# INCORPORATING ARTIFICIAL INTELLIGENCE AND MALL STRATEGIES IN EFL CLASSROOMS: INTERACTIVE PEDAGOGICAL PRAXIS

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## **ABSTRACT**

**Aim.** Pedagogical practices in English as a Foreign Language (EFL) classrooms are facing numerous challenges, experiencing artificial intelligence coming into classrooms across the globe. The present study aims to decipher the challenges pedagogues face in tackling the EFL classroom situation. The research explores the problems teachers face after introducing the artificial intelligence revolution in academia.

**Methods.** The present study is devoted to the collection of responses from EFL teachers teaching language at university level. The study uses the quantitative method using a questionnaire to elicit responses from thirty eight (38) teachers teaching in dif-

ferent countries of the Middle East, especially at undergraduate level EFL students emphasising skills in the English language.

**Results.** The findings reveal that pedagogues are still in a dilemma as to whether to allow or restrict students use of artificial intelligence (AI) tools for language learning tasks.

**Conclusion.** The respondents reveal that the reason is insufficient literature on what and how to use AI tools effectively for language learning purposes.

**Cognitive Value.** The present study intends to investigate the issues and challenges that language classrooms are using to integrate AI tools for teachers and also tries to provide a roadmap of strategies that can be utilised to teach English language using mobile aided language learning (MALL) strategies. The present study findings can be beneficial for academia to decide, think, and enact students learning outcomes by using AI tools and MALL strategies for better future action plans in classroom pedagogy.

**Keywords:** pedagogy, mobile-assisted language learning, artificial intelligence, language skills, interactive strategies

## Introduction

The computerised function of artificial intelligence (AI) may be the future of education. New expectations and problems have been brought about by technological advances for both instructors and students (Alam & Hameed, 2023). Academia is still need to finish talking about how the web and communication technology (ICT) is affecting our classrooms before we can be ready for progress with AI (Alam, Usama et al. 2023; Alam, Usama et al. 2024). Dian Toar Sumakul et al. (2022) elaborates that there are particular skills instructors need to develop in order to deal with the detrimental impacts of AI in education. Recent advancements in AI technology suggest that the responsibilities of English as a Foreign Language (EFL) teachers are also being disrupted in terms of EFL classes (Alam, Hameed et al., 2024). Technologies exist that could perform activities that are typically completed by teachers. For instance, there are AI-powered programmes, or apps, that might provide students' work linguistic comments without the assistance of an instructor.

The feedback comes with clear, succinct explanations and examples, and this may be one approach for students to learn grammar in execution, in context, as well as a style that is unique to them (Azizi et al., 2021). Similar applications are also available for other EFL topics including language acquisition and vocabulary development in addition to grammar. Additionally, these applications are also available for mobile devices, which increase accessibility and convenience for students and offer real-world learning scenarios and methods for self-management. From this angle, AI might be considered as a helpful assistant for both instructors and students, as it would be taxing for a teacher to supply each student with the same in-depth but customised input. However, it appears

that AI is replacing instructors in some capacities. Since AI already offers personalised instruction, it's possible that pupils may be able to study without the aid of a teacher who is human. This phenomenon can make us wonder about 'the pros and cons of AI in teaching and learning'. Looking at how the instructors view this issue can help us to answer the above question. When incorporating technology into education, it is important to take the teachers perspectives into account as they may have an impact on how well pupils learn (Azizi et al., 2020). As AI technologies have begun to saturate EFL classrooms, they have the potential to be beneficial companions for both students and teachers while also posing a threat to teaching profession jobs. Because teachers perceptions are crucial, this study sought to understand how teachers view the incorporation of technology into their instructional environments. Additionally, this study will look at the pedagogical elements, mobile related applications, and what teachers should take into account while using AI into their instruction.

