affect one's academic performance if it is used to complete tasks or learn English. Next, investigating into the ethical usage part of the theme, another notable response submitted is "*Schools can adopt a stricter AI detector system to prevent students for over relying on AI*" by Participant 74. For this response, there is a major consideration of implementing rigid AI detector systems that can detect students' tendency in over-relying on AI when completing tasks. This suggestion primarily aims to discourage the unethical use of AI by detecting plagiarism in learners' works, especially when they copy and paste information generated by AI without checking

the credibility of the source or without paraphrasing the content. With this, learners will be prompted to search for information through credible sources like journal articles or books, and they will also be encouraged to learn how to paraphrase sentences along with how to credit the sources used.

THEMES	RESPONSES
Practical & Human-Centred Activities	**Participant 2:** One strategy is to use practical, in-class activities like group discussions or role-plays…
	Participant 5: One of the strategies that can be used are engage ourselves more with our peers pr people surrounding us…
	Participant 9: …but meaningful learning still depends on student-teacher and peer interaction.
	Participant 16: …They should think the issue more critically or discuss it with their peers instead of discussion with AI to ask for solutions.
	Participant 21: Conducting group discussions and peer reviews encourages teal-time language use and ideas development…
	Participant 22: Reduce using technological devices, this can improve physical interaction
	Participant 26: One short solution to balance against the negative effects of excessive usage of AI in teaching English language is to insert human touch and critical thinking activities into the course curriculum…
	Participant 27: integrating AI tools with collaborative classroom activities. For example, teachers can use AI for brainstorming…

	Participant 32: On the spot task makes students to act immediately allowing critical thinking to take part…

Participant 35: Create or provide a physical assessment such as video production, micro-teaching and campaign…

Participant 43: …using analogues such as physical notebooks, printed calendars, hardcopy books, and more to increase our offline activities rather than staying online all the time

Participant 50: Incorporating practical, collaborative activities reduces overreliance on AI by fostering real-time communication…

Participant 52: Group discussions, role-plays, and real-time debates encourage spontaneous language use and critical thinking…

Participant 60: One strategy is integrating more collaborative, in-class activities like group discussions or presentations…

Participant 61: Integrating practical, human-centered activities to reduce the negative effects of excessive AI use…

Participant 63: Practical classroom activities. Such as debates, group discussion and oral presentations

Participant 65: This strategy involves combining AI tools with traditional human-guided learning, such as classroom teaching, peer discussions, and feedback from real instructors.

Participant 67: Strategy: Blend AI use with human feedback…

Participant 69: To solve the issue of increased screen time, we can start by engaging in offline tasks that require us to practice our English… |

	Participant 80: To decrease technology dependence, Don't ask AI tools whenever you meet challenge in life, try to ask someone you know in the real life (maybe teacher, parents or friends)
	Participant 85: Incorporate more practical activities like group discussion…
	Participant 88: One of the strategies to prevent personal disconnection is to prioritise collaborative tasks such as group projects and discussions physically with peers.
	Participant 95: Mix AI with Speaking Activities. After using AI tools, students do speaking tasks like group talks or role-plays. This keeps their real communication skills strong…
	Participant 97: We can have more teacher feedback. Sometimes I depend too much on AI…
	Participant 101: Strategy: Integrating Practical, Human-Centred Learning Activities Explanation: To balance AI use, educators can integrate activities such as group discussions, debates…
	Participant 102: Use Peer Review and Group Feedback Sessions. Explanation: Instead of relying solely on AI feedback, have students review each other's work…
	Participant 103: Design Real-World Language Tasks. Explanation: Give students tasks that mimic real-life situations—like interviewing classmates, giving presentations, or solving problems in English…
	Participant 104: Strategy: Encourage More Collaborative Learning. Explanation: Group discussions, peer reviews, and team projects help reduce overreliance on AI…

Table 11 *Second Theme of Question 2 (Practical and Human-Centred Activities)*

In addition, ***Table 11*** presents the next theme for Question 2, **Practical and Human-Centred Activities** that involves teachers' roles in carrying out activities that are practical and interaction-based with students to foster critical thinking, student-teacher and student-peer interactions, collaborative learning, etc. By having students participate in activities or tasks that focus on not only practicality but also real-life relevance and human interaction, they are able to prevent over-reliance on AI while increasing real-time language use. In the responses, there are some keywords and phrases and make a frequent appearance, namely "practical activities", "group discussions", "physical interaction", "collaborative classroom activities", "human-centred activities", and more. For example, one of the more eminent responses is Participant 61's suggestion on "*Integrating practical, human-centered activities to reduce the negative effects of excessive AI use…*", whereby educators are reckoned to integrate activities that foster critical thinking alongside with real-time communication and authentic English use. Activities like role-plays, debates, group discussions, etc. Unlike the content generated by AI, practical and human-centred activities allow students' collaboration and active participation in the activities as this significantly makes the learning process much more meaningful and engaging for the students. Likewise, such activities also provide a supportive learning environment for the students, in which they can openly work with their peers in solving problems and have more confidence in terms of their language skills. Other than that, another prominent response is submitted by Participant 103 on the viewpoint "*Design Real-World Language Tasks. Explanation: Give students tasks that mimic real-life situations—like interviewing classmates, giving presentations, or solving problems in English…*". This participant highlights conducting real-world language tasks like interviews, presentations, problem solving, and such to encourage students' spontaneous cognitive and communication skills that AI cannot replicate. Subsequently, by carrying out physical

activities that correspond with real-life scenarios, educators can reduce the overuse of AI while maintaining human interaction among the students to a certain extent.

THEMES	RESPONSES
Controlled Usage of AI	**Participant 3:** Ask AI to give ideas instead of the whole content. **Participant 8:** You could implement writing drafts in class and going through them… **Participant 10:** A strong strategy to reduce the negative effects of excessive AI use in English learning is integrating AI as a support tool, not a solution… **Participant 12:** Strategy: Integrating AI as a support tool, not a replacement… **Participant 13:** use AI purely just to understand a topic, rather than asking it to answer the question directly **Participant 14:** Setting up activities which allow the use of AI within a stipulated limit **Participant 17:** Strategy: Encourage AI-assisted learning rather than AI-dependent learning. Explanation: Teachers can guide students to use AI as a support tool… **Participant 18:** Control AI usage. Control AI usage means that teacher or lecturers can limit students using AI… **Participant 30:** One effective strategy is to use AI as a supplementary tool rather than a primary learning method… **Participant 31:** Strategy: Encourage AI as a Support Tool, Not a Substitute. Explanation: One effective strategy is to teach students how to use AI as a support tool…

	Participant 34: Balance AI-Powered and Analog Assessments Use a mix of AI-supported and traditional assessments…
	Participant 38: As for the impact of increase in screen time, one strategy to adopt is by limiting our use of AI by fixing a schedule…
	Participant 39: To reduce the potential issue of limited customisation, I think we should remind ourselves to use AI as a helper instead of a substitute…
	Participant 40: Minimal use of Artificial Intelligence in assessments and only being used for certain menial tasks…
	Participant 45: For technology dependence, maybe we can limit ourselves on how much AI we can use for a project…
	Participant 46: Integrate AI as a support tool, not a solution…
	Participant 47: To reduce issue of limited customisation, we can limit our AI usage…
	Participant 48: have AI create a first draft (point form) of what should be included, use that structure as a guide and expand on it without the use of AI…
	Participant 53: Train our writing skills to more and use the suggestions of AI apps as reference only.
	Participant 56: Structured Skill Segmentation with AI. Explicitly designate which language tasks can use AI and which must be done independently
	Participant 57: Limit the times that one can access the AI application or website.

