

PROCEEDINGS

5th International Technology-Enhanced Language Learning Symposium (iTELLs) 2024

*"Technology Integration for Advancing
Language Learning and Cultural Bridging"*

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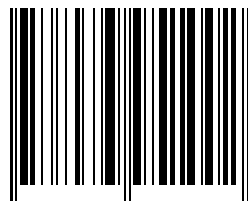
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PREFACE

Bismillahirrahmanirrahim.

In the name of Allah, the most Gracious, the most Merciful...

I commence this address with gratitude and appreciation to all the esteemed presenters, the dedicated team committee, and the diligent organizers, whose unwavering commitment and expertise have been instrumental in bringing the 5th International Technology-Enhanced Language Learning Symposium (5th iTELLS 2024) to fruition. As we convene this year, I am proud to witness how this symposium has grown from strength to strength, fostering deeper collaboration and expanding its global reach.

This year's symposium underscores the transformative role of educators and technology in shaping the future of language teaching and learning. The challenges of the post-pandemic era have been met with resilience and innovation, further solidifying the pivotal role of technology in education. The virtual format of this event continues to demonstrate the power of collaboration and inclusivity, bridging geographic boundaries and uniting experts, scholars, and students in a shared mission.

The 5th iTELLS 2024 serves as a testament to the power of partnerships and knowledge-sharing. Each year, the symposium has brought together an increasingly diverse and dynamic community, working collectively to push the boundaries of Technology-Enhanced Language Learning. The collaboration among institutions, scholars, and practitioners has never been stronger, and it is through these connections that we continue to achieve remarkable advancements.

Through this immersive platform, where experts, scholars, and students collaborate and share knowledge, we envision the continued emergence of a vibrant community well-versed in Technology-Enhanced Language Learning. This year's program promises to inspire innovative and engaging methods to incorporate technology in teaching and learning, setting a new standard for excellence in the field.

With renewed optimism and an unwavering commitment to educational advancement, I am confident that this symposium will serve as a catalyst for continued exploration and implementation of technology-enhanced language learning. May this gathering of experts, scholars, and students pave the way for a future where innovative and effective integration of technology in teaching and learning becomes the norm. Wishing all presenters, a fruitful and enlightening knowledge-sharing session.

Prof. Dr. Mohd Mahzan Awang

Dean

Faculty of Education

Universiti Kebangsaan Malaysia

PREFACE

Dear distinguished attendees,

It is with great pleasure that we welcome you to the 5th International Technology-Enhanced Language Learning Symposium (5th iTELLS 2024). This year's symposium, held under the theme "Technology Integration for Advancing Language Learning and Cultural Bridging," aims to explore innovative approaches and emerging technologies that shape the future of language education and intercultural understanding.

iTELLS 2024 continues to serve as a dynamic platform for fostering meaningful exchanges among ELT experts, educators, practitioners, and students from around the globe. The virtual format enables greater inclusivity, bringing together diverse perspectives to address the evolving landscape of English language teaching and learning in the 21st century.

We are proud to present an array of scholarly papers and presentations that delve into thematic areas such as Innovative and Transformative Language Teaching and Learning, Technology for Language Teaching and Learning, Gamified Learning, Personalised Learning, E-Learning/Blended Learning/MOOC, Virtual/Augmented/Mixed Reality, and Digital Learning, including the Teaching and Learning of Literature. These contributions reflect the ingenuity and dedication of our global academic community.

We extend our heartfelt gratitude to the keynote speakers and invited speakers, whose insights and expertise enrich this symposium. We also thank the dedicated presenters and participants for their invaluable contributions and active engagement. Special recognition is due to the organizing committee for their tireless efforts and commitment to ensuring the success of this event.

As we embark on this journey of knowledge-sharing and professional growth, we hope that iTELLS 2024 inspires you to innovate, collaborate, and advance the boundaries of technology-enhanced language learning. Together, let us continue to shape the future of education and build bridges across cultures.

With warm regards,

Assoc. Prof. Dr. Harwati Hashim
Chair
5th iTELLS 2024
Faculty of Education
Universiti Kebangsaan Malaysia

PREFACE

Dear esteemed scholars and language education enthusiasts,

It is with immense delight and scholarly enthusiasm that we extend our heartfelt welcome to the distinguished 5th International Technology-Enhanced Language Learning Symposium (5th iTELLS 2024). This esteemed symposium continues to serve as a pivotal platform for academics and researchers from diverse institutions, fostering the exchange and dissemination of cutting-edge research and transformative experiences in the realm of technology-enhanced language pedagogy.

The 5th iTELLS promises an intellectually stimulating journey, enriched by an exceptional lineup of keynote and invited speakers representing a global spectrum of expertise. This comprehensive program is designed to ensure participants engage in insightful dialogues and collaborative discussions, addressing a wide array of topics within the field of Technology-Enhanced Language Learning.

As a personal milestone, I am especially proud to highlight the participation of a dedicated committee of my supervisees, many of whom are graduating this year. Their contributions to the symposium reflect not only their academic rigor but also the culmination of years of mentorship, hard work, and collaboration. It is truly rewarding to witness their growth and achievements, and I am confident they will continue to make significant strides in their academic and professional journeys.

We extend our heartfelt gratitude to the diligent program committees for their tireless dedication in organizing this symposium. Our sincere thanks also go to the esteemed external reviewers for their meticulous evaluations, which have elevated the quality of the research presented. Special recognition is due to the authors and participants, whose invaluable contributions from the bedrock of this symposium, advancing its scholarly discourse to new heights.

As we embark on this intellectual voyage, I hope that the 5th iTELLS 2024 proves to be both fruitful and inspiring for all participants. Your unwavering support and enthusiastic participation are the cornerstones of this symposium's continued success. We look forward to reconnecting with you at future symposia, as we collectively drive the advancement of Technology-Enhanced Language Learning.

Sincerely,

Prof. Dr. Melor Md Yunus
Faculty of Education
Universiti Kebangsaan Malaysia

PREFACE

Dear distinguished attendees,

It is with immense pleasure that I welcome you to the 5th International Technology-Enhanced Language Learning Symposium (5th iTELLS 2024), hosted for the very first time from the United Kingdom at Canterbury Christ Church University. This momentous occasion marks a significant milestone in the history of iTELLS, as we expand our horizons through the virtual format, enabling global participation and inclusivity.

As the host institution, Canterbury Christ Church University is honored to provide a platform for scholars, educators, and practitioners to exchange groundbreaking ideas and innovations in technology-enhanced language learning. Under the theme "Technology Integration for Advancing Language Learning and Cultural Bridging," this symposium showcases the potential of technology to revolutionize language education while fostering intercultural understanding and collaboration.

This year's event features an impressive array of papers and presentations that delve into key thematic areas, including Innovative and Transformative Language Teaching and Learning, Technology for Language Teaching and Learning, Gamified Learning, Personalised Learning, E-Learning/Blended Learning/MOOC, Virtual/Augmented/Mixed Reality, and Digital Learning, among others. The diversity and depth of these contributions reflect the dedication and expertise of our global academic community.

We take pride in facilitating a space for meaningful dialogue and collaborative opportunities. The virtual format not only enhances accessibility but also underscores our commitment to adapting to the evolving educational landscape. It is our hope that this symposium inspires new partnerships and ignites transformative advancements in the field of technology-enhanced language learning.

I extend my deepest gratitude to all the participants, presenters, and the organizing committee for their unwavering commitment and contributions. Your efforts ensure the success of this event and reinforce the importance of collaboration in achieving academic excellence.

As we embark on this exciting journey, I encourage all attendees to fully engage with the discussions and activities, and to take away insights that will shape the future of language education. Together, let us push the boundaries of innovation and create lasting connections across cultures and disciplines.

With warm regards,

Dr. Kevin Balchin

Director

Centre for Language and Linguistics

Canterbury Christ Church University

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The Perceptions of Selected Junior High School English Teachers in Arkansas on Global Competence in English Lessons

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Abstract: Global competence is seen as a panacea to aid achieving a quality and global education. English teaching and learning is now being customised complementing the global education reform. Consequently, English teachers' global competence is crucial and contributes to the growth of students' global competence. Thus, it is intriguing to find out whether English teachers in a developed country such as the United States of America have the awareness, knowledge, skills and attitudes of global competence. Hence, this paper aims to identify the perceptions of English teachers from a local junior high school in Arkansas regarding the importance on integrating global competence into lessons through a survey questionnaire. This study also aims to explore the participants' opinions in more depth through open-ended questions. This research was conducted during the Corona Virus, COVID-19 pandemic at the selected school. Five junior high school English teachers participated in this mixed-method study. The findings showed that the English teachers in the school perceived global competence to be important and demonstrated characteristics of globally competent teachers. However, they were not completely aware of the elements of global competence and lacked information about incorporating global competence into practice. Future research could focus on a larger-scale study of this topic to gain further insights.

Keywords: *American English teachers, global competence, globally competent teachers, teachers' perceptions, teaching and learning of English*

Introduction and Literature Review

Global education coincides with the purpose of achieving quality education of the fourth Sustainable Development Goals (SDG 4). Global education stems from the reality that today's people live and interact in a more globalised environment (Hodorovska & Rankovova, 2023; Cabezudo et al., 2012). The global education goals are to prepare individuals who can live, work, and cooperate with people, are globally competent, creative, critical, and able to make decisions (Sinagatullin, 2019). These goals are equal to the 21st-century skills needed in students' education or language learning as predetermined by the Malaysia Ministry of Education (MoE) (Muhammad & Seng, 2019). Muhammad and Seng (2019) list out the key elements such as critical and problem-solving, communication and collaboration, adaptive and flexible, social and intercultural skills as the drive toward successful integration of 21st-century education in Malaysia. Consequently, it is critical for education to provide learners with the opportunity and skills to reflect on and share their point of view and role within a global, interconnected society, as well as to comprehend and discuss complex relationships between common social, ecological, political, and economic issues in order to generate new ways of thinking and acting (Hodorovska & Rankovova, 2023; Cabezudo et al., 2012). These are in line with SDG the target for quality education especially to create international understanding. From an array of approaches available today, integrating global competence is becoming more significant to achieve quality global education as it helps to shape individuals to be better global citizens in today's interconnected society.

Many researchers (i.e. Li, 2013; Tichnor-Wagner et al., 2016; Orazbayeva, 2016; Meng et al., 2017; Stankovska et al., 2019; Majewska, 2022) defined global competence as personal progress, the ability to perceive global and multicultural events for effective interaction and collaboration in global scenes. This is because, students are required to grasp the capacity to reason with knowledge, communicate reasonable opinions, understand conflict resolution, and adapt to the ever-changing future in order to survive in the interconnected world (Stankovska et al., 2019). It can happen with the help of globally competent teachers who can integrate global knowledge into lessons, create a learning environment that values diversity and global involvement, and promote global content courses (Karanikola, 2022; Orazbayeva, 2016; Parkhouse et al., 2015). Additionally, today, it is essential for teachers to better address controversial issues in the classroom, such as LGBTQ and the genocide in Palestine. According to Aleksiak, Kuleta-Hulboj, and Zielinska (2023), teachers are required to navigate controversial issues and unfavourable classroom contexts effectively to achieve the goals of global citizenship education.

English is a world language, used as the medium of instruction in fields such as education, politics, economics, social sciences and technologies (Iswandari & Ardi, 2022; Bullah & Yunus, 2019). It is clear that language instruction not only teaches students how to use the target language proficiently, but also prepares them for contact with people from varied cultural backgrounds by providing them with the required skills, attitudes, and information (Byram & Wagner, 2018). Therefore, teaching culture is an important aspect of language teaching (Byram & Wagner, 2018). Global competence includes the domains or elements of interculturality should be integrated into English lessons. The rationale of integrating global competence is to assist students' language learning (Ibrahim & Matore, 2024; Popescu & Iordachescu, 2015). As

supported by Kraus and Darmstadt (2020), languages and intercultural competences are among the relevant and sought-after skills in the job market and career development. Fittingly, the urgency for competent workers has been a worldwide concern (Majewska, 2022).

English teachers need to be globally competent to work in diverse American classrooms and school environments more effectively (Salzer & Roczen, 2018; Nganga, 2016). Despite that, one of the problems English teachers face is a lack of awareness of the elements of global competence and globally competent teaching (Ibrahim & Matore, 2024). This problem is associated with the fewer actions taken by the Department of Education in particular areas to assist English teachers' global competence and globally competent teaching development. Integrating global competence in American English lessons is as important as in English as a second language (ESL) and non-American English lessons. There should be no difference in integrating global competence when teaching English to native and non-native English speakers. Nevertheless, it is interesting to explore the native speakers' opinions regarding this area of interest since most global competence models, frameworks, and studies are from Western perspectives.

The lack of professional development programmes for English teachers appeared to be a serious problem, as evidenced by the findings that suggest a gap in the teachers' understanding of global competence and intercultural competence. This is similar to the findings in a study conducted by Ibrahim and Matore (2024), which discovered the limited studies on teachers' global competence, flaws in developing teachers' global competence programmes, and the scarcities in incorporating global elements in lessons in Malaysia. This results in inconsistent integration of global competence in English lessons and a missed opportunity to fully leverage its potential benefits for students. The native English teachers know the general idea of global competence but are uninformed about the domains and elements of global competence and globally competent English teaching. Despite various models have been developed and research conducted from the Western perspectives, the specific elements of global competence are not widely known by the English teachers in America.

This study's results demonstrate a need for targeted professional development initiatives that focus on global competence (Karanikola, 2022). Kraus and Darmstadt (2020) express their agreement to have programmes such as short-term programmes for workers in assisting their competence development. In this regard, English teachers should be given guidance and support through a systematic and well-organised mentoring approach, in addition to learning autonomously from experience and/or practises (Ibrahim & Matore, 2024). This dual approach would ensure that teachers are both informed about the theoretical underpinnings of global competence and have the practical skills to integrate it into their teaching effectively.

Research questions

The study sought to answers the following three research questions:

RQ1. How do English teachers in a particular junior high school in a town in Arkansas perceive the importance and benefits of global competence and the integration of global competence in English lessons?

RQ2. What are the opinions of English teachers in a particular junior high school in a town in Arkansas regarding the development and integration of global competence?

RQ3. What are the opinions of English teachers in a particular junior high school in a town in Arkansas on factors of current English curriculum and professional development programmes (on the development and integration) of global competence in English lessons?

Methodology

Research Design

This paper employed a mixed-method study, whereby both quantitative (questionnaire) and qualitative (open-ended questions) methods were utilised to give the participants many opportunities to express their opinions.

Sample and Data Collection

A set of survey questionnaire and open-ended questions was given to the participants which are five American teachers teaching English in a junior high school in a town in Arkansas, Arkansas, United States of America. The rationale for only focusing on five teachers is because that is the total number of English teachers in the particular school. Furthermore, the study conducted was during the Corona Virus (COVID-19) pandemic, thus, limiting many physical movements and engagements for data collection purposes.

Data Analysis

The questionnaire contained 27 items including 6 items on the demographic background of respondents, and five open-ended questions, followed by a 5-point Likert scale ranging from 1 to 5 with strongly disagree, disagree, quite agree, agree and strongly agree respectively. The questionnaire has a Cronbach Alpha value of .889 which is considered as an acceptable measure for a reliability. Data was analysed using SPSS and recorded as mean to represent each item.

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.889	.911	27

The small number of participants for the survey questionnaire was based on the population of English teachers in a particular American junior high school in a town in Arkansas. Therefore, the findings do not represent the views and opinions of the whole population of the English teachers in the state of Arkansas and in the United States of America. However, it is significant to look into the perceptions and opinions of the selected English teachers in that school which may contribute to the literature in this area of interest. The quantitative data is further supported with the open-ended questions employed in this study. Similarly, the qualitative findings obtained is used to bolster the discussion of the questionnaire's quantitative findings.

For the open-ended questions, content analysis is conducted to examine the opinions and explanations received about the topic under study. The following stages included the content analysis, which was adopted and adapted from Yadigaroglu's (2021) method in her study:

1. Using the research questions and interview technique to develop concepts, themes, and sub-themes
2. Putting together a group of comparable responses around certain thoughts and themes
3. Creating codes to explain sub-themes in the answers of the participants
4. Tables from themes, sub-themes, and codes are created and interpreted.

In this study, three themes are determined in line with the data obtained to support and elaborate the data from the survey questionnaire. These themes are the (i) advantages of global competence, (ii) factor of English curriculum/syllabus, and (iii) factor of professional development programmes related to global competence and globally competent teaching of the English teachers in the selected junior high school. The findings are further discussed in the next section of this paper.

Results

Based on the demographic data gained from the survey, the participants consisted of five female teachers, aged between 31 to 51 years old and above. The school setting of the particular school the teachers were teaching at was a semi-urban junior high school in a town in Arkansas, and they have six to more than 16 years of English teaching experience. Two out of five participants stated that they have attended ten or more courses or programmes related to developing global competence.

The findings from the survey questionnaire were to answer the research question 1 (RQ1) of this study. Whilst, the findings from the qualitative part of this study were to answer RQ2 and RQ3. The mean score for all items in the survey questionnaire was calculated and analysed using SPSS.

Survey Questionnaire

a. English teachers' knowledge of global competence

Table 1: English teachers' knowledge of global competence

Items	Mean
1 I know and understand the elements of global competence.	3.00
2 I consider myself as a globally competent teacher.	2.80
3 I know that intercultural competence is different from global competence.	2.60
4 I understand that being globally competent means being able to integrate global issues in teaching.	3.80
5 I understand that being globally competent means making connection between global and local issues.	3.60
6 In my opinion, being globally competent also means developing self-awareness and self-identity.	4.00
7 I am globally competent because I could interact well with others from diverse backgrounds.	4.00
8 I believe that global competence is closely-related to language learning.	3.60

Based on the overall mean scores, high mean scores (M=4.00) are found for the items in which the English teachers showed an understanding of some elements of global competence, such as self-awareness and self-identity, and the ability to interact with others from diverse backgrounds.

The participants scored a high mean score regarding their understanding of integrating global issues in teaching while *making connections between global and local* (item 5) and *Relation to language learning*(item 8) at M= 3.60. It is safe to assume that the teachers knew the importance of integrating global competence into language lessons since learning English relates to learning the language background and cultures.

On the other hand, item 3 has the lowest mean score (M= 2.60), reporting that two or more teachers strongly agreed and disagreed that they knew there was a difference between intercultural and global competencies. It shows the deficiency of information given to American English teachers regarding the domains or elements of intercultural competence and global competence.

b. *English teachers’ perceptions of integrating global competence English lessons*

Table 2 below presents the findings to further answer RQ1 of the study.

Table 2: English teachers’ perceptions of integrating global competence English lessons

	Items	Mean
1	I have a positive view on the integration of global competence in English lessons.	4.60
2	Integrating global competence in English lessons is important.	4.60
3	Integrating global competence creates meaningful English lessons.	4.60
4	Integrating global competence assists students’ English learning.	4.60
5	I agree that students engage better when English teachers teach global and local knowledge.	4.60
6	I ask for students’ opinions regarding global issues and to relate global issues to their local context.	4.00

The average mean regarding the teachers’ views of global competence development and integration is M= 4.60 for items 1, 2, 3, 4, and 5. This score means the small number of participants either strongly agreed or agreed with the statements of the items. It highlights the English teachers’ *Positive views* (item 1) of integrating global competence in lessons. It is because they knew its importance in ensuring students deep understanding of the English lessons.

The participants believed that integrating global competence *Creates meaningful English lessons* (item 3), *Assists students’ language learning* (item 4) and *Creates better engagement to global and local issues* (item 5). Regarding item 6, one participant disagreed that she/he asked for students’ opinions and for them to relate global issues in the local context, while the others agreed and strongly agreed that they practised that in their English lessons. Majewska (2022) mentions that it may be challenging for some teachers to teach global competence effectively and for students to learn it.

c. *English teachers’ perceptions on factors affecting the development and integration of global competence*

Table 3 displays the responses from the American English teachers regarding their perceptions on factors affecting the development of English teachers’ globally competent teaching and the integration.

Table 3: English teachers' perceptions on factors affecting the development and integration of global competence

	Items	Mean
1	I refer to global competence model or globally competent teaching model to develop my global competence.	2.40
2	The Ministry of Education in my country has helped me in the development of my global competence.	1.80
3	I gain knowledge about global issues from courses organised by the Ministry of Education/government educational organisation in my country.	1.80
4	The professional development programmes (if organized) provides platform for me to understand cultures and origins of different nationalities.	3.00
5	The current English syllabus offers a platform/medium for teachers to integrate global competence in English lessons.	3.20
6	I am able to develop critical thinking regarding issues around the world throughout the programme (if organised) and assist my students to do the same.	3.60
7	It is important to attend programmes that are properly organized to improve English teachers' global competence and self-development.	4.20

The items focused on the support from the authorities such as the Ministry of Education (MOE) or Education Department in Arkansas to organise professional development programmes and platforms for English teachers to widen their existing knowledge on global competence in lessons. The highest score of M= 4.20 shows that the participants agreed and strongly agreed on the *Significance of attending programmes to improve their global competence and self-development*. It will assist English teachers in enhancing their international awareness (NEA Education Policy and Practice Department, 2010).

However, four out of five participants strongly disagreed and disagreed that the *MOE in the United States of America has helped them develop their global competence* and *Organised courses specifically for English teachers* to gain knowledge on global issues (items 2 and 3). At M=2.40, it displays a mixed response for item 1, whether they have *Referred to the global competence-related models to help them*. This divided opinion regarding the statement reflected that some English teachers are aware of the global competence models designed and developed by many American or Western researchers (i.e. Hunter, 2004; Parkhouse et al., 2015; Tichnor-Wagner et al., 2016), and some are not. The current English education system must look into this gap, as not all native English teachers are exposed to the available global competence models that help them develop and integrate global competence.

Next, the participants indicated positive responses for items 4, 5 and 6. From their views, the *Professional development programmes on global competence (if organised) will enable them to understand cultures and origins of different nationalities* (M= 3.00) and *To develop critical thinking on world issues*(M=3.60), which are the elements of global competence. The findings are consistent with the study by Yacob, Yunus, and Hashim (2022), which reported on the importance of global competence in developing critical understanding and responses towards global issues. These become the factors affecting the development and integration of global competence among individuals and in English lessons. The findings reveal the participants' belief that they can also further *Assist their students to think critically* (M= 3.60) since according to them, *The current English syllabus allows teachers to integrate global competence in English lessons* (M= 3.20). It gives them the freedom to design their teaching according to the students' needs, as shown in the qualitative findings recorded in Table 5 in the subsequent subsection.

Open-ended Questions

- a. *Opinions on the advantages of incorporating global competence on students' English learning*

Table 4: Opinions on the advantages of incorporating global competence on students' English learning

Code	Frequency	Quote
Discussing worldwide issues: TC1, T2, T4	3	TC2: Language influences culture and culture influences language. The ability to make connections across the various languages our students know can only help them learn English better. Additionally, the study of themes and stories that exist across cultures demonstrate universal connections.
Creating engagement: TC 1, TC2, TC4, TC5	4	TC5: Students can connect cognates to further develop their vocabulary; when students make connections from other cultures, they can more deeply understand their English lesson.
Communicating with diverse others: TC2, TC3, TC4, TC5	4	TC3: (Students) need to know how to communicate and interact with people from around the world. TC4: Knowing that they (students) are safe with me (teacher) because I respect diversity and strive to better at global competence elevates the likelihood of taking risks to practise English and gain proficiency.
Connecting global and local concerns and self-identity: TC2, TC4, TC5	3	TC4: Because it helps students gain empathy and when our emotional affect is stable, we are better able to learn. In other words, global competence showcases our similarities despite our differences and removes USA as the center of perspectives.
Improving (English) language learning: TC1, TC2, TC3, TC4, TC5	5	TC1: I think the more that we can use language that addresses worldwide concerns, the more engaged students will be, and thus their learning would improve.
Being part of their learning: TC1, TC2, TC3, TC4, TC5	5	TC2: Additionally, the study of themes and stories that exist across cultures demonstrate universal connections and allow students to feel like they're part of what they are learning and see how what they are learning matters to them and is relevant to their lives.
Preparing for future career: TC2, TC3, TC4	3	TC3: Because many of my students will be working with global companies.

As shown in Table 4, the participants have shown interest and understanding in developing and integrating global competence in lessons. They firmly believed that the integration benefits the students as they can *Discuss worldwide issues* (f=3), *Create engagement* (f=4), *Communicate with diverse others* (f=4); *Connect global and local concerns and enhance self-identity* (f=5) and, *Improve English learning* (f=5). The students can *Become part of their learning* (f=5), which resonates with an autonomous learning experience. Most importantly, the English teachers agreed that the integration would result in *Preparing for future careers* (f=3). Global competence in education will equip students with the ability to compete globally, similar to the teacher's opinion that it will help the students to work in global companies, competing with other people and machines (NEA Education Policy and Practice Department, 2010).

- b. *Opinions on the factor of current English syllabus/curriculum that integrates global competence in English lessons.*

Table 5: Opinions on the factor of current English syllabus/curriculum that integrates global competence in English lessons

Code	Frequency	Quote
Inclusivity: TC1, TC2, TC3, T4, TC5	5	TC1: There is a strong emphasis in our country to teach empathy within our curriculum and to be able to examine issues and events from multiple perspectives.
Diversity: TC1, TC2, TC3, TC4, TC5	5	TC2: America is so diverse that developing a curriculum that meets the needs of all students cannot be done at a government level.
Bias: TC1, TC4	2	TC4: ESL curriculum in Springdale does but the English canon re: literature has been dominated by old white men for EVER. Some teachers in my building take the lead to diversify the syllabus.
Freedom to design syllabus/materials: TC1, TC2, TC3, TC4, TC5	5	TC3: The actual curriculum does not (do) that much, but we have individual freedom to design within our curriculum to pull in global and cultural literature and ideas.
Incorporation of global competence: TC1, TC2, TC3, TC4, TC5	5	TC2: We are not required to teach a certain text so much as teach students general skills to analyse any text. This level of freedom allows us to choose (or not) globally competent materials as we will.

Because of our increasingly interconnected and interdependent global society, American students must be taught to cultivate mental habits that include respect for others, cooperation, appreciation of our common humanity, and a sense of responsibility – all of which are essential components of global competence (NEA Education Policy and Practice Department, 2010). From the viewpoints of the English teachers, the curriculum puts emphasis on *Inclusivity*(f=5), *Diversity* (f=5), and *Incorporation of global competence* (f=5) with enough *Freedom to design the syllabus and materials* that include local and global issues (f=5).

As mentioned regarding the influence of white and Western perspectives in literature and studies regarding global competence, TC4 addressed a similar issue on the domination of the Western perspectives that initiates teachers to diversify the literature and materials accordingly. English teachers ought to have skills to find appropriate materials that expand students’ available knowledge.

Table 6: Opinions on the factor of professional development programmes in developing global competence

Code	Frequency	Quote
Organisation by MOE/Department of State: TC1, TC2, TC3, TC5	4	TC2: I believe the best influence a government educational entity such as Department of Education can have is to set loose standards and then allow the teachers to design the curriculum around the standards so that they can meet the needs of their students.
Importance of promotion/integration of global competence: TC1, TC2, TC3, TC5	4	TC1: I believe our country needs to develop these types of lessons. Our country is very individualistic, so we focus on the importance of individuals being kind and what a difference that can make, but we have yet to take it to a global scale.
Development of global competence: TC1, TC2, TC3, TC5	4	TC2: Thus the best way to develop globally competent, culturally rich, and student-driven courses is to let the teachers and districts gather the materials and build the curriculum based on what they know their students need while taking into account state standards, our ever-changing world, and global competence.
Lack of supports: TC1, TC4, TC5	3	TC4: No good opinions about state department of Education, some faith in ██████’s education secretary, cynical about any impacts on learning.
Lack of information: TC1, TC2, TC4, TC5	4	TC5: I would need in-depth PD (professional development) in order to incorporate global competence in my practice. I’m not opposed, just uninformed.

From the findings, four teachers believed that the integration of global competence in English lessons needs to be promoted since American society is very individualistic and the curriculum emphasises making differences as individuals but has yet to take it to a global scale. Thus, encouraging learning that looks into global similarities and differences could make a difference. The impact can be seen in students' global competence knowledge, skills, and dispositions (Ibrahim & Matore, 2024). Nganga (2016, p. 84) supports that "the teaching force in the United States of America is still predominantly white and monolingual, yet the US population is rapidly becoming culturally and ethnically diverse". Therefore, having a curriculum that encourages global competence development, especially learning that looks into global similarities and differences, is significant. The practical exploration of the area may avoid white supremacy and encourage peace and harmony.

Overall, the quantitative results are supported by the qualitative results from the English teachers' opinions. The findings from the open-ended questions are also used to illuminate the quantitative data and guide the interpretation. The qualitative results answered the second and third research questions in this study on the (RQ2) opinions of English teachers in a particular junior high school regarding the development and integration of global competence and (RQ3) opinions on factors of current English curriculum and professional development programmes on the development and integration of global competence in English lessons.

Discussion

The findings from the survey and the qualitative responses from the English teachers provide a comprehensive understanding of the advantages of incorporating global competence into students' English learning. Language is a pivotal medium for communication, interaction, and collaboration (Iswandari & Ardi, 2022). For that matter, it emphasises teachers' global competence development. In this study, the experienced teachers demonstrated a high level of awareness regarding the importance of global competence in language learning. This suggests that the participants recognised the value of global competence; however, the lower mean scores for some items summarised the lack of confidence among the local participants in describing themselves as globally competent since they were uninformed about all elements of global competence. This recent evidence suggests the insufficient structured global competence programmes for teachers to introduce global competence elements more meaningfully and practically to teachers. These results are supported by findings reported by previous studies in different geographical settings, such as by Karanikola (2022) and Yacob, Yunus, and Hashim (2022). Karanikola (2022) reports on teachers' awareness of the relevance and needs of global competence training for teachers. Further, the author argues about training deficiencies to enhance teachers' confidence in incorporating global competence in their instructional practices.

Besides, there appears to be a gap in understanding the distinction between intercultural competence and global competence, as indicated by the lowest mean score. Karanikola (2022) emphasises that teachers must be both globally and interculturally competent to teach global competence. The author has addressed global and intercultural competence separately to highlight the differences between these two concepts. Notably, global competence is an umbrella

for various intercultural or cross-cultural elements (Yacob et al., 2022). This highlights a potential area for professional development, as a clear understanding of these concepts is crucial for effective integration into the curriculum. NEA Education Policy and Practice Department (2010) also points out a need to align teacher preparation programs with multiple viewpoints.

The factors affecting the development and integration of global competence are also discussed in this study. While the teachers acknowledged the importance of attending programmes that improve their global competence and self-development, they also expressed a lack of support from the Ministry of Education regarding organised courses and professional development opportunities focused on global competence. This discrepancy suggests a need and demands for more structured support and resources from educational authorities to facilitate global competence development among English teachers. This is supported by Ibrahim and Matore (2024), who recommend more focused and structured programmes tailored to the real needs of teachers to integrate global competence elements in classroom interactions.

The qualitative responses also shed light on the need to diversify literature and materials to avoid the dominance of white and Western perspectives. This is particularly significant in a society such as the United States, which is becoming increasingly culturally and ethnically diverse (Nganga, 2016). The English teachers recognised the importance of promoting learning that looks into global similarities and differences, which can help counteract American society's individualistic tendencies and foster a greater sense of global responsibility and collaboration. Awareness and initiatives to assist students in learning through global competence are crucial for their future employment and personal and professional mobility (Kraus & Darmstadt, 2020).

Conclusively, the integration of global competence into English lessons is seen as advantageous for students' learning and development, with the potential to prepare them for future careers and to engage with the complexities of local and global society.

Conclusion

First of all, for the integration of global competence to achieve the determined objectives, the authorities and education department, practice educators, and teachers should cooperate with maximum interaction and commitment. The English teachers expressed a strongly positive view towards integrating global competence into English lessons as such integration assists students' language learning and enhances their engagement with global and local issues.

A detailed action plan for the professional development programmes should be designed to successfully organise the programmes catering to the development of English teachers' global competence and globally competent teaching. To date, none seems to offer a clear route to assist students to grab opportunities that ensure the maximum use of comprehensive and curated global skills to sustain them in life success. This study reports teachers' positive reception to professional development programmes that offer a platform for understanding different cultures and developing critical thinking about global issues. Ultimately, the teachers' insights provide valuable guidance for developing educational policies and practices that promote global competence in the classroom.

Recommendations

English teaching and learning that stresses global perspectives, including the local context, is a necessity in today's conditions of global education to achieve the sustainable development goals of quality education. Hence, studies on this area of interest should be encouraged. In the future, researchers and educators can look into the different settings in America and other countries.

Furthermore, while the mixed-method approach allows for a deeper exploration of the teachers' opinions through open-ended questions, it also relies on self-reported data, which can be subjective and may not fully capture the teachers' actual practices or depth of understanding regarding global competence. Thus, it is suggested that future research could expand the study to include a more extensive and diverse sample of teachers and employ other appropriate data collection methods, thereby providing a more detailed and complex understanding of global competence among English language teachers.

Apart from that, researchers can investigate the impacts of integrating global competence in lessons and the drawbacks of its absence in language teaching and learning.

Limitations

This study has several limitations that should be considered. Firstly, the research was conducted during the COVID-19 pandemic, which may have influenced the teachers' perceptions and responses due to the unique circumstances and challenges of the period. Secondly, the study's scope is limited to a single local junior high school in Arkansas, which may not represent the broader population of English teachers across Arkansas and the United States. The small sample size limits the generalisability of the findings. This study does not intend to be generalised to the broader population.

References

- Aleksiak, D., Kuleta-Hulboj, M., & Zielinska, A. (2023). Guerrillas or missionaries? Teachers addressing controversial topics of global citizenship education under unfavourable conditions. *Globalisation, Societies and Education*, 1- 17. <https://doi.org/10.1080/14767724.2023.2283501>
- Bullah, N. H. & Yunus, M. M. (2019). Teachers' perception on the implementation of dual language programme (DLP) in urban schools. *Asian Social Science*, 15(1). <https://doi.org/10.5539/ass.v15n1p24>
- Byram, M. & Wagner, M. (2018). Making a difference: language teaching for intercultural and international dialogue. *Foreign Language Annals*, 51(1), 140-151. <https://doi.org/10.1111/flan.12319>
- Cabezudo, A., Christidis, C., da Silva, M. C., Demetriadou-Saltet, V., Halbartschlager, F. & Mihai, G. (2012). *Global education guidelines: a handbook for educators to understand and implement global education*. Portugal: North-South Centre of the Council Europe.