Nowadays, everyone uses a smartphone, especially younger individuals. As a result, mobile learning (M-learning) is growing in value in education and teachers should deliberately address it in their lessons. Students may seek terminology or convert entire phrases using cell phones in language classes, there are even applications for improving reading abilities (Azizi et al., 2020; Azizi & Kralik, 2020). Since students can utilise the built-in camera, snap images of the contents on the whiteboard, or use of their mobile devices for a presentation, for example—a contemporary element of education at international institutions—they may make the note-taking system easier. Due to its portability and usage of portable broadband for quicker access to knowledge, such a mobile device therefore offers an ideal learning platform. The primary benefit of this type of learning is flexibility, or the ability to employ mobile learning tools at any time and any place, in both official and informal contexts. However, the majority of applications neglect their conceptual and empirical foundations. As a result, new approaches to creating mobile apps that suit learners on a personal and professional level are required. As a result, this necessitates that foreign language instructors possess digital abilities in order to be effective role models for their students and smart mentors who can offer them the assistance they need to achieve their language competence goals (Khonamri, Azizi et al., 2020; Khonamri et al., 2021).

In terms of language learning, smartphones are primarily used for second language acquisition of vocabulary, which appears to be operational for promoting both proactive and receptive communication abilities as well as for providing positive findings for acquiring novel terms for vocabulary that culminate from different processes of word formation despite the research emphasising that most participants had a restricted use of technological devices and also moderate mind-set. The difference in size between smartphone and laptop or tablet displays is the cause. Additionally, more lightweight and simpler to handle. It is optimal to acquire single words or brief sentences. Additionally, the results of numerous studies show that cell phones are useful to acquire foreign language terminology, the subject of this research that has received the most attention.

Therefore, the goal of this paper is to survey the primary subjective demands of university students in terms of the features and information they need from a mobile app for learning a foreign language. The study serves as a base for language instructors to build mobile aided language learning (MALL) tactics in EFL classes in today's AI-powered environment and to maximise their competency.

# RESEARCH OBJECTIVES

- The present research objectives accentuate classroom pedagogy problems in utilising the AI tools strategies.
- It investigates whether the teachers are well-informed and comfortable using these tools to benefit student's language learning.
- The study also acts as a torchbearer for language teachers to maximise their competence and develop MALL strategies in EFL classrooms in today's AI-empowered world.

## LITERATURE REVIEW

Mobile-assisted language learning strategies are effective means of pedagogy in EFL classrooms and have become a powerful tool for teaching when artificial intelligence is incorporated together to achieve language competence and learning outcomes. Interactions in EFL classrooms are essential as they provide practice and real-life context for language structure. The efficacy of communicative competence can be seen in integrating immediate responses through AI tools and MALL strategies. Hongzhi Yang and Suna Kyun (2022) conducted a study on artificial intelligence trends in language learning. The study provided the researchers focused on AI tools and their use in language classrooms. Chunpeng Zhai and Santoso Wibowo (2023) also carried out similar research where they emphasised using artificial intelligence and dialogue systems in foreign language classrooms to promote interactional competence among students. Both studies are essential for the present research as they foreground the trends and strategies to integrate and use mobile-assisted language learning, targeting maximising communicative competence among students.

Blanka Klimova and Liqaa Habeb Al-Obaydi (2023) conducted a survey-based study highlighting mobile applications used for language learning. The study's findings reveal a need to focus on the roadmap of instructions on how teachers can use these tools in class-room pedagogy. Arif Ahmed Mohammed Hassan Al-Ahdal and Mohammed Abdullah Alharbi's (2021) study discusses assisted language learning, especially for vocabulary purposes. They emphasise collaboration in language classrooms in their study, which plays a vital role in achieving communicative competence. Yi-chen Chen's (2022) article emphasises technology-enhanced pedagogy, which targets learners' speaking skills and deals with public speaking anxiety. It focuses on learning through different modalities