	Participant 59: Terminate AI, because AI is the source of this problem, and it is impossible to control every people's mind…
	Participant 76: Have break time. Rest your eyes after several hours looking the screen.
	Participant 77: Only use Ai on providing ideas. Ai provides us some ideas and we need to find the resources by ourselves.
	Participant 83: trying to practice using AI as only a last resort, not a first option when doing assignments…
	Participant 84: Limited usage / Limited access to AI
	Participant 86: We can set clear boundaries when using AI. Only use AI for idea inspirations and not for the complete content.
	Participant 89: …We need to limit our AI usage to reduce the screen time spent on technology.
	Participant 96: Use AI as a Support Tool, Not a Shortcut Teachers can guide students to use AI only for checking or improving their work…
	Participant 99: Step-by-Step Guidance with Limited AI Use. As a freshman who often feels lost and relies heavily on AI…
	Participant 100: Strategy: Promote AI as a Support Tool, Not a Solution. Explanation: Teach students to use AI for brainstorming…
	Participant 106: Limit the usage of Ai in every assessment given…

Table 12 Third Theme of Question 2 (Controlled Usage of AI)

Next, examining the theme **Controlled Usage of AI** under *Table 12* demonstrates the preventive measures of restricting one's usage of AI by setting boundaries, guidelines, and rules. This can be done by using AI as a supportive tool for ideas and inspirations rather than complete answers, allowing use of AI with rulesets, balancing use of AI with own abilities,

and such. With the integration of AI as a supplementary tool of assistance combined with one's unique and original content, learning English and completing tasks would be much more effective and self-developing as compared to using AI completely. Within this theme, some of the commonly perceived keywords and phrases from the responses consist of "support tool", "stipulated limit", "AI-assisted learning", "limiting use", "supplementary tool", "set clear boundaries", and more. For instance, a noteworthy response by Participant 12, "*Strategy: Integrating AI as a support tool, not a replacement…*", mentions using AI as merely a support tool in checking grammar, expanding vocabulary, practicing pronunciation, etc. rather than generating the content. To elaborate, this participant recommends that educators can guide students in using AI technologies appropriately by viewing AI-generated evaluations or feedbacks as a stepping stone to improve their English enhancement. By using AI as a sort of complementary resource rather than a replacement, it fosters students' active and independent learning without exploiting the use of AI. Moreover, Participant 38 also submitted a rather notable response, "*As for the impact of increase in screen time, one strategy to adopt is by limiting our use of AI by fixing a schedule…*". This response fundamentally highlights the limited usage of AI by suggesting learners to fix a schedule, in which they limit to using AI for only a certain time frame in a day before going offline to discuss with peers in solving a problem. As a result, this method does not only mitigate the issue of learners' increased screen time from using AI extensively, but also encourages social interaction among learners and their peers or teachers.

THEMES	RESPONSES
Independent Thinking & Creativity	**Participant 7:** I think setting more questions about personal experiences might mitigate the negative consequences of it… **Partpicipant 11:** I think presentations or interview assessments are a good strategy to truly determine one's independence from artificial intelligence… **Participant 15:** for excessive screen time, set a pomodoro timer to take breaks. you can also use this time to brain it out offscreen, without relying on AI for a while. **Participant 16:** …They should think the issue more critically or discuss it with their peers instead of discussion with AI to ask for solutions. **Participant 44:** To solve the problem of limited customisation in terms of a depleting motivation and creativity, we can start by doing simple and small creative tasks such as writing poems, comics… **Participant 54:** Paraphrasing using brain **Participant 64:** Encourage more speaking and writing practice without AI. Builds confidence and reduces overdependence on AI tools. **Participant 66:** Strategy: Implement personalised, teacher-led assessments. Explanation: This approach allows teachers to evaluate students based on their unique progress, ideas, and participation, making it harder for students to rely solely on AI tools… **Participant 68:** thoughtful questions that are opinion-based, e.g. how do you feel about this theory?

	Participant 72: For AI users' decrease in creativity (limited customization), they can engage in individuality-centred assessments that ask for their personal experiences, opinions, or perspectives…
	Participant 73: A creative strategy to reduce the negative effects of excessive AI use in English learning is to introduce "AI-Free Fridays" or "Unplugged English Days," where students complete all tasks without any digital assistance. This encourages learners to rely on their own language abilities, think critically, and express ideas independently…
	Participant 75: Personalised assessments, because people can have their own idea
	Participant 82: Design assessments requiring original thought (e.g., oral exams, handwritten essays, creative storytelling) …
	Participant 93: …people should include their own ideas as well while referring to the answers they get from AI to preserve the originality and creativity in their writing.
	Participant 94: … When incomplete answers are provided, users have to brainstorming on their own to think of the answers they desire

Table 13 Fourth Theme of Question 2 (Independent Thinking and Creativity)

Last but not least, the final theme for Question 2 is **Independent Thinking and Creativity**. According to *Table 13*, it presents the encouragement of independent thinking, creativity, critical thinking, and problem-solving skills through various tasks or practices. Some examples include opinionated questions, offline cognitive thinking, creative tasks, and such. By doing so, it undoubtedly promotes learners' original and unique ideas that illustrate their personal experiences, perspectives, individuality, self-expression, etc. through their

works. In this case, the common keywords and phrases that are observed from the responses involve "personal experience", "creative tasks", "opinion-based", "individuality-centred assessment", "originality and creativity", and more. Investigating into the responses under this theme, an appropriate exemplary response is "*To solve the problem of limited customisation in terms of a depleting motivation and creativity, we can start by doing simple and small creative tasks such as writing poems, comics…*" as written by Participant 44, which highlights diminishing the issue of limited customisation regarding the learners' lost in creativity and learning motivation. As a countermeasure, this participant suggested the execution of simple creative tasks like writing comics, poems, and stories that can assist the learners in gradually regaining their creativity skills through expressing themselves. Additionally, as a means of helping learners reignite their motivation and purpose in learning English, the participant also provided recommendations of partaking in a variety of competitions, such as story-writing and skit-creating, which encourages them to contribute their originality and unique ideas onto paper. Other than that, another response by Participant 82 is also notable on this subject matter, "*Design assessments requiring original thought (e.g., oral exams, handwritten essays, creative storytelling) …*". In this response, assessments that require learners' original thoughts and real-time responses are crucial in declining their dependency on AI technologies. This is because assessments like oral exams and creative essays reflect learners' linguistic abilities in terms of their understanding of the English language, fluency and confidence in communicating ideas, capability in organising ideas accordingly, etc. Furthermore, it also shows learners' imaginations and emotions, which are valuable humane components that even AI would not be able to replicate completely.

4.3 Summary

      In conclusion, this chapter has comprised the analysis and interpretation of the data collected from the questionnaires along with the findings and discussions in this research. There were also two different types of analytical methods utilised in this section, namely descriptive statistical analysis with the corresponding frequencies and descriptions, as well as thematic analysis with a total of 8 themes created over the span of two open-ended questions. As for the thematic analysis, the complete list of responses is inserted under the appendix.

CHAPTER 5: CONCLUSION

5.1 Introduction

In this chapter, the topic areas covered include the summary of the main findings for this research, the implications of this study, and the recommendations for future studies.

5.2 Summary of Main Findings

As a brief recap before delving into the main findings, the objectives of this research include examining the negative effects of long-term usage of Artificial Intelligence in English language learning, and identifying the precautionary measures that can be adopted to mitigate the negative impacts examined. Considering the objectives this study aims to achieve, there are several main findings obtained from analysing and interpreting the data collected.

Based on the main findings for **Research Question 1**, Technology Dependence and False information are two of the negative effects among the five covered in the questionnaire that received the highest number of votes. Contrarily, within the five areas, Personal Disconnection is the only exception that respondents disagree as a negative impact stemmed from using AI excessively in English language learning. Referring to the literature studies covered in Chapter 2 that specify on the negative impacts of using AI excessively in English language learning, the negative effects mentioned in the present study that correlate with the referred studies include Increased Screen Time, Personal Disconnection, and Technology Dependence. However, taking into consideration that Personal Disconnection is not supported in the present study, it should not be completely disregarded as a potential negative effect resulted from an extensive AI usage due to its existing discussion in the referred studies. In contrast, some of the negative impacts that are not discussed in the present study also involve increase in cost, network problems, security issues, inequal access, etc. (Eliott, 2023; Li, 2019).

Moving on, looking specifically into the discussion of Technology Dependence as the most prominent negative effect from the present study, it can be perceived that over-dependence on AI is a grave negative influence that affect learners' cognitive and affective abilities. To elaborate, though the results of the findings for both the present study and referred study are highly similar, the major difference is that the present study focuses on examining the general negative impacts while the referred study focuses specifically on the over-reliance of AI (Gartika Pandu Bhuana et al., 2025). In addition, in order to examine the negative effects of using AI for educational purposes, the present study adopts a descriptive quantitative approach in collecting data, which corresponds with the referred study. As a result, the findings show that Technology Dependence is a primary negative impact because it increases learners' sluggishness in completing work. When learners depend on AI too much in completing academic tasks or solving complex problems, it undoubtedly disrupts their critical thinking skills. Over time, they are bound to gain an inactive learning attitude that eventually fosters into laziness. Consequently, the results obtained in the present study regarding Technology Dependence as a major negative effect can be considered accurate and reliable because the research designs and findings are supported by the referred study (Msekelwa, 2024; Sayed Fayaz Ahmad et al., 2023).