- Hodorovska, M. & Rankovova, K. (2023). Reproducing hierarchisation and depoliticisation: Exploring discursive micro processes in global education. *Critical Studies in Education*, 65(2), 181-197. <https://doi.org/10.1080/17508487.2023.2249034>
- Ibrahim, S. N. A. & Matore, M. E. E. M. (2024). How does global competency look like in Malaysian teachers? Issues and suggestions. *International Journal of Academic Research in Progressive Education and Development*, 13(2). <http://dx.doi.org/10.6007/IJARPED/v13-i2/21375>
- Iswandari, Y. A. & Ardi, P. (2022). Intercultural communicative competence in EFL setting: a systematic review. *rEFLections*, 29(2), 361-380. https://repository.usd.ac.id/42801/1/8146_ICC_A+Systematic+Review.pdf
- Karanikola, Z. (2022). Depicting teachers' views on global competence training. *European Scientific Institute*, 498-514. <https://doi.org/10.19044/esipreprint.7.2022.p498>
- Kraus, B. & Darmstadt, T. (2020). Intercultural competence at work: intercultural mindset through short-term mobility. In Laine, P., Nemethova, I., & Wiwczaroski, T. (Eds.), *Intercultural Competence at Work* (pp. 88-104). SeAMK publications. ISBN 978-952-7317-36-5. <https://www.theseus.fi/bitstream/handle/10024/354179/B160.pdf?sequence>
- Li, Y. (2013). Cultivating student global competence: a pilot experimental study. *Decision Sciences Journal of Innovative Education*, 11(1), 125-143. <https://doi.org/10.1111/j.1540-4609.2012.00371.x>
- Majewska, I. A. (2022). Teaching global competence: challenges and opportunities. *College Teaching*, 71(2), 112-124. <https://doi.org/10.1080/87567555.2022.2027858>
- Meng, Q., Zhu, C. & Cao, C. (2017). Chinese international students' social connectedness, social and academic adaptation: the mediating role of global competence. *Higher Education*, 75(1), 131-147. <https://doi.org/10.1007/s10734-017-0129-x>
- NEA Education Policy and Practice Department. (2010). *Global Competence is a 21st Century Imperative*. Washington: Center for Great Public Schools.
- Nganga, L. (2016). Promoting intercultural competence in a globalized era: pre-service teachers' perceptions of practices that promote intercultural competency. *Journal of International Social Studies*, 6(1), 84-102. <http://www.iajiss.org>
- Orazbayeva, K. O. (2016). Professional competence of teachers in the age of globalisation. *International Journal of Environmental & Science Education*, 11(9), 2659- 2672. <https://doi.org/10.12973/ijese.2016.714a>
- Parkhouse, H., Tichnor-Wagner, A., Cain, J. M. & Glazier, J. (2015). "You don't have to travel the world": accumulating experiences on the path toward globally competent teaching. *Teaching Education*, 27(3), 267-285. <https://doi.org/10.1080/10476210.2015.1118032>
- Popescu, T. & Iordachescu, G. (2015). Raising students' intercultural competence through the process of language learning. *Procedia-Social and Behavioral Sciences*, 197(2015), 2315-2319. <https://doi.org/10.1016/j.sbspro.2015.07.259>

- Salzer, C., & Roczen, N. (2018). Assessing global competence in PISA 2018: challenges and approaches to capturing a complex construct. *International Journal of Development Education and Global Learning*, 10(1), 5–20. <https://doi.org/10.18546/IJDEGL.10.1.02>
- Stankovska, G., Dimitrovski, D., Memedi, I. & Ibraimi, Z. (2019). *Ethical sensitivity and global competence among university students*. Global Education in Practice: Teaching, Researching, and Citizenship, Sofia, Bulgarian Comparative Education Society. ISBN 978-619-7326-06-6
- Tichnor-Wagner, A., Parkhouse, H., Glazier, J. & Cain, J. M. (2016). Expanding approaches to teaching for diversity and social justice in K-12 education: fostering global citizenship across the content areas. *Education Policy Analysis*, 24(59), 1-35. ISSN 1068-2341.
- Yacob, N. S., Yunus, M. M., & Hashim, H. (2022). Globally competent teachers: English as a second language teachers' perceptions on global competence in English lessons. *Frontiers of Psychology*, 13, 925160. <https://doi.org/10.3389/fpsyg.2022.925160>
- Yadigaroglu, Z. (2021). Examination of Music teacher candidates' opinions regarding distance teaching practice course during the pandemic. *International Journal of Education*, 9(4), 419-432. eISSN 2582-1334.



Understanding Digital Technology Integration in ESL Classroom: Insights from Secondary School English Language Teachers

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Abstract: It is undeniable that technology helps make teaching and learning more fun and meaningful. While research shows that integrating technology in English language classrooms significantly boosts student interest and engagement, it also reveals that many teachers struggle with understanding how to effectively implement these digital tools. Therefore, this research aims at exploring teachers actual understanding on digital technology integration in carrying out English lessons. Concurrently, the study found out the ways and strategies teachers use in integrating digital technology in the classroom. To address the purpose, this qualitative research went ahead with a case study in a high school in Malaysia involving three experienced teachers in English language teaching. The semi-structured interview provided much insightful views on technology integration in English lessons. The findings revealed that the teachers know well what is meant by digital technology integration in lessons. However, teachers have not fully comprehended the integration of technology in teaching and learning. Their attention was solely on the use of devices, exercises which are available on millions of ESL websites and the communication platforms to have further discussion. Moreover, the participants understood that the use of readily available materials is one of the styles of technology integration in lessons. Findings also showed that the latest technology integration has not been practised by these participants and the methods that they have been using currently are not done on a regular basis. It is crucial for teachers to understand about the latest technology integration in their lessons so they can tailor the students accordingly. Future studies should be carried out on specific digital technology tools which can be more effective in teaching and learning English.

Keywords: *digital technology, ESL classroom, secondary school teachers' understanding, technology integration,*

Introduction

The importance of mastering English cannot be denied. Besides being spoken as the primary language in many countries around the world, English language is the second mostly widely spoken language in the world. It is also undeniable that English is an official language of the certain countries and many other international organisations and businesses (Kumar, 2020). In line with that, English language education is highly emphasised in multilingual countries, one such country that sees English language education as a key learning area is Malaysia where English language education is a long journey from preschool to tertiary education (Malaysian Education Blueprint, 2013-2025). Eventually, the level of proficiency in English language must be sufficient particularly when students leave school to seek job opportunities or to pursue further education. In correlation to that, schools and educational institutions in Malaysia put in much effort to generate significant improvement in our students' proficiency in English language.

The teaching and learning of English language have been reformed from the grammar translation method to current CEFR (Common European Framework of Reference) and from the conventional chalk and talk method to digital classroom. Digital technologies have been substituting and dominating all the fields with new, creative and active discoveries. Digital literacy is now an essential skill for participation in today's digital world (Khan et al., 2022). According to the ministry of education, the Malaysian education system will focus on a technology-centric learning system with emphasis on the English language (Soomro et al., 2021). Hence, it is a crucial responsibility of teachers to keep up with the new technology to cater the learning needs among the new generation of digital natives (Szymkowiak et al., 2021) as they are the key role players in boosting English language education among the students.

Problem Statement

It is proven that when technology is integrated in the classroom, students become more engaged and enthusiastic about their learning (Hashim et al., 2023). However, it is questionable that how do teachers use technology in the classroom. Another question to ponder is whether teachers are using various tools and methods to carry out their lessons with the assistance of technology or practising some other ways to retain their students' attention and engagement throughout the lesson with only minimal technology assistance.

A number of issues are concerned in answering the questions mentioned earlier. The answers could be varied as they can depend on the access of technology, teachers' readiness and understanding on digital technology. Sometimes, teachers are competent and ready to use technology in the classroom but the low access of technology may hinder them (Zakaria, 2023; Ng & Yunus, 2021; Rauf & Suwanto, 2020). On the other hand, high access of technology is available for teachers, but teacher may not be ready and are not competent enough to utilise them in their classroom (Ismail et al., 2022).

Purpose of the Research and Research Problems

Therefore, this research aims at exploring teachers' understanding on digital technology integration in English language teaching as well as recognising current strategies used by the teachers to integrate digital technologies in their teaching. The study arises two research questions;

1. What do teachers understand about digital technology integration in English Language teaching?
2. What are the current strategies of integrating digital technology into English language teaching?

Significance of the Research

In this fast-developing digital world, keeping up with the new technologies is inevitable especially it is more crucial among teachers to cater the learning needs of the generation Z (Cupido, 2022). Therefore, this study will create awareness among the English language teachers in the country about their current exposure to the technology and the required acquaintance to the technology to run the race along with their students' needs.

Moreover, this study will give an opportunity to the English language teachers to update their digital literacy in line with the current digital teaching and learning. It is a requisite for the English language teachers to continuously develop professionally, especially in the aspect of digital literacy (Agustini et al., 2020).

Digital Technology and English Language Teaching

Technology growth and evolution has made various impacts in every field, education field is not an exceptional. Teachers are increasingly expected to use digital resources to facilitate learning as learning how to use digital technology has become a crucial step in developing literacy in the twenty-first century (Audrin & Audrin, 2022). Besides imparting language skills, it is teachers' responsibility to produce students who can excel in all the skills they need to survive in the twenty-first century (Rajaram & Rajaram, 2021). Therefore, teachers must be proficient enough to demonstrate the essential skills confidently to their students. As mentioned by Martinez (2022) and Saraswati et al. (2021), language teachers are greatly encouraged to think of ways how they can effectively prepare students to exercise and develop digital literacies because it can lead to better job prospects, increased interaction in society, support more autonomous language learning, and provide wider entertainment options.

However, integrating digital literacy is challenging and often resisted by teachers. A number of studies have found out that many teachers only use a limited range of tools and their technology still stays at a personal (Blikstad-Balas & Klette, 2020). Shi and Jiang (2022) stated that there is a discrepancy or mismatch between teachers' self-rated abilities and their actual levels of technology knowledge and skills. Moreover, the study conducted by Zakaria et al. (2021) revealed that most of the teachers are still novice users of digital technology and their positive attitudes cannot always be interpreted into high competencies.

A growing numbers of research papers have reported the low levels of digital literacy among the contemporary English language teachers all across the world. For instance, Enayati and Gilakjani (2020) found out that Iranian teachers did not have an adequate level of digital literacy for language teaching and the implementation of CALL (Computer Assisted Language Learning). Besides, a total of 180 teachers from North Cyprus and Russian universities participated in mobile learning study and the findings revealed that while their perception of mobile learning is

generally high, this varies with age, showing notable differences in mobile technology usage based on professional seniority and age groups.

Digital Technology Mastery and English Language Teaching in Malaysia

As mentioned earlier, teachers are playing key role in successfully adapting the changes in English language education and produce globally competing citizens. The review carried out by Ng and Yunus (2021) and Hafifah (2020), reveals that the barriers in ICT integration are insufficient system support and teachers' reluctance to adopt the integration in English language lesson. The integration of digital tools and resources in English language lessons is vital and the teachers have to equip themselves with sufficient digital literacy to meet the current expectations in English language teaching and learning process.

According to Wan (2023), there were some existing problems among teachers such as teacher's language proficiency, inadequate trained and skilled teachers, mismatch between curriculum and practices, limited language exposure, and most importantly, the threatening view of the English language in maintaining multilingual plurality. Therefore, selected innovative practices such as integrating digital technology in language learning will illustrate the creative pathways in strengthening the young learners' English language proficiency.

As technology has become this generation's defining learning platform, there are gaps between students and teachers as some teachers still cling to the conventional methods of carrying out their lessons particularly language learning sessions. The study conducted by Evans and Robertson (2020) has proven this as a number of teachers label themselves as digital immigrants as opposed to digital natives. Furthermore, limited computer literacy, technical malfunctions, time factor, lack of instructional design are the primary reasons that caused teachers not to adopt and integrate ICT in their teaching (Zainal & Zainuddin, 2020).

While each of studies mentioned represent beneficial resources in assessing teachers' digital literacy and their use of technology in their teaching and learning, not a single study report on digital literacy among different types of secondary schools in Malaysia. Moreover, most of the studies conducted on students' digital literacy.

The Study

As the aim of this study is to explore teachers' understanding on digital technology integration in English classrooms, the study has employed qualitative method to seek teachers' views towards it. The research was carried out through a Case Study involving three teachers from a private high school which is adequately resources with technology facilities. The samples were purposively and conveniently chosen with the criteria of more than 5 years of teaching experience and good command of technology. A semi-structured interview was chosen to elicit more information from the participants. The interviews were transcribed and analysed through thematic content analysis whereby a list of categories was generated from the data to form the frame of analysis.

Findings and Discussions

The research findings are organised into the following broad themes, all of them have several sub-themes that follow: (1) In order to explore teachers' understanding on digital technology integration in English language teaching, teachers' thoughts on the term 'Digital technology' and 'Digital Technology Integration in Teaching and Learning' were focused. To discover more about their understanding on digital technology in current teaching practice, their awareness on existing technology in the present era was examined. Additionally, the preferred reasons for integrating technology in lessons were concentrated. (2) In identifying the current strategies used by teachers to integrate digital technologies in their teaching, the teaching tools, devices, platforms, resources and the ways they are being used were put into focus.

Teachers' Understanding on 'Digital Technology' and 'Digital Technology Integration in Teaching and Learning'

The term 'Digital Technology' is broad, hence everyone can relate it to different ways. When the three participants asked to define the term 'Digital Technology', each one of them had focused on different components. Participant 1 had a too general thought towards the term.

"Obviously computer and internet. Other than that, all sort of things we are exploring on net is digital technology".

Meanwhile, Participant 2 personalised the term by saying that,

"... online websites and applications like You Tube and Netflix for entertainment, Lazada and Shopee for online purchasing".

The last participant on the other hand specified the term, 'Digital Technology' is using

"mobile devices like smartphones, tablet, notepad".

Regarding the term 'Digital technology Integration in Teaching and Learning', all the 3 teachers conveyed the same thoughts such as using the devices and websites available on the internet with the assistance of electronical tools and devices.

Participant 1 sees integrating digital technology in teaching and learning as

"The tools like projector, interactive board, learning websites which teachers can use to include in their lessons".

Whereas, Participant 2 defined it this way.

"It's like using those online websites and resources to teach English like ESL Websites, online games like "Hangman", and digital books".

Participant 3 again mentioned 'Digital Technology Integration in Teaching and Learning' as

"... using all the mobile devices in teaching and learning process. Like, students can communicate with teachers by using the applications available on the mobile devices."

She further gave some examples of platforms available for teachers to carry out the lessons.

“Now, there are many applications available like Whatsapp, Wechat, Facebook, Zoom, Google Meet”.

It is clearly proven that the teachers know what is digital technology and digital technology integration in lessons. Grover (2021) defined digital technology as any technological device that functions through a binary computational code such as mobile phones, tablets, laptops, computers, etc. Some examples of digital technology are Augmented Reality (AR), Virtual Reality (VR), computer programs and software; web pages and websites, including social media; data and databases; digital audio such as mp3s and e-books (Suganya & Vijayarani, 2024).

However, teachers have not fully comprehended what is digital technology integration in teaching and learning. Their attention was solely on the use of devices, exercises that are available on millions of ESL websites and the communication platforms to have further discussion. The use of digital technologies is comprehensive and they are being extensively used in all sectors including education sector. Such widespread use of digital technologies provides more space to educators to generate new learning opportunities as students engage in online, digital environments and as faculty change educational practices through the use of hybrid courses, personalized instruction, new collaboration models and a wide array of innovative, engaging learning strategies (Himmelsbach et al., 2019).

Teachers' Awareness on Existing Technology in Teaching and Learning

The growing presence of technology in teaching and learning field provides more opportunities to create a more diverse and inclusive learning environment. In line with that, the respondents were cross-questioned to capture how far they are aware of the existing and emerging technologies that can be used to integrate in teaching and learning process. When the teachers were asked about their awareness of the existing technologies such as virtual field trip, digital story-telling, AR platforms, VR applications, Padlet, Prezi presentations, Edmodo or Kahoot, their responses evidently show that they only know the existence of the most common tools, devices and platforms which are being used in teaching.

Participant 1 responded that

“... I've heard about Kahoot, it's for games, right? But I've never used it. Usually I use those that mentioned to you just now in my lessons. I always bring my laptop to the classroom and I make use of the materials that I designed on power point slides... I have created google classroom for my classes but only using it occasionally...”

Meanwhile participant 2 said that

“... I had the experience of using Padlet when I was studying for masters. But I can't use it with my students here.... it's hassle, they have to create their own Padlet ID and they need to respond for my questions. I rather do it in the classroom in a traditional way.”

They hardly keep such technologies in practice and they feel a lot convenient with their own methods which are using the sources of available on the Internet by just printing out the materials and giving students the handouts as mentioned by participant 3.

“... I’m fine with my current style of teaching. ... I usually get them printed and distribute it to students. Like Maze, Crossword Puzzle, Charades and so on...”

According to these participants, the use of readily available materials available on ESL websites is one of the styles of technology integration in lessons. However, they have not realised that there are many other numbers of technologies attainable to be integrated into their teaching.

Reasons to Integrate Digital Technology in English Lessons

Digital technologies are being integrated in English lessons for numerous reasons. When the participants were approached regarding this question, their responses were all constructive. All three of them firmly responded that digital technology integration is certainly advantageous and they put forward some of the reasons. They all have the similar reasons in their thoughts. According to the participants, digital technology integration is crucial to increase students’ motivation and participation, to keep up with time and pace, to prepare effective stages of instruction or lessons; to focus on language skills and to make learning effective for all types of learners.

Participant 2 mentioned that

“The picture, audio or video projected are actually conversation starters. They encourage the students to talk about a topic.”

Participant 3 also had a quite similar thought which is

“It helps a lot the passive learners as they perform better on online platforms... It encourages a more active participation in the learning process which can be hard to achieve through a traditional teaching environment.”

The participants’ view that technology integration highly motivates and engages the learners and in learning language is strongly supported by the studies conducted by Wu et al. (2023), Aysu (2020), Shadiey and Yang (2020) and Sun and Gao (2020).

In addition, participants feel that technology integration in teaching and learning process is an obligation in this digital era.

The statement from participant 1,

“...technology integration in lessons is a must to keep up with the times and pace... Learners are no longer interested in the traditional 'talk and chalk' way of learning.”

and the statement from participant 2,

“Millennials are born into a world of vast technology utilising society which has made them rely heavily on technology so to teach such generation with technology is to provide meaningful content that is either derived from technology or requires the use of technology”

are certainly undeniable as educators are required to stay up-to-date with technology developments in order to prepare students for digital future. It has proven by Zain (2021) that as technology is constantly changing, it is more important that teachers keep abreast of technological expertise.

The participants believe that technology integration is beneficial as it helps teachers prepare effective stages of lessons and focus on language skills. With the presence of multifunctional tools and devices, teachers are given opportunities to enhance their teaching stages from the lead-in stages to the productive stage.

According to Participant 1,

“... technology is integrated into most stages but not too much in production stage or any stage that students are supposed to be independent in their task.”

Participant 2 stated that

“I prefer using technologies at all stages in a lesson because technology is very versatile in that sense. The technologies can be applied from lead-in stage till whole-class feedback stage of a lesson.”

Participant 3 specified that

“... In teaching reading skill especially when teaching vocabulary stage, I show them the images to give them the contextual clues in order to elicit the vocabulary from the students. This stage is interesting so students will be excited in taking part in lesson.”

Making learning effective for all types of learners is last reason the participants have put forward. A classroom may consist of active learners, passive learners, shy learners, slow learners, and physically challenged learners (Siregar & Haswani, 2020). Hence, it is the teachers' duty to carry out the effective lessons in order to cater to all the students' needs.

Participant 1 has clearly mentioned that

“...technology provides great opportunities for making learning more effective for everyone with different needs. For example, struggling or disabled students can learn at their own speed, review difficult concepts or skip ahead if they need to.”

Participant 2 supported this statement by stating,

“...they expose their hidden talents which they do not reveal in normal classes.”

Participant 3 agreed that

“Technology helps a lot the passive learners as they perform better on online platforms.”

Their statements have clearly shown that they are giving much attention on all types of learners in their classroom. In Siregar & Haswani (2020) article, it is mentioned teachers should develop fascinated, motivated, varieties learning activities and materials to help the students to comprehend the language learning. Thus, frequent technology integration will certainly assist these participants in achieving their motive of teaching the different types of learners.

Technology Currently in Practice to Teach English

The participants are generally in the view of using multimedia presentation, games in the downloaded and printed materials form, resources from ESL websites and social media, authentic

materials such as news, comics and ads and other essential teaching tools and devices like projector and smartphones as the technology integration in their teaching.

According to participant 1, the use of online resources is his current technology integration in language teaching.

“... Yeah I usually use online news for the listening practices. Sometimes, play games like scrabble, Bingo on gaming platforms. Other than that, ... I use any common pictures or videos available on Facebook or Instagram to initiate the lessons.

Another similar statement given by the participant 3.

“I use E-class, google classroom, Projector, PPT, speakers, Google images, online dictionaries, information from internet (Wikipedia), song and video from You tube and... grammar rules from various websites.”

The third participant elaborated further the way she uses the tools and resources in her teaching. She has been using online resources in the form of multimedia presentations.

“I use videos for mini-lessons and use websites that host teacher-made video content relevant to teaching topics. I prefer adding multimedia elements to presentations... such as images, graphs, pictographs, podcast clips, sound effects, short video lessons, news, movie and television show clips... “

Meanwhile participant 2 mentioned that she has been using her smartphone as a recording and timer tool. She is also fond of using online language resources in her lessons. However, it was good to hear that she is able to generate online language games.

“I use my phone recorder to record student’s short presentation and demonstration activity. Besides, I use my phone to set timer for class activities that must be completed in specific time and for competition. Moreover, I like downloading resources like audio, video, pictures and authentic materials like ads and comics to create content in lesson. I can also regenerate an online game within minutes like bingo and word search for additional activities, and get news feeds and highlights from web browser for class discussions.”

Subsequently, the participants were asked that how frequently they use the tools and online resources mentioned. Apparently, the practices mentioned are not applied on a frequent basis due to other workloads. Two participants have been practicing the use of devices and language resources weekly once or twice. On the other hand, the second participant mentioned that

“It depends on content of the lesson. If the lesson needs any infusion of technology like pictures from Facebook or videos from News channels, I will definitely look for them and get them downloaded. So, it will be easier for me to project in the classroom.”

Thus, it is noticeable that the latest technology integration has not been practised by these participants and the methods that they have been using currently are not done on a regular basis.

The Annual Learning Tools Survey 2024 which involved two hundred top tools for learning has proven that tools and technologies such as Content Management System, VLEs, collaborative tools, electronic assessment, submission and feedback tools, blended learning, web conferencing,

virtual classroom software, social networking, YouTube, blogs and wikis, podcasting, interactive whiteboards, mobile devices, and many other tools have been put into language teaching and learning practice (Association for Learning Technologies, 2024). The educators as well as students can benefit from the new technologies being developed today (Haleem et al., 2022). However,

Conclusion

The advent of technology today is highly revolutionizing the field of education. Therefore, it is vital to understand students' need and tailor the teaching accordingly. Teachers are increasingly expected to use digital resources to facilitate learning as learning how to use digital technology has become a crucial step in developing literacy in the twenty-first century. Besides imparting language skills, it is teachers' responsibility to produce students who can excel in all the skills they need to survive in the twenty-first century. Therefore, teachers must be proficient enough to demonstrate the essential skills confidently to their students. Subsequently, language teachers are greatly encouraged to think of ways how they can effectively prepare students to exercise and develop digital literacies because it can lead to better job prospects, increased interaction in society, support more autonomous language learning, and provide wider entertainment options. In future, studies can be carried out more specifically on digital technology tools which can be more effective in teaching and learning English. Thus, teachers may not have to worry about excelling in all technological tools. They can focus on specific technology which would allow them to come up with interesting and creative teaching to get students engaged completely in lessons.

Limitations

First, the study involved only three experienced English language teachers from a single high school in Malaysia, which limits the generalizability of the findings to other contexts and educational levels. Next, since the study was conducted in Malaysia, the results may not be applicable to teachers and students in different geographic or cultural settings where technology usage and educational practices may vary. Also, the qualitative approach, while providing in-depth insights, limits the ability to quantitatively measure the extent of technology integration and its impact on student learning outcomes.

Recommendations

Future studies should include a larger and more diverse sample of teachers across different schools, regions, and educational levels to increase the generalizability of the findings. Incorporating quantitative research methods alongside qualitative approaches to measure the impact of technology integration on student learning outcomes and engagement will illuminate the findings more precisely.

References

- Agustini, D., Lian, B., & Sari, A. P. (2020). School's strategy for teacher's professionalism through digital literacy in the industrial revolution 4.0. *International Journal of Educational Review*, 2(2), 160-173.
- Audrin, C., & Audrin, B. (2022). Key factors in digital literacy in learning and education: a systematic literature review using text mining. *Education and Information Technologies*, 27(6), 7395-7419.
- Aysu, S. (2020). The use of technology and its effects on language learning motivation. *Journal of Language Research*, 4(1), 86-100.
- Blikstad-Balas, M., & Klette, K. (2020). Still a long way to go: Narrow and transmissive use of technology in the classroom. *Nordic journal of digital literacy*, 15(1), 55-68.
- Cupido, J. (2022). Using technology and multimedia in Junior Secondary First Language creative writing skills development: New methodology to fit new literacies (Doctoral dissertation, Stellenbosch: Stellenbosch University).
- Enayati, F., & Gilakjani, A. P. (2020). The Impact of Computer Assisted Language Learning (CALL) on Improving Intermediate EFL Learners' Vocabulary Learning. *International Journal of Language Education*, 4(1), 96-112.
- Evans, C., & Robertson, W. (2020). The four phases of the digital natives debate. *Human Behavior and Emerging Technologies*, 2(3), 269-277.
- Grover, M. R. (2021). *Embracing Technology: Get Tech-Savvy by Learning About Your Computer, Smartphone, Internet, and Social Media Applications (English Edition)*. BPB Publications.
- Hafifah, G. N. (2020). Teachers perspectives of ICT integration in English language teaching: A review of literature. *Journal of English Educators Society (JEES)*, 5(1), 9-15.
- Haleem, A., Javaid, M., Qadri, M. A., & Suman, R. (2022). Understanding the role of digital technologies in education: A review. *Sustainable Operations and Computers*, 3, 275-285.
- Hashim, H., Jamal, M. F., Esa, I., & Rafiq, K. R. M. (2023). TEALL: Technology-Enhanced Active Language Learning. *Creative Education*, 14(7), 1453-1462.
- Himmelsbach, J., Schwarz, S., Gerdenitsch, C., Wais-Zechmann, B., Bobeth, J., & Tscheligi, M. (2019, May). Do we care about diversity in human computer interaction: A comprehensive content analysis on diversity dimensions in research. In *Proceedings of the 2019 CHI conference on human factors in computing systems* (pp. 1-16).
- Ismail, S. N., Omar, M. N., Don, Y., Purnomo, Y. W., & Kasa, M. D. (2022). Teachers' Acceptance of Mobile Technology Use towards Innovative Teaching in Malaysian Secondary Schools. *International Journal of Evaluation and Research in Education*, 11(1), 120-127.
- Kumar, P. P. (2020). English for career development. *UGC Care Journal*, 19(35), 292-299.

- Khan, N., Sarwar, A., Chen, T. B., & Khan, S. (2022). Connecting Digital Literacy in Higher Education to the 21st Century Workforce. *Knowledge Management & E-Learning*, 14(1), 46-61.
- Martinez, C. (2022). Developing 21st century teaching skills: A case study of teaching and learning through project-based curriculum. *Cogent Education*, 9(1), 2024936.
- Ng, M., & Yunus, M. M. (2021). Perceptions and Challenges to ICT Use in ESL Lessons among Malaysian Primary Teacher. *Creative Education*, 12(7), 1532-1557.
- Rajaram, K., & Rajaram, K. (2021). Transformation in higher education: Twenty-first-century teaching and learning competencies. *Evidence-Based Teaching for the 21st Century Classroom and Beyond: Innovation-Driven Learning Strategies*, 1-19.
- Rauf, A. A., & Suwanto, S. (2020). Attitudes and technology integration among ESL secondary school teachers in Sabah. *Malaysian Journal of Social Sciences and Humanities (MJSSH)*, 5(12), 280-287.
- Saraswati, G. P. D., Areni, G. K. D., & Anellysha, D. (2021). "Success is in your hand": Digital literacy to support students' autonomous learning in speaking class. In *ELT Forum: Journal of English Language Teaching* (Vol. 10, No. 1, pp. 70-78).
- Shadiev, R., & Yang, M. (2020). Review of studies on technology-enhanced language learning and teaching. *Sustainability*, 12(2), 524.
- Shi, L., & Jiang, L. (2022). How EFL teachers perceive and self-evaluate the knowledge components in forming Technological Pedagogical Content Knowledge (TPACK).
- Soomro, M. A., Hizam-Hanafiah, M., Abdullah, N. L., Ali, M. H., & Jusoh, M. S. (2021). Industry 4.0 readiness of technology companies: A pilot study from Malaysia. *Administrative Sciences*, 11(2), 56.
- Siregar, M. & Haswani, F. (2020). Learner Types and Their Preferences in Learning English. *Budapest International Research and Critics. Linguistics and Education (BirLE) Journal*, 3(2),777-783.
- Suganya, E., & Vijayarani, S. (2024). Digital Learning Resources: An Overview. *Transformative Digital Technology for Disruptive Teaching and Learning*, 1-25.
- Sun, Y., & Gao, F. (2020). An investigation of the influence of intrinsic motivation on students' intention to use mobile devices in language learning. *Educational Technology Research and Development*, 68(3), 1181-1198.
- Szymkowiak, A., Melović, B., Dabić, M., Jeganathan, K., & Kundi, G. S. (2021). Information technology and Gen Z: The role of teachers, the internet, and technology in the education of young people. *Technology in Society*, 65, 101565.
- Wan, I. Y. Q. (2023). Malaysian English language teachers' experiences teaching culturally and linguistically diverse students (Doctoral dissertation, University of Missouri--Columbia).

- Wu, M. L., Zhou, Y., & Li, L. (2023). The effects of a gamified online course on pre-service teachers' confidence, intention, and motivation in integrating technology into teaching. *Education and Information Technologies*, 28(10), 12903-12918.
- Zain, S. (2021). Digital transformation trends in education. In *Future directions in digital information* (pp. 223-234). Chandos Publishing.
- Zainal, A. Z., & Zainuddin, S. Z. (2020). Technology Adoption in Malaysian Schools: An Analysis of National ICT in Education Policy Initiatives. *Digital Education Review*, 37, 172-194.
- Zakaria, N. A. (2023). Teacher readiness and professional development strategies for technology integration in English teaching practice (Doctoral dissertation, Universiti Teknologi MARA (Kampus Puncak Alam)).
- Zakaria, M., Ahmad, J. H., Bahari, R., Hasan, S. J., & Zolkafli, S. (2021). Benefits and challenges of adopting Google Classroom in Malaysian University: Educators' perspectives. *Ilkogretim Online-Elementary Education Online*, 20(1), 1296-1304.
- Angelo, C.D., 2018. The Impact of Technology: Student Engagement and Success. *Technology and the Curriculum: Summer 18*



Fostering Creative Thinking in ESL Classrooms: The Transformative Potential of Digital Storytelling

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Abstract: English Language Learning (ELL) holds a crucial position in global education, gaining increasing prominence in the 21st-century learning landscape. Integrating Information and Communication Technology (ICT) in ELL, especially from early childhood, has been a significant focus. However, a knowledge gap remains regarding the challenges and opportunities associated with incorporating Digital Storytelling (DST) within the educational context, especially focusing on creative thinking. This conceptual paper explores the transformative potential of DST in enhancing ELL, emphasising the importance of creative thinking. By examining both the global and Malaysian contexts, the paper highlights the unique opportunities and challenges of implementing DST in ELL. It also explores the impact of DST on creative thinking, offering insights that align with the Malaysian Education Blueprint and the aspirations of Sustainable Development Goal 4. The findings contribute to the ongoing discourse on effective strategies to elevate language education, particularly within Malaysia's diverse and multicultural framework, by fostering creativity and innovation in learning.

Keywords: *Creative thinking, Digital storytelling, English language learning, English as second language, Information and communication technology*

Introduction

English as a Second Language (ESL) has become a crucial component of global education due to the increasing importance of English as a global language. The integration of global competence into ESL lessons not only enhances language skills but also promotes a deeper understanding of local and global issues (Yacob et al., 2022). Factors such as the recognition of English as a global language and the influence of globalisation have driven ESL teachers to

continuously improve their professional proficiency (Sawalmeh & Dey, 2023). In ESL classrooms, incorporating critical global literacies can significantly benefit English language learners by enhancing their understanding of global issues and promoting cross-cultural competence (Yol & Yoon, 2019). The role of English in globalisation has been a subject of comparative analysis, with studies examining its impact on education in different countries like Pakistan and China (Haidar & Fang, 2019). The spread of English as a global language has intersected with various themes in world history, emphasising its significance in today's interconnected world (Manolescu, 2023). Furthermore, the effectiveness of ESL education in promoting global competence and facilitating social change has been recognised, particularly in adult ESL learning environments (Biazar, 2022).

Integrating creative thinking into English language learning or ESL can significantly enhance students' language acquisition and overall learning experience. Several studies have highlighted the importance of fostering creativity in language classes to promote linguistic progress and cognitive skills (Kurniawati, 2023; Smare, 2022; Wahbeh et al., 2021). By incorporating positive psychology interventions, project-based learning, and augmented reality-enhanced game-based learning, educators can effectively improve students' creative thinking skills in English (Hung & Yeh, 2023; Wahbeh et al., 2021; Yastanti, 2023). These approaches not only enhance language competence but also create a joyful and motivating environment in the classroom (Smare, 2022). Project-based learning, outdoor learning, and digital tools have also been identified as effective methods to develop critical thinking, creativity, and collaborative skills in English language education (Reshid & Jeyaraj, 2022; Roliak, 2023; Wahbeh et al., 2021). These approaches not only improve language proficiency but also nurture students' problem-solving abilities and communication skills (Pentury & Anggraeni, 2021; Wahbeh et al., 2021). Furthermore, integrating critical thinking and scientific approaches in the EFL context can play a vital role in enhancing students' cognitive skills and promoting innovative learning models (Ansari, 2021).

The integration of technology in ESL classrooms has been identified as a valuable tool for enhancing language learning experiences (Pazilah et al., 2019; Ponnaiah & Aziz, 2022). Research indicates that technology can aid English language learners in both language acquisition and content learning (Andrei, 2016). Platforms such as Google Classroom have been particularly noted for their effectiveness in enhancing ESL instruction, especially during crises like the COVID-19 pandemic (Tahir, 2022). Furthermore, studies have explored seamless language learning experiences in ESL contexts, emphasising the positive impact of technology integration on ESL learners (Abdullah & Hashim, 2021). Moreover, utilising innovative technologies, such as mobile apps and e-learning platforms, can further boost students' creative potential and engagement in language learning (Liu et al., 2022; Umar & Ko, 2022). The integration of Information and Communication Technology (ICT) and 4Cs skills (communication, collaboration, critical thinking, and creativity) in English language teaching has been shown to positively impact students' learning experiences (Soomro, 2023). Additionally, incorporating high-order thinking skills (HOTS) and SMART learning environments can enhance students' creativity and language skills in the English learning process (Hasbullah et al., 2022; Huh & Lee, 2019).

Digital storytelling (DST) has been recognised as a valuable tool in English language learning and teaching. It has been found to improve learners' motivation, performance, and participation in speaking activities, particularly for low-proficiency students (Rahman et al., 2022). DST not only aids in language acquisition but also helps in increasing students' confidence and proficiency in English (Kasami, 2021). Other than that, DST encourages participants to visualise and imagine, promoting creative expression and critical thinking skills (Ng & Raghbir, 2021). This approach not only improves language skills but also nurtures 21st-century skills crucial for academic engagement and personal development (Raffone & Monti, 2019). Research indicates that DST can enhance students' English speaking proficiency and creative thinking abilities (Yang et al., 2020). When used as an interdisciplinary project, DST encourages creative thinking while improving language skills, especially in speaking and creative expression (Yang et al., 2020).

A significant knowledge gap exists concerning the challenges and opportunities associated with integrating Digital Storytelling (DST) within the Malaysian educational framework, particularly focusing on fostering creative thinking skills. While digital storytelling has been recognised as a valuable tool for enhancing learning experiences through technology (Talan, 2021), there is a need to ensure its compatibility with the Malaysian educational context, especially in English classrooms catering to students with varying language proficiency levels (Lim & Noor, 2019). Incorporating digital storytelling in the Malaysian educational context to enhance creative thinking skills requires a comprehensive understanding of its impact on students' technology literacy and social communication skills (Yulian & Yuniarti, 2022). Hence, to effectively leverage digital storytelling for creative thinking development, it is essential to address the existing gaps in knowledge and practice within the Malaysian educational context. This paper intends to explore the transformative potential of DST in enhancing ELL, emphasising the importance of creative thinking.

Creative Thinking in ESL Context

Creative thinking is crucial in the context of English as a Second Language (ESL), as it enhances students' abilities to express themselves effectively and engage in critical thinking. Integrating 21st-century learning skills into ESL classrooms highlights the importance of creativity, critical thinking, and collaboration (Seng et al., 2020). Additionally, innovative methods such as digital mind maps and short stories have been investigated for their potential to stimulate creativity and critical thinking in ESL writing courses (Karim & Mustapha, 2020; Jan & Aziz, 2022). These strategies are designed to improve students' creative writing skills and overall creative thinking abilities. The progression towards the Fourth Industrial Revolution underscores the necessity of developing creative thinking skills, as demonstrated in the STEM curriculum, thereby underlining the importance of creative thinking across various disciplines, including ESL (Yahya & Hashim, 2021). Consequently, understanding and implementing effective strategies to foster creative thinking in ESL classrooms is essential for preparing students to succeed in a rapidly evolving global environment.