that incorporate technology and targets to minimise the anxiety of speaking skills. Additionally, it foregrounds the importance and efficacy of mobile applications and their impact on learners' soft skills. Sohaib Alam et al. (2020); Alam and Mohammad Usama (2023); study delineates language teaching nuances and provides a practical solution by suggesting activities that can be used for language skills teaching. Alam et al. (2022) study describes the use of hybrid learning, its problems and challenges in the EFL/ESL context. It further investigates how formative and summative assessments can be done with the help of blended learning. Abdul Karim et al. (2023) and Alam, Ansa Hameed et al. (2023) study focus on language proficiency in professional communication in higher education. They highlight that the speaking and listening skills competence are evident in employment and their professional performance among peers. Ragad M. Tawafak et al. (2023) accentuate student's perceptions about social interactions by incorporating games, and they claim that it promotes an autonomous learning environment in classroom pedagogy (Khonamri, Pavliková et al., 2020). The study is vital for the present research as it targets EFL learners to enhance their language skills (Alam & Usama, 2023). As computer technology advances around the turn of the new century, artificial intelligence (AI) starts to demonstrate its relevance when working with massive amounts of data; in the context of this study, it works with the data of learners' language (Godwin-Jones, 2017).

Artificial intelligence (AI) is now having an adverse influence on a number of societal facets, including education. Despite considerable scepticism and anxiety, several researches argue that AI might benefit learning, and applications based on AI have been created to assist teachers in teaching English as a Foreign Language (EFL) and learning specifically in classrooms. Sumakul et al. (2021) comprehend whether or not AI might be detrimental or advantageous to the teaching and learning of EFL to observe from the instructors' viewpoints in their detailed research. Therefore, it is the reason why this study examined the opinions of instructors towards the employment of AI in their EFL classroom?

There has been a constant and significant disagreement among researchers and educators over the use of AI tools in language instruction. Numerous studies highlight the virtues of AI in language acquisition since it brings the promise of customised learning. For instance, it has been discovered that AI systems can handle language input from students (Alam, 2022; Karim et al., 2023), verify students' grammar and provide complex feedback and provide more useful grammatical feedback

# **MALL Strategies**

The effects of mobile learning and MALL have been extensively studied in recent years. It may surprise some people to know that MALL is still considered to be 'on the fringes' of formal language instruction given the smartphone's potent features, connection, multimedia support, and growing ubiquity. Godwin Jones (2017) notes that

the majority of published studies of mobile devices in the service of language learning are experimental in nature (with frequently no follow-up), have brief time frames (often four to six weeks), and tend to exclusively focus on vocabulary development. He makes this observation both in this study and in his meta-analysis from 2015. Over conversational activities, drill-style exercises are prioritised in the majority of MALL initiatives.

Agnes Kukulska-Hulme et al., (2017) emphasise how smartphones as well as tablets are examples of mobile technology that are widely used in daily life and might have an influence on education and instruction. In their comprehensive work they concluded that mobile learning frequently occurs away from the educational setting and out of the teacher's personal reach, the phrase "mobile pedagogy" may seem to be a contradiction in terms. Mobility exposes students to the unplanned, contrary to the precise preparation that is implied by teaching. New concepts of what is to be taught and new activity designs are required as part of a sensible educational reaction to this reality. This method acknowledges that pupils may behave more independently outside of the classroom, where internet and mobile activities might have an impact on their pursuits and communication requirements in their chosen language.

Travis Cote and Brett Milliner (2014) concluded that Cell phones and mobile aided language learning (MALL) apps may offer a paradigm shift in how schools and colleges operate. Their research supports that the experience of reading for students of a second language is one area that is open to change and emerging possibilities, given the pervasiveness of mobile phones and the growing accessibility of digitised material. Terminologies like Extensive Reading (ER) research using mobile devices is still a relatively new field of study in English as a Second Language (ESL) classrooms. Jack Burston (2014) in one of his highly cited researches, discusses the notion of mobile learning first, before describing the three main mobile devices—MP3 players, PDAs, and smartphones—upon which MALL application have been built. A behaviourist, teacher-focused transmissions teaching model has been the methodological foundation for most MALL applications, which is then identified. MALL can also allow more creative, constructivist, interactive, student-centred instruction, but this is rarely done. Examples of this are looked at. MALL has been limited by the availability of modern technology in addition to being hampered by a method of teaching that is significantly in conflict with approaches that have driven foreign language education for almost 40 years.