On the contrary, the findings of the present study also demonstrate that Personal Disconnection is the least prominent negative impact caused by the extensive use of AI, whereby it received the lowest percentage and ranking among the five areas. However, the present study also lacks in certain areas when discussing the negative effects, such as issues of privacy and security as well as lack of emotional intelligence, which are included in the referred study (Azizah Abd Rahman et al., 2023). On the contrary, while the present study depicts Personal Disconnection with the lowest regard, another research perceives it as one of the biggest negative effects of using AI. In this case, even though both studies aim to

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investigate the negative impacts of using AI, the present study focuses on the aspect of learning English while the referred study stresses on the general aspect of life, thus contributing to the difference in findings between the two studies (Shviti Sood & Anviti Gupta, 2025).

On the other hand, the main findings for **Research Question 2** demonstrates eight themes in total derived from the responses under Section C in the questionnaire, including Plagiarism Detection Tool, Practical Activities and Classroom Tasks, Assessment Personalisation and Adaptation, AI Literacy and Controlled Usage, AI Literacy and Ethical Usage, Practical and Human-Centred Activities, Controlled Usage of AI, along with Independent Thinking and Creativity. Similar to the studies mentioned in Chapter 2 concerning the precautionary measures to mitigate the negative impacts resulted from extensive AI usage, the interpreted data of the present study presents several solutions, such as creating individualised assessments, using AI detection tools, developing AI ethical guidelines, raising awareness, executing AI-based training programs, etc. (Maciel, 2024; Evans et al., 2023). Contrarily, the present study did not cover the precautionary measure known as "flipped classroom approach", whereby students are exposed to lesson materials before the classes are conducted. This is possibly because the method is not widely known among university students, which are the target group of this research, unlike other studies that mainly focus on educators or academic institutions' perspectives (Abdulmalik Ahmad Lawan et al., 2023).

Other than that, examining the findings of the present study in-depth depicts that one of the most eminent precautionary measures is raising users' awareness regarding the ethics in using AI for education purposes. According to the analysed data in the present study, there are several suggested methods that can be adopted by academic institutions, educators, and governmental segments, such as carrying out training programs, establishing guidelines or

policies on AI usage, incorporating AI ethics into daily lessons, etc., which can effectively equip users with the necessary knowledge in using AI appropriately in learning English. Under this circumstance, while the findings are similar, other studies tend to emphasise on collecting opinions from teachers' perspectives, unlike the present study that focuses on university students (Omer Elsheikh Hago Elmahdi et al., 2024). In addition to AI ethics, another measure to mitigate the adverse effects of using AI extensively in English language learning is to prepare users with AI literacy knowledge. Considering the common occurrences of students misusing AI tools in completing their academic tasks, students' academic dishonesty becomes a major issue. As such, educators can guide students with proper methods in using AI, which include checking the credibility of AI-generated information, paraphrasing to avoid plagiarism, using AI detection tools to check AI usage, and more. With this, not only does it resolve the negative impacts mentioned in RQ1 but it also ensures the validity of students' academic performance (Khalid Adam Abdulrhman Fadul, 2025).

Besides that, another precautionary measure discovered in the present study that is also discussed in other research is the personalisation of assessments to ensure students' academic integrity. Due to the rapid increase of Artificial Intelligence in the education segment, there are severe cases of students' dishonesty in completing academic work and taking assessments. As a result, it is believed that this adversity can be resolved via creating assessments with real-world situations or complex problems that require students' higher-order thinking skills, personal opinions or perspectives, and individual experiences (Evangelista, 2025). In contrast, while the present study views collaborative tasks as a means to mitigate AI's negative impacts, it does not mention the integration of AI into practical activities to enhance students' collaborative learning in the classroom. This is because the present study aims to scrutinise the precautionary measures to mitigate the negative impacts

of extensive AI usage in learning English whereas other research aims to investigate solutions to diminish the effects of AI on students' specific skills, such as communication, creativity, critical thinking, collaboration, etc. Additionally, although the present study fundamentally highlights the negative effects of AI in English language learning rather than the positive impacts, the potential of Artificial Intelligence to help educators in executing AI-assisted collaborative platforms for classroom activities should not be disregarded (Sajid Hasan et al., 2024; Umer Javed et al., 2025).

5.3 Implication of Study

Exploring into the implications, the present study is done primarily to raise awareness among the public regarding the potential negative effects of long-term AI usage in English language learning that should be taken into consideration before AI is incorporated into one's academics or work (Feffer et al., 2023). Moreover, not only students but also educators, institutions, and policymakers should take note of AI as a double-edged sword that possesses both beneficial advantages and harmful disadvantages, especially when it comes to using AI for learning. Hence, every segment should work together and take appropriate actions to mitigate the potential adverse effects (Basha, 2024).

First and foremost, investigating specifically into each segment, **educators** can conduct practical and human-centred activities in classrooms, such as debates, discussions, presentations, etc. By carrying out activities or tasks that require students' personal opinions, critical thinking skills, problem solving skills, real-time language use, and more, it would undoubtedly foster students' in-depth understanding on the topics learned rather than mere surface learning as this also reduces their tendency of overreliance on AI (Li et al., 2024). Furthermore, educators can also design assessments that do not require AI technologies and that are instead more inclined towards students' own opinions, perspectives, and experiences,

which involve open-ended, meaningful, imaginative questions, etc. With this, not only does it diminish chances of students' academic dishonesty during assessments, but it also discourages their excessive dependence on AI to help them solve problems. Also, if educators decide to execute online assessments, whether in schools or universities, questions that encourage students' higher-order cognitive skills are highly recommended as well (Kershnee Sevnarayan & Maphoto, 2024). In addition, educators should also teach students basic AI literacy regarding the core principles, information, and necessary knowledge in using AI appropriately without exploiting it. For example, how to use correct prompts when searching for ideas, cross-checking AI-generated information with credible sources, and using AI as an assistant rather than a substitution (Khlaif et al., 2025).

Moving on, other than educators, determining the negative impacts of using AI to learn English also allows **academic institutions** like primary schools, secondary schools, and colleges or universities to establish clear guidelines on the use of AI among the students, especially when it comes to their academic integrity. Some example methods include utilising plagiarism detection tools to check students' AI usage in their academic works, enforcing strict rules for students who abuse AI, and possibly specifying the contexts to when and where AI can be used. Consequently, establishing clear guidelines on AI usage not only ensures students' academic integrity but also enhances their learning process and maintains a well-balanced equity between education and AI (Jin et al., 2025). Besides that, institutions can also offer training programs for both students and staff on AI literacy workshops in learning how to use AI responsibly without taking advantage of it, and how to ensure that the learning process is meaningful even with the integration of AI. In this case, for students, such programs can effectively expand their understanding of the ethical implications, limitations, and potential adversities of AI to improve the quality of their AI-assisted learning process, whereas for educators, this can help them incorporate AI into their lessons effectively and

ease their burden when creating academic tasks or creating assessments as well (Campoverde-Quezada & Valdiviezo-Ramírez, 2024).

Last but not least, **policymakers** like the education ministries or governmental authorities can develop policies that draw a clear line on what can be categorised under acceptable and ethical AI usage in schools and universities. Since the rapid increase of AI in the education segment, many global wide policymakers have developed various frameworks, policy strategies, and ethics codes on AI in learning. For instance, Floridi's framework suggests five core principles regarding the ethical usage of AI, namely autonomy, justice, beneficence, non-maleficence, and explicability, which acts as a foundation used by many other policymakers to further develop their respective AI policies. However, although many global wide policymakers have developed various frameworks, policy strategies, and ethics codes on AI in learning English over the years, majority of them did not manage to anticipate the extent of AI's abilities and advancements that we know of in recent years. Henceforth, considering the potential negative effects of using AI in English language learning, a suitable AI education policy is crucial in addressing such concerns as a means of enhancing the overall education quality with the proper integration of AI (Chan, 2023; Schiff, 2022).

To conclude, by raising the public awareness about the potential consequences of using AI for long-term and having different bodies work together to mitigate the negative effects, the future environment for teaching and learning for both educators and students can be significantly improved, thus enhancing the quality of our world's education system as well.