According to Kim (2006), creative thinking comprises both innovative (originality) and adaptive (elaboration) dimensions. Innovative thinking entails generating novel and unique ideas, whereas adaptive thinking involves expanding and refining existing concepts. Both aspects are crucial for effective problem-solving and idea generation (Awalia et al., 2022). Innovative thinking, characterised by originality, frequently draws upon design thinking and problem-finding approaches, underscoring the significance of professional design practices in fostering innovation and a thorough consideration of creativity in addressing problems (Abdulla et al., 2020). In the ESL context, adaptive thinking, or elaboration, entails the enhancement of language skills, vocabulary, and grammatical structures (Lanszki, 2022). Furthermore, Aziz and Rawian (2022) discuss higher-order thinking skills and metacognitive awareness in English reading comprehension among university students, highlighting the implications for ESL pedagogy and educational system development. A comprehensive understanding of the dual aspects of creative thinking—innovative and adaptive—lays a solid foundation for enhancing problem-solving abilities and language proficiency in ESL education. This perspective emphasises the importance of integrating design thinking principles and metacognitive strategies into ESL instruction to cultivate both originality and elaboration in learners' linguistic and cognitive development.

The exploration of creative thinking in ESL teaching and learning has emerged as a prominent focus among English language researchers. Karim and Mustapha (2020) have investigated the use of digital mind maps to stimulate creativity and critical thinking in ESL writing courses. Sari et al. (2020) emphasise key indicators of creative thinking, such as fluency, flexibility, and originality, which align with the innovative aspect of creative thinking and underscore the importance of generating new and diverse ideas. Furthermore, Wahyudi et al. (2019) highlight the significance of flexibility, originality, and elaboration in mathematical creative thinking, thereby supporting the adaptive aspect of creative thinking by refining and enhancing existing ideas. Seng et al. (2020) discuss the integration of 21st-century learning skills in ESL classrooms, focusing on creativity, critical thinking, collaboration, self-direction, and cross-cultural skills. This body of research collectively underscores the critical role of fostering creative thinking in ESL education to enhance students' linguistic and cognitive development.

The investigation of creative thinking in ESL teaching and learning has been supported by numerous studies employing various methodologies and contexts, underscoring its critical role in enhancing language proficiency, critical thinking, collaboration, and cross-cultural skills. For example, Jan and Aziz (2022) found that using short stories to teach writing strategies significantly enhances students' creative writing skills in ESL classrooms. Additionally, Sambanthan and Ismail (2022) highlighted gamified learning as an effective tool to improve comprehension and foster critical and creative thinking in ESL settings. Li et al. (2022) demonstrated that creative thinking teaching methods significantly impact the development of sustainable development abilities among higher vocational students, influencing their creative tendencies. Moreover, Fitri et al. (2022) showed that DST-based tasks not only improved ESL students' motivation but also facilitated idea development and peer collaboration, emphasising the role of DST in promoting creativity. Gürsoy (2021) further linked DST to the development of 21st-century skills in ESL contexts. These findings collectively illustrate the transformative potential of innovative pedagogical approaches in fostering holistic development among ESL students.

Digital Storytelling to Foster Creative Thinking in ESL Context

Digital storytelling (DST) has been recognised as a valuable tool in education, particularly for fostering creative thinking among students. Numerous studies have demonstrated the benefits of DST in enhancing skills such as critical thinking, problem-solving, collaboration, and creativity (Sunday, 2021; Putra et al., 2022). By involving students in creating stories using digital technology, DST not only enhances English speaking skills but also nurtures creative thinking (Yang et al., 2020). Research has shown that DST can promote higher-order thinking by encouraging reflection, engagement, and personal expression (Davey & Benjaminsen, 2021). Furthermore, DST has the potential to improve learning experiences by incorporating multimedia elements and offering a platform for students to showcase their creativity (Wibawa, 2022). Studies have indicated that DST can aid in developing active listening skills and fostering creative thinking among students (Tabieh et al., 2021). Moreover, DST has been associated with the acquisition and advancement of 21st-century competencies such as problem-solving, critical thinking, and information technology literacy (Kahtali & Gencer, 2021).

In addition, research has shown that integrating DST in ESL classrooms can lead to improvements in students' motivation, idea development, collaboration, and English speaking proficiency (Huang, 2022; Raffone & Monti, 2019; Wong, 2022). This surge in motivation is essential because it affects students' willingness to interact with the language and actively participate in class activities. Additionally, DST has been found to have a positive impact on students' willingness to communicate in English and enhance group cohesion (James et al., 2019). By involving students in interactive DST activities, educators can promote academic engagement and cultivate 21st-century skills among ESL learners (Paneerselvam & Mohamad, 2019). Students' willingness to converse in English is positively impacted by DST's interactive format, which also lowers participation barriers and promotes a more welcoming and encouraging learning atmosphere. Furthermore, studies indicate that DST can stimulate creativity and enhance language teaching practices in ESL settings (Mathura & Zulu, 2021). Educators can utilise DST to diversify their teaching methods, encourage students to communicate in English, and boost vocabulary acquisition.

Contribution

The conceptual paper contributes to the discourse on English Language Learning (ELL) by highlighting the importance of creative thinking and exploring the transformative potential of Digital Storytelling (DST) within the Malaysian educational context. It addresses a significant knowledge gap by examining the challenges and opportunities associated with DST integration, particularly in fostering creativity. The paper provides a contextual analysis of global and Malaysian educational landscapes, aligning its findings with the Malaysian Education Blueprint and Sustainable Development Goal 4. It offers innovative pedagogical insights for enhancing language education and underscores the benefits of DST in promoting inclusivity and cultural understanding in Malaysia's diverse and multicultural framework. Additionally, the paper's findings contribute to sustainable development objectives and guide future research and practice in ELL, emphasising the role of creativity and innovation in education.

Conclusion

With an emphasis on its implementation, this conceptual paper has examined the transformative potential of digital storytelling (DST) in promoting creative thinking within the context of English language learning (ELL). This research has filled in a significant information gap about the opportunities using DST in ESL classes. It has also given important insights into how DST might improve language instruction focusing on creative thinking. It has been shown through an analysis of local and global contexts that DST fosters creative thinking, teamwork, and cross-cultural abilities in addition to language fluency among ESL learners. The paper also supports Goal 4 of the Sustainable Development Goal and the Malaysian Education Blueprint, highlighting the significance of incorporating cutting-edge educational strategies to support students' holistic development. In order to provide ESL learners with the tools they need to succeed in a world that is becoming more interconnected and dynamic, educators and legislators must take use of the revolutionary potential of DST.

Recommendation

It is recommended that future research endeavours concentrate on multiple critical areas in order to augment our comprehension of the function of Digital Storytelling (DST) in stimulating creative thinking in ESL classrooms. First and foremost, it is necessary to do longitudinal research to find out how DST integration affects students' language competency, capacity for creative thinking, and general academic achievement over time. Comparative studies comparing the efficacy of various DST techniques can also offer important insights into best practices for implementation. Examples of these studies include individual vs. collaborative storytelling initiatives and the usage of various digital storytelling technologies. Future research can help to improve ESL teaching methods going forward and encourage language learners to think creatively by filling up these research gaps.

References

- Abdulla, A. M., Paek, S. H., Cramond, B., & Runco, M. A. (2020). Problem finding and creativity: a meta-analytic review. *Psychology of Aesthetics, Creativity, and the Arts*, 14(1), 3-14. <https://doi.org/10.1037/aca0000194>
- Abdullah, S. N. A. & Hashim, H. (2021). Seamless language learning in an ESL context. *Creative Education*, 12(06), 1349-1363. <https://doi.org/10.4236/ce.2021.126103>
- Andrei, E. (2016). Technology in teaching English language learners: the case of three middle school teachers. *TESOL Journal*, 8(2), 409-431. <https://doi.org/10.1002/tesj.280>
- Ansari, N. (2021). Critical thinking and scientific approach in EFL context: a literature review. *CaLLs (Journal of Culture, Arts, Literature, and Linguistics)*, 7(2), 145. <https://doi.org/10.30872/calls.v7i2.5617>

- Awalia, U., Subiyantoro, S., & Margana, M. (2022). Analysis of 12th-grade student creative thinking abilities in theatre art concept for cultural art. *Proceedings of the 1st International Conference on Language, Literature, Education and Culture, ICOLLEC 2021*. <https://doi.org/10.4108/eai.9-10-2021.2319691>
- Aziz, M. & Rawian, R. M. (2022). Modeling higher order thinking skills and metacognitive awareness in English reading comprehension among university learners. *Frontiers in Education*, 7. <https://doi.org/10.3389/educ.2022.991015>
- Biazar, B. (2022). Adult English language education at a time of globalization: Opportunities for critical social change. *New Horizons in Adult Education and Human Resource Development*, 34(1), 55-59.
- Davey, N. G. and Benjaminsen, G. (2021). Telling tales: digital storytelling as a tool for qualitative data interpretation and communication. *International Journal of Qualitative Methods*, 20, 160940692110225. <https://doi.org/10.1177/16094069211022529>
- Fitri, H. A., Mohamad, M., Harianingsih, I., & Wadi, A. S. (2022). Digital storytelling-based tasks on speaking classroom; seen from ESL learners' lenses. *Jurnal Tatsqif*, 20(2), 180-198. <https://doi.org/10.20414/jtq.v20i2.6289>
- Gürsoy, G. (2021). Digital storytelling: developing 21st century skills in science education. *European Journal of Educational Research*, 10(1), 97-113. <https://doi.org/10.12973/eu-er.10.1.97>
- Haidar, S., & Fang, F. G. (2019b). English language in education and globalization: A comparative analysis of the role of English in Pakistan and China. *Asia Pacific Journal of Educatio*, 39(2), 165–176. <https://doi.org/10.1080/02188791.2019.1569892>.
- Hasbullah, H., Martanti, B. H., Sulistiyahadi, S., Ni'mah, F., & Busroni, L. M. (2022). The best practice of integrating hots (high order thinking skill) in English for pharmacy class at Qamarul Huda Badaruddin University. *International Journal of Social Science* 2(2), 1507-1512. <https://doi.org/10.53625/ijss.v2i2.3083>
- Huang, H. D. (2022). Examining the effect of digital storytelling on English speaking proficiency, willingness to communicate, and group cohesion. *TESOL Quarterly*, 57(1), 242-269. <https://doi.org/10.1002/tesq.3147>
- Huh, K. & Lee, J. (2019). Fostering creativity and language skills of foreign language learners through smart learning environments: evidence from fifth-grade Korean EFL learners. *TESOL Journal*, 11(2). <https://doi.org/10.1002/tesj.489>
- Hung, H. & Yeh, H. (2023). Augmented-reality-enhanced game-based learning in flipped English classrooms: effects on students' creative thinking and vocabulary acquisition. *Journal of Computer Assisted Learning*, 39(6), 1786-1800. <https://doi.org/10.1111/jcal.12839>

- James, P., Yong, K. L., & Yunus, M. M. (2019). Hear me out! digital storytelling to enhance speaking skills. *International Journal of Academic Research in Business and Social Sciences*, 9(2). <https://doi.org/10.6007/ijarbss/v9-i2/5533>
- Jan, T. P. & Aziz, A. A. (2022). The use of short stories in teaching writing strategies in ESL classrooms. *International Journal of Academic Research in Business and Social Sciences*, 12(12). <https://doi.org/10.6007/ijarbss/v12-i12/15398>
- Kahtali, B. D. and Gençer, G. (2021). Turkish teachers' views regarding the use of digital story telling in Turkish lessons. *International Journal of Education and Literacy Studies*, 9(2), 111. <https://doi.org/10.7575/aiac.ijels.v.9n.2p.111>
- Karim, R. A. & Mustapha, R. (2020). Students' perception on the use of digital mind map to stimulate creativity and critical thinking in ESL writing course. *Universal Journal of Educational Research*, 8(12A), 7596-7606. <https://doi.org/10.13189/ujer.2020.082545>
- Kasami, N. (2021). Can digital storytelling enhance learning motivation for EFL students with low proficiency and confidence in English?. *The EuroCALL Review*, 29(1), 68. <https://doi.org/10.4995/eurocall.2021.12754>
- Kim, K. H. (2006). Can we trust creativity tests? A review of the Torrance Tests of Creative Thinking (TTCT). *Creativity Research Journal*, 18(1), 3-14. https://doi.org/10.1207/s15326934crj1801_2
- Kurniawati, F. N. (2023). Fostering students' creativity in English writing class: investigating the impact of project-based learning in bridging ideas and words. *English Learning Innovation*, 4(2), 150-164. <https://doi.org/10.22219/englie.v4i2.30611>
- Lanszki, A. (2022). Digital media and storytelling in higher education. *L'Harmattan Publication*. <https://doi.org/10.56037/9782140306969>
- Li, X., Chen, C., & Kang, X. (2022). Research on the cultivation of sustainable development ability of higher vocational students by creative thinking teaching method. *Frontiers in Psychology*, 13. <https://doi.org/10.3389/fpsyg.2022.979913>
- Lim, P. R. & Noor, N. M. (2019). Digital storytelling as a creative teaching method in promoting secondary school students' writing skills. *International Journal of Interactive Mobile Technologies (iJIM)*, 13(07), 117. <https://doi.org/10.3991/ijim.v13i07.10798>
- Liu, X., Samah, N. A., & Salleh, S. M. (2022). Impact of using a mobile app on improving students' creative thinking in business English writing with self-regulated learning. *International Journal of Interactive Mobile Technologies (iJIM)*, 16(15), 46-61. <https://doi.org/10.3991/ijim.v16i15.31477>
- Manolescu, D. (2023). A quick snapshot of the English language. *Journal of Critical Studies in Language and Literature*, 4(1), 14-20.
- Ng, L. L. & Raghbir, R. S. A. (2021). Learning English vocabulary via computer gaming. *Issues in Language Studies*, 10(1), 93-109. <https://doi.org/10.33736/ils.2708.2021>

- Paneerselvam, A. and Mohamad, M. (2019). Learners' challenges and English educators' approaches in teaching speaking skills in an ESL classroom: a literature review. *Creative Education*, 10(13), 3299-3305. <https://doi.org/10.4236/ce.2019.1013253>
- Pazilah, F. N., Hashim, H., & Yunus, M. M. (2019). Using technology in ESL classroom: highlights and challenges. *Creative Education*, 10(12), 3205-3212. <https://doi.org/10.4236/ce.2019.1012244>
- Pentury, H. J. & Anggraeni, A. D. (2021). Using digital newspaper as creative learning media to boost students' higher thinking skills. *Deiksis*, 13(2), 170. <https://doi.org/10.30998/deiksis.v13i2.6902>
- Ponnaiah, P. & Aziz, A. A. (2022). The effectiveness of the use of technology in a primary ESL classroom: a systematic literature review. *International Journal of Academic Research in Progressive Education and Development*, 11(2). <https://doi.org/10.6007/ijarped/v11-i2/12275>
- Putra, R. E., Ekohariadi, E., Nuryana, I., & Anistyasari, Y. (2022). Development of automated assessment tool to measure student creativity in computer programming. *Advances in Social Science, Education and Humanities Research*. <https://doi.org/10.2991/assehr.k.211229.015>
- Raffone, A. & Monti, J. (2019). Becoming storytellers: improving ESL students' academic engagement and 21st century skills through interactive digital storytelling. *Proceedings of the 16th International Conference on Cognition and Exploratory Learning in Digital Age (CELDA 2019)*. https://doi.org/10.33965/celda2019_2019111020
- Rahman, N. F. N. A., Misman, J., Shaharudin, M. I. M., & Arshad, A. (2022). Using digital storytelling in speaking activities for low-proficiency tertiary students. *International Journal of Academic Research in Business and Social Sciences*, 12(11). <https://doi.org/10.6007/ijarbss/v12-i11/15672>
- Reshid, R. R. & Jeyaraj, J. J. (2022). Linking 21st century learning skills to outdoor learning: exploring the experiences of primary school English language teachers in Malaysian private schools. *The English Teacher*, 77-89. <https://doi.org/10.52696/ztlty2991>
- Sambanthan, P. T., & Ismail, H. H. (2022). The potential of gamified learning to improve comprehension of jungle book graphic novel: a concept paper. *International Journal of Academic Research in Progressive Education and Development*, 11(3). <https://doi.org/10.6007/ijarped/v11-i3/14640>
- Sari, H. I., Munawaroh, M., & Raharjo, H. (2020). Analysis of student's creative thinking ability in mathematical problem solving in terms of extrovert and introvert personality types. *Eduma: Mathematics Education Learning and Teaching*, 9(1), 34. <https://doi.org/10.24235/eduma.v9i1.6153>
- Sawalmeh, M. H., & Dey, M. (2023). Globalization and the increasing demand for spoken English teachers. *Research Journal in Advanced Humanities*, 4(2).

- Seng, G. H., Muhamad, M., & Kiely, R. (2020). Integration of 21st century learning skills and teacher characteristics in ESL classrooms: the case of Malaysia. *Universal Journal of Educational Research*, 8(12A), 7561-7566. <https://doi.org/10.13189/ujer.2020.082541>
- Smare, Z. (2022). The need to engage students' creative thinking in language learning classes. *TESOL and Technology Studies*, 3(2), 18-33. <https://doi.org/10.48185/tts.v3i2.644>
- Sunday, A. (2021). Digital storytelling as a reflective tool in occupational therapy curriculum. *Occupational Therapy International*, 2021, 1-10. <https://doi.org/10.1155/2021/2463916>
- Soomro, R. B. K., Khan, R. A., & Rind, I. A. (2023). Exploring ESL teachers' experiences about ICT-based 4cs skills: a phenomenological study.. <https://doi.org/10.21203/rs.3.rs-3299588/v1>
- Tabieh, A. A., Al-Hileh, M. M., Afifa, H. M. J. A., & Abuzagha, H. Y. (2021). The effect of using digital storytelling on developing active listening and creative thinking skills. *European Journal of Educational Research*, volume-10-2021(volume-10-issue-1-january-2021), 13-21. <https://doi.org/10.12973/eu-jer.10.1.13>
- Tahir, M. H. M. (2022). Factors influencing secondary English as a second language teachers' intentions to utilis google classroom for instructions during the covid-19 pandemic. *Arab World English Journal*, 13(2), 17-36. <https://doi.org/10.24093/awej/vol13no2.2>
- Talan, T. (2021). Meta-analytic and meta-thematic analysis of digital storytelling method. *Bartın University Journal of Faculty of Education*, 2021 February, Volume 10(Issue 1), 18-38. <https://doi.org/10.14686/buefad.706231>
- Umar, M. & Ko, I. (2022). E-learning: direct effect of student learning effectiveness and engagement through project-based learning, team cohesion, and flipped learning during the covid-19 pandemic. *Sustainability*, 14(3), 1724. <https://doi.org/10.3390/su14031724>
- Wahbeh, D. G., Najjar, E. A., Sartawi, A. F., Abuzant, M., & Daher, W. (2021). The role of project-based language learning in developing students' life skills. *Sustainability*, 13(12), 6518. <https://doi.org/10.3390/su13126518>
- Wahyudi, W., Waluya, S. B., Suyitno, H., & Isnarto, I. (2019). The analysis of the students' creative thinking ability in mathematics as viewed from their learning style and educational background. *Proceedings of the 6th International Conference on Educational Research and Innovation (ICERI 2018)*. <https://doi.org/10.2991/iceri-18.2019.21>
- Wibawa, B. (2022). Digital Storytelling for Early Childhood Creativity: Diffusion of Innovation" 3-D Coloring Quiver Application Based on Augmented Reality Technology in Children's Creativity Development". *International Journal of Online & Biomedical Engineering*, 18(10).
- Wong, A. R. (2022). A case study of English language student teachers' creativity potential. *International Journal on E-Learning Practices (IJELP)*, 5, 98-106. <https://doi.org/10.51200/ijelp.v5i.4104>

- Yacob, N. S., Yunus, M. M. & Hashim, H. 2022. The Integration of global competence into Malaysian English as a second language lessons for quality education (Fourth United Nations sustainable development goal). *Frontiers in Psychology*, 13, 848417.
- Yahya, M. S. & Hashim, H. (2021). Interdisciplinary learning and multiple learning approaches in enhancing the learning of ESL among stem learners. *Creative Education*, 12(05), 1057-1065. <https://doi.org/10.4236/ce.2021.125078>
- Yang, Y., Chen, Y. C., & Hung, H. T. (2020). Digital storytelling as an interdisciplinary project to improve students' English speaking and creative thinking. *Computer Assisted Language Learning*, 35(4), 840-862. <https://doi.org/10.1080/09588221.2020.1750431>
- Yastanti, U., Nurmalia, L., Anggraini, A., Faisal, F., & Santosa, T. A. (2023). The effectiveness of project based learning on students' creative thinking skills in English language learning: a meta-analysis study. *International Journal of Multicultural and Multireligious Understanding*, 10(11), 19. <https://doi.org/10.18415/ijmmu.v10i11.5153>
- Yol, Ö., & Yoon, B. (2020). Engaging English language learners with critical global literacies during the pull-out: Instructional framework. *Tesol Journal*, 11(2), e470. <https://doi.org/10.1002/tesj.470>
- Yulian, R. & Yuniarti, Y. (2022). Digital story telling based on multimodal elements on EFL learners' speaking performance. *JPI (Jurnal Pendidikan Indonesia)*, 11(2), 308-316. <https://doi.org/10.23887/jpiundiksha.v11i2.40217>



Aha! Moment with AhaSlides: Escalating Students' Participation in ESL Classroom

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Abstract: AhaSlides is a collaborative approach that leverages technology to facilitate idea generation and problem-solving in online settings. This study explores the effectiveness of AhaSlides as a platform to escalate students' participation in ESL classrooms. The study highlights the impact of this digital tool on four aspects related to active learning, motivation, ease of use and students' satisfaction among 54 ESL undergraduate students. The findings demonstrate AhaSlides' efficacy in fostering innovative thinking and to promote interactive learning sessions, especially in English language classrooms. Positive findings from the study could encourage educational institutions and policymakers to invest in and promote the use of interactive presentation tools like AhaSlides in ESL programs and curricula.

Keywords: *Ahaslides, digital pedagogy, ESL classroom, students' participation*

Introduction

In the context of teaching English as a second language (ESL), encouraging active student participation is essential to successful language learning (Motlhaka, & Wadesango, 2014; Zulfa & Zahidah, 2023). Conventional teaching approaches frequently struggle to maintain students' attention and involvement, which results in less than ideal learning results. With the introduction of digital tools, there are now more ways to address these issues by developing dynamic and captivating learning environments. Of these resources, AhaSlides stands out as a potentially useful tool for improving student participation and classroom engagement (Mashifana, 2022).

With the help of interactive presentation software like AhaSlides, teachers can design engaging and interactive learning environments. Through the use of interactive elements in Ahaslides like word clouds, live polls, quizzes, and real-time Q&A sessions, can turn boring textbook study into a conversation (Phelps & Moro,2022). The constructivist learning theory, which holds that students actively create knowledge rather than merely absorbing it, is the foundation of this study. Teachers may establish a learner-centered environment that promotes engagement, critical thinking, and cooperative learning by utilising AhaSlides. This method is in line with modern pedagogical approaches that support using technology into the classroom to improve learning outcomes.

Problem Statement

The increasing necessity for English as a Second Language (ESL) proficiency in globalized economies underscores the importance of effective ESL education. However, a persistent challenge in ESL classrooms is fostering active student participation, which is crucial for language acquisition and retention. Traditional teaching methods often fail to engage students sufficiently, leading to passive learning environments where students may feel reluctant to participate due to fear of making mistakes, lack of motivation, or unengaging instructional methods (Yaccob et al.,2022;Jie, Zakaria & Hassan, 2023).

Also, effective participation is a crucial factor in language learning, as it provides opportunities for students to practice and improve their English language skills. However, many English as a Second Language (ESL) classrooms face challenges in fostering active student participation due to various factors such as shyness, lack of confidence, or cultural differences (Musabal & Abdalgane, 2023). Traditional teaching methods and materials may not be sufficient to engage students fully and encourage them to participate actively in class activities.

AhaSlides, an interactive presentation tool, has shown potential in enhancing student engagement and participation in various educational settings. However, its effectiveness in ESL classrooms has not been extensively explored. This research aims to investigate the impact of using AhaSlides on escalating student participation in ESL classrooms. Using a quantitative method, the study investigates the extent to which AhaSlides can improve students' learning aspects related to active learning, motivation, ease of use and students' satisfaction. The findings are expected to provide valuable insights for educators seeking innovative strategies to enhance ESL instruction and contribute to the broader discourse on technology integration in education.

Literature Review

The integration of technology in education has revolutionized traditional teaching methodologies, particularly in the context of English as a Second Language (ESL) instruction. Numerous studies highlight the potential of digital tools to enhance student engagement, motivation, and learning outcomes. This literature review examines the role of interactive technologies in ESL education, with a specific focus on the use of AhaSlides to escalate student participation particularly in ESL classroom.

Interactive technologies have been widely recognized for their ability to create more engaging and effective learning environments. Due to their ability to provide dynamic, varied information that suits different learning styles, interactive multimedia tools are a vital component of language acquisition programmes. These resources include interactive whiteboards, multimedia projectors, and web-based applications like iBook Author and WeChat (Smirnova et al.,2020;Liu & Moeller,2019). These web-based applications provide opportunities for engaging learners with language, content, and culture, ultimately promoting language proficiency. Furthermore, students' autonomy, self-efficacy, and motivation to participate in the learning process can all be strengthened by the incorporation of interactive and multimedia-enhanced technologies in language learning environments, both inside and outside of institutional settings (Setyorini,& Masulah,2015). Through deliberate use of these resources and their alignment with learning strategies informed by research, educators can design a more engaging and productive language learning environment for students with varying backgrounds and learning styles.

Student engagement is a critical factor in the success of ESL instruction (Panhwar,& Bell,2023). Engaged students are more likely to participate actively, retain information, and achieve higher proficiency levels. Liu et al. (2023) categorize student engagement into behavioral, emotional, and cognitive dimensions, each of which can be enhanced through interactive technologies. By carefully considering the fit between individual, task, environment, and technology, educators can facilitate student engagement and ultimately improve learning outcomes.

AhaSlides is an interactive presentation platform designed to facilitate real-time audience engagement through features such as live polls, quizzes, word clouds, and Q&A sessions. Research on similar tools suggests that such interactive features can significantly improve student participation. For example, Arjomandi et al. (2023) found that using interactive polling tools in the classroom increase student attention, participation, and feedback. Similarly, Zhang (2023) demonstrated that real-time interactive systems could enhance classroom dynamics and promote active learning by increasing student involvement, and providing valuable feedback to both students and instructors.

While specific studies on AhaSlides in ESL classrooms are limited, the broader body of research on interactive presentation tools provides a strong foundation for its potential benefits. Interactive technologies like AhaSlides align with the principles of constructivist learning theory, which advocates for active learner participation and knowledge construction (Vagele-Kricina, 2021). By facilitating real-time interaction, AhaSlides can help create a more learner-centered environment that supports the active involvement and engagement of ESL students.

To conclude, the literature underscores the significant potential of interactive technologies to enhance student engagement and participation in ESL classrooms. AhaSlides, with its array of interactive features, offers a promising avenue for creating dynamic and participatory learning environments. While empirical studies specifically focusing on AhaSlides are needed, the existing research on similar tools provides a robust foundation for exploring its effectiveness in ESL education. This highlights the need for further investigation into the practical implementation and impact of AhaSlides, aiming to provide insights that can inform and enhance ESL instructional practices.

Methodology

Research Design

This study employed a quantitative research approach using a survey method to investigate the impact of AhaSlides on escalating student participation in ESL classrooms.

Sample and Data Collection

This study used a survey gathered from 54 students from one public university in Malaysia. The participants are randomly selected for this study to discover the participants' perceptions in using Ahaslides in the ESL classroom.

Analyzing of Data

The quantitative data was analysed using SPSS 22.0. The questionnaire used consisted of 21 questions and the Cronbach alpha coefficient was 0.94 which was highly significant at the 0.01 level. Appropriate statistical methods, like descriptive statistics, were used to analyse the quantitative data from the closed-ended survey questions.

Findings / Results

Table 1 shows the demographic profiles of the respondents involved in the survey. A total of 54 students participated in this study.

Table 1: Demographic details of the respondents

<i>No.</i>	<i>Variable</i>	<i>Category</i>	<i>Frequency</i> (<i>N = 54</i>)	<i>Percentage</i>
<i>1</i>	<i>Gender</i>	<i>Male</i>	<i>13</i>	<i>24.1</i>
		<i>Female</i>	<i>41</i>	<i>75.9</i>
<i>2</i>	<i>MUET Band</i>	<i>Band 5</i>	<i>1</i>	<i>1.9</i>
		<i>Band 4</i>	<i>6</i>	<i>11.1</i>
		<i>Band 3</i>	<i>29</i>	<i>53.7</i>
		<i>Band 2</i>	<i>18</i>	<i>33.3</i>

Table 2 displays the respondents' perceptions on the use of Ahaslides in ESL classroom to promote active learning.

Table 2: Active Learning

Item	Strongly Agree	Agree	Neutral	Disagree	Strongly disagree
	N (%)	N (%)	N (%)	N (%)	N (%)
1. was more engaged in my learning	33 (61.1)	16 (29.6)	4 (7.4)	0 (0)	1 (1.9)
2. was more encouraged to complete the tasks	32 (59.3)	16 (29.6)	5 (9.3)	0 (0)	1 (1.9)
3. was less stress in completing individual tasks	29 (53.7)	14 (25.9)	10 (18.5)	0 (0)	1 (1.9)
4. gave more input for the task given by the instructor	33 (61.1)	15 (27.8)	6 (11.1)	0 (0)	0 (0)
5. it can stimulate my interest	34 (64.0)	15 (27.8)	4 (7.4)	0 (0)	1 (1.9)

Table 3 shows the analysis of respondents' motivation on the use of Ahaslides in ESL classroom.

Table 3: Motivation

Item	Strongly Agree	Agree	Neutral	Disagree	Strongly disagree
	N (%)	N (%)	N (%)	N (%)	N (%)
1. when my instructor is using Ahaslides in class it motivates me to participate in class activity	40 (74.1)	7 (13.0)	6 (11.1)	0 (0)	1 (1.9)
2. when my instructor is using Ahaslides in class it motivates me to	41 (75.9)	8 (14.8)	3 (5.6)	1 (1.9)	1 (1.9)

complete tasks assigned by my instructor.					
3. When my instructor is using Ahaslides in class it motivates me to interact more with my classmates	38 (70.4)	10 (18.5)	4 (7.4)	1 (1.9)	1 (1.9)
4. When my instructor is using Ahaslides in class it motivates me to give more feedback during classroom activities.	36 (66.7)	13 (24.1)	3 (5.6)	1 (1.9)	1 (1.9)
5. When my instructor is using Ahaslides in class it motivates me to be more active during the class activity.	40 (74.1)	9 (16.7)	4 (7.4)	0 (0)	1 (1.9)

Table 4 displays the respondents' perceptions on the ease of use of Ahaslides in ESL classroom.

Table 4: Ease of use

Item	Strongly Agree	Agree	Neutral	Disagree	Strongly disagree
	N (%)	N (%)	N (%)	N (%)	N (%)
1. When using Ahaslides in class it helps me be more effective in giving related input.	33 (61.1)	15 (27.8)	5 (9.3)	0 (0)	1 (1.9)
2. When using Ahaslides in class, it is easy to contribute my ideas	35 (64.8)	14 (25.9)	4 (7.4)	0 (0)	1 (1.9)
3. It is user friendly.	38 (70.4)	11 (20.4)	3 (5.6)	1 (1.9)	1 (1.9)
4. It is simple to use.	36 (66.7)	13 (24.1)	4 (7.4)	0 (0)	1 (1.9)

5.	33 (61.1)	16 (29.6)	3 (5.6)	1 (1.9)	1 (1.9)
It meets my expectations					

Table 5 shows the analysis of respondents' satisfaction on the use of Ahaslides in ESL classroom.

Table 5: Satisfaction

Item	Strongly Agree	Agree	Neutral	Disagree	Strongly disagree
	N (%)	N (%)	N (%)	N (%)	N (%)
1. After using Aha slides, I am satisfied with aha slides	38 (70.4)	10 (18.5)	5 (9.3)	0 (0)	1 (1.9)
2. After using Aha slides, Aha slides is fun to use	39 (72.2)	9 (16.7)	5 (9.3)	0 (0)	1 (1.9)
3. After using Aha slides, I would like to use Aha slides in other courses	35 (64.8)	10 (18.5)	7 (13.0)	1 (1.9)	1 (1.9)
4. After using Aha slides, I found the lecture more interesting	40 (74.1)	8 (14.8)	5 (9.3)	0 (0)	1 (1.9)
5. After using Aha slides, I prefer to share my views using aha slides than to reply out loud	31 (57.4)	17 (31.5)	3 (5.6)	2 (3.7)	1 (1.9)
6. After using Aha slides, I prefer my instructor to use aha slides compared to powerpoint	37 (68.5)	10 (18.5)	6 (11.1)	0 (0)	1 (1.9)

Discussion

The findings of this study underscore the significant impact that AhaSlides can have on escalating student participation in ESL classrooms. The research reveals several key insights into how interactive technologies like AhaSlides can transform the learning environment and enhance student engagement.

AhaSlides promotes active learning by requiring students to engage with the material continuously. This active participation fosters deeper cognitive processing, which is critical for language acquisition and retention. The immediate feedback provided by quizzes and polls helps students to quickly identify and correct their misunderstandings, thereby reinforcing their learning. These findings are consistent with Arjomandi et al. (2023) assertion that interactive and gamified elements can enhance motivation and learning outcomes in language education.

The findings of this study suggest that AhaSlides is perceived as a user-friendly and intuitive tool by ESL students. The majority of participants reported that the interactive features of AhaSlides, such as real-time quizzes, polls, and collaborative activities, were easy to navigate and interact with, even for those with limited technological proficiency. This ease of use was a crucial factor in facilitating active participation and engagement during ESL lessons, as students felt more comfortable and confident in utilizing the tool without feeling overwhelmed by its complexity (Zhang,2023).

The data indicates that the use of AhaSlides significantly increases student motivation and satisfaction. Students reported feeling more involved and motivated to participate in classroom activities when using the interactive features of AhaSlides. This aligns with the literature on interactive technologies, which emphasizes the role of real-time feedback and dynamic content in maintaining student interest and participation (Zhang,2023). The ability to contribute anonymously in polls and quizzes also encouraged students who might be reluctant to participate in traditional classroom settings, thereby broadening overall class involvement.

Conclusion

In conclusion, the use of AhaSlides in ESL classrooms has demonstrated substantial potential to escalate student participation and engagement. While there are challenges to be addressed, the overall positive impact on classroom dynamics and student motivation suggests that interactive technologies like AhaSlides can play a crucial role in modernizing and enhancing language education. By embracing these tools, educators can create more interactive, inclusive, and effective learning environments for their students.

Recommendations

This study provides a foundational understanding of the benefits and challenges of using AhaSlides in ESL classrooms. Future research should explore the long-term impacts of sustained use of AhaSlides on language proficiency and academic performance. Additionally, comparative studies involving different interactive tools could provide deeper insights into the specific features that most effectively enhance student engagement and learning outcomes. Investigating the impact of AhaSlides across diverse educational contexts and student demographics would also help to generalize the findings and inform best practices for technology integration in ESL education.

Limitations

The study may be limited in its generalizability if the sample selected is not truly representative of the larger population of ESL students and teachers. The findings may be specific to the institutions or geographical regions from which the sample is drawn.

AhaSlides, like any technology tool, is subject to continuous development and updates. The study's findings may become less relevant or applicable if significant changes are made to the tool or if new, more advanced interactive presentation tools emerge.