## RESEARCH METHODOLOGY

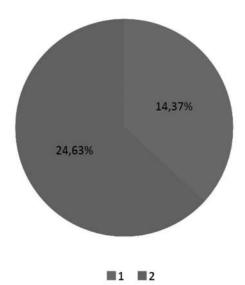
The present study follows a mix method to understand the opinion of teachers about using AI tools integrating MALL strategies in EFL classrooms. The research prepared a questionnaire to infer responses from pedagogues. The questionnaire follows a dynamic design of a Likert scale and open ended for feedback. Reliability and validity of questionnaire were checked before giving it a final shape. To avoid redundancy and biased responses,

Cronbach Alpha was used to check the appropriateness and accuracy of the questionnaire. Thirty-eight (38) teachers were selected randomly using the purposive method in the study teaching English as a foreign language in the Middle East region. To analyse data which was collected from respondents, MS Excel was used for the tabulation of data. Later, SPSS is used to make detailed inferences and findings in the present research. The limitation of the study can be seen as the survey is conducted on a small number of teachers, as it is impossible to conduct an extensive survey for individual researchers.

# ANALYSIS AND INFERENCES

The first question inquired about respondents' participation in any in-service training course which enables them to use strategies and techniques of AI-enabled MALL strategies in classroom pedagogy, and if yes, then what was the area of emphasis of the in-service programme? The options for the fourth question are 'yes' or 'no'. The questions have an additional open-ended option for the participants who opted for the yes option. Then, they were asked to elaborate on the nature of the training programme, whether it focuses on strategies, techniques, content, or instructional methodology.

**Figure 1** *Training and participation on AI-enabled MALL strategies* 



Source. Own research.

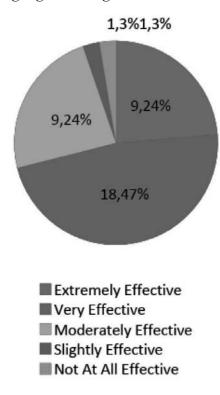
The above figure shows the participation of respondents in training where they can actually train themselves to transform their classroom into interactive sessions using AI and MALL strategies. As shown in figure 1 above, 1 shows the participants chosen as yes and 2 shows they did not attend any in-service course. The data clearly shows that most of them are unaware of the recent trends or do not want to update themselves for numerous reasons.

During the interaction between researcher and the respondents it was revealed that most of the teachers are not ready to accept the change in classroom pedagogy. When they were asked the reason why they are not experimenting or using the new techniques and startegies to maximize the learning experience they were not responsive or few of them stated that they do not feel it's needed.

The following questions ask what you think about using mobile-assisted language teaching in EFL classrooms. The options were based on five point likert scale. All the options were coded in a numeric value for the tabulation and analysis. The idea behind this question was to gather information about the teachers perspective and their thoughts about incorporating MALL strategies in EFL classroom to teach English language.

The recorded responses show, out of thirty-eight (38), nine (9) respondents chose option 'extremely effective', eighteen (18) chose option 'very effective', nine (9) chose option 'moderately effective', only one (1) respondent chose 'slightly effective', and one (1) chose option 'not at all effective'. The MALL strategies are not being used in EFL classrooms very often but they responded it is an effective strategy to teach the language. The reason is unavailability of English language exposure in daily life of the students, however it can be effective but still not explored as most of the participants believe it can divert students from learning because teachers will not have control of what and how it can be utilised when it comes to classroom teaching and learning procedure (Gadušová et al., 2021).