5.4 Recommendation for Future Studies

Taking the limitations of this study into account, there are several recommendations that other researchers can consider for future studies on similar topics and research objectives.

One of the major suggestions is to expand the population of target respondents in their research. Instead of focusing solely on university students majoring English in a specific university, future researchers can extend the target population to universities from other states or even countries as well. To elaborate, obtaining a wide range of perspectives from participants of various cultural backgrounds, fields of study, demographics, etc. would be extremely effective in achieving a more in-depth comparison of results, especially in terms of investigating students' perspectives on the negative effects of using AI in English language learning along with the mitigation methods (Chea & Xiao, 2024).

Additionally, future researchers may also consider seeking educators' perspectives on the extensive use of AI in English language teaching. This is because while this study emphasises only on students' opinions, gaining educators' insights on the matter would be valuable as well, especially in providing a comprehensive understanding regarding the negative effects of using AI in not only learning but also teaching. Consequently, the range of ways to mitigate such adversities will also expand along with educators' contributions from the teaching perspective (Rizqi Akbarani, 2023).

In addition, another recommendation for future researchers is the use of interviews to attain deeper insights for the participants' experiences and viewpoints regarding the negative consequences of using AI excessively in learning English. Although the present study adopts a qualitative measure in collecting data from the respondents for RQ2 using open-ended questions, a quantitative measure is adopted for RQ1 instead with the use of 5-point Likert scale questions. In this case, unlike questionnaires that limit respondents to predetermined

options and limited areas of negative effects, interviews or other qualitative methods allow them to express their opinions without restrictions, which encourages more personal input and enhances the clarity of their responses as well (Insaf Khoudri et al., 2024).

Besides that, researchers can also use theoretical frameworks related to English language learning or integration of AI into education as a foundation when conducting the research. This not only provides a more structural approach for the studies, but also helps the researchers to achieve a more reliable outcome. Some examples of theoretical frameworks involve Self-Determination Theory (SDT) that highlights learners' motivation in learning, Vygotsky's Social Constructivist Theory (SCT) that underlines the cruciality of collaborative learning and social interactions in learning, and Theory of Planned Behaviour (TPB) that emphasises learners' intentions in learning (Du & Alm, 2024; Wang et al., 2022; Wei, 2023).

5.5 Summary

To conclude, this chapter underscores the summary of the main findings of the study, the comparisons between the present study and other research, the implications of the study from various segments, and the suggestions for future researchers in conducting similar studies.

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Appendix

Complete List of Responses (Questionnaire Section C – Open-ended Questions)

THEME	RESPONSES
Plagiarism Detection Tools	**Participant 7:** AI checker such as copyleaks AI and turnitin might prevent negative impacts of it. **Participant 9:** Plagiarism detection tools like turnitin to check our work mistakes. **Participant 18:** Plagiarism detection tools, because it can help detect the AI involvement in the work and determine if the work is fully original. **Participant 25:** Using plagiarism checker is effective to prevent negative impacts of using A.I in English language learning because I can get to know the similarity in percentage on how much I have relied on A.I, so I would not rely too much in learning English, and I will come out with a direct evidence, whereby I will put in my effort to learn my English well. **Participant 36:** Plagiarism detection tools. Apart from that, students can be asked questions on the spot after a particular lesson to ensure they understand. Even though tutorial questions and assignments assist in refreshing the lesson learnt, chances are high for AI to be used in order to complete tasks assigned. **Participant 38:** I believe plagiarism detection tools would be suitable in preventing negative impacts of using AI excessively. Because these detection tools mainly aim to detect usage of AI in various works, so when students submit their works, they could get flagged for using too much AI and this can discourage overdependence. **Participant 44:** We can limit our AI usage by using plagiarism detection tools. Such tools are built to detect use of AI in our works and once detected, it will notify the user. With this, we can accurately know how much AI we use and whether we over rely on it.

	Participant 49: plagiarism detection tools.
	Participant 51: Plagiarism detection tools
	Participant 54: Plagiarism detection tools
	Participant 55: Develop more plagiarism detection tools to ensure students double-check their work even if they utilize AI. By doing this, students will be able to at least remember their tasks.
	Participant 57: Plagiarism detection tools as it can directly tell us which part of the text is AI generated.
	Participant 59: Plagiarism detection tool
	Participant 62: Plagiarism detection tools. This is because this can prevent students to hand in contents plagiarized from different sources directly.
	Participant 75: Plagiarism, because people can change the mistake of AI during plagiarism
	Participant 83: plagiarism tools as well as creating assignments that do not allow for the easy use of AI to answer the questions
	Participant 88: Plagiarism detection tools would be most suitable because it can detect the frequency in terms of AI usage in a work, which informs the user about the results as well.
	Participant 92: Plagiarism detection tools are effective. It can detect users' AI usage in their work and inform them about their lack of originality.
	Participant 93: The reinforcement of plagiarism detection tool in detecting AI writing. As students afraid that they might get barred because of high percentage of AI writing detection, they might reduce the usage of AI while writing in English.
	Participant 106: Use turnitin or quilbot. These tools can detect the Ai generated texts in a short time in every written assessment.
Practical Activities & Classroom Tasks	**Participant 1:** Practical activities like group discussions, role-plays, and games help students use English in real situations. These tasks cannot be done by AI because students need to think and speak on the spot. It makes learning more fun and helps students build confidence in using English without depending on AI.

Participant 8: Students can be evaluated through tasks that AI cannot easily help with, such as oral presentations where students need to demonstrate their language proficiency on the spot. They can also be given personalised assessments based on their abilities or personal interests which may make it more motivating to complete the work on their own.

Participant 20: Use AI only for specific purposes that do not require measurability: (1) suggestive prompts for Word Chain games/quizzes. (2) Prompts must include all the necessary details of a product IF you want to increase validity (which may increase risk of disclosure/poor confidentiality).

Participant 22: Practical and creative activities as it enables teachers to gain students' attention and develop an interest in learning

Participant 30: The most effective measure is incorporating practical, interactive classroom activities alongside AI tools. This ensures that students actively use the English language through speaking, writing, and collaborating with peers, rather than relying solely on AI-generated content. It promotes critical thinking, creativity, and authentic language use, which cannot be fully developed through AI alone.

Participant 32: Implement more of on the spot task without the use of any technological devices.

Participant 33: More practical activities during lessons so that students are pushed into the circumstance where they must complete a task hands-on, thus reducing the chances of AI exploitation

Participant 35: Can use AI detectors and provide practical activity to track down students' academic performance. This can allow students to use their creativity and less depending on the AI tools.

Participant 36: Plagiarism detection tools. Apart from that, students can be asked questions on the spot after a particular lesson to ensure they understand. Even though tutorial questions and

assignments assist in refreshing the lesson learnt, chances are high for AI to be used in order to complete tasks assigned.

Participant 42: Practical activities would be best. Because practical activities would need us to get into it hands-on without relying on AI to complete our tasks. We can also conduct practical activities with peers as well to not only reduce negative impacts of AI but also enhance social connections

Participant 45: I think practical activities would be efficient because we would be motivated to complete hands-on activities without relying on AI.

Participant 56: The most effective measure is integrating project-based practical activities such as presentation

Participant 66: These tasks, like role-plays or group discussions, promote authentic language use and reduce over-reliance on AI by encouraging students to think and communicate independently.

Participant 70: Practical activities. Because they require students' creativity and personal input, thus promoting original ideas and prevent over-reliance

Participant 71: I think integrating hands-on activities such as group works, language games, paper-based projects, etc. can help reduce AI users' dependence on AI.

Participant 73: Incorporate Practical, Creative Output Tasks Regularly. These tasks require students to think and speak independently, reducing overreliance on AI and promoting genuine language use, critical thinking, and real-time communication.

Participant 76: Group work. Have discussion with other to solve problems

Participant 86: Incorporating practical activities can help prevent technology dependence because users need to execute hands-on tasks without using any technologies

Participant 89: Practical activities, especially group activities. Because this not only requires learners' hands-on experience but also strengthens connection between peers.

Participant 90: Practical activities would be the most effective measure, these activities can reconnect us to the physical world of real-life scenarios rather than AI generated ones.

Participant 91: Practical tasks that focus on learners' creativity skills such as designing, drawing, imagining, etc. can help gain back the motivation and engagement lost.

Participant 95: AI Reflection Journals with Peer Feedback. Students write weekly reflections on how they used AI in learning English, then exchange journals with peers for feedback. This builds self-awareness, limits overreliance, and encourages real human interaction.