References

- Arjomandi, A., Paloyo, A. R., & Suardi, S. (2023). Active Learning And Academic Performance : The Case Of Real-Time Interactive Student Polling. *Statistics Education Research Journal*, 22(1), 1–15. <https://doi.org/10.52041/serj.v22i1.122>
- Jie, Y. X., Zakaria, A. Z., & Hassan, H. (2023). The Use of Gamification in Enhancing Students Engagement and Performance in ESL Speaking Lessons. *International Journal of Academic Research in Business and Social Sciences*, 13(1), 479-503.
- Liu, X., & Moeller, A. J. (2019). *Promoting learner engagement through interactive digital tools*. Faculty Publications: Department of Teaching, Learning and Teacher Education, 310–331. Available at: <http://digitalcommons.unl.edu/teachlearnfacpub/310>
- Liu, K., Yao, J., Tao, D., & Yang, T. (2023). Influence of individual-technology-task-environment fit on university student online learning performance: The mediating role of behavioral, emotional, and cognitive engagement. *Education and Information Technologies*, 28(12), 15949-15968. <https://link.springer.com/article/10.1007/s10639-023-11833-2>
- Mashifana, T. (2022, November). Active student participation and engagement in the virtual classroom during the COVID-19 pandemic. In *2022 IEEE IFEES World Engineering Education Forum-Global Engineering Deans Council (WEEF-GEDC)* (pp. 1-7). IEEE. doi: 10.1109/WEEF-GEDC54384.2022.9996241.
- Motlhaka, H. A., & Wadesango, N. (2014). Freirean participatory approach: Developing interactive listening skills in the English as a Second Language (ESL) classroom. *Mediterranean Journal of Social Sciences*, 5(11), 101-107.
- Musabal, A., & AbdAlgene, M. (2023). Exploring the Obstacles EFL Learners Encounter in Classroom Oral Participation from the Perspective of Tertiary Level Instructors. *Journal of Namibian Studies*, 33S1 (2023).
- Panhwar, A. H., & Bell, M. J. (2023). Enhancing student engagement in large ESL classes at a Pakistani university. *Educational Action Research*, 31(5), 964-980. <https://doi.org/10.1080/09650792.2022.2089191>

- Phelps, C., & Moro, C. (2022). Using live interactive polling to enable hands-on learning for both face-to-face and online students within hybrid-delivered courses. *Journal of University Teaching and Learning Practice*, 19(3), 8. <https://files.eric.ed.gov/fulltext/EJ1361762.pdf>
- Setyorini, A., & Masulah, M. (2015). The Use of Interactive Multimedia in ELT to Enhance Students' Autonomous Learning. *The 62nd of TEFLIN 2015*, 1(1). <https://repository.um-surabaya.ac.id/2943/>
- Smirnova, Z. V., Vaganova, O. I., Vinnikova, I. S., Lapshova, A. V., & Golubeva, O. V. (2020). Modern Multimedia Didactic Tools of Interactive Training. En E. G. Popkova (Ed.), *Growth Poles of the Global Economy: Emergence, Changes and Future Perspectives* (pp. 485-491). Springer International Publishing. https://doi.org/10.1007/978-3-030-15160-7_49
- Vagele-Kricina, A. (2021). E-Constructivism: A Ready Response to the Challenges of E-Learning. In *Practical perspectives on educational theory and game development* (pp. 130-147). IGI Global.
- Yacob, N. S., Rahman, S. F. A., Mohamad, S. N. A., Rahim, A. A. A., Rashid, K. K. A., Aldaba, A. M. A., ... & Hashim, H. (2022). Gamifying ESL Classrooms through Gamified Teaching and Learning. *Arab World English Journal*, 8, 177-191. <https://doi.org/10.24093/awej/call8.12>
- Zhang, L. Y. (2023, May). Tips for Using Gamified Real-Time Polling Quizzes as a No-Stakes Engagement Tool for Computing Courses. In *Proceedings of the 25th Western Canadian Conference on Computing Education* (pp. 1-2). <https://doi.org/10.1145/3593342.3593357>
- Zulfa, V., & Zahidah, A. N. (2023). Analysis of student motivation of English learning as a second language. *International Education Trend Issues*, 1(2), 165-170. <https://doi.org/10.56442/ieti.v1i3.202>



Augmented Reality in Second Language Acquisition: Theoretical Perspectives, Benefits, and Practical Implications

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Abstract: In the current digital world, Augmented reality (AR) technology holds significant promise for revolutionising language education by offering immersive, interactive, and contextualised learning experiences. Though AR offers immersive and interactive learning opportunities, integrating technology into language courses poses practical problems, such as the need for pedagogical methodologies, accessibility issues, and educator training. This paper discusses the theoretical underpinnings of AR in Second Language Acquisition (SLA) and its benefits, applications, and practical implications for educators. Based on theoretical frameworks such as Krashen's Input Hypothesis, Vygotsky's Socio-Cultural Theory, and Cognitive Theories of SLA, AR enhances language acquisition by providing authentic input, fostering social interaction, stimulating cognitive processes, and promoting cultural immersion. The benefits of AR for immersive language learning include contextualised learning experiences, multisensory engagement, personalised learning, and collaborative activities. Additionally, AR has various applications in language learning, ranging from vocabulary acquisition to cultural immersion and cross-cultural communication. Despite its transformative potential, integrating AR into language learning curricula presents challenges related to pedagogical alignment, accessibility, and equity. Prioritising professional development, fostering collaborative partnerships, addressing digital disparities, and promoting research and development initiatives could maximise the benefits of AR in language education. While AR offers exciting opportunities for enhancing language learning outcomes, addressing its inherent limitations requires ongoing research, investment, and adaptability.

Keywords: *Augmented Reality (AR), immersive experience, language learning, Second Language Acquisition (SLA), theoretical perspectives*

Introduction

Augmented reality (AR) technology is emerging in language education by combining virtual and physical worlds, potentially transforming conventional teaching methods (Johnson, 2020). By offering immersive and interactive experiences that transcend the confines of the traditional classroom, AR presents a unique opportunity for educators to re-envision language learning as a dynamic and engaging process (Chen & Wang, 2024). As AR technology becomes increasingly accessible, its potential to foster linguistic proficiency and cultural competence in students becomes more evident (Miyashita et al., 2021). In alignment with Sustainable Development Goal 4 (Quality Education), integrating AR into language learning could enhance educational experiences, making them more inclusive, equitable, and effective (United Nations, n.d.). Furthermore, leveraging AR aligns with digital literacy policies to prepare students for the digital age, equipping them with the skills necessary to navigate and thrive in a technology-driven society (European Commission, 2020).

Despite the promising potential of augmented reality (AR) technology to transform language learning into immersive and engaging experiences, a gap exists in understanding how educators can effectively integrate AR into language learning curricula (Johnson, 2020). While the accessibility of AR technology continues to expand, there remains a lack of comprehensive guidance and practical strategies for educators to harness its capabilities optimally (Bacca et al., 2014). This deficiency hampers the realisation of AR's full potential in language education, hindering the creation of dynamic and authentic learning environments that foster linguistic proficiency and cultural competence (Miyashita et al., 2021). Additionally, the current discourse predominantly focuses on the benefits and applications of AR in language learning, overlooking the practical challenges and considerations that educators encounter in its implementation (Klopfer et al., 2002). Moreover, recent studies have highlighted the need for educators to address issues of accessibility and equity when incorporating AR into language learning, ensuring that all students, regardless of socioeconomic background or technological proficiency, can benefit from these immersive experiences (Smith & Jones, 2023).

Consequently, there is a pressing need for research and development initiatives aimed at addressing these gaps, providing educators with evidence-based frameworks, pedagogical strategies, and technological support to effectively integrate AR into language learning contexts (Lee & Hammer, 2011; Chen & Wang, 2024). By addressing these challenges, educators can unlock the transformative power of AR technology to enhance language learning outcomes and prepare students for real-world communication challenges in diverse linguistic and cultural contexts. This paper discusses the potential of AR for immersive language learning in terms of theoretical perspectives on Second Language Acquisition (SLA), benefits, applications, and practical implications for educators. By embracing AR technology, educators enrich language learning experiences and foster student engagement, motivation, and preparedness for real-world language use.

Theoretical Perspectives of AR in Second Language Acquisition (SLA)

The integration of augmented reality (AR) technology presents a promising avenue for enhancing Second Language Acquisition (SLA) through its capacity to offer immersive and interactive learning experiences tailored to the diverse needs of learners. This technology facilitates language proficiency development in real-world contexts. Exploring AR's efficacy in SLA necessitates a consideration of the theoretical frameworks that underlie language acquisition processes.

One theory in SLA is Krashen's Input Hypothesis, which posits that language acquisition occurs when learners are exposed to comprehensible input that slightly surpasses their current proficiency level (Krashen, 1985). AR aligns with this theory by providing authentic and contextualised language input in real-world environments, enabling learners to interact with language in meaningful and comprehensible ways (Johnson, 2020). Vygotsky's Socio-Cultural Theory emphasises the significance of social interaction and collaborative learning in language development (Vygotsky, 1978). Implementing AR fosters social interaction among learners through collaborative activities and communication in the target language. AR-enabled collaborative tasks allow learners to engage in authentic language exchanges, negotiate meaning, and participate in knowledge co-construction, facilitating language acquisition (Bacca et al., 2014).

Additionally, Cognitive Theories of SLA, such as Information Processing Theory and Connectivism, underscore the importance of cognitive processes, memory, and pattern recognition in language learning (Ellis, 1994). AR enhances cognitive processes by providing multisensory experiences that stimulate memory retention and cognitive engagement. The immersive nature of AR allows learners to interact with language content in a spatial and sensory-rich environment, fostering deeper cognitive processing and long-term retention of linguistic structures and vocabulary (Smith & Jones, 2023). Moreover, the Sociocultural Theory of SLA, proposed by Lantolf and Thorne (2006), emphasises the socio-cultural context in which language learning occurs, highlighting the role of cultural immersion and authentic language use in language development. AR promotes cultural immersion by enabling learners to interact with virtual representations of cultural artefacts, locations, and scenarios. Through engagement in virtual culture immersion experiences, learners develop cross-cultural communication skills, cultural sensitivity, and the ability to interact respectfully in diverse linguistic and cultural contexts (Wang & Wang, 2023).

In addition to these theoretical frameworks, constructivist approaches to SLA highlight the active role of learners in constructing knowledge and meaning through interaction with their environment (Swain, 2000). AR is congruent with constructivist principles, providing learners with opportunities for active exploration, experimentation, and problem-solving in authentic language contexts. Learners can manipulate virtual objects, engage in hands-on activities, and collaborate with peers to construct their understanding of language concepts and structures (Wu et al., 2013).

Benefits of AR for Immersive Language Learning

Augmented reality (AR) technology has significantly transformed language learning, offering numerous advantages that enhance the educational process. One of its key strengths is providing contextualised learning experiences, making language acquisition more meaningful and enjoyable (Johnson, 2020; Bacca et al., 2014). By immersing students in real-world scenarios through the superimposition of digital content, AR assists in comprehending linguistic and cultural nuances, aiding in better understanding and retention of language content (Miyashita et al., 2021; Dafoulas et al., 2023). The contextualisation offered by AR helps students establish connections between language concepts and real-life situations, contributing to improved learning outcomes (Chen & Wang, 2024; Wang & Wang, 2023).

Furthermore, studies have evidenced that AR provides students with multisensory experiences, significantly enhancing their comprehension and retention of learning material. According to Smith and Jones (2023), AR environments enable students to engage multiple senses simultaneously as they interact with virtual objects and scenarios in real-time. The effectiveness of this multimodal learning approach has garnered attention in various educational domains, including language acquisition (Chen & Wang, 2024; Dey et al., 2022). By stimulating multiple senses concurrently, AR facilitates a more effective processing and retention of the language material, thereby improving proficiency. In addition to its immersive aspects, AR encourages active participation and engagement among language learners. Traditional approaches to language acquisition often entail passive absorption of course content, leading to reduced effectiveness and student disengagement (Chen & Wang, 2024). In contrast, AR promotes experiential learning through hands-on exploration and manipulation of virtual elements within the physical environment (Johnson, 2020; Bacca et al., 2014). This active participation sustains students' attention and enhances their motivation and commitment to language learning activities (Miyashita et al., 2021; Dafoulas et al., 2023). By creating an interactive and dynamic learning environment, AR empowers students to take control of their education, yielding more substantial and enduring language acquisition results.

Moreover, AR technology facilitates personalised learning experiences tailored to individual learners' needs and interests. AR applications can dynamically adjust the difficulty level and learning pace using adaptive algorithms and real-time feedback systems to ensure optimal learning outcomes for each user (Wang & Wang, 2023; Dey et al., 2022). This personalised approach not only accommodates diverse learning styles and aptitudes but also enhances students' self-efficacy and sense of autonomy (Smith & Jones, 2023; Chen & Wang, 2024). By enabling students to design their learning paths, AR technology promotes a learner-centric approach to language instruction, maximising the efficiency and efficacy of language acquisition. Furthermore, AR supports collaborative learning activities that foster peer cooperation and social engagement, which is crucial for language learning (Miyashita et al., 2021; Dafoulas et al., 2023). AR facilitates peer communication and cooperation through virtual spaces and collaborative activities, enhancing language competence through real-world engagement (Johnson, 2020; Bacca et al., 2014). This collaborative nature of AR not only improves the educational process but also nurtures essential social and communication skills pivotal for practical language application (Wang & Wang, 2023; Dey et al., 2022).

Applications of Augmented Reality in Language Learning

Augmented reality (AR) in language learning extends beyond mere vocabulary practice, encompassing various applications that enhance communicative proficiency, cultural immersion, and collaborative language learning. Mobile applications with AR capabilities facilitate immersive language practice in authentic contexts, integrating AR technology to superimpose interactive assessments, digital vocabulary aids, and language exercises onto real-world environments. This approach allows students to engage with language resources on-site, reinforcing the relevance of language learning in everyday settings and facilitating the acquisition of practical language skills aligned with real-world experiences. Furthermore, AR in language learning encourages dynamic interactions and communication among students within immersive virtual settings, catalysing collaborative learning experiences. Virtual reality (VR) platforms enhanced with augmented reality elements enable learners to interact with virtual characters or peers in real time, promoting an enriched language learning experience.

Moreover, immersion environments foster a supportive space for language learners to refine their skills, fostering experimentation and risk-taking without fear of judgment. AR-enabled VR platforms effectively bridge the gap between language study and practical application by offering learners interactive environments conducive to developing fluency, communicative competence, and cultural awareness in the target language. Additionally, the integration of gamification, utilising interactive game mechanics to engage and motivate learners, holds the potential to enhance language acquisition through AR. By integrating elements of competition, exploration, and problem-solving into the learning process, augmented reality-enabled language learning games offer students a dynamic and engaging platform for language skill practice, promoting intrinsic motivation and sustaining interest over time.

AR technology holds significant promise for facilitating language acquisition and promoting cross-cultural understanding and communication in diverse educational settings. By allowing students to interact with virtual representations of cultural artefacts, locations, and scenarios, AR fosters intercultural competency and empathy, deepening students' understanding of cultural diversity and global citizenship. Participating in virtual cultural immersion experiences enables learners to develop cross-cultural communication skills, cultural sensitivity, and the ability to engage with poise and respect. Overall, AR technology presents a variety of applications for language learning, including gamification, communicative activities, vocabulary practice, cultural immersion, and cross-cultural communication, enabling educators to design dynamic and immersive learning environments that facilitate student interaction, collaboration, empathy, and intercultural understanding. The transformative potential of AR in language acquisition is poised to revolutionise language education in the 21st century as it continues to evolve and integrate into educational practices.

Practical Implications for Educators

Incorporating augmented reality (AR) technology into language learning curricula holds significant potential. However, Lee and Hammer (2011) highlight certain drawbacks that must be considered. They emphasise the pivotal role of pedagogical practices in AR deployment and

stress the importance of educators carefully planning learning experiences to utilise AR's potential fully. Therefore, teachers must be discerning in their selection of AR apps and activities to ensure alignment with their learning objectives and target language outcomes (Johnson, 2020; Bacca et al., 2014; Klopfer & Squire, 2008). This alignment is crucial for ensuring that AR contributes to the learning process without hindering it. Furthermore, using augmented reality in education raises concerns about fairness and accessibility (Smith & Jones, 2023; Dafoulas et al., 2023). Educators must address these concerns ardently to ensure that all students, regardless of their backgrounds or skills, can benefit from AR-enhanced learning. This involves accommodating a range of learning needs and preferences and ensuring equitable access to AR-enabled devices and information (Wu et al., 2013; Yuen et al., 2011).

A potential approach for educators to leverage augmented reality (AR) to promote inclusivity in language acquisition involves implementing inclusive practices. Additionally, educators require adequate training and support to harness AR's potential in language instruction fully (Chen & Wang, 2024; Wang & Wang, 2023; Wu et al., 2013). This necessitates pedagogical guidance on seamlessly integrating AR technology into their teaching practice, alongside technical proficiency with the technology. Tailored professional development opportunities can equip teachers with the knowledge and skills to utilise augmented reality in language learning environments effectively (Yang et al., 2010). Institutions can enable educators to realise the transformative potential of AR in language instruction by providing continuous training and support.

Conclusion

In summary, augmented reality (AR) exhibits significant potential for transformative impacts on language learning by providing enhanced engagement, contextualised learning experiences, and improved retention. However, the successful integration of AR into language learning contexts necessitates collaborative efforts among educators, technologists, and policymakers to address practical challenges and ensure equitable access for all learners.

AR can enrich language learning experiences by providing contextualised, multisensory, and culturally immersive learning environments. Its applications span from vocabulary acquisition to communicative tasks, catering to language learners' diverse needs and preferences. However, the effective incorporation of AR into language learning requires careful consideration of pedagogical strategies, accessibility, and equity. Educators must adeptly adjust their instructional practices to effectively utilise the affordances of AR, while policymakers and institutions must ensure fair access to AR-enabled resources and devices for all learners. Furthermore, continual research and development efforts are imperative to explore the efficacy of AR in various language learning contexts and refine AR technologies and applications for language education.

Despite the challenges involved, the potential benefits of AR in language learning are considerable. Through enhancing engagement, promoting contextualisation, and facilitating interaction, AR promises to transform language learning into a dynamic and meaningful experience. With concerted efforts from educators, policymakers, researchers, and technology developers, AR can be pivotal in preparing learners for success in an increasingly globalised and

technologically driven world. Therefore, AR has the potential to revolutionise language learning by presenting educators and learners with new possibilities for exploration, communication, and collaboration. By embracing AR technology and addressing associated challenges, stakeholders can leverage its transformative power to enhance language learning outcomes and empower learners to thrive in diverse linguistic and cultural contexts.

Recommendations

To fully harness the potential of augmented reality (AR) in language learning, stakeholders must prioritise investment in professional development. Educators should be equipped with comprehensive training and support to integrate AR into language learning curricula proficiently. This integration should incorporate pedagogical strategies, technical competencies, and troubleshooting skills. Moreover, fostering collaborative partnerships between educators, researchers, policymakers, and technology developers is critical for co-designing AR solutions that cater to language learners' diverse needs and preferences. In addition, concerted efforts should be directed towards minimising the digital divide and ensuring equitable access to AR-enabled resources and devices for all learners, irrespective of their socioeconomic backgrounds or geographical locations. Furthermore, continuous research and development endeavours are indispensable to assess the efficacy of AR in varied language learning contexts and to refine AR technologies and applications for language education. By adhering to these recommendations, stakeholders can effectively unleash the transformative potential of AR, thereby augmenting language learning outcomes and equipping learners for success in an increasingly interconnected and digital world.

Limitations

Integrating augmented reality (AR) into language learning presents a promising prospect accompanied by several inherent limitations. Technical constraints, such as the dependency on AR-enabled devices and consistent internet connectivity, may deter specific learners, impeding access. Furthermore, the efficacy of AR in language acquisition may fluctuate depending on variables such as learner motivation, previous exposure to technology, and language proficiency. Moreover, the rapid evolution of AR technology introduces challenges related to staying abreast of updates and advancements. Effectively addressing these limitations necessitates continual research, investment in infrastructure, and conscientious consideration of learner requirements and needs.

References

Bacca, J., Baldiris, S., Fabregat, R., Graf, S., & Kinshuk. (2014). Augmented reality trends in education: A systematic review of research and applications. *Educational Technology & Society*, 17(4), 133-149.

- Chen, C., & Wang, L. (2024). Exploring the potential of augmented reality for cultural immersion in language learning. *Educational Technology Research and Development*, 72(2), 321-338.
- Dafoulas, G., & Johnson, R. (Eds.). (2023). *Augmented reality in educational settings: A new dawn for education*. Routledge.
- Dey, A., Mukherjee, M., & Bhattacharya, A. (2022). Investigating the Effectiveness of Augmented Reality in English Language Teaching: A Meta-analysis. *Educational Technology & Society*, 25(2), 1–14.
- Ellis, N. C. (1994). *Implicit and explicit learning of languages*. Academic Press.
- European Commission. (2020). *Digital Education Action Plan: Resetting Education and Training for the Digital Age*. Retrieved from https://ec.europa.eu/education/policies/digital-education-action-plan_en
- Johnson, L. (2020). Augmented reality in education: A review of current research and emerging trends. *Educational Technology Research and Development*, 68(5), 2459–2480.
- Klopfer, E., & Squire, K. (2008). Environmental detectives—The development of an augmented reality platform for environmental simulations. *Educational Technology Research and Development*, 56(2), 203–228.
- Klopfer, E., Squire, K., & Jenkins, H. (2002). Environmental detectives—the development of an augmented reality platform for environmental simulations. *Educational Technology Research and Development*, 50(2), 203-223.
- Krashen, S. D. (1985). *The input hypothesis: Issues and implications*. Longman.
- Lantolf, J. P., & Thorne, S. L. (2006). *Sociocultural theory and the genesis of second language development*. Oxford University Press.
- Lee, J. J., & Hammer, J. (2011). Gamification in education: What, how, why bother? *Academic Exchange Quarterly*, 15(2), 1-5.
- Miyashita, T., Zhao, Y., & Ishii, I. (2021). Enhancing language learning experiences through augmented reality: A literature review. *Interactive Learning Environments*, pp. 1–16.
- Smith, A., & Jones, B. (2023). Equity and augmented reality in education: Ensuring accessibility for all learners. *Journal of Educational Technology & Society*, 26(3), 183–195.
- Swain, M. (2000). The output hypothesis and beyond Mediating acquisition through collaborative dialogue. In J. P. Lantolf (Ed.), *Sociocultural theory and second language learning* (pp. 97–114). Oxford University Press.
- United Nations. (n.d.). *Goal 4: Quality Education*. Retrieved from <https://sdgs.un.org/goals/goal4>
- Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes*. Harvard University Press.
- Wang, F.-K., & Wang, C.-H. (2023). Exploring the impact of augmented reality on English as a foreign language vocabulary learning. *Interactive Learning Environments*, 31(5), 627–642.

- Wu, H.-K., Lee, S. W.-Y., Chang, H.-Y., & Liang, J.-C. (2013). Current status, opportunities and challenges of augmented reality in education. *Computers & Education*, 62, 41–49.
- Yang, J.-C., Yu, S.-C., & Yang, S.-J. H. (2010). Collaborative augmented reality learning system: A case study in a natural science course. *Computers & Education*, 55(1), 348–359.
- Yuen, S. C.-Y., Yaoyuneyong, G., & Johnson, E. (2011). Augmented reality: An overview and five directions for AR in education. *Journal of Educational Technology Development and Exchange (JETDE)*, 4(1), 119–140.



Leveraging Technology for Enhanced Content-Based Language Teaching in English Language Learning

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Abstract: Teaching English language has rapidly evolved especially in integrating technology to deliver language programs of the highest quality and to improve student outcomes. Technology is having a growing impact on language learning. It has not only transformed the way a language is taught but also made the learning of a language more engaging and meaningful for the students. Technology tools used facilitate the process of integrating technology in teaching and learning with the objective of engaging and diversifying the positive learning environment. Thus, this conceptual paper explores the potential of integrating technology into content-based language teaching (CBLT) within the context of English language learning. The objective of this paper is to review advantages and disadvantages of utilizing technology-enhanced language teaching into CBLT. This paper presents some of the examples of technology integration in CBLT which are digital content resources, language learning apps and online collaboration platforms. Through a review of advantages, disadvantages and pedagogical implications, the paper highlights the potential of technology-enhanced CBLT in promoting language proficiency, content understanding and also critical thinking skills among ESL learners.

Keywords: *Content-based Language Teaching (CBLT), English Language Learning, Language Teaching, Educational Technology, Pedagogical Implications, Technology Integration.*

Introduction

In today's rapidly changing and interconnected world, there is an enormous need for high-quality language instruction. Technology provides a variety of solutions that meet this requirement by offering a wide range of easily accessible learning experiences. It has become an essential part of language learning, with online learning websites and computer-assisted language learning programs being widely used. Technology integration refers to the incorporation of technology into routine educational tasks and school operations. Examples of this integration include electronic devices like computers, mobile phones, tablets, digital cameras, social media platforms, software programs, the Internet, and other devices (Consoli, Desiron & Cattaneo, 2023).

Content-Based Language Teaching (CBLT) in language education blends the study of second or additional languages, such as L2, with the teaching of academic subjects like mathematics, science, and history. CBLT integrates the learning of content and language in a way that enhances both components. In our globalised and digitalized world, many subjects related to CBLT are now taught through technology. The integration of technology in CBLT for English Language Teaching (ELT) contexts has accelerated significantly.

Many teachers now widely apply CBLT to ELT using technology to keep up with the latest trends. This approach enables knowledge to reach many students, including those living far away. The presence of technology integration in CBLT for ELT contexts has made it easier for students to study anytime at their convenience while integrating digital media into the educational perspective (Wei, 2023). The reliance on physical face-to-face classroom lessons has decreased significantly, with many lessons now being conducted virtually. The role of technology in education is diverse, supporting both academic and administrative functions while enhancing the effectiveness of teaching and learning processes. Learning analytics, virtual reality, and AI-integrated tools such as ChatGPT are increasingly reshaping pedagogical approaches and learner engagement (Ríos-Campos et al., 2023). Moreover, the integration of educational and learning theories into AI-enabled online learning is poised to redefine the landscape of English language learning (Ríos-Campos et al., 2023).

Literature Review

Effectiveness and Benefits of Digital Content Resources in CBLT

Various digital content resources, such as social media platforms and interactive websites, are commonly utilized in CBLT to facilitate language learning. These resources can be tailored by educators for their diverse learners' needs, thus enhancing engagement and motivation in the classroom. As today's students are well-versed in technology, their apprehension and active participation in learning can be heightened through technological adaptation in education (Ahmadi, D. M. R., 2018). For example, a small-scale study by Alakrash, H.M., et al. (2022) found that high school students in Malaysia exhibited positive attitudes and awareness regarding the efficacy of online digital platforms for English language learning and skills development. Consequently, it was found that students are more inclined to participate in their learning when

digital platforms are incorporated in the classroom activities. Furthermore, several studies have examined the impact of using digital resources, particularly on the usage of ‘Duolingo’ application onto students’ speaking accuracy and fluency (Ahmed, A. et al., 2022), vocabulary proficiency (Irawan, A., Wilson, A., & Sutrisno, S., 2020), and students’ learning engagement and motivation (Peláez-Sánchez, I. C., & Velásquez-Durán, A., 2023). The common finding is that the integration of digital content resources through Duolingo in ELT and EFL classrooms has been associated with increased active learning, engagement and motivation as these learners are provided with materials that are aligned with their interests (Ahmed, A. et al., 2022; Irawan, A., Wilson, A., & Sutrisno, S., 2020; Peláez-Sánchez, I. C., & Velásquez-Durán, A., 2023). Additionally, research indicates that the flexible use of digital content resources through Duolingo can enhance learners’ autonomy and active learning, enabling students to self-direct their own progress in terms of vocabulary learning, thus improving their motivation in language acquisition (Indrasari, H. A., Prasetyo, Y., & Putranto, H. R., 2024). In addition, Kassem, M. A. M. (2018) has found that technological integration not only positively impacts educators’ teaching practices, but also increases students’ participation in classroom activities. In his study, it was found that when technology is integrated with pedagogy and content knowledge, there are significant improvements in the students' language skills (Kassem, M. A. M., 2018). Overall, the integration of digital content resources presents a significant potential of improving students’ engagement and motivation in ELT.

Language learning apps have surged in popularity owing to their interactivity and gamified approaches, complementing traditional classroom instruction. Numerous studies have been done in finding the various benefits of incorporating digital language learning resources into English Language Teaching (ELT) settings. For example, in a study by Lampropoulos, Georgios et al. (2022), the incorporation of gamification and augmented reality (AR) in the classroom helps in achieving the pedagogical objectives through immersive learning experience in classrooms. Learning is improved in terms of students’ development of 21st century skills when students are engaged to the gamified and AR activities (Lampropoulos, Georgios et al., 2022). Language learning apps also play an important role in vocabulary acquisition and retention among ESL learners. Through repeated exposure, students can practise across varied contexts and through virtual competitions with other users (Chukwu, James, 2024). Furthermore, apps interfaces are also designed with appealing multimedia and availability of virtual communities. These features also facilitate English interaction and enhance students' engagement to their language learning (Shen, 2023). Consequently, the interactive features of apps enhance learning with immediate feedback mechanisms (Hassan & Mirza, 2021, as cited in Octaberlina, 2023). In conclusion, integrating language learning apps into ELT not only serves learners with engaging and interactive learning experiences, but also cultivates enhanced vocabulary acquisition, heightened students’ learning engagement, and immediate feedback, thus emphasising their important roles in contemporary language education.

Challenges and Considerations of Technology Integration in CBLT

Integrating technology into language teaching has become indispensable in the 21st century. From workplace communication to educational settings, technology permeates every aspect of our lives. The COVID-19 pandemic accelerated this integration, making online collaboration

tools like Zoom, Google Meet, and Microsoft Teams essential for virtual meetings and educational delivery. These platforms bridge the gap between instructors and learners, facilitating communication and collaboration. Research indicates that technology can enhance language learning outcomes by facilitating social engagement and meaning interpretation.

Students are more engaged with the use of technology in language learning, improving their learning outcomes (Bush and Terry, 1997 as cited in Syathroh, I.L., et al., 2021). Nonetheless, the integration of digital content resources and language learning apps into ELT presents several challenges. Several studies have identified considerations that shall be addressed by educators. For example, ensuring equitable access to digital content resources is one of the challenges, especially among learners from disadvantaged backgrounds (Jung, 2005, as cited in Syathroh, I.L., et al., 2021). Zainal, A.Z., et al. (2021) stated that in this issue, educators' considerations onto their students' circumstances are crucial in applying distant learning. Another concern is on the quality and authenticity of digital resources used, thus the need in advocating educators to be able to critically evaluate and select apps that are aligned with the pedagogical objectives and learners' needs (Patel, D. S., 2014, as cited in Zainuddin, Nurkhamimi., 2023). Hence, there are several challenges related to the integration of digital content resources and language learning apps in ELT. In the subsequent sections, these challenges and the significance of digital integration in education in shaping effective language teaching practices will be further discussed.

Social media has also evolved into a necessary component today. Studies have shown that social media platforms like Facebook and Instagram, as well as synchronous online communication tools like Zoom, promote language development by providing opportunities for authentic communication and collaboration. According to Muhammad, R., & Nagaletchimee, A. (2023), numerous studies suggest that different social media platforms and technological tools have made it easier for ESL students to learn English. Recent studies conducted during the pandemic have also revealed a notable rise in social media usage, leading to a high prevalence of social media addiction. (Cinelli et al., 2020; Haman, 2020; Jomezai et al., 2021). For example, social media such as Facebook, WhatsApp and Instagram are used as a medium to chat and upload photos. Therefore, it serves as a communication link between teachers and pupils. However, challenges such as poor internet connection or difficulties in developing speaking skills highlight the need for further research and pedagogical innovation.

Pedagogical Principles in Enhancing English Language Teaching and Learning

A key approach in the teaching and learning of languages is constructivism. Constructivism emphasizes active learning and knowledge construction, aligning with the idea of using technology to create authentic learning environments where students engage meaningfully with content (Kanuka & Anderson, 1999). Reviews of the literature on Facebook's effectiveness as a mediating tool for the development of writing skills in EFL were conducted in several studies (Klimova & Pikhart, 2020). Utilizing Web of Science & Scopus, the studies found that using Facebook improved writing skills (Klimova & Pikhart, 2020). Facebook was also found to be useful in the Thai setting by Ulla and Perales (2020) for speaking, comprehension, and conversation writing exercises that improved students' involvement in language tasks both within and outside of the classroom. In addition, Muhammad & Nagaletchimee (2023) found that

Instagram is also helpful among Saudi EFL students in which it helps students to engage more with the teacher. A study has also been conducted on using Zoom meetings as a synchronous online learning tool for English as a foreign language (EFL) instruction in Indonesian higher education institutions. According to the study, there are varied students' opinions of using the Zoom Meeting platform for EFL instruction. Positive opinions include a greater understanding of the content, effective communication, and participation, while negative reviews include difficulties in developing speaking skills, poor support for specific classes, and poor internet connectivity (Muhammad & Nagaletchimee, 2023).

Based on a previous study conducted by Le, M., & Tran, K. N. (2023), there are three primary forms of contact in online learning: student-content interaction, among-student engagement, and student-teacher interaction. The involvement of learners can be observed in the virtual platform's video interaction, visual hand-raise feature, microphone-assisted speech, and virtual whiteboard feature. Such features enable students to actively participate in synchronous and asynchronous learning via social media and virtual platforms. Apart from this, learning a language via online can be engaging to acquire the language skills. Students perform better as it emphasizes student-centred learning. Students can work in groups or with pairs in their own breakout rooms, making it easier for them to socialize with their peers to complete tasks or provide and receive feedback from one another. This is evident in how the class interacts as a whole (Le, M., & Tran, K. N., 2023).

Over the years, the traditional classroom has been the only method of instruction. However, the COVID-19 pandemic forced a sudden shift to online learning, thus highlighting the importance of adaptation and innovation in education. It is believed that this sudden transition may result in significant learning challenges for students, including financial difficulties and a lack of internet access (Adnan & Anwar, 2020). The teacher's or the lecturer's instruction is vital as it's believed that there shouldn't be any difference in the way of implementing educational instructions whether it's online or even face-to-face classroom. The students should also be prepared as usual to attend their online class as they will be prepared for their traditional class.

Discussion

Integration of Technology in Content-Based Language Teaching (CBLT) for English Language Learning

a. Technological Advancements in Language Teaching

Students varied in their learning needs and styles. The integration of technology in Content-Based Language Teaching (CBLT) helps educators to design their pedagogical approaches by identifying these needs. Osifo (2019) stated that learners are provided with personalised and differentiated learning that are beneficial for their learning progress. A comparative study between digital tools and traditional teaching methods by Chandana (2023) has identified the positive impacts of technology integration on learners' language acquisition and proficiency. The study found that other than improvements in students' language skills, students were more motivated and involved in their learning progress in the classroom.

In today's era, technology plays a significant role that transforms English Language Teaching (ELT). In the context of Content-Based Language Teaching (CBLT), the integration of various digital content resources in education helps to facilitate virtual learning, commonly through language learning apps and online collaboration platforms. The integration of technology in content-based language teaching is also becoming prominent in recent years due to the pandemic (Zainal, A.Z., & Zainuddin, S.Z., 2021). Furthermore, technological advancements also shifted teachers' instructional practices from traditional approaches to technology-oriented approaches (Veljkovic Michos, Nasradin, & Boskovic Markovic, 2019). The availability of technology in education also provides flexibility for learners to choose their time and location of learning (Veljkovic Michos et al., 2019).

In addition, the advancements in technology, especially Artificial Intelligence (AI), also brought changes in the educational practices today. There are better options for educators to identify their best approach to teach language skills (Rebolledo Font de la Vall and González Araya, 2022). For example, in a study by Um, H., et al. (2023), the usage of 'AI-Pengtalk' app for remote education during the Covid-19 pandemic allows teachers to evaluate their students' English proficiency levels and adjust their needs for the best pedagogical approach that fit each student. Therefore, the integration of technology in language learning enhances the effectiveness of CBLT, leading to improved learning outcomes among students.

b. *Technology Tools in CBLT: Digital Resources, Apps, and Online Platforms*

Digital content resources are widely used in content-based language teaching (CBLT). Common digital content resources utilised by educators include interactive multimedia presentations, audio-visual materials, and online platforms such as Quizizz and WordWall. For example, Quizizz is an interactive learning platform that allows teachers to create engaging learning activities for various subjects including English. In a study on the impact of gamified learning through Quizizz on EFL learners' grammar achievement by Pham (2023), Quizizz enables teachers to assess the students' language skills through gamified quizzes on grammar or vocabulary. This platform reinforces learning concepts and encourages active participation through feedback mechanisms, enriching students' language learning experience in the classroom (Pham, 2023).