Figure 2
Use of mobile-assisted language teaching in EFL classrooms

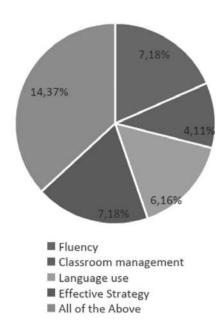


Source. Own research.

The above data reveals that although these strategies are useful and efficacious in EFL classroom there is no mechanism available to implement it or teachers are not trained enough to use it in their classroom pedagogy. The next questions enquire about the purpose of using mobile assisted strategies in classroom pedagogy. The options for the questions given were fluency, accuracy, classroom management, language use, and all of the above.

Some of the participant reveal that most of the time classrooms are not equipped with the multimedia system that can be used to implement MALL strategies for learning purposes. Another issue teachers raised is unavailability of training i.e. they are not trained enough to improvise these strategies in classroom.

**Figure 3** *Purpose of using MALL* 



Source. Own research.

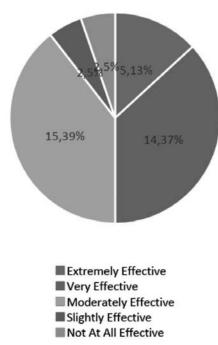
The responses recorded were seven (7) teachers selected option 'it is effective in second language classroom', four (4) teachers selected option 'easy to control with teaching techniques', six (6) teachers selected option 'produces explicit knowledge of the language', seven (7) teachers selected option 'it is an effective language learning strategy' and sixteen (14) teachers selected option 'all of the above. It can be seen from the figure 3 above, that thirty-seven (37) percent of teachers agreed on all of the above options.

The results reveal that although it is effective, teachers are ready to incorporate it in the classroom teaching. It is still a stigma that these gadgets are a distraction in the teaching-learning process. However, the results show that it does develop the fluency among students if used with proper strategy and techniques. It is easier with pair

and group work to manage the classroom. The dialogues and the activities promote language use among the peers.

The next questions directly asks respondents about what they think about learning language through MALL strategies as somehow more effective than other teaching methods?

Figure 4
Comparison among AI and other teaching praxis



Source. Own research.

There are a number of teaching methodologies which have been used by teachers in classrooms but what they think of using *MALL* activities learning the English language is the concern of the question. The options given were extremely effective, very effective, moderately effective, slightly effective, and not at all effective. The responses recorded were five (5) teachers chose option 'extremely effective', fourteen (14) teachers chose option 'very effective', seventeen (15) teachers chose option 'moderately effective', two (2) teachers chose option 'slightly effective', and two (2) chose option 'not at all effective'.

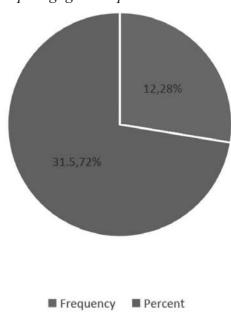
In most of the cases teachers do not allow students to use multimedia devices in the classroom as they stated that it can be a distraction to the learning procedures. However, when they were asked if these strategies were effective they responded positively. The question here arises as to whether we are ready to allow students fully to take command of the learning procedures while utilising AI in education. If we allow them how much can we can rely on AI in future.

The next question asks about the availability of the materials to use or improvise in the classroom teaching. The challenge teachers face changing the instructional method in class-

room pedagogy i.e. unavailability of authentic materials for their students. Sometimes when materials are available suitability comes into question. As the Figure 5. displays below, the hesitation of respondents when asked about using MALL strategies primarily lies as to whether they are not trained enough or materials are not available that suit their classroom.