Participant 96: We can have AI free challenge days. Designate specific days where students complete tasks or projects without any AI tools. These days promote creativity, independent thinking, and authentic language production. It trains learners to rely on their own skills while balancing AI use on other days for support.

Participant 97: Practical Activities. As a student, I sometimes rely too much on AI when I'm stuck, so doing more practical activities like group discussions or role-plays really helps. These tasks push me to think and speak on my own, which reduces my dependence on AI and helps me learn better.

Participant 99: Practical Activities. As a freshman still learning the basics, I often turn to AI because I'm unsure of myself. But doing more practical activities like pair work, simple speaking tasks, or hands-on exercises helps me build real skills and confidence. It reduces my need to rely on AI all the time.

Participant 100: Suggestion: AI-Free Challenge Days
Explanation: Designate regular "AI-Free Challenge Days" where students complete tasks—like storytelling, debates, or journaling—without any digital aid. This sparks creativity, builds confidence, and encourages authentic language use, ensuring students rely on their own skills, not just the machine's.

	Participant 102: Suggestion: Incorporate Practical and Collaborative Learning Activities. Explanation: One of the most effective measures to prevent the negative impacts of excessive AI use in English language learning is to integrate practical, collaborative learning activities—such as group discussions, role plays, debates, or writing circles into the classroom. These activities require learners to think, speak, and write in real time, reducing their dependence on AI-generated responses. They also help develop communication, critical thinking, and creativity—skills that AI cannot replicate or provide for students. **Participant 103:** Suggestion: Spontaneous Writing Prompts. Explanation: Give surprise in-class writing tasks with limited time and no device access. This trains students to think and write independently, reducing reliance on AI-generated content. **Participant 105:** Provide more practical activities or excersise. This allows leaners to learn and answer the activities imidiately with the least help of AI tools.
Assessment Personalisation & Adaptation	**Participant 2:** One effective measure is using personalised assessments. This helps teachers evaluate students based on their own ideas and progress, making it harder to rely too much on AI tools or copy answers. **Participant 6:** Increasing the bar of assessment equally while not banning the use of artificial intelligence. As students are getting more and more relying towards the use of AI, banning the use of it isn't much practical and often very ineffective because it is getting increasingly harder to define the boundaries between human-written or AI-generated nowadays. Increasing the bar allows higher standard in performance while testing the abilities of the students as much as they can produce. **Participant 8:** Students can be evaluated through tasks that AI cannot easily help with, such as oral presentations where students need to demonstrate their language proficiency on the spot. They can also be given personalised assessments based on their abilities

or personal interests which may make it more motivating to complete the work on their own.

Participant 10: One of the most effective measures to prevent the negative impacts of excessive AI use in English language learning is personalised assessments. Explanation: Personalised assessments are tailored to individual learners' abilities, interests, and progress. Unlike generic tests or AI-assisted tools that might encourage over-reliance or even plagiarism, personalised assessments require students to produce original responses based on their own experiences and learning journey. This makes it difficult to outsource answers to AI and encourages genuine engagement with the language. Teachers can include oral interviews, reflective writing, or project-based tasks that AI cannot easily complete on a student's behalf, promoting critical thinking and authentic language use.

Participant 11: I think personalised assessments, like written exams without any assistance from artificial intelligence. Students have will then be forced to answer based on their own understanding instead of blindly copying whatever the ai tools tell them.

Participant 12: One of the most effective measures to prevent the negative impacts of excessive AI use in English language learning is personalised, teacher-led assessments. Suggestion: Personalised, teacher-led assessments. Explanation: While AI can support learning, overreliance can reduce critical thinking and language production skills. Personalised assessments—such as oral interviews, reflective journals, or in-class writing under supervision—require students to demonstrate authentic language use without AI assistance. These assessments help teachers gauge actual proficiency, provide tailored feedback, and discourage plagiarism or overdependence on AI tools, fostering more genuine language development.

Participant 17: Implement personalised assessments that require learners to apply language skills in authentic, context-based tasks. Explanation: Personalised assessments—such as reflective journals, oral presentations, creative writing based on personal experiences, or portfolio-based tasks—make it harder for students to rely solely on AI tools, since the content must be rooted in their own thoughts, voice, and lived experiences. These tasks encourage critical thinking, creativity, and personal expression, reducing the temptation or usefulness of using AI-generated responses. Moreover, teachers can provide meaningful feedback tailored to individual needs, helping learners grow in a more holistic and authentic way.

Participant 26: One of the most effective measures to counterbalance the negative consequences of excessive dependence on AI in English language acquisition is the implementation of AI-proof tests that emphasize higher-order thinking skills. Such tests are designed in a manner that requires critical thinking, creativity, and personal reflection—abilities that AI technology cannot easily replicate. For instance, the incorporation of reflective essay questions enhances reflection on how students can apply theory to practice in their own words, maximizing sincerity and reducing avenues for AI-generated responses. By emphasizing learning processes and championing individualized output, these types of tests guard academic integrity while facilitating the development of crucial cognitive abilities among learners.

Participant 27: One effective measure is the use of personalized assessments that require critical thinking and creativity, especially when it comes to tasks that involve open-ended responses. It will become difficult to just rely solely on AI tools.

Participant 29: Have exams where students cannot use AI, and therefore will still require to study independently.

Participant 31: Suggestion: Personalised Assessments.
Explanation: One of the best ways to prevent the negative effects of

relying too much on AI in English learning is through personalised assessments. When tasks are tailored to each student's interests, skill level, and learning style, it becomes much harder to simply copy or rely on AI tools. These kinds of assessments—like individual writing prompts, oral presentations, or in-class activities—encourage students to think for themselves and use the language in a way that reflects their own voice. This not only supports more meaningful learning but also helps teachers see each student's real progress.

Participant 34: A practical approach to mitigating the drawbacks of excessive AI use in learning English is implementing personalized assessments. These tasks ask students to create original content that reflects their own experiences, viewpoints, or classroom discussions. This approach limits students' ability to depend solely on AI tools, as it requires genuine personal contribution and active involvement. Additionally, personalized assessments enable teachers to gain a clearer insight into each learner's actual skills, helping to minimize plagiarism and promote deeper, more meaningful learning.

Participant 37: I think personalised assessments would be the most effective way. This is because personalised assessments can be created and modified to evaluate learners' individual proficiency and progress, whereby it would require them to provide their unique responses, and with that reducing their over-reliance on AI

Participant 40: Physical lessons and assessments where the students are unable to use Artificial Intelligence, instead having to use critical thinking and logic.

Participant 46: Personalised assessments. They encourage original work and reduce AI overreliance by focusing on students' personal experiences and in-class learning.

Participant 47: I think personalised assessments would be most efficient. This is because personalised assessments require students to apply their own thoughts, experiences, or opinions, making it

difficult to rely on generic AI responses and encouraging deeper critical thinking.

Participant 50: Personalised assessments are most effective, as they require individual responses, reduce AI misuse, and encourage authentic learning by focusing on students' unique understanding and expression.

Participant 52: Personalised assessments help ensure originality by requiring learners to produce unique, experience-based responses. This reduces overreliance on AI and promotes genuine language use.

Participant 58: Plagiarism detection is reactive—it only catches issues after they happen. But personalised assessment is proactive—it discourages misuse in the first place by making every task feel personal and original. It also builds stronger engagement and accountability, so students are less likely to rely on AI shortcuts.

Participant 60: Personalised assessments help reduce overreliance on AI by requiring original, experience-based responses. They promote authentic learning and discourage plagiarism effectively.

Participant 61: Personalised Assessment. Personalised assessments require learners to demonstrate their understanding through tasks tailored to their individual learning paths, interests, or progress. This approach reduces the likelihood of students relying on AI-generated content, as it is more difficult for generic AI tools to respond accurately to highly specific or unique prompts.

Participant 63: Personalised assessments. Require students to produce original responses based on their own experiences or opinions

Participant 64: Use personalised assessments to check real understanding. They show true skills, not AI-generated work.