With digital learning, learners are responsible of their own learning progress (Abdelhak, 2019, as cited in Azar, 2021). Besides conducting pedagogical activities in the classroom, the skills in using ICT tools are also a part of autonomous learning for students (Andriani et al., 2018, as cited in Pratiwi, Damar & Waluyo, Budi., 2023). The usage of digital resources in the classroom guides learners, especially young children, on their skills of navigating digital interfaces and working with interactive elements in the classroom. Students have the opportunity for an engaging learning experience by learning how to use the interactive learning materials, thus enhancing their autonomous learning. The learning process of integrating both language teaching objectives and content-instruction (Moustaghfir, S., et al., 2024) helps develop both educators and learners' critical thinking skills about the resourcefulness and limitations of digital integration in education (Snow, 2014; Villalobos, 2013, as cited in Sariyani, S., et al., 2022). In the context of CBLT, the alignment of educational contents with the academic subjects through digital platforms by ICT literate educators helps in fostering students' critical thinking and problem-solving skills in their

language learning (Pratiwi, D. I., & Waluyo, B., 2023). Therefore, the integration of online digital resources and subject-specific classroom learning helps in facilitating language learning (Bilalova, D. N., et al., 2020; Klimova, B., 2020 as cited in Zakirova et al., 2021).

Language learning apps are the applications designed to facilitate learners' language acquisition and skills development. With a variety of interactive activities, these apps are accessible on various digital devices, especially smartphones and computers. Users can also use them to learn at their own pace and convenience. In addition, some language learning applications are incorporated with artificial intelligence (AI) technology to enhance learning experiences. With the utilisation of algorithms and natural language processing, these applications provide personalised feedback tailored to students' language proficiency and learning styles. As a result, personalised learning experience is built through the analysis and adjustment made onto the content and pace of the lessons according to the users' needs (Chen, Zou, Xie, & Cheng, 2021, as cited in Rebolledo Font de la Vall et al., 2022). With the increasing diversity of language learning applications available today (Rodgers & Weatherby, 2021; Tao et al. 2020, as cited in Karasimos, 2022), the usage of these apps benefits learners' language acquisition in CBLT.

According to Rintaningrum (2023), one of the advantages of integrating technology in English language teaching and learning is that learners are given the opportunities to practice at their own pace through online quizzes, thus improving their basic skills in English. For example, a cross-platform study on language learning apps by Karasimos (2022) has listed 'Busuu', 'Memrise', 'Duolingo' and more as some of the language learning apps that deliver subject-specific and language-rich contents to their users. The study found that most of the language learning applications support learners through contextual and interactive language learning activities (Karasimos, 2022). Hence, the usage of applications and AI tools help to facilitate the integration of language learning and content mastery through engaging materials among users (Kessler, 2018 as cited in Rebolledo Font de la Vall et al., 2022), providing opportunities for an immersive language practice. Additionally, the immediate feedback provided enhances students' learning efficiency by allowing students to quickly identify and correct their mistakes (Rebolledo Font de la Vall et al., 2022). Real-time feedback, combined with the flexibility to learn at one's own pace, promotes self-directed and engaging language learning experiences for students using language learning apps. Therefore, educators can benefit from using language learning apps in their pedagogical approach.

c. Advantages & disadvantages of the Integration of Technology in Content-Based Language Teaching (CBLT) for English Language Learning

The field of English Language Teaching (ELT) has greatly benefited from the integration of digital content resources, which provide learners with a wide range of genuine language materials. These materials are extremely beneficial for teaching content, as they allow learners to interact with a wide range of themes and situations, which helps them improve their language skills and cultural understanding. Technological advancements have eliminated geographical barriers and greatly expanded the availability of information and resources, therefore revolutionising language learning and instruction (Gilakjani, 2017).

Apps like Duolingo, Babbel, and Rosetta Stone are notable improvements in language learning. They provide organised instructional material through captivating and interactive platforms. These applications employ gamification to enhance motivation and utilise educational tactics like spaced repetition to improve recall. They provide customised educational experiences that adapt to the learner's proficiency, enabling personalised advancement (Gilakjani, 2017). Collaboration platforms represent the transition towards interactive and communicative language practice, enabling learners to communicate regardless of their geographical location. Platforms such as Google Classroom, Microsoft Teams, and Zoom have proven essential in facilitating this approach, enabling collaboration on assignments, debates, and project work. (Fu & Wang, 2020)

The new generation of “digital natives” becomes the force that pushes teachers to stretch beyond their comfort zone with regard to using ICT in their classrooms (Gao et al., 2009). It is beneficial that teachers perceive technology in education as part of the pedagogical process. The development of technology in this era has brought many benefits to the teaching and learning process. The first advantage is that teachers can create or access any available digital content resources online to assist students’ learning. Digital content resources have changed the way students learn. By using digital learning resources, teachers can offer personalised learning to students and boost their engagement in the learning activities (Abid Haleem et al., 2022).

There are many benefits of using digital learning resources in the classroom. First and foremost, the learning resources can be tailored to students’ abilities, allowing them to have learning materials that suit their level and needs. There are three types of students’ learning abilities namely advanced, moderate and weak. It is the teachers’ role to cater to students’ readiness and interest in learning. Advanced students may not need teachers’ guidance most of the time. However, teachers must ensure that they do not become complacent. This type of student should still be given regular attention and assessment so that they are always motivated to learn. Teachers should also focus on teaching them new skills as well as improving their existing skills. Moderate students may need more attention in the preparation of their learning materials. Teachers must work hard to engage these students with the learning activities as well as provide them with relevant skills and knowledge based on their level. Weak students may need the most attention in the preparation of their learning materials. The materials should fit their level to avoid lack of motivation and to improve their confidence in completing the tasks. The engaging and interactive elements in digital resources make learning fun and interesting for the students. Personalised learning is very crucial as Malini Ganapathy & Gooi (2016) also mentioned in their journal article that the level of understanding differs from one student to the other. The students expect the teaching approaches to vary as well, which will help them feel confident and work towards learning the language with a positive attitude and stay motivated towards learning. Secondly, digital learning resources are accessible anytime and anywhere. Students are able to access resources and information to learn further about a topic or to practise some core skills at home.

Technology can also encourage students to be independent learners where they can learn at their own speed, review topics and skip ahead where necessary. In these modern days, students have to be more proactive in order to excel in their studies. Learning in school alone is not sufficient. They have to make use of the other learning resources that they can access to improve themselves occasionally and technology is a very handy way for them to achieve that. Last but not least,

digital learning resources are more environmentally friendly because they reduce the need for printed books or worksheets. In Malaysian context, technology is not widely used in schools especially in the rural and suburban areas due to lack of facilities (Nurhuda Syed, 2018). Therefore, teachers have to print out all the learning materials for the students which leads to paper waste. Actions should be taken in order to cater this issue. The presence of digital resources subjects to less paper used and thus can save the use of paper and prevent paper waste (Shiv Ratan Agrawal, 2020). Learning using technology can also equip students with computer skills which are vital for their survival in the modern world which demands high tech skills from workers.

The second advantage is the integration of online learning applications in the teaching and learning process. There are many online applications related to teaching and learning such as Kahoot! And Quizizz. Games have many advantages for both language teachers and its learners. The main purpose of gamification in education is to increase students' engagement through the use of student-led learning and immediate feedback. It supports learning when students are involved in the games and have fun without noticing that they are learning the language (Gozcu, 2016). Learning English can be very effective if students find the lesson to be fun and filled with excitement. It makes the learning more meaningful and thus, they tend to learn better. The use of games in teaching English also helps to reduce boredom as well as increase students' motivation in learning (Lusi Dyah Ayu, 2018). Games such as kinetic games can provide refreshment in the class, especially when students are getting tired and find it difficult to concentrate (Muhammad Waqar & Mohammad Iqbal, 2015). Young learners tend to have short attention spans. The use of the traditional chalk-and-talk method by the teacher in the classroom will lead them to lose focus after a few minutes of the learning session. Therefore, it is very crucial to integrate games in the teaching and learning session to arouse their interest in learning. This does not only apply to young learners, but also to adult learners. People tend to get bored if they have to sit down and listen to the teacher giving inputs for hours without having any activities done in between as refreshment. In tackling this issue, the integration of games can be very effective. A game might be time-consuming to prepare. However, it is worth it considering the benefits that it offers to students especially in learning a language. In a nutshell, in these modern days, students are more interested in learning activities that allow their active involvement. It is not about listening to the teachers and doing exercises anymore like how teachers used to do in the old days. Pertaining to this shift, the use of games can be really effective in catering to the students' needs.

The final advantage is that the use of technology can also promote online collaboration among students. Online collaboration makes it possible for students to work together even when apart. Good collaboration can generate inventive ideas and help students learn from one another. It also enables better communication and sharing of knowledge among students and thus makes it easier for them to inspire each other. Online collaboration tools are becoming more popular in nearly all settings, including education (Ivy, 2019). There are many benefits of online collaboration tools, which is why teachers should consider using them in their classroom. It enables students to collaborate effectively. For instance, team projects can be tough because sometimes not every student does their part as instructed, leaving others to do more work. However, with online collaboration tools, several students can work on a project together at the same time and the tools keep track of who does what. This way, everyone has to do their part, which helps teachers see

who is really putting in effort when they grade the project. Furthermore, it makes it easier for everyone to work together while the teacher keeps an eye on things. Most students today are already familiar with the digital environment and prefer for it to be incorporated in the teaching and learning process. They have grown up with digital technology and use it for lots of things every day. They are comfortable with technology and often like using it. Therefore, it makes sense for schools to use online collaboration tools because that is what students expect now and in the future.

Another benefit of incorporating online collaboration is the centrally located notes and assignments. Online collaboration software for education usually offers a central hub where students can find all their learning materials such as notes and online worksheets. Students do not have to worry about being absent from school. They can just log in and check the notes and exercises for any missed class. This feature makes sure students have a single place to find everything they need. It is evident that the incorporation of technology can enhance content-based learning and greatly help students in learning better. Therefore, teachers should try to shift their teaching method by incorporating technology to help students to learn effectively.

Besides that, another disadvantage of the said tech integration is that the presence of integration technology has replaced some of the teachers in the classroom. These days, the presence of interactive learning sessions is so successful that a student doesn't even need a teacher to assist them just with the presence of the software or app that can take on that role. Integration technology has effectively replaced certain teachers in the classroom, since interactive learning sessions have become progressively more successful. Nevertheless, the teacher's position is not completely eliminated, but rather altered. Although students may not always require direct intervention from a teacher because of the availability of software or applications, the teacher's role remains crucial in crafting impactful learning experiences, offering direction, and cultivating meaningful interactions. (Sujatha & Bhuvaneshwari 2020) With the help of technology, teachers can now play more of an observational role rather than an active one. New technology automates learning while adapting to students' changing needs making it more seamless than before thus neglecting the teaching efforts of the teachers themselves.

Last but not least, another disadvantage of the said tech integration is that it causes privacy concerns for certain students. Every day, when lessons are being integrated technologically, the endangering of students' identities is always seen as a major concern. Even with advanced privacy filters installed on computers, mobile devices, operating systems, and apps that reduce the likelihood of identity theft, there is no way to guarantee that all risks are eliminated unless the equipment is never connected to the internet (Nguyen, 2019). Numerous advantages of integrating technology into the classroom are lost if the implementation of change has implied significantly.

Pedagogical Implications of the Integration of Technology into English Language Teaching (ELT)

In recent years, the integration of technology into education has become increasingly prevalent, offering both opportunities and challenges for English Language Teaching (ELT) practitioners.

This discussion aims to delve into the pedagogical implications of incorporating technology into ELT practices, examining its potential benefits, drawbacks, and best practices. The dependence of technology in teaching and learning has more positive sides other than the negatives as 21st century learning has become a norm in teachers to implement the tools and leveraging the effectiveness of teaching and learning. According to (Chappelle, 2017a) in (dos Santos, L. S., Becker, K., Muhammad, A., Hegelheimer, V., & Kochem, T., 2018) reiterate the symbiosis of technology and its connections in ELT by discussing technology and learning, technology and language and technology and English. The interconnections integrated between technology shows the effectiveness of technology in teaching and learning English.

The technology reliant on ELT has affected the quality of teaching and learning such as its sustained engagement. Interactive multimedia tools, such as educational apps, videos, and interactive whiteboards, can captivate students' attention and make learning more engaging. Studies have been conducted on Kuwait students on the usage of interactive technology among the students has significantly improved their learning motivation towards the second language which is English. Feedbacks like the apps and learning tools are mostly in English has driven the teachers and students to learn the language involuntarily (Maha Bader Alghasab, Anaam Alfadley & Amel M. Aladwani, 2020). Next, the technology integration is also featured in personal learning as there are many learning platforms that can be tailored to the students' needs and their levels (Novoa-Echaurren, 2024).

Other than that, adaptation of technology into ELT has provided the access to authentic resources such as digital platforms and online resources offer students access to authentic English materials, including articles, videos, and podcasts, enriching their language learning experience (Gameil, Azza & Al Abdullatif, Ahlam, 2023). In Malaysia, the Education Ministry also provides a digital learning platform called DELIMa 2.0 as it flourishes with recent and up-to-date learning platforms and resources for both learners and educators needs parallel to the country's vision on the (Malaysian Ministry of Education, 2013). Moreover, access to authentic resources in integrating ELT also provide digital platforms and online resources offer students access to authentic English materials, including articles, videos, and podcasts, enriching their language learning experience (Luh Wina Sari Merta, Ni Made Ratminingsih & I Gede Budasi, 2023). Besides, collaborative learning in integrating technology in ELT has made virtual collaboration tools and online discussion forums facilitate collaborative learning experiences, allowing students to engage in meaningful interactions with peers both inside and outside the classroom (Dillenbourg, 2016). Subsequently, the acquisition of technology in teaching and learning English provides more feedback and assessment. Learning analytics and automated assessment tools enable teachers to provide timely feedback on students' performance and track their progress more effectively (Kong, 2021).

Whilst, there are some implications and considerations needed to evaluate related to technical issues. Despite advancements in technology, technical issues such as connectivity issues and software compatibility remain prevalent, posing challenges for seamless integration into teaching practices (Alkamel, M. A. A., & Chouthaiwale, S. S., 2018). Next, digital equity. Socioeconomic disparities in access to technology and internet connectivity may exacerbate inequalities in learning opportunities, widening the digital divide among students (Fischer, C & et al, 2020).

Furthermore, the digital distraction in technology integration in ELT. The plentiful presence of digital devices in the classroom can lead to distractions and off-task behaviour, necessitating strategies to mitigate distractions and promote focused learning (May and Elder (2018). Whereas, the implications on integrating technology in ELT in pedagogical adaptation may have some impacts. Teachers may encounter resistance or lack of familiarity with technology, requiring ongoing professional development and support to effectively integrate technology into their teaching practices (Spante, M., Hashemi, S. S., Lundin, M., Algers, A., & Wang, S., 2018). Indeed, the significance to inclusion of technology in ELT has the effect on the ethical considerations. The use of educational technology raises ethical concerns regarding data privacy, digital surveillance, and algorithmic bias, underscoring the importance of ethical considerations in technology integration (Williamson, 2021).

The best practices for technology integration into English Learning Teaching (ELT) listed as pedagogical alignment. Technology should be integrated strategically to align with pedagogical goals and enhance learning outcomes, rather than as a mere add-on (Chatterjee, S. (2022). Next, teacher professional development is also one example of integration best practices. Continuous professional development programs and peer learning communities can support teachers in acquiring the skills and confidence needed to effectively integrate technology into their teaching practices (dos Santos, L. S., Becker, K., Muhammad, A., Hegelheimer, V., & Kochem, T., 2018). Other than that, the integration also promotes student-centred approaches. Adopting student-centred approaches that prioritise active learning, collaboration, and creativity can maximise the benefits of technology integration and foster student autonomy (Reinders et al., 2020). Meanwhile, the impartial access to integrating technology in ELT also ensures equitable access to technology through initiatives such as device loan programs and community partnerships that can mitigate disparities in access and promote inclusive learning environments such as a study by (Nieves, K.,2021) to students with disabilities to promote technology in ELT. As a rule, the interaction may have an effect on the ethical guidelines which are establishing clear ethical guidelines and protocols for the responsible use of educational technology can safeguard students' privacy and rights while promoting digital citizenship and responsible use (Crompton, H.,2023).

The integration of technology into ELT offers ludicrous opportunities to enhance teaching and learning experiences, but it also presents complex challenges that require thoughtful consideration and strategic planning. By embracing pedagogically sound practices, providing ongoing support for teachers, and addressing issues of equity and ethics, educators can harness the transformative potential of technology to create dynamic and inclusive learning environments that empower students to thrive in the digital age.

Conclusion

In a nutshell, the impact of technology on education has been profound, bringing about positive changes to students' learning process. Firstly, it caters to the diverse learning styles of students by offering a variety of tools and resources. Students can choose any learning methods that suit them such as watching videos, playing educational games or reading online. Technology allows

students to engage with learning materials in ways that suit their preferences and abilities. Secondly, technology allows easier and unlimited access to information and knowledge. With the internet at their fingertips, students can explore a vast array of resources, from textbooks and articles to interactive simulations. This accessibility not only enriches their learning experiences but also fosters a culture of curiosity and lifelong learning. Moreover, technology facilitates collaboration and communication among students and teachers. Online platforms and tools enable seamless interaction, allowing students to work together on projects, exchange ideas and receive feedback, regardless of their physical location. This fosters the development of essential teamwork and communication skills vital for success in the modern world. Technology also has the power to make learning engaging and enjoyable. Gamified learning platforms, interactive tutorials and multimedia presentations capture students' interest and motivation, making learning more interactive. The incorporation of elements of play and exploration also allows technology to cultivate a positive attitude towards learning and encourage students to take an active role in their education. As for educators, technology serves as a valuable aid in lesson planning, assessment and data analysis. Online collaboration software allows teachers to organise learning materials such as notes and exercises, create assessments and track students' progress more efficiently. Furthermore, data analytics tools provide insights into students' performance trends, enabling teachers to tailor their teaching strategies to meet the diverse needs of their students.

However, making sure students can understand technology and learn to use it safely is really important. Teaching students how to navigate the digital landscape responsibly and critically evaluate information is essential in an era dominated by information overload and misinformation. In conclusion, technology has revolutionised education, making it more accessible, interactive and effective. Efforts must be made to bridge the digital divide and ensure that all students have access to the necessary technology and internet connectivity. If technology is used carefully and widely, classrooms where everyone feels included and students can do their best can be produced. That way, students will be ready for whatever comes their way in the future.

References

- Abid, H., Javaid, M., Qadri, M. A., & Rajiv, S. (2022). Understanding the role of digital technologies in education: A review. *Sustainable Operations and Computers*, 3(2), 275-285.
- Adnan, M., & Anwar, K. (2020). Online learning amid the COVID-19 pandemic: Students' perspectives. *Journal of Pedagogical Sociology and Psychology*, 2(1), 45-51. <https://doi.org/10.33902/JPSP.2020261309>
- Agrawal, S. R. (2020). Adoption of ICT-based education system to protect environment and improve present education system. *International Journal of Environment and Waste Management*, 26(2), 41-56.
- Alakrash, H. M., Razak, N. A., & Krish, P. (2022). The application of digital platforms in learning English language. *International Journal of Information and Education Technology*.

- Alkamel, M. A. A., & Chouthaiwale, S. S. (2018). The use of ICT tools in English language teaching and learning: A literature review. *Journal of English Language and Literature (JOELL)*, 5(2), 29-33.
- Anggoro, K. J., & Pratiwi, D. I. (2023). University students' perceptions of interactive response system in an English language course: A case of "Pear Deck". *Research in Learning Technology*, 31.
- Azar, A. S., & Tan, N. H. (2020). The application of ICT techs (mobile-assisted language learning, gamification, and virtual reality) in teaching English for secondary school students in Malaysia during COVID-19 pandemic. *Universal Journal of Educational Research*, 8, 55-63.
- Bussi eres, E.-L., St-Germain, A., Dub e, M., & Richard, M.-C. (2017). Efficacit e et efficacit e des programmes de transition   la vie adulte: Une revue syst ematique [Effectiveness and efficiency of adult transition programs: A systematic review]. *Canadian Psychology/Psychologie Canadienne*, 58(1), 354-365. <https://doi.org/10.1037/cap0000104>
- Chandana, U. S. P. (2023). The impact of technology-enhanced language learning on English proficiency: A comparative study of digital tools and traditional methods. *International Journal of Environment Agriculture and Biotechnology*, 8(6), 136-138. <https://doi.org/10.22161/ijeab.86.14>
- Chatterjee, S. (2022). Synchronous environment and strategies: Supporting online learning. In E. Langran (Ed.), *Proceedings of Society for Information Technology & Teacher Education International Conference* (pp. 1800-1803). Association for the Advancement of Computing in Education (AACE). Retrieved May 6, 2024, from <https://www.learntechlib.org/primary/p/220953/>
- Chowdhury, D. M., Dixon, D. L., Kuo, D. L., Donaldson, D. J., Eslami, D. Z., Viruru, D. R., & Luo, D. W. (2024). Digital game-based language learning for vocabulary development. *Computers and Education Open*.
- Cinelli, M., Quattrociocchi, W., Galeazzi, A., Valensise, C. M., Brugnoli, E., Schmidt, A. L., Zola, P., Zollo, F., & Scala, A. (2020). The COVID-19 social media infodemic. *Scientific Reports*. <https://doi.org/10.1038/s41598-020-73510-5>
- Consoli, T., Desiron, J., & Cattaneo, A. (2023). What is "technology integration" and how is it measured in K-12 education? A systematic review of survey instruments from 2010 to 2021. <https://www.sciencedirect.com/science/article/pii/S0360131523000192>
- Crompton, H. (2023). Evidence of the ISTE standards for educators leading to learning gains. *Journal of Digital Learning in Teacher Education*, 39(4), 201-219. <https://doi.org/10.1080/21532974.2023.2244089>
- Dillenbourg, P. (2016). The evolution of research on digital education. *International Journal of Artificial Intelligence in Education*, 26(2), 544-560. <https://doi.org/10.1007/s40593-016-0106-z>

- dos Santos, L. S., Becker, K., Muhammad, A., Hegelheimer, V., & Kochem, T. (2018). Technology integration and pedagogical practice in English language teaching: Lessons learnt. *The European Journal of Applied Linguistics and TEFL*, 7(2), 25+. <https://link.gale.com/apps/doc/A593430599/AONE?u=anon~aacc3b09&sid=googleScholar&xid=1fab8f4>
- Elena Zakirova, E., Kulikova, E., & Medvedeva, E. (2021). Digital educational resources for English language studies: Teachers and learners' attitude. *SHS Web of Conferences*, 106, 03016. <https://doi.org/10.1051/shsconf/202110603016>
- Fischer, C., Pardos, Z. A., Baker, R. S., Williams, J. J., Smyth, P., Yu, R., Slater, S., Baker, R., & Warschauer, M. (2020). Mining big data in education: Affordances and challenges. *Review of Research in Education*, 44(1), 130-160. <https://doi.org/10.3102/0091732X20903304>
- Fu, H., & Wang, H. (2020). Developing college students' English autonomous learning through WeChat public platform. 11, 942-952.
- Gameil, A., & Al Abdullatif, A. (2023). Using digital learning platforms to enhance the instructional design competencies and learning engagement of preservice teachers. *Education Sciences*, 13, 334. <https://doi.org/10.3390/educsci13040334>
- Ganapathy, M., & Gooi, C. Y. (2016). Attitude and motivation of students towards learning English as a second language in a secondary school in Penang. *Malaysian Journal of Language and Linguistics*, 5(2), 39-56.
- Gao, P., & Choy, D. (2009). Developing a better understanding of technology-based pedagogy. *Australasian Journal of Educational Technology*, 25(5), 714-730.
- Gilakjani, A. (n.d.). A review of the literature on the integration of technology into the learning and teaching of English language skills. 7(5), 95.
- Gozcu, E. (2016). The importance of using games in EFL classrooms. *Cypriot Journal of Educational Science*, 11(3), 126-135.
- Tarun, I. M. (2019). The effectiveness of a customized online collaboration tool for teaching and learning. *Journal of Information Technology Education: Research*, 18(4), 275-292.
- Karasimos, A. (2022). The battle of language learning apps: A cross-platform overview. *Research Papers in Language Teaching and Learning*, 12, 150-168.
- Klimova, B., & Pikhart, M. (2020). Cognitive and applied linguistics aspects of using social media: The impact of the use of Facebook on developing writing skills in learning English as a foreign language. *European Journal of Investigation in Health, Psychology and Education*, 10 (1), 110-118. <https://doi.org/10.3390/ejihpe10010010>
- Kong, Y. (2021). The role of experiential learning on students' motivation and classroom engagement. *Frontiers in Psychology*, 12. <https://doi.org/10.3389/fpsyg.2021.771272>

- Le, M., & Tran, K. N. (2023). Synchronous virtual learning students' experience and the prospect in Vietnam. *Turkish Online Journal of Distance Education*, 24(3), 163-177. <https://doi.org/10.17718/tojde.1099129>
- Lusi, D. A. (2018). The use of games in teaching English. *Liberal Arts and Social Sciences International Journal*, 13(2), 12-23.
- Mandasari, B., Rido, A., & Kuswoyo, H. (2022). Using Zoom Meeting platform as a synchronous online learning tool in EFL classroom at Indonesia tertiary level: A literature review. 19th International Conference on Cognition and Exploratory Learning in Digital Age (CELDA 2022). https://doi.org/10.33965/celda2022_202207c037
- May, K. E., & Elder, A. D. (2018). Efficient, helpful, or distracting? A literature review of media multitasking in relation to academic performance. *International Journal of Educational Technology in Higher Education*, 15(1). <https://doi.org/10.1186/s41239-018-0096-z>
- Osifo, A. (2019). Improving collaboration in blended learning environments through differentiated activities and mobile-assisted language learning tools. *Proceedings of the 15th International Conference on Mobile Learning 2019*.
- Prasad Adhikary, R., & Tribhuwan University, Kathmandu (Nepal), M.M. Campus, Nepalgunj, Nepal. (2020). Effectiveness of content-based instruction in teaching reading. *Theory and Practice in Language Studies*, 10(5), 10. <http://dx.doi.org/10.17507/tpls.1005.04>
- Pratiwi, D., & Waluyo, B. (2023). Autonomous learning and the use of digital technologies in online English classrooms in higher education. *Contemporary Educational Technology*, 15, 423-1309. <https://doi.org/10.30935/cedtech/13094>
- Rebolledo Font de la Vall, R., & Gonzalez Araya, F. (2023). Exploring the benefits and challenges of AI-language learning tools. *International Journal of Social Sciences and Humanities Invention*, 10, 7569-7576. <https://doi.org/10.18535/ijsshi/v10i01.02>
- Rios-Campos, C., Mendoza Canova, E. S., Aguirre Zaquinaula, I. R., Aguirre Zaquinaula, H. E., Castro Vargas, D. J., Suarez Pena, W., & Tapia Idrogo, C. E. (2023). Artificial intelligence and education. *Education*, 4, 641-655.
- Spante, M., Hashemi, S. S., Lundin, M., Algers, A., & Wang, S. (2018). Digital competence and digital literacy in higher education research: Systematic review of concept use. *Cogent Education*, 5(1). <https://doi.org/10.1080/2331186X.2018.1519143>
- Sujatha, & Bhuvaneshwari, P. (2020). Face to face vs. online instruction: An analysis. 58(2), 5948-5953.
- Syathroh, I. L., Kareviati, E., Lestari, A., & Fitria, N. (2021). Exploring the potentials of technology integration for teaching language skills: A literature review. *PROJECT (Professional Journal of English Education)*.
- The integration of technology in English language teaching to stimulate students' critical thinking. *UNNES Journal*. <http://journal.unnes.ac.id/nju/index.php/lc>

- Ulla, M. B., & Perales, W. F. (2020). The adoption of Facebook as a virtual class whiteboard: Promoting EFL students' engagement in language tasks. *TESOL Journal*, 11(3). <https://doi.org/10.1002/tesj.515>
- Um, H., Kim, H., Choi, D., et al. (2023). An AI-based English education platform during the COVID-19 pandemic. *Universal Access in the Information Society*. <https://doi.org/10.1007/s10209-023-01046-2>
- Veljkovic Michos, M., Nasradin, K., & Boskovic Markovic, V. (2019). Traditional language teaching versus ICT oriented classroom. In *Proceedings of the International Scientific Conference Sinteza 2019* (pp. 627-632). <https://doi.org/10.15308/Sinteza-2019-627-632>
- Wei, Z. (2023). Navigating digital learning landscapes: Unveiling the interplay between learning behaviors, digital literacy, and educational outcomes. Retrieved from <https://link.springer.com/article/10.1007/s13132-023-01522-3>
- Williamson, B. (2021). Making markets through digital platforms: Pearson, edu-business, and the evaluation of higher education. *Critical Studies in Education*, 62(1), 50-66.
- Zainal, Azlin & Zainuddin, Siti Zaidah. (2021). Malaysian English Language Teachers' Agency in Using Digital Technologies During the Pandemic: A Narrative Inquiry. *Íkala Revista de Lenguaje y Cultura*. 26. 587-602. 10.17533/udea.ikala.v26n3a07.



Bridging Language Gaps: A Review on the Lacks, Needs and Wants of STEM Students in English Language Learning

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Abstract: English language proficiency is increasingly crucial for success in the fields of Science, Technology, Engineering, and Mathematics (STEM). However, in recent years, STEM students have faced unique challenges in acquiring and mastering English due to their disciplines' specialised vocabulary and technical nature. Hence, this paper aims to review STEM students' English language learning challenges, emphasising the lack, need, and want in their language acquisition journey. Examining lacks, such as deficiencies in STEM-specific vocabulary, academic writing skills, and oral communication proficiency, reveals the fundamental areas requiring attention in language learning initiatives for STEM students. Moreover, recognising the need for targeted vocabulary instruction, academic writing support, and speaking practice opportunities highlights actionable steps towards improving English proficiency among STEM cohorts. Additionally, by exploring the wants expressed by STEM students, including desires for interactive learning tools, peer collaboration, and contextualised language learning experiences, this paper underscores the importance of incorporating student preferences and aspirations into language education strategies. It is hoped that this review could provide immediate pedagogical interventions to underscore the significance of integrated language and content instruction. Furthermore, future research endeavours could focus on evaluating the effectiveness of proposed strategies and exploring innovative approaches to language learning in STEM contexts.

Keywords: *English language learning, lacks, needs, STEM, wants.*

Introduction

English language proficiency is increasingly crucial for success in the fields of Science, Technology, Engineering, and Mathematics (STEM) (Oppenheimer et al., 2020). The global nature of STEM disciplines means that English, often considered the lingua franca of science and technology, is essential for communication, collaboration, and dissemination of research (Luczaj et al., 2022). However, STEM students often face unique challenges in acquiring and mastering English due to the specialized

vocabulary and technical nature inherent in their fields. This paper aims to review the English language learning challenges faced by STEM students, emphasizing the lacks, needs, and wants in their language acquisition journey.

STEM students often struggle with English language proficiency, which can impede their academic and professional progress. According to Kan (2021), high-frequency spoken vocabulary in STEM classrooms significantly overlaps with general oral vocabulary, providing a robust foundation for understanding and participating in STEM discussions. However, mastering the specialised vocabulary of STEM fields remains a significant hurdle. Wei (2021) highlights that academic vocabulary is strongly related to academic achievement and is critical for content learning and classroom interactions. Thus, addressing the language deficiencies that STEM students encounter is imperative for their success.

This study aims to identify and review the specific English language learning challenges faced by STEM students, focusing on the lacks, needs, and wants in their educational experiences. By examining the deficiencies in STEM-specific vocabulary, academic writing skills, and oral communication proficiency, this paper seeks to uncover the fundamental areas requiring attention in language learning initiatives for STEM students. Moreover, the study will highlight the need for targeted vocabulary instruction, academic writing support, and speaking practice opportunities, providing actionable steps towards improving English proficiency among STEM cohorts. Finally, the paper will explore the wants expressed by STEM students, such as desires for interactive learning tools, peer collaboration, and contextualised language learning experiences, emphasising the importance of incorporating student preferences into language education strategies.

Literature Review

The Lacks Among STEM Students

a. Deficiencies in STEM-specific vocabulary

Vocabulary is the basis of all languages and is a significant part of language learning for STEM. It is the building block in expressing thoughts, sharing information, and building relationships. A wider vocabulary supports the development of all four language skills and is a stepping stone to higher levels of language fluency (Thompson, 2024). Balqis (2018) asserts that vocabulary is an essential component in learning a second or foreign language. Thus, vocabulary learning is a basic step for learners. As widely researched, vocabulary size is closely related to second language attainment. Vocabulary, as in content-specific words, is a vital competency in STEM whereby the students should be able to use vocabulary accurately and effectively.

However, low vocabulary proficiency is an issue among most English speakers. Learners possibly consider vocabulary as a challenging aspect of language learning and encounter difficulty with vocabulary-based STEM tasks (Al Qunaveer, 2021). Most learners lack vocabulary, especially in oral and written, affecting their effectiveness in communication (Halik & Jayasundara, 2021). STEM learners who lack vocabulary can neither express their concepts fluently nor understand the books written in English well (Balqis, 2018). As a result, it leads to communicative barriers among English as a Foreign Language (EFL) and English as a Second Language (ESL) speakers as they struggle to use the language due to insufficient vocabulary (Halik & Nusrath, 2020). Since larger structures like sentences, paragraphs, and entire texts are built from smaller units of meaning called words, students need an adequate vocabulary to understand others or express themselves clearly (Firda et al., 2021). Therefore, vocabulary learning is a prerequisite for ESL or EFL learners.

The power of language, especially in the classroom, convicts that a thoughtful approach to vocabulary learning is critical. Nevertheless, no one strategy fits all students to master the vocabulary they might need to succeed in STEM-related fields. Thompson (2024) identified three common science vocabulary pitfalls. Educators often assume mastery of vocabulary equals mastery of concepts, try to teach more words than are needed, and start with the vocabulary but not move much beyond. Instead, educators should differentiate the use of vocabulary from mastery of STEM concepts, recognise that not all vocabulary words are equal, and teach vocabulary in context. Traditional methods, such as flashcards and rote memorisation, while offering a foundation for vocabulary retention, are often inadequate in enabling vocabulary applications (Fengyu, 2023). Therefore, this implies a need for a sensible approach to language teaching that integrates traditional and modern methods.

b. Academic Writing Skills

Writing is one of the four fundamental language skills for ESL or EFL. Valdés (2019) defines academic writing as any formal educational writing, specifically reports, research, studies, theses, and others. In university settings, writing is one of the primary ways to demonstrate knowledge and understanding, and written assignments are one of the key ways students are evaluated (Therova, 2022). Academic writing requires a standard writing style for the assignment to be completed based on evidence-based arguments, exact word choice, logical arrangement, and impersonal tone (Perry, 2020). In the upcoming years, the demand for STEM careers will keep increasing. According to IDTech, STEM jobs are projected to grow by 13% between 2017 and 2027, compared to only 9% for non-STEM careers (Futurum, 2021). STEM students often take subjects connected to the arts and writing lightly. Nonetheless, written communication is a core ability vital for the success of any career.

Çelik, (2020) revealed that graduate students in higher-level education faced an ongoing concern about the lack of writing skills that hinder their advancement in their academic careers. Meanwhile, Phan et al. (2022) discovered the five main difficulties in writing: background knowledge, vocabulary knowledge, grammar sentence structure, idea arrangement, and orthography (punctuation, pronunciation, contractions). Students consider writing to be challenging and burdensome for them due to limited vocabulary knowledge (Sreejak & Thanavanasate, 2023) and also writing anxiety in line with the arguments by Sa'adah and Ali (2022) that ESL students potentially experience writing anxiety in academic writing as it requires all vital yet complex elements, such as vocabulary knowledge.

Effective written and oral communication skills are vital for a fruitful career in any STEM field, and hence, students should gain these skills from their STEM education. Yet, typical programmes have little, if any, formal instruction in scientific writing built into their curricula, and graduate students feel ill-prepared for the scientific writing that is a fundamental part of their programme requirements (Grady et al., 2022; Hawari et al., 2021). Even though the writing skills of some students may be arguably good to a certain extent, they lack sufficient vocabulary to expand their writing skills (Pelger, 2022). STEM students often disregard writing, assuming that they know how to write. However, professional writing is different from essays and research papers (Lang et al., 2022).

c. Oral Communication

Along with critical thinking, collaboration and creativity, communication is one of the four Cs of STEM fluency, a 21st-century skill to prepare students for the globalising STEM workplace (Owens & Hite, 2022). Effective oral communication is the flow of speech from which collaboration stems (Prier, n.d.). Without proper communication, STEM-related research and technological advancements cannot be shared adequately with the public (Pressbooks, 2021). The learning outcomes in many curricula reflect the importance of learning and teaching communication (Pelger, 2022). This includes a critical

understanding of how the organisation and technical detail in an explanation for effective STEM communication. However, little emphasis is given to improving the students' speaking ability at schools. In STEM subjects, communication skill is undervalued and not highly regarded.