As the figure below reveals only 28% ofrespondents said that materials are available for pedagogical implementation in the actual classroom, 72% said that materials are not available. Moreover, it is noted through the study that very few materials are available which can be directly used in classroom teaching. The available materials must either be improvised or changed according to the classroom nature, which is impossible because of lack of training among the respondents.

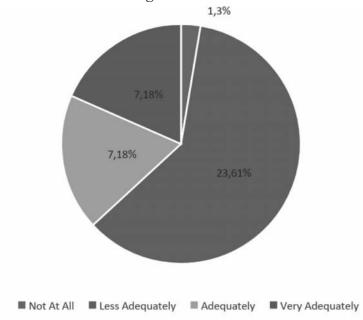
Figure 5
Availability of materials for pedagogical improvisation



Source. Own research.

The following question asks how adequately to cover the English language syllabus by using AI enabled MALL strategies? Response recorded as shown in the Figure. 6 (below) were, one (1) teacher responded that he/she not able to complete English language syllabus by using his/her own style or methods, seven (7) teachers responded they cover 'less adequately', twenty-three (23) teachers responded that they cover their syllabus adequately, and seven (7) teachers responded they cover 'very adequately. However, a number of participants responded that they either are not able to complete the syllabus in time or cover less adequately so there is a need for alternative methods which can cover the syllabus easily. Another issue respondents raised during the study is that these strategies will be time consuming and they clearly stated that they are always in hurry to finish the syllabus.

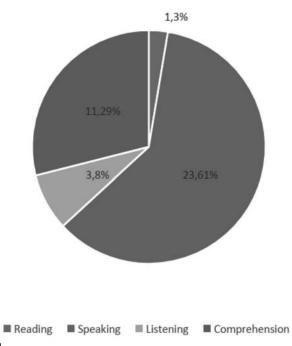
Figure 6
Adequacy of AI enabled MALL strategies



Source. Own research.

The next questions ask respondents about areas in the English language where learners have been experiencing difficulties.

Figure 7
Difficulties of learners in classroom

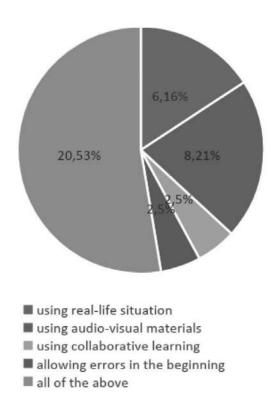


Source. Own research.

Responses recorded after the tabulation of data is shown above in the Figure. 7. Only one (1) participant said that students are facing difficulty in reading, and twenty-three (23) teachers responded the option 'speaking', three (3) teachers responded option 'listening' and eleven (11) teachers responded option 'comprehension'. None of them responded to option 'writing'. It has been observed that speaking is the most vulnerable skill among learners and it is unfortunately neglected skill in other traditional teaching methodologies. Using MALL strategies as teaching strategy gives learners enough space to practice speaking and listening skills and to develop the accuracy and fluency.

The following question asks about the area of emphasis or what areas one should focus on when they use MALL strategies on the classroom pedagogy. The responses are displayed below in Figure 8.

Figure 8
Area of emphasis in classroom pedagogy



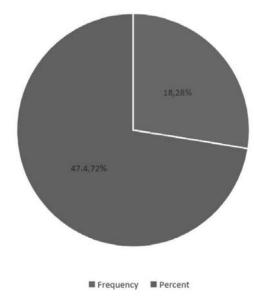
Source. Own research.

Responses recorded (see Figure. 8 above) after tabulation of data were six (6) participants chose option 'using real-life situation', eight (8) participants chose option 'using audio-visual materials', two (2) participants chose option 'using collaborative learning', two (2) participants chose option allowing errors in the beginning', twenty (20) out of forty (38) participants chose option 'all of the above'. Materials used

in the classrooms are vehicles which take learners to their destination which is learning the English language. It is very important to use authentic, appropriate, and standard materials in the classroom for better results.