Participant 68: meaningful questions; if AI can answer the question, it probably isn't worth asking

	Participant 69: Personalised assessments would be most effective because it will be tailored to students' personal experiences, opinions, etc., thus reducing the chances of relying on AI-generated answers
	Participant 77: Personalised assessments. It gives each students a suitable assessment for them to do without relying on Ai.
	Participant 82: I believe personalized assessments could be an effective way to reduce everyone's dependence on AI. If the assessments are designed using only human knowledge and IQ, AI would not be able to answer them. As a result, students would be forced to think and respond on their own.
	Participant 85: Personalised assessments. They encourage original thinking and reduce over-reliance on AI by requiring students to apply knowledge in unique, individual ways.
	Participant 87: Personalised assessments would be effective. Learners are required to provide original work depending on the task given according to their own perspectives and opinions.
	Participant 98: Personalised Assessments. As a final-year student who often excels, I believe personalised assessments are the most effective measure. They challenge students at their level and make it harder to rely solely on AI-generated answers. This approach encourages deeper learning and original thinking, especially for high-achieving learners who might otherwise use AI to save time.
	Participant 101: Personalised assessments are one of the most effective ways to prevent the negative impacts of excessive AI use in English language learning. By tailoring tasks to each student's unique learning profile, background, and interests, it becomes harder for students to rely entirely on AI-generated responses. This approach encourages original thinking, creativity, and genuine language use. For example, asking students to reflect on their personal experiences, opinions, or local context in writing tasks can make plagiarism and overreliance on AI tools less likely, as the answers must be authentic and personal.

	Participant 104: Personalised Assessments. Explanation: Personalised assessments reduce overreliance on AI by requiring pupils to share their own thoughts and experiences. This makes it harder to copy answers and encourages genuine learning and critical thinking.
AI Literacy & Controlled Usage	**Participant 3:** Use AI develop ideas instead of copying everything. Double check the information given by AI **Participant 4:** read and cross check before using information provided by AI to prevent wrong information **Participant 5:** An individual should be able to control the frequency and balance in between using AI technologies and other realistic learning materials. Instead, he or she should think and learn more from both aspects to ensure their own effective learning. **Participant 13:** use AI purely just to understand a topic, rather than asking it to answer the question directly **Participant 14:** rather than ban AI, I believe that constructing activities which allow the use of AI but with rulesets would prevent the negative impacts of AI usage. **Participant 16:** Control the usage of AI. **Participant 19:** Reduce the frequency of utilising artifical intelligence tools while doing work in relation to creativity. We could came up with our own draft and carry out brainstorming first before we asked the assistance from these artificial intelligence tools. This is to prevent the lost of creativity and critical thinking tools due to the overreliance of artificial intelligence tools while we have to create something from scratch even those these tools are very handy nowadays from these types of work. **Participant 21:** Conducting AI literacy workshops. Teaching students how to use AI responsibly can be a powerful preventive tool. When students understand both the benefits and the limitations of AI, they are more likely to use it as a support tool rather than a substitute for genuine learning.

	Participant 23: Try writing down on a piece of paper about ideas that you want to brainstorm about and use critical thinking skills to generate the ideas *[encouraging traditional methods & restricting AI usage]*
	Participant 24: Universities/Schools should have a strict guidelines regarding using Artificial Intelligence in English language learning. Excessive use of Artificial Intelligence is prohibited. Teachers/lecturers and students are required to follow it and have restricted access to Artificial Intelligence.
	Participant 28: Increase learners' awareness about using AI so that they are aware of the potential issues that would happen due to over-reliance.
	Participant 39: We can expand our knowledge on AI ethics. While it is okay for us to use AI in helping us complete complex tasks, we need to keep in mind not to exploit the use of it. For example, we need to understand that after using AI in producing our works, our final work should still reflect our own contributions and not that of AI's. If AI is not used appropriately, our unique voices and creativity will be overshadowed by AI which often leads to lost of motivation.
	Participant 41: Having ethical guidelines and frameworks
	Participant 43: For tasks such as writing, we can adopt a structure-oriented writing process. For example, we follow a structural process of brainstorming for ideas, creating a draft, writing the work, and proofreading the work. This way, we can rely on ourselves instead of AI to complete writing tasks.
	Participant 48: workshops on how to use AI effectively (eg, how to give good prompts), and how to check the work of AI (and not just blindly copy paste whatever it gives you)
	Participant 53: Don't too rely on any AI apps
	Participant 65: Cross check the info given by AI tools
	Participant 67: Suggestion: Promote digital literacy and AI awareness. Explanation: Teaching students how AI works, its

| | benefits, and its limitations helps them become responsible users. When learners understand that AI is a tool—not a shortcut—they're more likely to use it ethically and thoughtfully.

Participant 72: AI users need to set boundaries on AI usage. They need to understand that AI can be used for brainstorming for ideas but the content and justifications should still be based on their own opinions.

Participant 74: Have workshops on the ethical way of using AI

Participant 78: Only use AI for ideas but not detailed works

Participant 79: Proper education and exposure to AI. Instead of limiting, we should work towards appropriate and more suitable exposure and introduction of AI power to learners and users.

Participant 80: Communicate face-to-face and avoid any electronic equipment while talking.

Participant 81: Always check all the resources manually

Participant 94: Spread the awareness of the possibility of false information provided by AI, as false information will affect students' grades and learning progress, by spreading the awareness, it might influence the frequency of them obtaining input from AI. |
|---|---|

Question 1: In your opinion, what is the most effective measure to prevent negative impacts of using Artificial Intelligence excessively in English language learning? (e.g. plagiarism detection tools, practical activities, personalised assessments, etc.) Please provide a suggestion and a brief explanation about the suggestion.

THEME	RESPONSES
AI Literacy & Ethical Usage	**Participant 1:** Teachers can explain when and how students are allowed to use AI tools, like for checking grammar or getting ideas but not for copying whole answers. When students understand the right way to use AI, they are less likely to depend on it too much and more likely to learn on their own.
	Participant 4: encouraging youth to read more and cross check more
	Participant 6: Proper ways of using Artificial Intelligence should be instructed in schools. This allows all students to learn equally at the starting line while maximising the benefits of using AI. This could be done ahead in time to expose students earlier towards this technology and inform them about the consequences of misusing.
	Participant 19: Use the tools in a balanced manner. Instead of just merely relying on what these tools provided to us after we have consulted their opinions, we as human have to differentiate whether the information we were provided are true or false and is it usable in our academic work. *[determining appropriateness and accuracy of AI-generated information is a core principle of AI literacy]*
	Participant 20: Use prompts like "proof of validation" from an uploaded referenced source. Use prompts that are not misleading that can in turn negate the truthfulness of the product. ("Product" as in the results that AI tools provide/response)
	Participant 23: Increase more ai detectors that can be used by both students and teachers
	Participant 24: Heavy punishment towards teachers/lecturers and students who abuse Artificial Intelligence in English language learning classes. Teachers/Lecturers can get fired and students can get suspended or fail that certain subject. *[discouraging the abuse of AI]*
	Participant 25: Paraphrasing my sentences would be effective because paraphrasing changes the sentence structrure without changing the original meaning of the sentence.

	Participant 28: Encourage learners to use AI for ideas and prompts rather than complete content. This can raise learners' awareness about how to use AI appropriately without exploiting it
	Participant 29: Provide awareness to students regarding the potential side effects.
	Participant 33: Educate students on AI literacy in terms of the limitations and potential errors that AI may produce. For example, teaching students how to credit reliable sources and identify accurate information
	Participant 36: Develop more AI detection tools such as "Turnitin"
	Participant 37: For inaccurate information, we can check the credibility of information generated by AI. By ensuring the reliability of the source of the information, we can ensure that the information we use are accurate
	Participant 41: Teach the public understanding and dialogue around AI's potential impacts.
	Participant 42: Increase our knowledge about the advantages and disadvantages of AI. While it is good to use AI every now and then for certain tasks or idea prompting, we must remember that using too much AI can also bring negative impacts. So, to prevent this, we can equip ourselves with the necessary knowledge of how AI can be a double edged sword
	Participant 51: Use plagiarism detection tool so that even if people uses AI, they still need to think on how to paraphrase and stuffs
	Participant 55: Come up with more paraphrasing
	Participant 58: For example, students can draft essays themselves and then use AI to get feedback on structure or vocabulary, followed by a class discussion or peer review. This builds digital literacy and encourages ethical usage. Plus, when teachers are actively involved in guiding AI usage, students are less likely to rely on it blindly.

Participant 62: Students should try to understand contents from sources and paraphrase it so that they can avoid plagiarism.

Participant 70: For the problem of false information, we can always double check the information generated by AI with reliable sources such as journal articles. This way, we use AI for ideas and we use reliable sources to verify the information

Participant 71: Incorporate AI literacy education to AI users, teaching them how to critically evaluate information generated by AI and verify the accuracy of information from reliable sources.