Willoughby et al. (2018) emphasise that institutions and universities pay minimal focus on the significance of oral communication. Not all students can conceptualise an idea when they do not comprehend most of the words said to them. Most students fail to master English, and more attention is directed to studying other subjects for university admission (Halik & Nusrath, 2020). Prier (n.d.) stresses the lack of communication education in STEM-related fields and majors. Besides, Salera et al. (2020) claim that media influence learners as they allot most of their time to social networking platforms, such as Facebook or Instagram, where English language proficiency is overlooked because slang and colloquial words are trending. Understanding these hurdles requires that educators grapple with the specific challenges of communicating to novice students.

According to Nihei et al. (2021), the main speaking struggles that students encounter are (1) stuttering, (2) mental block while reciting, (3) pronunciation, and (4) translation. These difficulties are attributed to (1) nervousness, (2) low level of confidence, and (3) fear of being judged by others. Halik and Nusrath (2020) observed low vocabulary proficiency to be the primary problem in students' speaking performance. When the students engage in speaking activities, they cannot speak fluently with proper pronunciation, and they do not use the relevant words in their spoken discourse based on the context, leading to a barrier in oral skills. Prier (n.d.) labels it as a 'cognitive gap', or in other words, an inability to communicate or explain a topic to an audience with a different level of education as the speaker. Subject-specific vocabulary, or jargon, impairs students' ability to process scientific information, and this impedes communication (Bullock et al., 2019).

The Needs Among STEM Students

a. Recognising Targeted Vocabulary

Vocabulary recognition is essential for STEM (Science, Technology, Engineering, and Mathematics) students, particularly those learning English as an additional language. Mastery of targeted vocabulary enables these students to understand and engage with their subject matter effectively, facilitating academic success and professional development.

Vocabulary knowledge is a foundational element of reading comprehension, particularly in technical subjects. Research shows that a robust vocabulary facilitates a better understanding of complex texts, which is crucial for STEM students who frequently engage with highly specialised and technical material (Kilag et al., 2024). Heard et al. (2020) added by stating that recognising targeted vocabulary is integral to the development of critical thinking and problem-solving skills. STEM disciplines often involve intricate problem-solving and the application of theoretical knowledge to practical scenarios (Tan et al., 2023). Copur-Gencturk and Doleck (2021) stated that effective vocabulary knowledge allows students to interpret problems accurately, engage in critical analysis, and devise appropriate solutions. The precise use of technical terms is necessary for articulating and solving complex problems encountered in STEM coursework and research (Wang et al., 2024)

Proficiency in targeted vocabulary enhances communication and collaboration among STEM students. According to Kilag et al. (2024), clear and precise communication is vital in STEM fields, where collaborative projects and interdisciplinary research are common. The ability to use and understand specific terminology ensures that students can effectively share ideas, interpret peer contributions, and

work cohesively in team settings (Petkova et al., 2021). Tambunan et al. (2024) highlighted that this is particularly important in global and multicultural educational environments where English serves as the lingua franca.

Effective vocabulary acquisition often involves learning words in context rather than in isolation. Tseng et al. (2020) stated that contextual learning helps students understand the practical application of vocabulary in their field. Studies have shown that integrating vocabulary instruction with subject-specific content improves retention and comprehension (Abella et al., 2023; Danwah, 2023). For instance, incorporating vocabulary exercises into lab reports, research papers, and technical presentations can enhance students' grasp of essential terms.

Recognising targeted vocabulary is indispensable for STEM students learning English. It enhances their comprehension, critical thinking, communication, and overall academic performance. Employing effective vocabulary acquisition strategies, such as contextual learning, digital tools, and explicit instruction, can significantly support STEM students in mastering the necessary terminology for their fields.

b. Academic Writing Support

Scientific writing demands precision, clarity, and the ability to convey complex information succinctly. Many STEM students struggle with structuring their arguments and presenting data effectively in written form (Reynders et al., 2020). Limeri et al. (2020) supported this by saying this difficulty is compounded for students who are non-native English speakers, as they must also navigate language barriers while adhering to the conventions of scientific discourse.

Inquiry-based learning has been shown to enhance critical thinking skills, which are essential for effective academic writing (Wale & Bishaw, 2020; Wale & Bogale, 2021). However, traditional teaching methods often fail to foster these skills adequately. Studies indicate that students trained in inquiry-based learning demonstrate better critical thinking abilities, which translate into improved writing skills (Adhami & Taghizadeh, 2022). Kousloglou et al. (2023) highlighted that this method encourages students to seek, analyse, and synthesise information, which are key components of academic writing.

Providing academic writing support helps STEM students articulate their ideas more effectively. Effective communication is crucial in STEM fields, where clear and precise documentation of research and findings is essential (Kilty & Burrows, 2022). Support in academic writing ensures that students can present their work to a broader audience, including peers, educators, and professionals in their field (Tan et al., 2023).

Writing support programs can lead to improved academic performance. Dergaa et al. (2023) stated that students who receive targeted writing instruction are better prepared to complete assignments, theses, and research papers. This preparation can result in higher grades and a deeper understanding of course material. STEM students require specialised academic writing support to overcome the unique challenges they face in their disciplines. According to Warr and West (2023), integrating language learning with STEM content, fostering critical thinking through inquiry-based learning, and providing targeted writing instruction can significantly enhance students' writing skills.

c. Communication Proficiency

STEM subjects often involve complex terminology and concepts that require precise communication. McComas and Burgin (2020) highlighted that non-native English-speaking students face additional challenges as they must master both the technical language of their field and general academic English. This dual challenge can hinder their ability to effectively communicate their ideas and findings (Lee & Stephens, 2020)

Proficiency in English is essential for participation in interactive learning environments, such as group projects, presentations, and discussions. According to Mahdi (2020), these activities are integral to STEM education as they foster collaboration and problem-solving skills. However, students who lack confidence in their English-speaking abilities may be reluctant to participate, thereby missing out on valuable learning opportunities (Malik et al., 2021; Aziz & Kashinathan, 2021).

Developing strong communication skills can lead to improved academic performance. Mahoney et al. (2021) stated that students who are proficient in English can better understand course materials, participate in discussions, and complete assignments effectively. Mohamed Elsayed (2022) supported this by saying that this proficiency translates into higher grades and a deeper comprehension of STEM subjects.

Proficiency in English opens up opportunities for international collaboration, an increasingly important aspect of scientific research and professional practice (Abelha et al., 2020). English is often the lingua franca in international conferences, journals, and collaborative projects. STEM students who are proficient in English can engage with a global audience, share their research, and collaborate with peers worldwide (Llurda & Cots, 2020).

The need for communication proficiency in English for STEM students is evident. It is essential for academic success, effective collaboration, and career advancement. By addressing the language barriers and fostering strong communication skills, educational institutions can better prepare STEM students for the challenges and opportunities of their respective fields.

The Wants of STEM Students

a. Desires for Interactive Tools

With the recent development of interactive learning tools, traditional disciplinary boundaries are dissolved, and STEM students can seamlessly apply multidisciplinary knowledge to tackle complex problems in the English language. Yang and Baldwin (2020) conducted research emphasising the importance of technology-use strategies, aimed at enhancing student learning across integrated Science, Technology, Engineering, and Mathematics (STEM) settings. Their study highlights various approaches, from the inclusion of Science and Mathematics education to the simultaneous integration of Engineering and Technology instruction, all within an English language framework.

Engaging students in real-world scenarios and applications is vital for fostering interactive learning with authenticity. For instance, Physics or Chemistry simulations and virtual laboratories, including virtual reality and interactive simulations, have proven effective in improving student engagement and understanding (Reeves & Crippen, 2021). These tools not only strengthen vocabulary and concepts but also inspire students to describe observations or hypotheses in English, thereby integrating language learning components. Interactive simulations offer STEM students opportunities to actively participate with STEM materials, reinforcing their understanding through hands-on exploration. The advantages of using such simulations include linking observable and unobservable phenomena, providing adaptive guidance and highlighting essential information (Dashkina et al., 2020).

The integration of immersive technologies, such as virtual reality, has captured students' interest, increased creativity, strengthened motivation, and improved technology literacy (Dashkina et al., 2020; Yildirim et al., 2020). Virtual laboratory environments have demonstrated better outcomes and fostered a more positive attitude towards learning English (Dashkina et al., 2020). Virtual reality in the classroom has captured their academic interest, increased their creativity, strengthened students' motivation, improved students' technology literacy, provided individualised learning to ease the students to understand difficult

or abstract concepts as described by the teachers (Dashkina et al., 2020; Yildirim et al., 2020). Virtual laboratory environments resulted in better outcomes and helped the students adopt a more positive attitude to learning English.

Furthermore, the study by Yang and Baldwin (2020) also outlines that to support student learning within integrated STEM frameworks by offering web-based inquiry environments via online discussion forum platforms to facilitate inquiry-based learning experiences, encouraging exploration and critical thinking. The students can practice written or spoken English in a supportive environment with the inclusion of instant feedback and pronunciation practice features. By leveraging immersive technologies to empower students to actively participate in learning to nurture deeper understanding.

b. Peer Collaboration

Apart from interactive learning tools, peer collaboration provides valuable opportunities for language practice and mutual support (Trainor, 2023; Dianati, 2020). Group projects where students must work together to solve problems or complete tasks with English as the communication means. For example, STEM students collaborate on an engineering project and present their findings in English. In peer review sessions for academic writing assignments, students provide feedback and suggestions to each other. This encourages students to actively engage with the language. Language exchange partnerships where STEM students pair up with native English speakers or proficient language learners to practice conversational English. This allows for authentic communication and cultural exchange.

c. Contextualised Language Learning Experience

In addition, contextualised teaching and learning is not a new approach where its usefulness is understood and practised (Khanal, 2023). Contextualised language learning experiences incorporate language instruction with STEM content, making the learning process motivating and meaningful (Wagle et al., 2024; Khanal, 2023). In other words, contextualised language learning experiences refer to language instruction and practice that are integrated within real-world contexts (Orpwood et al., 2010). For instance, a Biology course that incorporates reading scientific articles or literature, writing lab reports, and discussing research findings in English. Besides, internships in STEM-related industries where students can apply their language skills in real-world contexts that require students to use English to solve authentic STEM problems. This provides hands-on experience and reinforces language learning through practical application.

According to Hwang et al. (2023), AI-Sample Sentences (AI-SS) can help the contextualisation to produce comprehensive content actively while AI-Writing Feedback (AI-WF) can help the personalisation to improve the writing quality through several revisions. With contextualised learning, the students may express their ideas through multimodal resources including text and images in their stories and their 3D virtual contexts, which brings improvements not only in their English language reading but also in their learning motivation (Guo & Lan, 2023).

Conclusion

All in all, this review underscores the critical importance of addressing the English language learning challenges faced by STEM students, focusing on the lacks, needs, and wants that impact their academic and professional success. It is evident that deficiencies in STEM-specific vocabulary, academic writing skills, and oral communication proficiency pose significant barriers, necessitating targeted interventions in vocabulary instruction, writing support, and speaking practice. Additionally, incorporating student preferences for interactive learning tools, peer collaboration, and contextualised language learning

experiences can greatly enhance engagement and effectiveness in language acquisition. By integrating these strategies, educational institutions can better support STEM students in overcoming language barriers, thereby improving their overall academic performance and career readiness. Future research should prioritise evaluating the effectiveness of these interventions and exploring innovative approaches to further enhance English language learning within STEM contexts. This comprehensive approach will not only bridge the language gaps but also empower STEM students to excel in their fields and contribute effectively to the global scientific community.

Recommendations

Future research could conduct longitudinal studies to track the progress of STEM students' English proficiency, implement experimental designs to test the effectiveness of various teaching strategies, explore the potential of advanced technologies like AI and virtual reality, investigate cultural impacts on language learning, and develop interdisciplinary and student-centred approaches. Additionally, examining collaborative learning environments and peer feedback can further enhance both language proficiency and subject matter understanding. The implications of the study suggest the need for integrating targeted language support into STEM curricula, providing professional development for educators, allocating resources for interactive learning tools, and creating policies that mandate language learning support within STEM education frameworks.

References

- Abelha, M., Fernandes, S., Mesquita, D., Seabra, F., & Ferreira-Oliveira, A. T. (2020). Graduate employability and competence development in higher education—A systematic literature review using PRISMA. *Sustainability*, *12*(15), 5900.
- Abella, J., De Gracia, J., Maningo, S. A., Paculanang, M. R., & Kilag, O. K. (2023). Integrating Collaborative Strategic Reading (CSR) in ESL Instruction: Effects on reading comprehension, content mastery, and language acquisition. *Excellencia. International Multi-disciplinary Journal of Education (2994-9521)*, *1*(5), 88-99.
- Adhami, N., & Taghizadeh, M. (2024). Integrating inquiry-based learning and computer supported collaborative learning into flipped classroom: Effects on academic writing performance and perceptions of students of railway engineering. *Computer Assisted Language Learning*, *37*(3), 521-557.
- Al Qunayeer, H. S. (2021). An investigation of the relationship between reading comprehension, vocabulary knowledge, and English language proficiency level of Saudi EFL learners. *Advances in Language and Literary Studies*, *12*(2), 59-69. <https://doi.org/10.7575/aial.v.12n.2.p.59>
- Aziz, A. A., & Kashinathan, S. (2021). ESL learners' challenges in speaking English in Malaysian classroom. *Development*, *10*(2), 983-991.
- Balqis, N. (2018). Students' problems in building up English vocabulary (A study at Sman 1 Baktiya) (Doctoral dissertation, UIN Ar-Raniry Banda Aceh).
- Bratsch-Hines, M. E., Vernon-Feagans, L., Pedonti, S., & Varghese, C. (2020). Differential effects of the targeted reading intervention for students with low phonological awareness and/or vocabulary. *Learning Disability Quarterly*, *43*(3), 214-226.

- Dergaa, I., Chamari, K., Zmijewski, P., & Saad, H. B. (2023). From human writing to artificial intelligence generated text: examining the prospects and potential threats of ChatGPT in academic writing. *Biology of Sport*, 40(2), 615-622.
- Bullock, O. M., Colón Amill, D., Shulman, H. C., & Dixon, G. N. (2019). Jargon as a barrier to effective science communication: evidence from metacognition. *Public Understand. Sci.* 28, 845–853. doi: 10.1177/0963662519865687
- Çelik, S. (2020). Building critical academic writing skills: the impact of instructor feedback on Turkish ELT graduate students. *The Electronic Journal for English as a Second Language*, 24(3), 1-12. <https://eric.ed.gov/?id=EJ1275864>
- Copur-Gençtürk, Y., & Doleck, T. (2021). Strategic competence for multistep fraction word problems: an overlooked aspect of mathematical knowledge for teaching. *Educational Studies in Mathematics*, 107(1), 49-70.
- Danwah, A. (2023). Strategies for increasing long-term language comprehension in English learners abstract. *Undergraduate Review*, 17(1), p-29.
- Dashkina, A.I.; Khalyapina, L.P.; Kobicheva, A.M.; Odinkaya, M.A.; Tarkhov, D.A. (2020). Developing a model of increasing the learners' bilingual professional capacity in the virtual laboratory environment. *Appl. Sci.*, 10, 7022. <https://doi.org/10.3390/app10207022>
- Dianati, S., & Oberhollenzer, Y. (2020). Reflections of students and staff in a project-led partnership: Contextualised experiences of students-as-partners. *International Journal for Students as Partners*, 4(1), 1-15. <https://doi.org/10.15173/ijasp.v4i1.3974>
- Fengyu, Z. (2023). The impact of vocabulary learning methods on students' vocabulary application skills. *English Language Teaching and Linguistics Studies*. 5, 206. 10.22158/elts.v5n4p206.
- Firda, I. N., & Azkiyah, I. (2021). Testing breadth and depth of vocabulary knowledge and their relationship with vocabulary size of EFL students. *JET (Journal of English Teaching)*, 7(1), 89-100. <https://doi.org/10.33541/jet.v7i1.2434>
- Futurum. (2021). Why writing skills are important for STEM students. <https://futurumcareers.com/why-writing-skills-are-important-for-stem-students>
- Grady, S. M., Morton-Aiken, J., Druschke, C. G., Lofgren, I.E., Karraker, N. E., McWilliams, S. R., Reynolds, N., Finan, E., Wolter, P. L., Leff, D. R., & Kennedy, M. (2022). Defining a flexible notion of “good” STEM writing across contexts: Lessons learned from a cross-institutional conversation. *Front. Commun*, 7, 767557. doi: 10.3389/fcomm.2022.767557
- Guo, S. C., & Lan, Y. J. (2023). Virtual world-supported contextualised multimodal EFL learning at a library. *Language Learning & Technology*, 27(2), 176–198.
- Halik, A. F. A., & Jayasundara, N. S. (2021). Lack of vocabulary: A barrier to the oral communication skills of GCE A/L students in the Trincomalee district of Sri Lanka. <https://journals.kln.ac.lk/jhu/media/attachments/2021/12/02/chapter-07.pdf>
- Halik, A., & Nusrath, R. G. M. (2020). Students' lack of interest in learning G Trincomalee, Sri Lanka.
- Hawari, O. M. A., Al-Shboul, Y., & Huwari, I. F. (2021). Supervisors' perspectives on graduate students' problems in academic writing. *European Journal of Educational Research*, 11(1), 545-556. <https://doi.org/10.12973/eu-jer.11.1.545>

- Heard, J., Scoular, C., Duckworth, D., Ramalingam, D., & Teo, I. (2020). Critical thinking: Skill development framework.
- Hwang, W.-Y., Nurtantyana, R., Purba, S. W. D., Hariyanti, U., Indrihapsari, Y., & Surjono, H. D. (2023). AI and recognition technologies to facilitate English as foreign language writing for supporting personalization and contextualisation in authentic contexts. *Journal of Educational Computing Research*, 61(5), 1008-1035. <https://doi.org/10.1177/07356331221137253>
- Jung, J. (2020). Effects of content support on integrated reading-writing task performance and incidental vocabulary learning. *System*, 93, 102288
- Kan, A. L. (2021). Spoken vocabulary to English language learners in K-12 math and science classroom. Proceedings of the 3rd International Conference on Future of Social Sciences.
- Khanal, H. R. (2023). Freirean strategies in meaningful learning: a critical pedagogy of contextualised classroom. *Journal of Transformative Praxis*, 4(1), 42-53. <https://doi.org/10.51474/jrtp.v4i1.578>
- Kilty, T. J., & Burrows, A. C. (2022). Integrated STEM and partnerships: What to do for more effective teams in informal settings. *Education Sciences*, 12(1), 58.
- Kilag, O. K., Uy, F., Tiu, J., Dacanay, L., Vestal, P., & Zamora, M. (2024). Empowering learners: addressing linguistic hurdles in English education for senior high school students in the Philippines. *International Multidisciplinary Journal of Research for Innovation, Sustainability, and Excellence (IMJRISE)*, 1(5), 121-127.
- Kousloglou, M., Petridou, E., Molohidis, A., & Hatzikraniotis, E. (2023). Assessing students' awareness of 4Cs skills after mobile-technology-supported inquiry-based learning. *Sustainability*, 15(8), 6725.
- Lang, S., Ibba, M., & Musier-Forsyth, K. (2022). New paradigm for teaching scientific writing in STEM. *Trends in Biochemical Sciences*, 47(8), 631-634. <https://doi.org/10.1016/j.tibs.2022.03.019>.
- Lee, O., & Stephens, A. (2020). English learners in STEM subjects: Contemporary views on STEM subjects and language with English learners. *Educational researcher*, 49(6), 426-432.
- Limeri, L. B., Carter, N. T., Choe, J., Harper, H. G., Martin, H. R., Benton, A., & Dolan, E. L. (2020). Growing a growth mindset: Characterizing how and why undergraduate students' mindsets change. *International Journal of STEM Education*, 7, 1-19.
- Llurda, E., & Cots, J. M. (2020). PLURELF: A project implementing plurilingualism and English as a lingua franca in English language teaching at university. *Status Quaestionis*, (19).
- Luczaj, K., Leonowicz-Bukala, I., & Kurek-Ochmanska, O. (2022). English as a lingua franca? The limits of everyday English-language communication in Polish academia. *English for Specific Purposes*, 66, 3-16
- Mahdi, D. A. (2022). Improving speaking and presentation skills through interactive multimedia environment for non-native speakers of English. *SAGE Open*, 12(1), 21582440221079811.
- Mahoney, J. L., Weissberg, R. P., Greenberg, M. T., Dusenbury, L., Jagers, R. J., Niemi, K., ... & Yoder, N. (2021). Systemic social and emotional learning: Promoting educational success for all preschool to high school students. *American Psychologist*, 76(7), 1128.

- Malik, S., Qin, H., & Oteir, I. (2021). Perceived psychological, linguistic and socio-cultural obstacles: an investigation of English communication apprehension in EFL learners. *International Journal of Instruction*, 14(4), 733-752.
- McComas, W. F., & Burgin, S. R. (2020). A critique of “STEM” education: Revolution-in-the-making, passing fad, or instructional imperative?. *Science & Education*, 29(4), 805-829.
- Mohamed Elsayed, S. A. (2022). The effectiveness of learning mathematics according to the STEM approach in developing the mathematical proficiency of second graders of the intermediate school. *Education Research International*, 2022(1), 5206476.
- Nihei, S., Jimmy, S., Mora, R., & Matriano, E. (2021). Struggles in oral communication: Cases of college students who are not yet proficient in English language. https://www.researchgate.net/publication/350152543_struggles_in_oral_communication_cases_of_college_students_who_are_not_yet_proficient_in_english_language
- Owens, A. D., & Hite, R. L. (2022). Enhancing student communication competencies in STEM using virtual global collaboration project based learning. *Research in Science & Technological Education*, 40(1), 76–102. <https://doi.org/10.1080/02635143.2020.1778663>
- Orpwood, G., Schollen, L., Marinelli-Henriques, P., & Assiri, H. (2010). College mathematics project 2009 (Final report). Seneca, Ontario: Seneca College of Applied Arts and Technology, York-Seneca Institute for Mathematics, Science and Technology Education.
- Oppenheimer, S. B., Mills, J. I., Zakeri, A., Payte, T. R., Lidgi, A., & Zavala, M. (2020). An approach to improving student success in science, technology, engineering, and mathematics (STEM) career pathways. *Ethnicity & disease*, 30(1), 33.
- Pelger, S. (2022). Academic development to overcome STEM teachers’ challenges in teaching communication. *International Journal for Academic Development*, 27(1), 17–30. <https://doi.org/10.1080/1360144X.2021.1891905>
- Perry, D. (2020). Writing styles. The Graduate Writing Center.
- Perwita, T., Asmana, C. H., & Arifani, Y. (2021). Mobile-assisted language learning based using scientific approach to improve students vocabulary. *Journal of English Teaching, Literature, and Applied Linguistics*.
- Phan, T. M. U., Nguyen, T. T. H., & Le, T. T. (2022). A survey on the difficulties in writing essays of English majored sophomores at Tay Do University. Vietnam. *European Journal of English Language Teaching*, 6(1), 201-231. <http://dx.doi.org/10.46827/ejel.v6il.3389>
- Pressbooks. (2021). 3.8 Communication and writing in STEM (synthesis). In understanding literacy in our lives, Chapter 3: Literacies across the disciplines. <https://pressbooks.ulib.csuohio.edu/understanding-literacy-in-our-lives/chapter/3-8-communication-and-writing-in-stem-synthesis/>
- Prier, D. (n.d.). How to improve communication skills in STEM students. *Communication and Technology in the Classroom*, 17.
- Reeves, S.M., Crippen, K.J. (2021). Virtual laboratories in undergraduate science and engineering courses: a systematic review, 2009–2019. *Journal of Science Education Technology*, 30, 16–30. <https://doi.org/10.1007/s10956-020-09866-0>

- Reynders, G., Lantz, J., Ruder, S. M., Stanford, C. L., & Cole, R. S. (2020). Rubrics to assess critical thinking and information processing in undergraduate STEM courses. *International Journal of STEM Education*, 7, 1-15.
- Sa'adah, N., & Ali, F. (2022). Writing anxiety in English academic writing: a case study of EFL students' perspectives. *Eternal (English Teaching Learning and Research Journal)*, 8. 18-33. 10.24252/Eternal.V81.2022.A2.
- Salera, D., Baleyos, H., Dela Cruz, J. H., Navarro, R., Vargas, M. B., & Ablen, D. A. . (2020). Factors affecting English communication skills of Grade 11 students at Bestlink College of the Philippines. *Ascendens Asia Singapore – Bestlink College of the Philippines Journal of Multidisciplinary Research*, 2(1). <https://www.ojs.aaresearchindex.com/index.php/aasgbcjpmra/article/view/1689>
- Skarpaas, K. G., & Rødnes, K. A. (2022). Vocabulary teaching practices of L2 English in upper secondary vocational classrooms. *Languages*.
- Sreejak, T., & Thanavanasate, J. (2023). An investigation of graduate students' vocabulary problems in writing academic papers (Unpublished). <https://www.researchgate.net/publication/373979959>
- Tahir, M. H., Albakri, I. S. M. A., Adnan, A. H. M., & Karim, R. (2020). The application of visual vocabulary for ESL students' vocabulary learning. *Arab World English Journal*, 11(2), 323-338.
- Tan, A. L., Ong, Y. S., Ng, Y. S., & Tan, J. H. J. (2023). STEM problem solving: Inquiry, concepts, and reasoning. *Science & Education*, 32(2), 381-397.
- Tambunan, E. E., Ramadhani, Y. R., & Sibuea, B. (2024). The impact of project-based learning on collaborative and critical thinking skills of students in translation course. *ETANIC Journal Of English Language Teaching And Applied Linguistics*, 2(1), 65-79.
- Therova, D. (2022). The development of academic vocabulary in international foundation students' assessed academic writing. *The Journal of International Students*, 12(1), 123–140. <https://doi.org/10.32674/jis.v12i1.2824>
- Thompson, C. J. (2024). Teaching vocabulary in the STEM classroom. Accelerate Learning. <https://blog.acceleratelearning.com/teaching-vocabulary-in-the-stem-classroom>
- Trainor, A., Newman, L., & Romano, L. (2023). Contextualising school engagement during transition for students receiving special education and English learner services. *The Journal of Special Education*, 57(1), 24-35. <https://doi.org/10.1177/00224669221107089>
- Tseng, W. T., Liou, H. J., & Chu, H. C. (2020). Vocabulary learning in virtual environments: Learner autonomy and collaboration. *System*, 88, 102190.
- Valdés, O. (2019). An introduction to academic writing. Thought Co. <https://www.thoughtco.com/what-is-academic-writing-1689052>
- Wagle, S. K., Luitel B. C. & Krogh, E. (2024) Exploring possibilities for participatory approaches to contextualised teaching and learning: a case from a public school in Nepal, *Educational Action Research*, 32(2), 276-294. <https://10.1080/09650792.2023.2183874>
- Warr, M., & West, R. E. (2020). Bridging academic disciplines with interdisciplinary project-based learning: Challenges and opportunities. *Interdisciplinary Journal of Problem-Based Learning*, 14(1).

- Willoughby, S., LaMeres, B., Hughes, B., Organ, C., Green, J., Sterman, L., & Davis, K. (2018). Board 81: Stem STORYTELLERS: Improving the oral communication skills of STEM graduate students. https://www.researchgate.net/publication/344820745_Board_81_STEM_Storytellers_Improving_the_Oral_Communication_Skills_of_STEM_Graduate_Students
- Yang, D. & Baldwin, S. J. (2020). Using technology to support student learning in an integrated STEM learning environment. *International Journal of Technology in Education and Science*, 4(1), 1-11. <https://doi.org/10.46328/ijtes.v4i1.22>
- Yildirim, B., Sahin-Topalcengiz, E., Arikan, G., & Timur, S. (2020). Using virtual reality in the classroom: Reflections of STEM teachers on the use of teaching and learning tools. *Journal of Education in Science, Environment and Health (JESEH)*, 6(3), 231-245. <https://doi.org/10.21891/jeseh.71177>



Employing Kahoot! to Enrich English as Second Language (ESL) Learners Vocabulary Mastery

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Abstract: Utilizing technological tools, games, and software updates in language teaching has proven to be highly beneficial in enhancing the learning experience within the classroom. Research indicates that incorporating gamification, particularly through applications like Kahoot!, has a notable impact on language learning outcomes. This approach serves not only as an engaging teaching tool but also as an effective means of assessment in language classrooms. The dynamic and interactive nature of Kahoot! fosters student participation and motivation. By creating customized quizzes and games, educators could tailor activities to suit different proficiency levels, making the learning process enjoyable, adaptive, and conducive to improving language acquisition. The platform's features, including immediate feedback and progress tracking, further contribute to a comprehensive and effective language teaching strategy. The purpose of this seminar paper is to investigate how gamification and technological tools might help students become more proficient with vocabulary. The goal of the seminar paper is to shed

light on different approaches for creating creative vocabulary learning interventions. The final objective is to provide useful advice for creating customized vocabulary learning plans that meet the various demands of students and improve vocabulary acquisition techniques.

Keywords: *games, gamification, Kahoot!, learner's vocabulary mastery, technological tools.*

Introduction

In the field of education, the combination of gamification and technology tools has received a lot of interest due to its potential to improve learning experiences. One specific area of focus is using these technologies to increase students' language competency. Vocabulary acquisition is a critical component of language learning, impacting communication and comprehension abilities. Traditional vocabulary education, on the other hand, frequently lacks interest and fails to accommodate a variety of learning styles. The use of technology has become a revolutionary force in the constantly changing field of language education, providing creative answers to age-old teaching problems. Recent study has investigated the effectiveness of using gamification and technology solutions to solve these difficulties (Hamari et al., 2014; Li et al., 2020). By incorporating gaming aspects into instructional activities, educators want to create immersive and dynamic environments that engage students and enhance language learning. Technological technologies enhance this strategy by delivering tailored learning experiences, rapid feedback systems, and possibilities (Dichev & Dicheva, 2017). Gamified learning platforms are one such technology that has attracted a lot of attention lately because of its potential to improve learning outcomes and student engagement (Hamari et al., 2014). Educators across the world have taken an interest in Kahoot! since it is a dynamic and interactive tool among these platforms. Kahoot! uses game-based learning techniques to create an interesting and immersive teaching environment, which improves motivation and retention. Studies have demonstrated that Kahoot! can dramatically improve students' learning experiences. Wang and Tahir (2020) did a comprehensive assessment of Kahoot! and concluded that it not only promotes student engagement and enjoyment but also improves academic achievement across a variety of areas, including language learning.

Li et al. (2020) discovered that gamified vocabulary acquisition greatly boosted learners' motivation and engagement compared to traditional techniques. Similarly, Smith and Johnson (2018) found significant increases in vocabulary retention and utilization among students who used technology-enhanced vocabulary learning platforms. Additionally, the effectiveness of technologically augmented games in aiding language learners' vocabulary development has been highlighted by earlier research. A thorough analysis of the gamification literature was done by Hamari et al. (2014), who discovered that gamified learning environments can greatly improve learning outcomes, motivation, and engagement. They pointed out that gamified platforms provide special chances for frequent exposure to vocabulary words in context, which is important for vocabulary learning (Nation, 2001). An important assessment of the research on gamification that explores the efficacy of gamified learning settings is that by Hamari, Koivisto, and Sarsa (2014). They discovered that adding gaming components to instructional settings can improve student motivation, engagement, and learning results in the end. This is consistent with studies conducted in the field of language learning, which show that involvement and motivation are

critical success factors. Kahoot! is one such platform that has acquired popularity among instructors worldwide because to its dynamic and interactive nature.

Despite these encouraging outcomes, there is still a lack of understanding about the best design and execution techniques for using gamification and technology tools in vocabulary training. Furthermore, the influence of individual characteristics, such as learning styles and competence levels, calls for further exploration. While the literature on gamified vocabulary training has shown encouraging results, there are still a lot of unanswered questions about the best ways to develop and implement programs and how individual factors affect the results. The best gamification components and how to incorporate them with instructional content are still up for debate, even with the encouraging outcomes of several research. This gap calls for more research into the ways that various design and implementation strategies affect learners' interest, motivation, and eventually vocabulary acquisition.

This paper aims to add to the current body of knowledge by reviewing studies and the efficacy of gamification and technology aids in increasing learners' vocabulary proficiency. This study intends to give insights into the creation of creative and powerful vocabulary learning interventions by examining various techniques and assessing outcomes across distinct learner demographics. With Kahoot!'s gamified elements, educators may craft dynamic and captivating learning opportunities that accommodate a range of learning styles and skill levels. Games and quizzes with customizable options provide a special chance to modify tasks to fit each student's needs, making sure that every student is suitably pushed and encouraged in their language learning process. By exploring the real-world uses for Kahoot!

This study aims to add to the expanding corpus of research on technology-enhanced language education in vocabulary instruction. It is ultimately intended that the results of this study would influence pedagogical practices and encourage teachers to investigate cutting-edge methods of teaching languages that put an emphasis on student motivation, engagement, and language proficiency. We hope to realise the full potential of gamified vocabulary training in boosting language learning and empowering learners throughout the world via collaborative efforts among educators, researchers, and technology developers.

Overview of the Approach

The use of technology in the classroom has created new opportunities in recent years to raise student engagement and improve learning results. Of all the educational resources available, Kahoot has become a well-liked platform that uses gamification techniques to produce engaging instructional content. Because of its customizable quiz structure and user-friendly interface, Kahoot has become a more popular tool in classrooms for English vocabulary acquisition. The theoretical foundations of how Kahoot enhances students' vocabulary skills are briefly discussed in this introduction, which also covers important ideas like flow theory, social cognitive theory, and cognitive load theory. We can gain a better understanding of the methods by which Kahoot facilitates students' efficient acquisition and retention of language by exploring these theoretical frameworks.

When it comes to using technology to improve vocabulary, gamification refers to the deliberate addition of game-like features and mechanics to educational platforms in order to increase student motivation, engagement, and vocabulary learning proficiency. Researchers like Hamari et al. (2014) have examined this strategy, which uses social interaction, obstacles, and incentives that are inherent to gaming dynamics to produce engaging and entertaining learning environments. Gamification is based on theories of motivation and learning, namely Self-Determination Theory (Deci & Ryan, 1985). These theories highlight the significance of autonomy, competence, and relatedness in promoting long-term participation and significant learning results. Furthermore, Watson et al. (2017) research provides valuable insights into how technology might provide individualized feedback, collaborative learning environments, and adaptive learning experiences, all of which enhance the efficacy of gamified vocabulary instruction.

A notion that may be pertinent to the discussion of how Kahoot enhances vocabulary in the English language is psychologist Mihaly Csikszentmihalyi's concept of "Flow". When engaged in an activity, flow is a condition of ideal experience marked by deep involvement, strong focus, and delight. Learners are more likely to be completely engaged in the activity and produce better learning outcomes when they are in a state of flow. Within the Kahoot environment, learners can feel flow more easily because of the platform's competitive and interactive features. Students may benefit from improved focus, greater drive, and a sense of accomplishment when they correctly answer questions as they compete with their peers in quizzes. By encouraging sustained attention to the content and facilitating deeper cognitive processing, this state of flow can improve vocabulary learning.

Furthermore, Albert Bandura's Social Cognitive Theory can clarify how Kahoot improves vocabulary acquisition. This theory states that learning happens as a result of seeing, copying, and modelling the actions of others. Within the Kahoot platform, students may watch how their peers answer problems and pick up tips and tricks from their methods. Learners can improve their own vocabulary by seeing examples of effective vocabulary use and by picking up from the errors made by their peers.

Additionally, learning may be impacted by the cognitive load placed on students' working memory, according to John Sweller's Cognitive Load Theory. The interactive tests and game-based structure of Kahoot can reduce cognitive load by dissecting difficult vocabulary terms into smaller, more digestible portions. Kahoot helps people learn and remember vocabulary terms by reducing cognitive load and delivering information in an engaging and interactive way.

Moreover, Deci and Ryan (1985) introduced the Self-Determination Theory (SDT), which is useful in the context of gamified vocabulary training. According to SDT, intrinsic motivation, which is motivated by autonomy, competence, and relatedness, results in greater long-term and meaningful engagement than extrinsic motivation. In the context of vocabulary learning, increasing learners' intrinsic motivation through gamification can improve the sustained interest and deeper cognitive processing, eventually facilitating vocabulary acquisition (Li et al,2020). It is said that, gamification in education is the integration of game design features and mechanics into non-game situations, such as learning environments, with the goal of increasing engagement, motivation, and learning outcomes (Deterding et al., 2011). This method uses the intrinsic

attraction of games, such as challenges, incentives, and interactive feedback, to make instructional sessions more interesting and successful.