The following question asks from your teaching experience do you think MALL strategies can be used in English language teaching in EFL classrooms? As Figure. 9 demonstrates 72% participants says that MALL strategies can be used in learning the English language whereas 28% says it cannot. A majority of the teachers responded to their own experience and they responded positively to the statement.

Figure 9
Efficacy of MALL strategies



Source. Own research.

## **DISCUSSION**

The personal discussion with the respondents discloses a number of issues and concerns which academia should take into consideration. Whether to allow AI in the language classroom or not, and if teachers allow it, to what extent it can be used.

While data collection reveals a number of issues in the classroom pedagogy. The traditional method of teaching allowing teachers to become an authoritative master of the classroom while change in instructional method introduces them to a number of problems. A participant said students feel very motivated and enjoy the teaching-learning process when these MALL activities propel the class. They feel relaxed from the boredom of lecture-based, teacher-centered classroom. It enhances some of their soft-skills also. One of the participants answered learners' lack of awareness and exposure to using these AI enabled techniques in ELT, therefore, they mistake it for

fun not learning. On the other hand, they are highly motivated to use MALL enabled activities in a classroom (Alam, Madej et al., 2024). The reason teachers are hesitant in changing the methodology of the classroom pedagogy is lack of training. Teachers should be given enough training and preparation time so that they can craft their own dialogue activities. They can use ready-made materials in the classroom and give students time to comprehend it but the rationale should be made very clear. Activities like role-playing should be designed keeping in mind the classroom space. And groups should be formed heterogeneously. (it can be a help in vocabulary building). Learners at the beginning are motivated but have difficulty in understanding the complex dialogues, lack of listening skills. Sometimes they are not able to relate what they learn in the classroom through mobile based activities (Alam, Hameed et al., 2024; Alam, Usama et al., 2024; Usama et al. 2024).

One of the participants responded that their students face problems in learning the language at the verbal level, and it does not help with learning new vocabulary. The difficulty with segmental and supra-segmental features of language as well as pronunciation. Learners are hesitant in participating in activities and the size of the classroom which is large in a number of students do not allow the teacher to experiment with activity based learning strategy. Additionally, completion of the syllabus is always the priority for a teacher. Difficulty in cultural variations, lack of theatre studies and aptitude among them. One of the difficulties a participant responded is the monopoly of English language i.e. use of only English language rather that one can improvise in their vernacular language. Lack of language skills and infrastructure. Infrastructure is one of the issues with this approach but one has to understand that it is a cost-effective method and can be utilised without any infrastructure.

# **FINDINGS**

The findings suggest:

- The outcome of the present study suggests that MALL strategies using AI tools can
  produce detailed, comprehensive, specific, unambiguous, and explicit knowledge and
  understanding of English language. It is an efficacious language learning strategy that
  can be utilised through careful organisation and management of classroom proceedings;
- It was observed that the quality and standard of the activities, lessons, and exercises are firmly dependent upon the organisation, sequencing, use of audio-visual aids, technology (if available), and, most importantly, their pacing according to the level and understanding of the students;
- The findings revealed that the materials used in the classroom for teaching are based on the teacher's presentation, i.e. clarity of the materials, speech clarity of the teacher, classroom management, knowledge of the material and understanding of when and how to use for better learning outcomes;

- The teachers have to ensure to take care of the student's interest level, interactive interaction throughout the class, balance over student-teacher speech, and provide ample opportunity to practice language structures through dialogues and so on (Pavlíková & Ambrozy, 2019);
- The findings noted and the respondents firmly believe that MALL strategies using AI tools provide simultaneous practice of receptive and productive skills in the English language.

## LIMITATIONS OF THE STUDY

The limitation is highlighted in the methodology i.e. the sample size of the study is small in nature. The study is conducted on a small sample size as it is inconvenient for individual researchers to conduct large surveys. Further studies are needed for policy recommendation in higher education.

# **ACKNOWLEDGEMENT**

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