Participant 74: Schools can adopt a stricter AI detector system to prevent students for over relying on AI

Participant 78: Discover ways to utilize AI in command prompt instead of blindly asking for all the answers.

Participant 79: The endorsement of self-monitoring ethic. To teach the people the appropriate and proper ways to utilize AI, towards discipline and self-control.

Participant 81: For me, I will always check online such as Google or Google scholar to make sure that the data from AI is accurate. Besides that, I will also use the other AI applications to double confirm the accuracy of the information

Participant 87: For misinformation, we can learn to double check information provided by AI with reliable sources.

Participant 90: Raise awareness about AI literacy, we need to understand that we can use AI as a supportive tool, but we cannot over rely on it.

Participant 91: Learn about both the benefits and drawbacks of using too much AI. This can help us understand how to appropriate use AI better without exploiting it.

Participant 92: Cross check information given by AI with credible sources instead of relying completely on AI.

Participant 98: Encourage Critical Reflection Before Submission. As a high-performing final-year student, I find it helpful when lecturers ask us to include short reflections explaining our thought

	process. This strategy discourages blind use of AI by requiring us to demonstrate personal understanding, which maintains academic integrity and supports real learning.
	Participant 105: Teach some literacy of AI in learning. Learners should be taught about the role of Ai in learning and the possible effects caused by over using AI by ther tutors or the teachers.
Practical & Human-Centred Activities	**Participant 2:** One strategy is to use practical, in-class activities like group discussions or role-plays. These tasks encourage real-time thinking and speaking, reducing the chance of over-relying on AI tools.
	Participant 5: One of the strategies that can be used are engage ourselves more with our peers pr people surrounding us. The exposure in the community and relationships can help you to communicate, exchanging ideas or even solve some specific problems effectively.
	Participant 9: Teachers can design activities where AI provides support e.g. grammar feedback or vocabulary suggestions, but meaningful learning still depends on student-teacher and peer interaction.
	Participant 16: When doing a certain task or even thinking about personal issue, some people tend to use AI to ask for suggestions. They should think the issue more critically or discuss it with their peers instead of discussion with AI to ask for solutions.
	Participant 21: Conducting group discussions and peer reviews encourages teal-time language use and ideas development together which cannot be done by AI alone.
	Participant 22: Reduce using technological devices, this can improve physical interaction
	Participant 26: One short solution to balance against the negative effects of excessive usage of AI in teaching English language is to insert human touch and critical thinking activities into the course curriculum. Student engagement through debates, discussions, and collaborative projects activates interpersonal skills and

	understanding, which cannot be replicated through AI software. This approach encourages learners to analyse, evaluate, and create content based on their perspectives, enhancing critical thinking and reducing overreliance on AI-generated responses. Balancing AI-assisted learning with human-centric activities ensures a more holistic and effective language learning experience.
	Participant 27: integrating AI tools with collaborative classroom activities. For example, teachers can use AI for brainstorming or vocabulary building, following by group discussions, peer review and group presentations.
	Participant 32: On the spot task makes students to act immediately allowing critical thinking to take part. This will be beneficial for them to work out their brain and improve problem solving skills.
	Participant 35: Create or provide a physical assessment such as video production, micro-teaching and campaign. These practical assessments can allow lecturer to know how well the students can perform in their academic.
	Participant 43: In addition to using AI to complete tasks, we also spend a lot of time on social medias and entertainment. So, we can reduce our screen time by using analogues such as physical notebooks, printed calendars, hardcopy books, and more to increase our offline activities rather than staying online all the time
	Participant 50: Incorporating practical, collaborative activities reduces overreliance on AI by fostering real-time communication, critical thinking, and peer interaction, promoting authentic English language use.
	Participant 52: Group discussions, role-plays, and real-time debates encourage spontaneous language use and critical thinking, making it difficult for students to rely on AI tools and promoting authentic communication.
	Participant 60: One strategy is integrating more collaborative, in-class activities like group discussions or presentations. This

encourages real-time language use and limits dependence on AI-generated responses.

Participant 61: Integrating practical, human-centered activities to reduce the negative effects of excessive AI use, educators can integrate more practical, human-centred activities into English learning—such as group discussions, role-plays, debates, presentations, and peer feedback sessions.

Participant 63: Practical classroom activities. Such as debates, group discussion and oral presentations

Participant 65: This strategy involves combining AI tools with traditional human-guided learning, such as classroom teaching, peer discussions, and feedback from real instructors.

Participant 67: Strategy: Blend AI use with human feedback. Explanation: Encourage students to use AI for initial drafts or ideas, but require revisions based on teacher or peer feedback. This ensures active engagement with the learning process and reduces dependence on AI-generated answers.

Participant 69: To solve the issue of increased screen time, we can start by engaging in offline tasks that require us to practice our English the traditional way. For example, we can practice journalling or writing essays to enhance our English proficiency and self-expression skills.

Participant 80: To decrease technology dependence, Don't ask AI tools whenever you meet challenge in life, try to ask someone you know in the real life (maybe teacher, parents or friends)

Participant 85: Incorporate more practical activities like group discussion. These build communication and critical thinking skills that AI tools can't fully replicate.

Participant 88: One of the strategies to prevent personal disconnection is to prioritise collaborative tasks such as group projects and discussions physically with peers.

Participant 95: Mix AI with Speaking Activities. After using AI tools, students do speaking tasks like group talks or role-plays. This

keeps their real communication skills strong and stops them from relying only on AI.

Participant 97: We can have more teacher feedback. Sometimes I depend too much on AI because I'm not sure if my answers are correct. If I could get more feedback from my teacher, I'd feel more confident doing the work myself instead of turning to AI all the time.

Participant 101: Strategy: Integrating Practical, Human-Centred Learning Activities Explanation: To balance AI use, educators can integrate activities such as group discussions, debates, storytelling, or role-playing tasks. These encourage learners to practise real-life communication skills, develop critical thinking, and interact socially—skills that AI alone cannot fully cultivate. This helps reduce over-reliance on AI tools while maintaining engagement and language improvement through authentic experiences.

Participant 102: Use Peer Review and Group Feedback Sessions. Explanation: Instead of relying solely on AI feedback, have students review each other's work and give constructive comments in groups. This builds collaboration, critical thinking, and communication skills—while reducing dependence on automated tools. Students learn to trust their own judgment and develop a stronger sense of language awareness.

Participant 103: Design Real-World Language Tasks. Explanation: Give students tasks that mimic real-life situations—like interviewing classmates, giving presentations, or solving problems in English. These tasks require spontaneous thinking and communication, which AI can't replicate. It keeps learning grounded in human interaction and reduces the temptation to overuse AI tools.

Participant 104: Strategy: Encourage More Collaborative Learning. Explanation: Group discussions, peer reviews, and team projects help reduce overreliance on AI by promoting real communication and interaction. Pupils learn to express ideas, listen

	to others, and build confidence using English naturally, rather than depending on AI-generated responses.
Controlled Usage of AI	**Participant 3:** Ask AI to give ideas instead of the whole content.
	Participant 8: You could implement writing drafts in class and going through them. This way, you at least know the students are coming up with their own ideas even if they use AI to do the work for them at home. You could also use AI detection tools and set clear consequences if students overuse AI in their work.
	Participant 10: A strong strategy to reduce the negative effects of excessive AI use in English learning is integrating AI as a support tool, not a solution. Explanation: This strategy involves guiding students to use AI tools (like grammar checkers, summarizers, or translators) after they attempt tasks independently. For example, learners first write an essay without assistance, then use AI to identify areas for improvement. Teachers can also set clear rules about when and how AI can be used—such as for brainstorming or proofreading only. This approach helps students build core language skills while still benefiting from AI's support, preventing dependency and encouraging critical self-evaluation.
	Participant 12: Strategy: Integrating AI as a support tool, not a replacement. Explanation: To reduce negative effects, educators can teach students to use AI as a complementary resource—for example, for grammar checking, vocabulary expansion, or pronunciation practice—while still requiring them to generate original content. By guiding students on how to critically evaluate and revise AI-generated suggestions, teachers can promote active learning and prevent passivity or dependency. This strategy encourages students to think independently while benefiting from AI's strengths.
	Participant 13: use AI purely just to understand a topic, rather than asking it to answer the question directly
	Participant 14: Setting up activities which allow the use of AI within a stipulated limit

Participant 17: Strategy: Encourage AI-assisted learning rather than AI-dependent learning. Explanation: Teachers can guide students to use AI as a support tool—for example, to brainstorm ideas, check grammar suggestions, or explore alternative sentence structures—while ensuring that the core thinking, writing, or speaking is done by the student. This helps learners become more aware of the learning process and discourages passive reliance on AI.