To sum up, the integration of prior studies on gamification in education with theoretical frameworks like flow theory, social cognitive theory, and cognitive load theory offers a strong basis for comprehending how Kahoot can enhance students' English vocabulary acquisition. This study adds to the larger conversation on successful pedagogical strategies in the digital era by clarifying the ways in which Kahoot's gamified features engage students and promote learning.

Technology Integration

Technology has blended into human's daily life and become inseparable. Every human in this world is fascinated by playing games online during free time replacing the common hobby. Therefore, technology is also integrated in education by using well-coordinated digital devices and computers as tools to make learning more interesting and easier to understand. Integrating technology in the classroom provides opportunity for students to acquire competence in digital platforms, collaborate online, and communicate using digital channels. Student-centered teaching is effective in today's education now as supported by Uzonboylu et al. (2020). Games have made the biggest revolution in human social life. People started to see everything in different perspectives in line with technology growth. In today's education arena games have become a technique in teaching education at school. There are many education tools online that generate more challenging and attractive learning programs. During the pandemic, many new games and technology-based tools were introduced for the teaching and learning process, intended to help the teachers to plan their online teaching more interesting and also to lift pupils' self-learning skills. As supported by Johnson (2023) Digital game Kahoot is able to provide more vast choices for teachers to swerve from their traditional teaching style and integrate in a more meaningful way. Educators started to use Kahoot in the teaching and learning process.

Microsoft Office

Kahoot has been used by the teacher to check the students' knowledge of the content taught on the day. It is easier to generate questions using Kahoot. The quizzes can be set according to the teacher's preference. The teacher can share the quiz code and students can access the quiz from anywhere in the world. Teachers can design a learning lesson and add the code at the end of the lesson for students to check their understanding as well as teachers to monitor whether their objectives for the lesson are achieved or not.

Microsoft PowerPoint is a presentation program developed by Microsoft together with other software such as Word, Excel, and Outlook. PowerPoint is widely used for presentations purposes in education to deliver a good lesson. Powerpoint presentations fit in very well with Kahoot to develop more engaging teaching and learning methods. Merging PowerPoint slides with Kahoot is a definite way to leave an eternal impression on students. As a whole, PowerPoint is a good tool to create visually fascinating presentations that efficiently deliver information to the students.

Internet Connections

Having a reliable internet connection is crucial for leveraging platforms like Kahoot effectively in educational settings. It ensures real-time engagement without interruptions, allowing students to actively participate in quizzes and receive timely feedback. Teachers heavily rely on internet connectivity to create, manage, and host Kahoot games, enabling seamless facilitation of lessons and assessments. The accessibility and flexibility of Kahoot, accessible from anywhere with an internet connection, empower continuous learning beyond traditional classroom settings. It serves not only as a formative assessment tool but also as a means for enrichment practices and self-evaluation tests, supporting students' understanding and progress. During school holidays, students can utilize Kahoot for revision and review without the need for physical textbooks, promoting continuity in their learning journey. However, it's important to address disparities in internet access to ensure equitable opportunities for all students to benefit from these innovative learning platforms.

Classroom Gadgets and Digital Devices

With advanced technology in modern life, digital devices are used as a mode of communication and it is indispensable in human life. The advances in technology have evolved rapidly, with powerful processors, high-resolution screen displays and cameras, and a variety of features and apps in the devices.

Smartphones are among digital devices which are popular and have been used widely for staying in touch with loved ones, accessing information globally, to watch movies, gaming, to send business emails and even to have virtual meetings with clients from different parts of the world. Smartphones are inseparable and easy to handle by any age of people from toddlers to elderly people. For students, Smartphones have been a window to access vast amounts of information which enable them to conduct study, research, collect data, and search related information for their education and daily life.

The iPad is another interesting tool that became popular among students during the pandemic as it has a wide screen and is user friendly and it enables the students to use it for assignments as well as taking part in online classes. It is also comprehensible to submit their lesson work on time to their teacher. Students in schools have access to all their books on a single iPad, and the need for lockers and bags is not essential (Pilgrim et al., 2003).

Another common classroom tool that is portable and easy to carry is a laptop, it is provided at school in the computer labs. Although specific requirements are needed to use it for gaming, work, or everyday use, it is still one of the best choices for students.

Lessons are also very stimulating nowadays with the use of smartboards at school as an interactive tool by teachers globally. Students find the smartboard more engaging as it has a touchscreen and it is user-friendly. For Kahoot, there are many ways to reach the application. If the lesson is carried out in a computer lab, students can simply access Kahoot via online. The smartphone and ipad users can access and download it via the App Store - for iOS 14 or newer. They also can access or download it in Google Play - for Android 8.0 or newer.

Introducing Artificial Intelligence for Kahoot

Artificial Intelligence (AI) integration in educational tools brings a new revolution in the education system and also improves students' knowledge in technology. AI algorithms can analyze the students' achievement data and provide recommendations for future practice. Teachers are able to personalize learning content according to the student's weaknesses and plan a target support, vary the difficulty level of the questions, and administrative assessment and provide new opportunities for students to learn the lesson more interactively. In Kahoot, teachers can use AI to generate questions for quizzes, provide better experiences for the students and easier for them to engage. AI can regulate the difficulty level of the questions based on the student's performance and design a more engaging learning environment. Students can search for any topic in the Kahoot! creator and generative AI will automatically create Kahoot questions matching their chosen topic. AI can even interpret the students' questions in their natural language and provide relevant answers and feedback to the students. The combination of AI in Kahoot definitely helps the teachers and students to modernize the education method and assist students to achieve more in future life.

Integrating Kahoot with Google Classroom and Microsoft Teams

Google Classroom excels at providing a central location for classroom activities, allowing teachers to create assignments, collect student assignments, assess and comment on them, and return them to students. Microsoft Teams is a collaboration software that includes essential features such as corporate messaging, calling, video meetings, and file sharing. Teams can be used for education and it is accessible via desktop and any internet-connected device.

Combining Kahoot with Google Classroom and Microsoft Teams can assist you boost your classes. Allowing you to conduct entertaining formative assessments whether you're teaching in person, remotely, or in a hybrid system. Using Kahoot with Google Classroom and Microsoft Teams allows you to play interesting games with your students from anywhere. Kahoot! is a fun game show-style evaluation tool. It allows for a variety of inventive ways to examine and appraise. Kahoot allows students to answer questions using their own device. Using Kahoot in Google Classroom and Microsoft Teams opens up a whole new universe in the education system.

Advantages and Disadvantages of Employing Kahoot to Enrich ESL

Integrating gamification as a part of the teaching method is considered impactful looking at the current learning behavior of the 21st century learners. According to Villagrasa et al. (2014) mentioned that the main objective of gamification is to increase commitment and motivation. In the field of education, gamification offers the transfer of gaming mechanics to educational environments with the goals of spiking up the motivation in improving the capacity to acquire input and skills. Subsequently, the use of graphics and sounds as the stimulus to keep learners engaged with the learning longer evidently. Chen, W. et al. (Eds.) (2017) claimed that while the use of Kahoot! itself was an enjoyable activity, students said that Kahoot! motivated them to pay attention during the lecture. The deployment of Kahoot! also motivated students to closely examine lecture material to prepare for Kahoot! and answer questions correctly. Gaming

elements, countdowns, music, and entertaining animations help the students to maintain their engagement while being competitive with the others.

The utilization of Kahoot! in assessing students' performances made it optimum for teachers to track students' performances. Rita Maher Wassef (2021) mentioned that the tasks or quizzes can be assigned individually or based on their learning level. Teachers would be able to monitor the record using the leaderboard function and individual profiles that project their performances. Based on the post-COVID-19 situation, most individuals have their own devices of choice in optimizing the teaching and learning process. This situation happened due to the need for internet access to learn during the lockdown that was started in March of 2020. As we know Kahoot can be accessed via various devices such as smartphones, IOS devices, tablets, laptops, and desktop PCs. It is an advantage for learners to play their part in getting the input and exercise to enrich their vocabulary mastery.

Numerous insights into those advantages of employing Kahoot! can enrich ESL learners' vocabulary mastery. First and foremost, teachers have the opportunity to create tasks or quizzes that focus on specific vocabulary topics such as synonyms, antonyms, word usage, definitions, and more subtopics of just vocabulary itself. Next, vocabulary games and collaborative learning can be applied to the learners using this application. It allows students to communicate and enjoy the process of finding the solutions for each task, puzzles or quizzes constructed by the teachers. One word that can describe this type of learning is 'fun'. Two research works carried out in South America (Guaqueta & Castro-Garces, 2018; Medina & Hurtado, 2017) focused on EFL instruction, Kahoot!, and vocabulary acquisition. The descriptive statistics in the analysis demonstrated enhanced knowledge; however, without inferential statistics, the significance of the results cannot be ascertained. Another investigation by Iwamoto et al. (2017) utilized inferential statistics and discovered a statistically significant improvement in vocabulary knowledge, but it was conducted in a general psychology class with native speakers. The sole study we found that used Kahoot!, inferential statistics, EFL students, and concentrated on vocabulary was conducted by Wichadee & Pattanapichet (2018) in Thailand. They discovered that students who used Kahoot! showed statistically significant improvement in a vocabulary and grammar exam, as well as in a post-instruction motivation survey compared to the control group.

To explain more why utilizing Kahoot! is crucial in ESL vocabulary mastery, a research conducted by Moh Mansur and Dian Fadhilawati (2019) entitled *Applying Kahoot to Improve the Senior High School Students' Vocabulary Achievement* shows the results of how Kahoot significantly improved students ESL vocabulary achievement. All four variables measured in the finding show positive feedback which is learning motivation, learning outcome, assignment completion, and social relationship collaboration. The students expressed a positive attitude towards the use of Kahoot in vocabulary learning. They reported feeling more motivated and engaged in the learning process, particularly when it came to learning English vocabulary. The game-based format of Kahoot made learning more enjoyable and interactive, which helped to hold their attention and keep them interested. The students also appreciated the opportunity to review the materials and complete tasks given by the teacher at home using Kahoot. This allowed them to reinforce their learning and build their vocabulary skills outside of the classroom. The flexibility and convenience of Kahoot made it easy for students to access the materials and

practice their skills at their own pace. Furthermore, the students enjoyed collaborating with their friends in group activities using Kahoot. The social aspect of the platform helped to build a sense of community and encouraged peer-to-peer learning. Students were able to work together to solve problems, share ideas, and support each other in their learning.

Despite all the advantages of ‘gamification’ specifically employing Kahoot! in teaching and learning as mentioned above, there are also some issues that were identified. One of them is the necessity of smartphones or computers to support learning and a good network to ensure the success of integrating Kahoot! in teaching and learning (Pahamzah, J., Syafrizal, S., & Nurbaeti, N., 2022). These are the prominent basis before the educators carry out an effective lesson for the students. Corresponding to the rapid development of technology nowadays, it is said that integrating digital elements into the classroom and instructional method is crucial for educators. In this case, employing Kahoot! in teaching and learning does benefit the students to improve their second language (L2) acquisition. Hence, well-equipped facilities will help to support the effectiveness of utilizing Kahoot! during a lesson. However, there are disadvantages especially when it comes to students in rural schools since most of the schools still lack various basic facilities, as compared to schools in the city (Andin, Ambotang, Kamin, and Hamzah, 2019). This will hinder the educators to run the lesson smoothly and the students to perform well based on the learning outcomes.

Besides that, even though games are popular among ESL teachers and are beneficial for education, there are still other disadvantages that may come up. Esraa et al (2021) stated that students may counter the problems to enrich vocabulary mastery by using Kahoot! due to vocabulary retention and memorization. This is because the students find difficulty in identifying the meaning of new words and in translating different texts. Moreover, Derryn Jackson (2022) explained that due to the varying and complex nature of students’ development, with several factors impacting it such as socioeconomic status, home environment, experience, school environment as well as the ethical and limiting factors when studying the human brain and learning, it can also be challenging to study and gain consensus on memory recall in students. Yousefi and Biria (2018) also stated that there is a gap in the research on the effect of the context of second language vocabulary instruction on the acquisition and retention of target words. This will become a problem for some students even though Kahoot! is integrated into the lesson.

Other than that, struggling with time management while using Kahoot! in teaching and learning is also said as one of the factors that may affect the flow of lessons. Noluthando Mdlalose, Sam Ramaila, and Umesh Ramnarain (2022) stated that this issue specifically occurred during the initial administration of online quizzes. In this study, the observation underscored the need to adjust time allocation per question in subsequent quizzes in order to allow the students to have time to digest the questions given. The finding also shows that the students’ performance was inadequate in the first quiz administered and this can be attributed to their inability to manage allocated time when engaging with online quizzes. Time management appeared to be a significant operational challenge for the students in the initial stages of quiz administration as the following excerpt illustrates. *“While the time set for each question is reasonable, I had difficulty managing time to read through all the answers properly. In some instances, I had to guess answers as I ran*

out of time". The students indicated that time management can be improved through sustained active involvement in the use of Kahoot! as a game-based learning platform. This sentiment is encapsulated in the following excerpt. "*Our time management can get better if additional opportunities are given to use Kahoot! as a learning tool. Learning can be enhanced with more practice on the use of Kahoot!*". Therefore, prior training on the use of Kahoot! was provided to the participants to ensure that they are able to use the platform properly.

Apart from that, teachers also point out that students use other applications in the middle of Kahoot quizzes. This issue will not only distract them from the lesson but also may affect the flow of the lesson. One of the participants has commented, '*students use other applications to waste time*'. Another teacher raised the same concern when he/she mentioned, '*students go to WhatsApp and other social networking sites. This lack of attention could be caused by multiple reasons*'. In this case, teachers may overlook the problem as they are concentrating more in carrying out the lesson instead of focusing on the students individually. Furthermore, Licorish et al. (2018) notes that students may grow bored once they are accustomed to a game-show learning environment. In another survey, Wang's (2015) showed that repeated use of Kahoot! changed students' perception slightly over time regarding user-friendliness, engagement, and motivation which led to a slight 'wear-out effect' of classroom dynamics. Moreover, Plump and LaRosa (2017) also reported that once students get several wrong answers, it was hard for them to stay motivated and engaged. Another possible explanation to this lack of interest is that some students do not like being ranked and that is not always appealing to them (Singer, 2016). In the same vein, Ipeirotis and Gabrilovich (2015) concluded that those low-ranked students on the scoreboard may be demotivated as they get lower scores than their classmates, which eventually results in negative effects on students' participation. It can be argued that despite the fact that Kahoot entertains users most of the time, lack of engagement and attention cause some students to be distracted.

Implementation and Pedagogical Implication On ELT

Implementing Kahoot! for Enhancing ESL Vocabulary Mastery

Kahoot! presents a dynamic tool for ESL educators to enhance vocabulary mastery through interactive quizzes. Crafting quizzes tailored to different aspects of vocabulary learning ensures a comprehensive approach. Quizzes can cover synonyms, antonyms, word associations, definitions, and contextual usage, catering to various learning preferences and addressing different facets of vocabulary acquisition. For instance, quizzes focusing on synonyms and antonyms help students expand their vocabulary network, while those emphasizing contextual usage provide insights into real-life language application. By customizing quizzes to match learners' proficiency levels, educators can provide appropriately challenging content, fostering gradual vocabulary growth without overwhelming students. Additionally, Kahoot! quizzes can incorporate multimedia elements such as images, audio clips, and videos, which enhance understanding and retention of new words. This multimodal approach ensures that learners engage with the vocabulary in varied and meaningful ways, promoting deeper cognitive processing and better retention. Moreover, the flexibility of Kahoot! allows teachers to update

and modify quizzes easily, ensuring that the content remains relevant and aligned with the curriculum goals.

Interactive Learning and Immediate Response

The real-time nature of Kahoot! quizzes transforms vocabulary lessons into engaging experiences. Conducting these sessions in class allows students to participate using their smartphones or computers, promoting active engagement and involvement. Immediate feedback is a cornerstone of Kahoot! quizzes, reinforcing correct understanding and promptly addressing misconceptions. This instant feedback loop enables students to learn from errors swiftly, consolidating their understanding of new vocabulary. Moreover, the competitive aspect inherent in Kahoot! quizzes motivates students to actively participate, fostering a spirit of friendly competition that drives improvement and enhances retention. The social aspect of Kahoot! also helps build a supportive classroom environment, where students are encouraged to try their best and learn from each other. This peer interaction can be particularly beneficial for shy or reluctant learners, as the game format reduces anxiety and promotes a positive attitude towards learning new vocabulary. Additionally, the visual and auditory stimuli provided by Kahoot! can cater to different learning styles, making the vocabulary learning process more inclusive and effective.

Encouraging Peer Learning and Collaboration

A significant pedagogical advantage of employing Kahoot! in ESL instruction is the opportunity it offers for peer learning. Educators can encourage students to create and share their own Kahoot! quizzes based on recently learned vocabulary. This process of quiz creation necessitates students to have a comprehensive understanding of the vocabulary, as they must formulate accurate questions and answers. By taking ownership of their learning and collaborating with peers, students reinforce their knowledge and assist each other in understanding challenging vocabulary concepts. This collaborative approach not only enhances vocabulary mastery but also cultivates a sense of responsibility and camaraderie within the classroom. When students explain vocabulary to their peers through their quizzes, they reinforce their own understanding, rendering the learning process more effective and comprehensive. Furthermore, peer-created quizzes introduce a variety of perspectives and explanations, enriching the learning experience and making it more relatable and engaging for students. The act of creating quizzes also helps students develop critical thinking and analytical skills, as they must consider how to best convey the meaning and usage of new vocabulary.

Integrating Kahoot! into the ESL Curriculum

To optimise the benefits of Kahoot!, it should seamlessly integrate into the ESL curriculum. This integration can occur by incorporating Kahoot! quizzes as supplementary activities or as part of regular vocabulary lessons. Consistent exposure to new vocabulary through engaging and interactive quizzes ensures that learners have multiple opportunities to practice and reinforce their learning. This consistent reinforcement is vital for long-term vocabulary retention and mastery. Moreover, the data generated from Kahoot! quizzes provides valuable insights for educators. Teachers can analyze the results to identify areas where students may need additional support and adjust their instruction accordingly. This data-driven approach allows for personalized teaching, catering to the individual needs of each student. By utilizing Kahoot! as a

regular component of the curriculum, educators can create a dynamic and effective vocabulary instruction program that fosters a deeper understanding and mastery of English vocabulary among ESL learners. In addition, incorporating Kahoot! into the curriculum aligns with modern pedagogical trends that emphasize formative assessment and immediate feedback, ensuring that instruction is continuously adapted to meet students' evolving needs. The ability to track progress over time through Kahoot!'s analytics also enables teachers to set measurable learning objectives and monitor student achievement against these goals.

Pedagogical Implications of Kahoot! Usage

The pedagogical implications of implementing Kahoot! in ESL classrooms are significant. First and foremost, Kahoot! promotes active learning, where students are actively engaged in the learning process rather than passively receiving information. This active participation enhances understanding and retention of vocabulary. The game-like experience provided by Kahoot! also increases students' motivation and enthusiasm for learning. The intrinsic rewards, such as earning points and achieving high scores, serve as positive reinforcement, encouraging students to participate and learn more actively. Furthermore, Kahoot! caters to different learning styles by engaging students through visual and auditory stimuli. This multimodal approach can be particularly beneficial for ESL learners, as it enhances their ability to learn and remember new vocabulary. Additionally, the competitive and interactive nature of Kahoot! can help break the monotony of traditional language learning methods, making vocabulary acquisition a more enjoyable and stimulating experience.

Furthermore, the use of digital tools like Kahoot! aligns with modern educational practices, helping students develop digital literacy skills while enhancing their language learning experience. In today's digital age, integrating technology into the classroom is essential for preparing students for the future. By using Kahoot!, educators can bridge the gap between traditional learning and digital innovation, providing students with a relevant and engaging learning experience. Overall, implementing Kahoot! in ESL classrooms can lead to more dynamic and effective vocabulary instruction, fostering a deeper understanding and mastery of English vocabulary among learners. The incorporation of digital tools also prepares students for the increasing demands of the 21st-century workplace, where digital proficiency is a crucial skill. By engaging students with tools like Kahoot!, educators not only enhance language learning but also contribute to the development of essential technological competencies. Moreover, Kahoot! encourages self-directed learning, as students can access and play quizzes outside of the classroom, providing additional practice and reinforcement of vocabulary on their own time.

Recommendations and Limitations

Employing Kahoot! in the classroom must be aligned with the readiness and preparation that must be considered. Students that live in different environments may have a hard time to fully accept Kahoot as a learning tool. It is recommended that teachers must make sure that the learners are introduced briefly to the interface of the Kahoot web or application. Primary schools that are located in the rural area must be given insights on how to use devices other than smartphones to access Kahoot!.

Internet connectivity will become the main consideration in applying Kahoot! With that, teachers must make sure that the connection is optimum to utilise this as part of the English curriculum. The other recommendations to make sure to include feedback from the students on how effective the lessons were. A thorough analysis can be done by the teachers to extend the improvement needed after each lesson.

In terms of learning objectives. It is recommended that teachers plan ahead and explain to the students what the learning objective of that particular lesson is. The students will understand that it is merely not just an entertainment but a different learning environment. Games in the classroom have been shown to boost motivation levels overall. Learning, focus, and participation in class activities all increase in students' motivation. In addition, they can be an excellent tool for managing a classroom and inspiring students. Digital gaming is frequently the subject of some criticism. However, using children's passion for video games for educational purposes by introducing games like Kahoot into a lesson can have a significant positive impact on students' self-esteem. A learner must be aware and focused for extended periods of time because games might move swiftly. Playing games helps pupils become more attentive and teaches the brain how to learn, which is a real benefit.

Next, teachers are advised to diversify the digital game-based learning. Do not put limitations on just one or two types of tasks in Kahoot! Explore and expand the creativity of the tools to be fully utilised to ensure the learning process is impactful.

Another drawback to consider is that students may prioritise the competitive aspects of Kahoot! over the educational content. To address this, teachers can incorporate team-based activities and conversations that promote collaborative play over competitive play. It is also crucial to address any digital divides that may develop among students. Teachers should guarantee that all pupils have equal access to the essential technology and provide assistance to those who are not as digitally savvy. This could include holding additional training sessions or giving paper materials to support digital activity.

Lastly, the novelty of using Kahoot! may wear off with time, resulting in decreasing interest. To counteract this, teachers should update the Kahoot! activities' content and presentation on a frequent basis to keep them fresh and entertaining. Incorporating multimedia elements like films, photos, and audio clips can help improve the learning process.

Conclusion

To conclude, Integrating gamification and technology tools, especially through platforms like Kahoot!, shows great potential for improving vocabulary acquisition in English language learners. Drawing on theoretical frameworks such as flow theory, social cognitive theory, and cognitive load theory, Kahoot! is shown to create an engaging and interactive learning environment that enhances motivation, engagement, and cognitive processing. Research highlights several benefits of using Kahoot! in ESL classrooms, including increased student engagement, motivation, collaboration, and better vocabulary retention and learning outcomes (Plump & LaRosa, 2017; Wang, 2015; Tóth, 2018).

Despite challenges like the need for adequate technology infrastructure, issues with vocabulary retention, and time management concerns (Bicen & Kocakoyun, 2018), the use of artificial intelligence can further personalize learning experiences and cater to individual student needs (Holmes et al., 2019). Pedagogically, Kahoot! aligns with active learning principles and provides valuable data that teachers can use to guide their instruction and support students' language development. The platform's real-time feedback and data analytics capabilities help educators monitor progress and adjust their teaching strategies.

Furthermore, using Kahoot! into ESL training can assist bridge the gap between various learning styles. Visual and auditory learners can benefit from the multimedia content, while kinaesthetic learners can participate in the interactive quizzes (Hwang, 2014). This multimodal approach guarantees that a broader spectrum of pupils benefit from the learning activities, encouraging inclusivity in the classroom.

Additionally, incorporating Kahoot! into ESL training has been proven to minimize language anxiety in students, which can be a substantial barrier to effective language learning (Shao et al., 2013). The game-based style creates a low-stress setting in which kids feel more comfortable trying out new words.

Moreover, the collaborative nature of Kahoot! promotes social learning and peer interaction, both of which are essential components of language acquisition (Vygotsky, 1978). Students can work in groups to solve questions, discuss vocabulary phrases, and learn from one another, creating a helpful learning environment.

The platform also allows differentiated learning, allowing teachers to design questions and exams to different competency levels, guaranteeing that all students, regardless of starting point, may participate and profit from the activities (Tomlinson, 2014).

Overall, incorporating Kahoot! in ESL classrooms offers a dynamic and effective method for vocabulary instruction, leading to more engaging and impactful language learning experiences that help students achieve greater proficiency and fluency in English. As educators continue to explore innovative language instruction methods, collaboration among researchers, educators, and technology developers will be key to fully realizing the potential of gamified vocabulary training and promoting more inclusive and effective global language education practices.

References

- Bicen, H., & Kocakoyun, Ş. (2018). Perceptions of students for gamification approach: Kahoot as a case study. *International Journal of Emerging Technologies in Learning (iJET)*, 13(2), 72-93.
- Csikszentmihalyi, M. (1990). *Flow: The psychology of optimal experience*. Harper & Row.
- Bandura, A. (1977). *Social learning theory*. Prentice-Hall.
- Deci, E. L., & Ryan, R. M. (1985). *Intrinsic Motivation and Self-Determination in Human Behavior*. Perspectives in Social Psychology. Plenum.

- Deterding, S., Dixon, D., Khaled, R., & Nacke, L. (2011). From game design elements to gamefulness: defining “gamification”. In Proceedings of the 15th international academic MindTrek conference: Envisioning future media environments (pp. 9-15). ACM.
- Dichev, C., & Dicheva, D. (2017). Gamifying education: What is known, what is believed and what remains uncertain: A critical review. *International Journal of Educational Technology in Higher Education*, 14, 9.
- Flores Quiroz, M., Guttierrez, R., Roccha, F., Valenzuela, M.P. & Vilches, C.. 2021. Improving English Vocabulary Learning through Kahoot!: A Quasi-Experimental High School Experience 21(2): 3–13. <http://www.tewtjournal.org>
- Fuster-Guillo, A., Pertegal-Felices, M.L., Jimeno-Morenilla, A., Azorin-Lopez, J., Rico-Soliveres, M.L. & Restrepo-Calle, F.. 2019. Evaluating Impact on Motivation and Academic Performance of a Game-Based Learning Experience Using Kahoot 10.
- Hwang, G. J. (2014). Definition, Framework and Research Issues of Smart Learning Environments - A Context-Aware Ubiquitous Learning Perspective. *Smart Learning Environments*, 1, 4.
- Holmes, Bialik, M., & Fadel, C. (2019). *Artificial Intelligence in Education*. Center for Curriculum Redesign.
- Hamari, J., Koivisto, J., & Sarsa, H. (2014). Does gamification work?--A literature review of empirical studies on gamification. In 2014 47th Hawaii international conference on system sciences (pp. 3025-3034). IEEE.
- Hasin, I. & Nasir, M.K.M.. 2021. The Effectiveness of the Use of Information and Communication Technology (ICT) in Rural Secondary School in Malaysia. *Journal of Education and e-Learning Research*. Volume 8(No. 1): 59–64.
- Ipeirotis, P. G., and Gabrilovich, E. (2015). Quizz: Targeted crowdsourcing with a billion (potential) users. *International Conference on World Wide Web*, 143-154. <https://doi.org/10.1145/2566486.2567988>
- Johnson, F. V. (2023) Teachers’ Perceptions on the Influence of Kahoot! on the Mathematics Achievement of High School Students
- Kaushik, M. & Guleria, N.. 2020. The Impact of Pandemic COVID -19 in Workplace Vol.12(No.15).
- Li, X., Wang, Y., & Liu, Y. (2020). Gamified vocabulary learning: the impact of intrinsic and extrinsic motivation on vocabulary acquisition. *Computer Assisted Language Learning*, 1-25.
- Licorish A. S., Owen, H. E., Daniel, B. & George, J. L. (2018). Students’ perception of Kahoot’s influence on teaching and learning. *Research and Practice in Technology Enhanced Learning*, 13(9), 1-23. <https://doi.org/10.1186/s41039-018-0078-8>

- Mansur, M. & Fadhilawati, D.. 2019. Applying Kahoot to Improve the Senior High School Students' Vocabulary Achievement 3(2).
- Plump, C. M., & LaRosa, J. (2017). Using Kahoot! in the classroom to create engagement and active learning: A game-based technology solution for eLearning novices. *Management Teaching Review*, 2(2), 151-158.
- Pahamzah, J., Syafrizal, S., & Nurbaeti, N. (2022). The Effects of EFL Course Enriched with Kahoot on Students' Vocabulary Mastery and Reading Comprehension Skills. *Journal of Language and Linguistic Studies*, 18(1), 643-652. Doi: 10.52462/jlls.209
- Singer, N. (2016). Kahoot app brings urgency of a quiz show to the classroom. Retrieved from <https://www.nytimes.com/2016/04/17/technology/kahoot-app-brings-urgency-of-a-quiz-show-to-the-classroom>. Html
- Smith, J., & Johnson, A. (2018). Enhancing vocabulary acquisition through technology: A comparative study of vocabulary learning strategies. *Journal of Educational Technology & Society*, 21(2), 220-232.
- Sweller, J. (1988). Cognitive load during problem solving: Effects on learning. *Cognitive Science*, 12(2), 257-285.
- Tóth, Á. (2018). The impact of using Kahoot! game on the student's learning results: Case study. *Periodica Polytechnica Social and Management Sciences*, 26(1), 59-63.
- Uzunboylu, H., Galimova, E.G., Kurbanov, R.A., Belyalova, A.M., Deberdeeva, N.A. & Timofeeva, M.. 2020. The Views of the Teacher Candidates on the Use of Kahoot as A Gaming Tool 15(23): pp. 158–168.
- Wang, A., Sætre, R., Rydland, T. & Dahl, Y.. 2019. Evaluation of interactive and gamified approaches for teaching ict theory: A study of powerpoint, ssembly, and kahoot.
- Watson, W. R., Mong, C. J., & Harris, C. A. (2017). A meta-analysis of the effects of gaming on learning vocabulary. *Review of Educational Research*, 87(5), 1019-1054.
- Wang, A. I. (2015). The wear out effect of a game-based student response system. *Computers & Education*, 82, 217-227.
- Wang, A. I., & Tahir, R. (2020). The Effect of Using Kahoot! for Learning – A Literature Review. *Computers & Education*, 149, 103818.



Levelling Up Education: Development of 'Lit Legends' Game-Based Learning Kit and Its Influence on Student Success

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Abstract: This research investigates the development and impact of the "Lit Legends" educational kit in game-based learning, particularly focusing on its effect on Form 2 students' ability to identify literary devices. Two specific research questions are addressed: (1) How does the 'Lit Legends' learning kit impact Form 2 students' acquisition of knowledge regarding literary devices? And (2) Does the implementation of the 'Lit Legends' learning kit engage students' interest in learning literature? Using a mixed-method research design, the study measured the effectiveness of the game-based learning tool. The research involved eight Form 2 students divided into a treatment group using "Lit Legends" and a control group using traditional methods. Pre and post-test questions and interviews were utilised as research instruments. Results showed a significant increase in mean post-test scores for the treatment group compared to the control, highlighting the effectiveness of "Lit Legends" in enhancing students' understanding of literary devices. Qualitative findings from interviews echoed these results, indicating increased interest and engagement among students. The seamless integration of education and entertainment in "Lit Legends" holds promise for revolutionising education and enhancing student success in grasping complex literary concepts.

Keywords: *Culturally Responsive Pedagogy, game-based learning kit, literary devices, literature, student engagement*

Introduction

Literature is undeniably a powerful tool that aids students in enriching their tapestry of language. Sharna (2022) highlighted the significance of literature in the context of English language

acquisition, suggesting that it plays a pivotal role in improving suboptimal language proficiency. English literature instruction also helps students become more proficient speakers, more culturally aware, and more critical thinkers (Azmi et al., 2020).

In Malaysia, the inception of literary studies within schools occurred during the 1970s when it was initially incorporated into English Language Reading Programmes and later, formally integrated into the Malaysian Learning syllabus in 2000 (Ganakumaran et al., 2003). In 2005, the inclusion of literature in the curriculum was extended to encompass students from Standard 4 through Standard 6, marking a pivotal development after the integration of literary studies for secondary school pupils. The incorporation of literature into the curriculum was notable due to the low achievement for English papers in two major examinations during the previous years (Omar, 2017). The inclusion of literature is also advocated as a means to achieve the vision outlined by the Malaysian government which is to create holistic individuals in the future (Jais & Ismail, 2023).

Initially regarded as essential, literature later faced a decline in emphasis, only to regain its influential status (Subramaniam, 2007). This resurgence aligns with the National Education Blueprint (2013-2025), which recognizes literature's importance in fostering students' English language proficiency. The revised English language syllabus integrated literature as a component classified under "language for aesthetic use," reflecting its role in enhancing critical thinking skills and achieving educational objectives (Ukat & Ismail, 2022; Zuhaimi & Abdullah, 2023). Table 1 provides an overview of the selected literary texts for secondary school students, following the implementation of the Malaysian Education Blueprint 2013-2025.

Table 1: English literature component prescribed text from 2015 onwards

Form	Poems	Short Stories	Novels	Dramas
Form 1	1. Sad I Ams Trevor Millium 2. News Break Max Fatchen	1. Fair's Fair Narinder Dhani	1. The Swiss Family Robinson by Johanna D. Wyss 2. King Arthur by Janet Hardy-Gou (retold) 3. 20 000 Leagues Under the Sea by Jules Verne	Nil
Form 2	1. My Hero by William Hall	1. Cheat! by Allan Baillie	Nil	1. A Night Out by John Escott (retold)

	2. What is Red t Mary O' Neill			
Form 3	1.A Fighter's Line t Marzuki Ali	Nil	1.The Elephant Ma by Tim Vicary	Nil
Form 4	1. The Living t Photograph by Jack Kay 2. The Charge of t Light Brigade by Lo Tennyson	1. Leaving by M.G. Vassanji 2. Tanjung Rhu t Mingfong Ho	Nil	1. The Right Thing T Do by Martyn Ford
Form 5	1.What Has Happen to Lulu? by Charl Causley 2.A Poison Tree t William Blake	Nil	1. Sing to the Dawn t Mingfong Ho 2.Captain Nobody t Dean Pitchford 3.Dear Mr. Kilmer t Anne Schraff	Nil

However, despite the clear advantages of incorporating literatures, literary genres have been shown to have several drawbacks when used in ESL classrooms, including the pupils' difficulty in retaining attention and having to deal with linguistic challenges (Ukat & Ismail, 2022). One of the linguistic challenges that students may encounter would be the intricacies of literary devices in texts. Based on a study conducted by Kim Wai and Abidin (2020), it is found that students struggle in identifying literary devices which they found to be far too challenging. Not only that, many EFL learners mistakenly believe that English literature opposes their own culture, values, and beliefs (Alshammari et al., 2020). Furthermore, many educators prefer to use the conventional "chalk and talk" approach when teaching literature rather than coming up with innovative teaching strategies that would pique students' interest (Hashim & Abd. Talib, 2019).

To bridge the cultural disconnection and lack of interest experienced by ESL learners when dealing with literary elements, an interactive learning kit specifically designed to accommodate the rich cultural tapestry of Malaysian landscape is imperative. As such, this research is based on two research questions: (1) How does the use of "Lit Legends" learning kit impact the knowledge acquisition of Form 2 students regarding literary devices? and (2) Does the implementation of "Lit Legends" learning kit engage students' interest in learning literature?

Literature Review

Issues and challenges in teaching and learning of English literature

Previous investigations have revealed results that underscore the issues and challenges encountered by both educators and students in the realm of English literature. One of the challenges associated with the selection of literary materials for classroom use would be the prevalent negative attitude among students toward the literature texts utilised in the classroom (Nor & Mahmud, 2012; Ghazali et al., 2009; Naser & Aziz, 2017). The primary reason for students perceiving reading literary texts as unenjoyable stems from their perception that the issues and themes presented are uninteresting, and the novels feature a dreary storyline that lacks relatability to their experiences (Ghazali et al., 2009). Picton (2014) further reiterates by outlining how language complexity and technicalities involved may hinder students from engaging with the selected text as they might not possess adequate knowledge in dealing with the intricacies of linguistic elements. Consequently, students encounter difficulty in learning poetry, as the comprehension of the text necessitates familiarity with linguistic elements (Nor & Mahmud, 2012; Ghazali et al., 2009).