Participant 18: Control AI usage. Control AI usage means that teacher or lecturers can limit students using AI by asking students to use AI to provide prompts and write it down bring it to class then ask students to discuss the prompt provide by AI in the class. So instead of using AI in the class to complete certain task, AI is used as a support. This strategy makes sure that AI is not majorly involve in learning English, but it only provides support.

Participant 30: One effective strategy is to use AI as a supplementary tool rather than a primary learning method. Teachers can guide students to use AI for idea generation or grammar checks but require them to explain and reflect on the content in their own words. This encourages independent thinking, reinforces learning, and reduces the risk of overdependence on AI tools.

Participant 31: Strategy: Encourage AI as a Support Tool, Not a Substitute. Explanation: One effective strategy is to teach students how to use AI as a support tool rather than a shortcut. For example, learners can use AI to brainstorm ideas, check grammar, or explore vocabulary—but the final work should always come from their own thinking. By guiding students to see AI as a helpful assistant instead of a replacement for their effort, teachers can promote critical thinking, creativity, and independent learning. Clear classroom discussions about responsible AI use can also help set healthy boundaries and expectations.

Participant 34: Balance AI-Powered and Analog Assessments Use a mix of AI-supported and traditional assessments, such as

handwritten tests or verbal reports, to comprehensively evaluate students' skills and reduce opportunities for misuse of AI tools

Participant 38: As for the impact of increase in screen time, one strategy to adopt is by limiting our use of AI by fixing a schedule. For example, we can set a schedule where we limit ourselves to using AI for a maximum of half an hour a day to brainstorm for ideas, then after that we can switch to discussing with our peers for further ideas. This way, we can prevent excessive screen time and increase social connections at the same time.

Participant 39: To reduce the potential issue of limited customisation, I think we should remind ourselves to use AI as a helper instead of a substitute. Of course it is alright to use AI to generate ideas or check our grammar, but it is important to note that we must not be over-reliant on it. For essential tasks such as designing and decision-making, we should still complete it ourselves rather than having AI do it. That way, we can gradually increase our motivation in learning again.

Participant 40: Minimal use of Artificial Intelligence in assessments and only being used for certain menial tasks, instead of important creative skills such as thinking of new ideas.

Participant 45: For technology dependence, maybe we can limit ourselves on how much AI we can use for a project. For example, only using AI for inspirations and ideas rather than using it to help us complete our projects.

Participant 46: Integrate AI as a support tool, not a solution. Teach students to use AI for ideas, feedback, or language practice, but require them to create and reflect on their own work to build real skills and avoid dependency.

Participant 47: To reduce issue of limited customisation, we can limit our AI usage. For example, we can use AI for ideas but we should not completely follow the content they give. Instead, we should use the ideas given by AI and combine with our own style to create unique work.

Participant 48: have AI create a first draft (point form) of what should be included, use that structure as a guide and expand on it without the use of AI, and then have AI refine it by checking for grammatical errors, alternate sentence structures, etc.

Participant 53: Train our writing skills to more and use the suggestions of AI apps as reference only.

Participant 56: Structured Skill Segmentation with AI. Explicitly designate which language tasks can use AI and which must be done independently

Participant 57: Limit the times that one can access the AI application or website.

Participant 59: Terminate AI, because AI is the source of this problem, and it is impossible to control every people's mind, therefore, stopping AI is the best solution. *[even though it's extreme, it still implies that AI should be restricted & eliminated]*

Participant 76: Have break time. Rest your eyes after several hours looking the screen.

Participant 77: Only use Ai on providing ideas. Ai provides us some ideas and we need to find the resources by ourselves.

Participant 83: trying to practice using AI as only a last resort, not a first option when doing assignments. this will help you train to first think creatively then only turn to AI if you really need help, solving the issue of tech dependency

Participant 84: Limited usage / Limited access to AI

Participant 86: We can set clear boundaries when using AI. Only use AI for idea inspirations and not for the complete content.

Participant 89: Balancing screen time and social time would be effective. We need to limit our AI usage to reduce the screen time spent on technology.

Participant 96: Use AI as a Support Tool, Not a Shortcut Teachers can guide students to use AI only for checking or improving their work, not doing the whole task. This helps students stay involved in the learning process and reduces laziness or overreliance on AI.

	Participant 99: Step-by-Step Guidance with Limited AI Use. As a freshman who often feels lost and relies heavily on AI, I think getting clear, step-by-step instructions from the teacher first would help. If I try the task on my own first, with some guidance, and only use AI after that, I'll slowly learn to depend on my own thinking more. **Participant 100:** Strategy: Promote AI as a Support Tool, Not a Solution. Explanation: Teach students to use AI for brainstorming, feedback, or language correction—*not* for doing the whole task. By setting clear guidelines on when and how AI can be used (e.g. idea generation only, not final writing), learners build awareness and responsibility. This encourages independent thinking and helps prevent over-reliance or academic dishonesty. **Participant 106:** Limit the usage of Ai in every assessment given. This allows learners to contribute more critical thinking and effort on completing the task by themselves.
Independent Thinking & Creativity	**Participant 7:** I think setting more questions about personal experiences might mitigate the negative consequences of it as AI cannot replicate experiences. Plus, having a presentation of it might test the students comprehension on their own work and not AI doing all the jobs **Participant 11:** I think presentations or interview assessments are a good strategy to truly determine one's independence from artificial intelligence. This may be a hassle to conduct, but it will allow the student to prove their understanding of topics when AI tools aren't there to help them out **Participant 15:** for excessive screen time, set a pomodoro timer to take breaks. you can also use this time to brain it out offscreen, without relying on AI for a while. **Participant 16:** When doing a certain tasks or even thinking about personal issue, some people tend to use AI to ask for suggestions. They should think the issue more critically or discuss it with their peers instead of discussion with AI to ask for solutions.

	Participant 44: To solve the problem of limited customisation in terms of a depleting motivation and creativity, we can start by doing simple and small creative tasks such as writing poems, comics, stories, and such to slowly build our creativity and confidence. Besides, we can also participate in various competitions worldwide (e.g. story-writing, skit-creating, etc.) as a means of finding our purpose in English again
	Participant 54: Paraphrasing using brain
	Participant 64: Encourage more speaking and writing practice without AI. Builds confidence and reduces overdependence on AI tools.
	Participant 66: Strategy: Implement personalised, teacher-led assessments. Explanation: This approach allows teachers to evaluate students based on their unique progress, ideas, and participation, making it harder for students to rely solely on AI tools. It encourages originality and helps teachers identify genuine language development.
	Participant 68: thoughtful questions that are opinion-based, e.g. how do you feel about this theory?
	Participant 72: For AI users' decrease in creativity (limited customization), they can engage in individuality-centred assessments that ask for their personal experiences, opinions, or perspectives. This can reduce both technology dependence and depletion of creativity.
	Participant 73: A creative strategy to reduce the negative effects of excessive AI use in English learning is to introduce "AI-Free Fridays" or "Unplugged English Days," where students complete all tasks without any digital assistance. This encourages learners to rely on their own language abilities, think critically, and express ideas independently. It also creates a balanced learning environment by reminding students that while AI can be a helpful tool, authentic communication and personal effort are essential in mastering a language.

	Participant 75: Personalised assessments, because people can have their own idea
	Participant 82: Design assessments requiring original thought (e.g., oral exams, handwritten essays, creative storytelling) that AI cannot replicate. Tasks like live debates or handwritten reflections force students to rely on their own knowledge, reducing dependency on AI-generated answers.
	Participant 93: Do not depend on AI 100% while asking for opinions or ideas, people should include their own ideas as well while referring to the answers they get from AI to preserve the originality and creativity in their writing.
	Participant 94: The modification of those AI models to not provide complete answers when the users asked for it. When incomplete answers are provided, users have to brainstorming on their own to think of the answers they desire

Question 2: What are some strategies that can be adopted to reduce the potential negative effects (as mentioned in previous section) of excessive Artificial Intelligence usage in learning English? Please provide a strategy and a brief explanation about the strategy.