Other than that, cultural alienation is also a prevalent issue when addressing the challenges in English literature. As delineated by Ukat and Ismail (2022), cultural alienation is characterised by the devaluation or rejection of one's own culture or cultural background. As such, it is viewed that one of the notable limitations of English Literature in ESL classrooms is students' inability to fully relate to the selected text due to cultural disconnection (Land, 2007). Wigfield and Cambria (2010) explain that certain texts, due to their cultural and contextual foreignness, lead to a loss of interest among students, hindering their ability to engage deeply with the material. This finding is further supported by previous studies that echoed the same sentiment- the convergence of readers' cultural diversity and the textual provenance pose significant difficulties to students (Ismail et al., 2022).

In addition, educators notably often adhere to traditional teaching methods in literature instruction, resisting innovative approaches (Lin & Eng, 2016). This reluctance may stem from a lack of exposure to student-centred approaches and teachers' deficiencies in content mastery, particularly with sophisticated texts (Omar, 2017). Consequently, students may struggle to comprehend literary texts during lessons (Othman et al., 2015). This phenomenon leads to disinterest and a perceived monotony associated with literature (Aziz & Nasharudin, 2010).

Gamification in literature

Gamification has garnered considerable interest, particularly within educational settings (Koivisto & Hamari 2017; Seaborn & Fels 2015). Due to technological advancements facilitating the development of digitised learning environments and the utilisation of technical capabilities derived from video games, the trend of incorporating gamification into education and learning experiences has been steadily on the rise. Apostol et al. (2013) delineate eight components inherent in games that are harnessed for the gamification of learning such as rules, goals, outcomes, feedback, rewards, problem-solving, narrative structure, players, a secure environment, and a sense of mastery. Optimal selection of game elements by instructional designers or teachers should be contingent upon a thoughtful consideration of educational

objectives and the intended outcomes of the learning process.

In light of the substantial growth in the incorporation of games in language learning, a few researchers have attempted to apply this approach in literature classrooms. In the Malaysian context, John (2019) conducted a study on the use of games to enhance literature learning among Form 4 students in Sarawak. The study employed action research design and involved the use of a game-based learning kit, the 'GrandLit Prix' platform'. The study reveals that the incorporation of gamification elements in 'GrandLit Prix', specifically involving visual aids, unquestionably proved advantageous for the students. The students demonstrated an enhancement in their literature section scores, surpassing their pretest marks by more than 5%.

In a separate study conducted by Omar et al. (2019), the emphasis was placed on examining the utilisation of interactive board games in the process of learning short stories. The study was carried out using a quasi-experimental design involving students from two secondary schools in Kuala Lumpur. The results indicated that students exhibited a positive disposition toward learning literature through a gamified approach, likely because the game prioritised enjoyable learning experiences and facilitated meaningful interaction. Both studies demonstrate that integrating games can be highly beneficial for students, contributing to improvements in both their academic success and interest in learning literature.

Theories and approaches behind the study

This study utilised constructivist learning theories, specifically drawing upon Piaget's Cognitive Constructivism Theory, in which Piaget (1968) postulated that the process of learning is dynamic and learners actively engage in the construction of knowledge by formulating their own construction of meaning. Additionally, constructivism emphasises the facilitation of learners' knowledge construction through social interaction and the utilisation of games would adhere to this as it is able to promote construction (Padirayon et al., 2019). It is also concurred that games are regarded as a communal social experience that learners can utilise to augment their educational endeavours (Yaacob et al., 2019).

Furthermore, according to Kolb's Experiential Learning Model, games can serve a dual role by facilitating a concrete experience and enabling active experimentation. In the former, learners can draw upon either their personal or vicarious experiences to inform intuitive decision-making and the latter underscores the significance of practical applications in accomplishing tasks (Omar et al., 2020). The learning model is also aligned with the incorporation of games where it serves as an experiential exercise in which learners actively apply their acquired knowledge and skills, employing strategic approaches in the execution of their designated roles (Zapalska, 2021).

The study also utilized Culturally Responsive Pedagogy (CRP) to address cultural relevance. CRP emphasises the significance of connecting learning to students' language, social interactions, and lived experiences (Lawrence, 2020). It prioritises acknowledging students' cultural backgrounds, experiences, and perspectives (Guberina, 2023). Essentially, CRP recognizes and respects students' diverse cultural identities. Given the limited cultural relevance of foreign literary texts to Malaysian students, CRP serves as a transformative educational approach. It aims to bridge cultural gaps by integrating students' experiences with the prescribed texts and elements. Thus, CRP is crucial in this study to tackle cultural challenges effectively.

Methodology

Research Design

This research employs both quantitative and qualitative approaches to assess the impact of Lit Legends, an educational card game, on Form 2 students' comprehension of literary devices and their ability to apply them in literary texts. Using a pretest-posttest design, the study measures individual progress and overall effectiveness by assessing students' comprehension before and after playing the game. Interviews are utilised to gather detailed insights directly from participants, exploring the nuanced dimensions of engagement and interest in learning literature. This method allows for a comprehensive exploration of students' experiences and perceptions regarding the effectiveness of Lit Legends in fostering engagement with literary devices.

Sample and Data Collection

This study involved eight participants from a Malaysian secondary school in Melaka, Malaysia, representing the entire Form 2 student body. Purposive sampling was utilised to select participants with prior experience in card games and a basic familiarity with card game mechanisms. This choice spared researchers from introducing basic game features, such as turn-taking, and ensured a sample representing the population's diversity. Participants shared similar backgrounds, validated through their mid-year examination results, serving as a measure of equality.

Data collection utilised two instruments: a pre-test administered in the initial week with 20 multiple-choice questions covering literary devices, and a post-test conducted two weeks after introducing the intervention, "Lit Legends." Participants earned marks for each completed question, later converted into a percentage. Subsequently, face-to-face interviews were conducted immediately after the post-test to gather qualitative insights on the impact of "Lit Legends" on students' interest in learning literature.

Table 2: Previous Exam Results

	Student								
Grades	A	B	C	D	E	F	G	H	Total
Grade A (8/100)			✓		✓				2
Grade B (7/84)	✓						✓		2

Grade C (669)		✓				✓			2
Grade D (559)			✓					✓	2
Total									8

Research Instrument

This research utilised Davis (1986) Technology Acceptance Model (TAM) survey questionnaire, which was transformed into an interview format. Adaptation and modifications were implemented and validated to fulfil the study's objectives. TAM comprises five factors: (1) perceived ease of use, (2) perceived usefulness, (3) behavioural intention, (4) attitudes, and (5) actual usage. The interview comprised two sections: Part 1, consisting of three items related to demographics, and Part 2, containing six items addressing respondents' perceptions and experiences in using "Lit Legends" as an intervention.

Lit Legends, an Educational Card Game

This learning tool's approach focuses on the practical aspects of the product, which takes the form of a card game called "Lit Legends." Lit Legends is an educational card game crafted to assist students in improving their grasp of literary devices. The creation of this educational tool aligns with the adaptation of the ADDIE Model put forth by E. Forest (2014). Following the ADDIE model, the learning kit progresses through five phases: requirement analysis, design, development, implementation, and evaluation.



Figure 1: Lit Legends deck set

Data Analysis Procedure

The analysis of students' improvements in scores utilised the independent T-test feature in SPSS v27, employing inferential statistics to explore frequency, percentage, standard deviation, and mean values. SPSS's efficiency in analysing repetitive data facilitated swift validation of results. The data summarised participants' responses, revealing the extent to which "Lit Legends" enhanced pupils' proficiency in using literary devices.

Qualitative analysis of interview data delved into the impact of the 'Lit Legends' learning kit on students' interest in learning literary devices. Verbatim transcription captured participants' perspectives accurately, followed by thematic analysis to identify recurring themes and patterns. These themes were organised to present key patterns in how the learning kit affected students' interest. Diverse perspectives were considered to ensure a comprehensive exploration of 'Lit Legends' impact on students, yielding a nuanced understanding of their perceptions regarding its impact on their interest in learning literary devices.

Findings

RQ 1: How does the use of “Lit Legends” learning kit impact the knowledge acquisition of Form 2 students regarding literary devices?

A T-test (independent sample T-test) was carried out to assess whether a notable difference existed between the mean post-test scores of the treatment group and the control group. The outcomes presented in Table 2 reveal a mean score of 86.2 (SD = 8.53) for the treatment group and a mean score of 47.5 (SD = 14.43) for the control group, resulting in a difference of 38.7 between the two means. These findings indicate that the mean score of the treatment group surpasses that of the control group. Additionally, the t-test analysis reveals a significant p-value of .004, which falls below the 0.025 threshold. This implies a significant disparity in post-test scores between the treatment and control groups. With a confidence level of 95%, it can be concluded that there exists a substantial difference in the mean post-test scores of the treatment group compared to the control group. Thus, "Lit Legends" has positively impacted the knowledge acquisition of Form 2 students regarding literary devices.

Table 3: Independent T-Test on the impact of knowledge acquisition of Form 2 students regarding literary devices

Group Statistics					
	Group	N	Mean	Std. Deviation	Sig.
Posttest_Score	Treatment Group	4	86.2500	8.53913	.004
	Control Group	4	47.5000	14.43376	

RQ 2: Does the implementation of “Lit Legends” learning kit engage students’ interest in learning literature?

Generally, the interview responses from Form 2 students regarding the use of "Lit Legends" as a learning tool for literary devices reveal a positive and engaging experience. The insights gathered from the participants shed light on various aspects of the game's impact on their learning process. Table 4 shows the responses given by the students regarding the use of “Lit Legends”.

Table 4: The interview responses from Form 2 students regarding the use of "Lit Legends" as a learning tool for literary devices

Item	Question	Feedback
1	Do you agree that using “Lit Legends” as a learning tool is a wise idea?	A: It's not used just for memorising stuff; you actually get to use what you learn during the game. C: The game doesn't feel like a typical lesson. E: It's wise because it keeps us engaged and motivated to understand things better.
2	Is it easy for you to use “Lit Legends” as a learning tool?	B: Yes, the rules are not complicated. D: Definitely, the game has clear instructions, and we quickly got the hang of it. F: The game mechanics are straightforward.
3	Do you think that “Lit Legends” is a fun tool to incorporate in learning literary devices?	A: I like that it's not boring, and we get to compete with each other. D: It's cool that we can challenge our friends. G: Yes, learning with "Lit Legends" is like playing and learning at the same time.
4	What is your feeling when playing “Lit Legends”?	B: The game makes me want to do well and understand everything because when you win, it's a real confidence boost. E: The game helps me remember things without feeling overwhelmed. H: The competition part makes it a bit intense, but in a good way. I feel more involved in the learning process.
5	Do you understand literary devices better after using “Lit Legends”?	A: Yes because the game forces you to think about how to apply literary devices in different situations. B: It sticks in your mind better when you see why and how

		to use literary devices and I get that when using "Lit Legends". C: When you're playing the game, it's like you're practising without realising it.
6	Would you use "Lit Legends" frequently to revise literary devices?	F: For sure, it's more interesting than just reading notes and textbooks. G: If I can revise while playing a game, I'd do it more often. H: I think so too. It's a break from the usual way of studying.

Participants unanimously agree that using "Lit Legends" is a wise idea. Student A emphasises that the game goes beyond mere memorization, allowing students to apply what they learn actively. Student E reinforces this sentiment, stating that the game keeps them engaged and motivated, emphasising the practical application of knowledge within the game context. The consensus is that the game transforms the learning experience into an active and participatory process.

The ease of using "Lit Legends" emerges as a prominent theme. Participants highlight the straightforward rules and clear instructions of the game. Student B asserts that the rules are not complicated, and Student D affirms that they quickly grasped the game mechanics. This feedback indicates that the game's design contributes to a user-friendly experience, ensuring accessibility for all students.

The perception of "Lit Legends" as a fun tool for learning literary devices is strongly endorsed by the participants. Student A appreciates the game's ability to make learning enjoyable and competitive. Student D notes the exciting element of challenging friends, and Student G explicitly states that learning with "Lit Legends" feels like a combination of play and education. The overall sentiment is that the gamified approach adds an element of enjoyment to the learning process.

Furthermore, the emotional impact of playing "Lit Legends" is a noteworthy finding. Student B highlights the boost in confidence gained from winning, linking success in the game to increased self-assurance. Student E notes that the game aids in remembering concepts without feeling overwhelmed, suggesting a positive emotional association with the learning experience. Student H emphasises the intensity brought about by competition, expressing a heightened sense of involvement in the learning process.

Participants also affirm that their understanding of literary devices improves through the use of "Lit Legends." Student A emphasises the necessity of thinking about the application of literary devices in diverse situations within the game. Student B emphasises the lasting impact of seeing why and how to use literary devices, highlighting the game's effectiveness in reinforcing learning. Student C notes that playing the game feels like practical, subconscious practice.

The willingness to use "Lit Legends" frequently for revising literary devices is evident among

the participants. Student F expresses a preference for the game over traditional study methods, emphasising its inherent interest. Student G expresses a readiness to revise while playing, indicating a desire for a more engaging revision process. Student H echoes this sentiment, viewing the game as a refreshing departure from the usual study routine.

Overall, the qualitative findings underscore the positive impact of "Lit Legends" on Form 2 students' perceptions and experiences of learning literary devices. The game's ability to engage, facilitate understanding, and evoke positive emotions contributes to its effectiveness as an innovative educational tool. The insights gained from the participants provide valuable qualitative support for the broader understanding of the game's role in enhancing literary device comprehension among students.

Conclusion

The T-test analysis results strongly endorse the effectiveness of integrating educational card games, particularly "Lit Legends," to enhance students' comprehension of literary devices. The treatment group, immersed in the card game, exhibited a significantly higher mean post-test score compared to the control group employing traditional methods, with a notable difference of

38.7 points between them. This substantial variance underscores the superior performance of the treatment group, emphasising the positive impact of the gamified learning approach. Qualitative findings further support this conclusion, as participants unanimously highlight the benefits of using "Lit Legends," including increased engagement, ease of use, enjoyment, emotional impact, improved understanding, and a willingness to use it for revision.

In light of these positive outcomes, educators are encouraged to integrate innovative and engaging tools like "Lit Legends" into their literary devices teaching methodologies. The study highlights the potential of gamified approaches not only to capture students' interest but also to enhance their comprehension and application of intricate concepts. In conclusion, this research contributes valuable insights to literature education by emphasising the affirmative influence of gamified learning tools.

Recommendations

Based on the findings of the study, several recommendations emerge for future researchers and practitioners. First, future researchers may replicate this study in diverse educational contexts to validate the effectiveness of "Lit Legends" across different study populations which may include larger sample sizes. Furthermore, a longitudinal study may also be conducted to assess the sustained effects of "Lit Legends" on students' comprehension of literary devices.

References

Affendi, F. R., & Aziz, A. (2020). Systematic review: The challenges and approaches in the teaching of English literature in enhancing English proficiency. *International Journal of*

Academic Research in Progressive Education and Development, 9(1), 318–336.
<https://doi.org/10.6007/IJARPED/v9-i1/7136>

- Alisoy, H. (2023). Unlocking student engagement in stylistics: A game-based pedagogical strategy for lower-level English learners. *International Journal of Philosophical Studies and Social Sciences*, 3(5), 5-12.
- Alshammari, H. A., Ahmed, A. E., & Shouk, A. M. A. (2020). Challenges to studying English literature by the Saudi undergraduate EFL students as perceived by instructors. *English Language Teaching*, 13(3), 8-19.
- Apostol, S., Zaharescu, L., & Alexe, I. (2013). *Gamification of learning and educational games*. In Proceedings of the 9th International Scientific Conference eLearning and Software for Education (pp. 67-72). Bucharest.
- Aziz, M. A., & Nasharudin, S. N. S. (2010). An investigation on approaches used to teach literature in the ESL classroom: A case study of Sekolah Menengah Kebangsaan Taman Desa Skudai, Johor Bahru. Unpublished manuscript. Universiti Teknologi Malaysia. Retrieved from <http://eprints.utm.my/11115/>
- Azmi, M. N. L., Hassan, I., Ali, E. M. T. B. E., Hidayah, A. T., Anas, M. B., & Suhaimi, N. I. (2020). English language learning, environment, and the formation of Islamic self-identity among students in selected religious secondary schools. *International Journal of Innovation, Creativity, and Change*, 11(7), 466-482.
- Bawa, P. (2020). Game on!: Investigating digital game-based versus gamified learning in higher education. *International Journal of Game-Based Learning*, 10(3), 16–46.
- Davis, F. D. (1986). *A technology acceptance model for empirically testing new end-user information systems: Theory and results* (Doctoral dissertation). Massachusetts Institute of Technology.
- Ganakumaran, S., Hamdan, S. I., & Koo, Y. L. (2003). Pedagogical implications of the incorporation of the literature component in the Malaysian ESL syllabus. In M. E. Vethamani & G. Subramaniam (Eds.), *Teaching of literature in ESL/EFL contexts* (pp. 62-87). Petaling Jaya: Sasbadi MELTA ELT Series.
- Ghazali, S. R., Muthusamy, C., & Jusoff. (2009). ESL students' attitude towards texts and teaching methods used in literature classes. *English Language Teaching*, 2(4), 51-56.
- Guberina, T. (2023). Cultivating inclusive learning environments: Incorporating diversity through culturally responsive pedagogy. *Social Science Chronicle*, 2(1), 1-14.
- Hashim, H., & Abd Talib, M. A. (2019). The learning of English literature in Malaysia. *Religación*, 4(17), 68-74.
- Isa, N., & Mahmud. (2012). Literary texts for Malaysian secondary schools: Needs versus policy. *International Journal of Humanities and Social Science*, 2(7), 76-86.
- Ismail, H. H., Azizan, M., Rashid, R. A., & Asif, M. (2022). Appropriating Shakespearean

- graphic novels for Malaysian classrooms to create correct gender representations. *Frontiers in Psychology*, 13, 874960. <https://doi.org/10.3389/fpsyg.2022.874960>
- Jais, N. F. M., & Ismail, H. H. (2023). Combining Learners' Challenges in The Learning of Literature in Malaysian ESL Classrooms: A Review. *International Journal of Academic Research in Progressive Education and Development*, 12(1), 512–535.
- John, S. D. (2019). The GrandLit platform: A constructive tool to support literature learning. *The Asian ESP Journal*, 15(2), 04-22.
- Koivisto, J., & Hamari, J. (2019). The rise of motivational information systems: A review of gamification research. *International Journal of Information Management*, 45, 191-210.
- Lam, P., & Tse, A. (2022). Gamification in everyday classrooms: Observations from schools in Hong Kong. *Frontiers in Education*, 6, 630666. <https://doi.org/10.3389/feduc.2021.630666>
- Lawrance, J. P., Moreira, A., & Santos, C. (2021). Gamification to improve learners' learning in higher education. *Internet Latent Corpus Journal*, 11(2), 8-22.
- Lawrence, A. 2020. Teaching as Dialogue: An Emerging Model of Culturally Responsive Online Pedagogy. *Journal of Online Learning Research*, 6(1): 5-33
- Ling, S., & Eng, C. S. 2016. Types of English literature teaching approaches preferred by teachers in secondary schools in Miri, Sarawak. *International Journal of Language Education and Applied Linguistics*.4. <https://doi.org/10.15282/ijleal.v4.481>
- Naser, S. H. M., & Aziz, A. A. (2017, August 23). *Students' perceptions of the text selection in the literature component* [Paper presentation]. Presented at The National Pre-University Seminar. Selangor, Malaysia.
- Omar, N., Govindasamy, M., Kunjanman, S., & Yunus, M. M. (2019). Literature made easy: Exploring the use of games in learning a short story. *ESL Practitioner*, 8(5), 53-63.
- Omar, Y. (2017). The inclusion of literature components in Malaysian English papers: The challenges and pros in teaching and learning. *Al-Ta Lim Journal*, 24(3), 174–186. <https://doi.org/10.15548/jt.v24i3.335>
- Othman, N. I., Shah, P. M., Karim, A. A., Yusof, A., Din, R., Ramli, N. A., & Salleh, N. S. M. (2015). Personalizing learning of English literature: Perceptions and challenges. *Journal of Personalized Learning*, 1(1), 104-112.
- Padirayon, L., Pagudpud, M., & Cruz, J. (2019). Exploring constructivism learning theory using mobile game. *IOP Conference Series: Materials Science and Engineering*, 482, 012004. <https://doi.org/10.1088/1757-899X/482/1/012004>
- Piaget, J. (1968). *Six psychological studies*. (A. Tenzer, Trans.). New York: Vintage Books.
- Picton, I. (2014). *The impact of eBooks on the reading motivation and reading skills of children and young people: A rapid literature review*. London: National Literacy Trust.

- Seaborn, K., & Fels, D. I. (2014). Gamification in theory and action: A survey. *International Journal of Human-Computer Studies*, 74, 14–31.
- Subramaniam, G. (2007). Literature programme in Malaysian schools: Then and now. In M. E. Vethamani & R. Perumal (Eds.), *Teaching English in Malaysia*. Petaling Jaya: Sasbadi Sdn. Bhd.
- Ukat, J. A., & Ismail, H. H. (2022). Teaching literature in Malaysian English classrooms: A review on its challenges and opportunities. *International Journal of Academic Research in Business & Social Sciences*, 12(11), 1991-2004.
- Vijayarajoo, A. R., Yatim, A. I. A., Singh, K. K. M., & Jan, R. M. (2019). Poetricks: A game to engage Malaysian secondary school ESL learners in understanding poetry. *Social and Management Research Journal*, 16(1), 1-18.
- Wai, T. L. K., & Abidin, H. Z. (2020). Learning poetry: Attitudes and challenges faced by ESL students. *LSP International Journal*, 7(2), 55-69.
- Wigfield, A., & Cambria, J. (2010). Students' achievement values, goal orientations, and interest: Definitions, development, and relations to achievement outcomes. *Developmental Review*, 30(1), 1–35.
- Yaacob, A., Ying, L. X., Mantor, S. R. A., Mansor, W. H. A. N., Zahari, N. F. C., & Liza, G. G. (2019). Teachers' perspectives on the use of Bug's Life board game in enhancing LINUS pupils' vocabulary board. *Practitioner Research*, 1, 155-179.
- Zapalska, A. (2021). Designing experiential learning with simulations and games to improve education in an undergraduate engineering major. *ASEAN Journal of Engineering Education*, 5(1), 32-43.
- Zuhaimi, N., & Abdullah, A. Q. C. (2023). Literature in Malaysian classrooms: A conceptual paper. In *ICOFA 2023, ASSHER* (pp. 269-280).



A Transformative Pedagogical Intervention for ESL Literature Instruction: “Lit Up Your Adventures” Learning Kit

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Abstract: "Lit Up Your Adventures" (LA), a game-based learning kit, aims to rekindle student engagement with poetry. This study explores the learning kit's development and implementation in ESL classrooms, analysing its effectiveness through a mixed-methods approach. Triangulated data from pre- and post-assessments, observations, student interviews and teacher feedback revealed significant gains in student motivation, vocabulary acquisition, comprehension and critical thinking skills. LA's interactive activities and focus on language as a tool for meaning-making resonated with students, fostering deeper engagement with the poems. The study further highlights the importance of a dynamic feedback loop, emphasising how teacher and student input informed iterative program refinements to address challenges and improve effectiveness. LA's promising results suggest its potential to revolutionise poetry education by igniting a love for language and literature through playful and engaging learning experiences. This study lays the groundwork for further research and refinement, paving the way for LA to illuminate the path for future generations of young learners to discover the magic of poetry.

Keywords: Comprehension, ESL classrooms, interactive learning kit, literature instruction, student engagement, vocabulary acquisition,

Introduction

The historical evolution of literature instruction within the field of language education reflects a dynamic relationship between pedagogical trends and methodologies across different eras. In the early 1900s, the grammar-translation method was the prominent approach. This method, characterised by an emphasis on grammatical rules, rote memorisation of vocabulary through

repetition and translation exercises, positioned literature primarily as a practical tool for applying acquired grammatical and lexical knowledge (Swarnananda, 2020). Literature served as a medium to showcase authentic examples of sentence structures, verb forms, and memorised vocabulary. Subsequently, during the mid-1900s, a significant transformation transpired, pivoting towards an increased focus on cultivating students' communicative competencies. The direct method and the audio-lingual method rose to prominence during this era. However, this shift came at the cost of literature, which experienced a diminishing presence and eventually vanished from the curriculum. This significant shift highlights an inclination towards prioritising direct communication, thereby relegating literature to a subsidiary role, with educators emphasising spoken language proficiency at the expense of engaging with literary texts. Advancing to the 1960s and '70s, a transformative change took place with the advent of the communicative approach as the dominant methodology in language classrooms. This marked a notable resurgence of interest in literature within language education contexts. Educators recognised the intrinsic value of literature in fostering not only linguistic but also communicative competencies. According to Noer (2012), the communicative approach facilitated a more holistic integration of literature into language instruction, acknowledging its role in enhancing students' ability to understand and express themselves in a communicative context.

Literary Pedagogy in Malaysian Primary Schools and its significance

In examining the landscape of literature instruction in Malaysian primary schools, notable transformations have manifested in recent years. Historically, literature existed as a distinct domain governed by prescribed readings, as outlined by Subarna and Ganakumaran (2008). However, a contemporary perspective reveals a paradigmatic shift towards the integration of literature into the regular curriculum, aligning with broader educational paradigms. The evolution in Malaysia's literature education signifies a deliberate effort to intertwine literature and language within the educational framework. This transformative shift, as discussed by Kaur and Mahmor (2013), emphasises not only language acquisition but also the essential role of literature in fostering personal development, offering students a platform for self-discovery and self-expression. Moreover, this paradigmatic shift recognises literature as a potent catalyst for character growth, instilling values and moral perspectives that contribute to the holistic development of students. The deliberate inclusion of diverse literary works and cultural narratives broadens students' horizons, providing them with exposure to diverse global perspectives. This exposure is instrumental in nurturing cultural sensitivity, fostering an appreciation for diversity and cultivating a more comprehensive understanding of the world.

Contemporary literature education in Malaysian primary schools encompasses a varied selection of literary genres, encompassing novels, short stories, poetry, and drama. This expansive approach aligns with the explicit objectives set forth by the Ministry of Education. As explained by Siti et al. (2018), the ministry's explicit goals extend beyond the conventional scope of language acquisition. They encompass a broader educational agenda, emphasising the cultivation of a genuine passion for literature among students. The curriculum aims to provide students with an understanding of human experiences and relationships, offering them insights into the complexities of diverse narratives. Moreover, literature education becomes a vehicle for the transmission of values, fostering a sense of moral awareness and ethical consideration. The

emphasis on critical thinking is integral, encouraging students to analyse and interpret literary works, thereby enhancing their cognitive abilities (Siti et al., 2018). Additionally, the curriculum introduces various modes of writing and expressing ideas, nurturing the development of students' creative and communicative skills.

The significance of literature in language education, particularly within the context of young English as a Second Language (ESL) learners in Malaysia, is accentuated by its dual function as a repository of linguistic and cultural knowledge. Educators involved in literature instruction employ varied methodologies with the aim of igniting enthusiasm for narrative exploration among learners. The main objective is not solely confined to the augmentation of language proficiency but extends to the stimulation of critical thinking and the fostering of an appreciative understanding of diverse cultures. Literature, encompassing diverse genres such as narratives, poems and dramatic works, serves as an invaluable repository of linguistic richness. It operates as a medium for the introduction of advanced vocabulary, varied sentence structures and complex expressive elements (Özlem & Sıla, 2021). Going beyond immediate linguistic advantages, literature significantly contributes to the enhancement of reading, writing, speaking and listening skills, thereby fostering a comprehensive language proficiency (Lucas, 2020).

The cognitive advantages associated with literature extend beyond linguistic competence, encompassing a comprehensive cognitive exercise. Engaging with stories encourages interpretative, analytical and critical thinking is crucial for both academic pursuits and real-world applications (Chi-An & Shu-Ying, 2009). Reading, in this context, evolves into a process of decoding, analysing writing techniques and identifying recurring themes across diverse narratives (Paul, 2020). This intellectual engagement fosters a strong cognitive toolkit for learners, enhancing their capacity to navigate both scholastic challenges and the complexities of the broader world. Moreover, literature serves as an eyeopener to diverse cultures and perspectives, akin to a passport enabling exploration of different societies and traditions (Kevin, 2018). It facilitates a virtual journey into uncharted territories, providing insights into various historical epochs and geographical locations. This immersive experience fosters open-mindedness and empathy, shaping learners into global citizens who are equipped with the awareness of interconnectedness and cultural diversity. The integration of literature into language education goes beyond being merely a pedagogical strategy; it serves as a gateway to nurture young minds and equip them for forthcoming challenges (Janice, 2018; Edgar, 2023). This paper aims to investigate innovative teaching methods employed to enhance the literature experience for ESL primary students. The ultimate objective is to provide educators and researchers with valuable insights and resources, empowering them to excel in their teaching pursuits and contribute to the comprehensive development of young learners in both language proficiency and cognitive abilities.

Literature Review

The Impact of CEFR on Literature Teaching

The integration of literature into language education has undergone a transformative shift catalysed by the influence of the Common European Framework of Reference for Languages

(CEFR). This transformation demands educators to align their pedagogical approaches with CEFR standards, involving a meticulous selection of texts tailored to the language proficiency levels of learners. According to Paramjit and Mah (2022), The CEFR serves as a guiding framework, directing educators to curate a literary curriculum that not only facilitates language learning but also ensures coherent progression in English proficiency, simultaneously immersing learners in captivating narratives. Beyond the imperative of enhancing language skills, contemporary literature instruction is distinguished by a broader objective – the cultivation of a genuine appreciation for literature. Consequently, educators are innovating their teaching methods and teaching aids, seeking not only comprehension but also profound engagement to ignite a passion for literature among students. Shaped by the influence of the CEFR, the contemporary landscape of literature teaching embodies an ethos where pedagogy transcends traditional boundaries. It no longer adheres to the rigidity of grammar-translation methods but has evolved into a dynamic, engaging, and enjoyable educational pursuit. The integration of language proficiency development with a deeper appreciation for literature establishes the foundation of this evolved pedagogical paradigm, exemplifying a dual outcome of improved language skills and an enriched affinity for literature.

In the current landscape of literature instruction, influenced by the CEFR, the primary objective has evolved beyond the traditional focus on enhancing language skills. Educators are now driven to instil a genuine love for literature, prompting innovative changes in their teaching methods. The emphasis no longer rests solely on comprehension; instead, the goal is to cultivate profound engagement and kindle a passion for literature among students. This shift signifies a departure from the conventional rigidity associated with grammar-translation methods, ushering in a teaching endeavour that is characterised by dynamism, engagement, and enjoyment.

The integration of language proficiency development and a deeper appreciation for literature stands as this foundation shifted pedagogical paradigm. In this context, literature is not merely viewed as a means to improve language skills; rather, as a journey that enriches students' lives by fostering a genuine affection for literary works. The CEFR has played an important role in navigating this dual transformation, directing literature teaching towards a more holistic and impactful approach. Essentially, the contemporary literature classroom has become a space where language acquisition seamlessly intertwines with the exploration of diverse narratives, yielding a two-fold outcome of enhanced language skills and a heightened fondness for literature. This dual impact highlights the significance of the CEFR in shaping the landscape of today's literature education.

Literature Teaching Models and Approaches

In the field of literature in second language teaching, distinct approaches have emerged, each based on models established by Carter and Long (1991). These models serve as foundational frameworks for various literature teaching approaches (Rashid et al. 2020; Aydin, 2013; Bagherkazemi & Alemi, 2010; Thunnithet, 2011). The first model is the Cultural Model, which emphasises literature's role as a cultural treasure trove. Advocates of this model emphasise its significance in providing students with insights into history, politics, social norms, and traditions. This approach, typically teacher-centred, goes beyond the literary aspect, delivering a rich array of information and historical context to students (Rashid et al., 2010).

The second model, known as the Language Model, places a focus on the inherent power of language within literature. This model seamlessly integrates language and literature, offering students a unique opportunity to enhance their language proficiency while immersing themselves in various literary concepts. By intertwining language skills with the study of literature, this approach proves to be an excellent choice for fostering language development in students (Hwang & Embi, 2007).

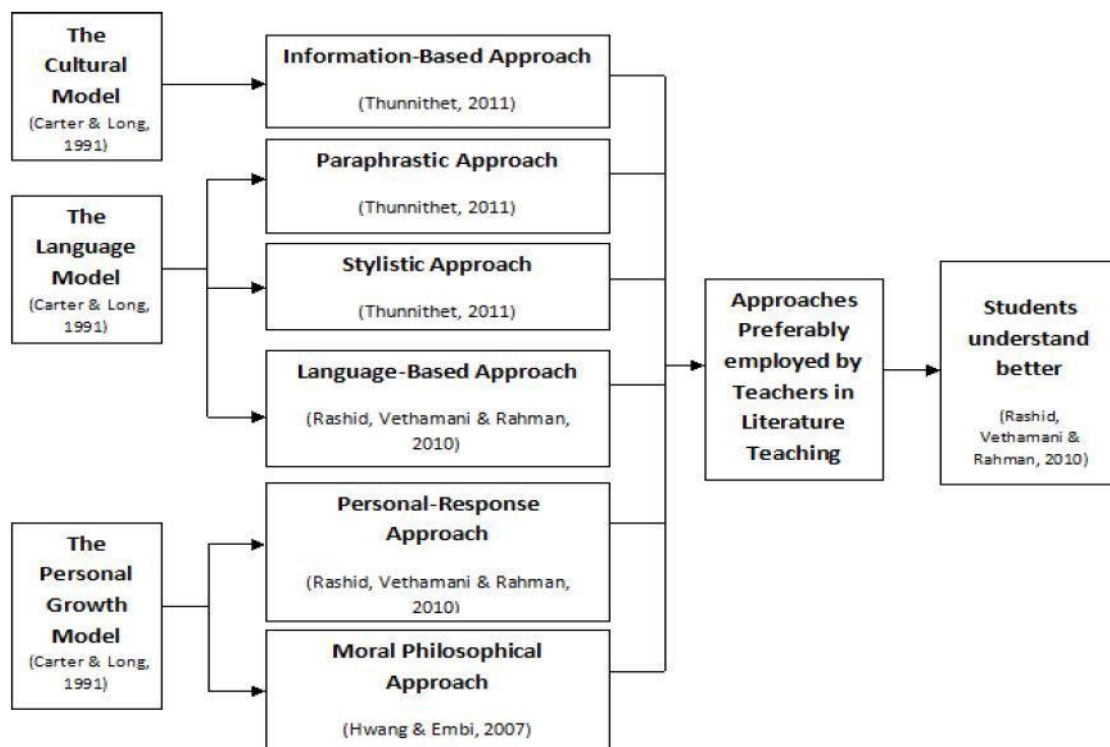


Figure 1: Literature Teaching Models Established by Carter and Long (1991)

The third model, the Personal Growth Model, shifts the focus to personal engagement and connection with literature. According to Carter and Long (1991), literature serves as a gateway for students to gain a deeper understanding of themselves, connect with universal themes, and relate to the world around them. Beyond instilling a love for reading, this model encourages students to apply literary insights to their own lives and relationships, fostering not only language proficiency but also personal growth.

The significance of these approaches in ESL classrooms cannot be overstated, serving as guiding principles to facilitate genuine and meaningful connections between students and the literature instruction. Among these approaches, three specific pedagogical approaches have risen to prominence in the teaching of literature to ESL primary learners, namely, the Information-Based Approach, the Personal-Response Approach and the Language-Based Approach.

The Information-Based Approach distinguishes itself by seamlessly integrating language skills with diverse subjects, providing students with a comprehensive understanding of a broader curriculum. Its distinctive feature lies in transcending conventional language learning, fostering in-depth discussions that delve into the nuanced content encountered by students (Olmedo, 2014). The Personal-Response Approach, championing the cause of active reading, conceptualises readers not as passive observers but as active participants who contribute their unique experiences and perspectives to the text. By fostering personal and interactive connections with literature, this approach transforms the act of reading into a dynamic and engaging conversation with the literary work at hand (Cagri, 2019).

On the other hand, the Language-Based Approach (LBA) is chosen as the foundation when creating the learning kit, specifically for literature instruction to ESL primary learners. Rooted in an immersive linguistic setting, the LBA highlights the pivotal significance of vocabulary, grammar and comprehension while seamlessly integrating literary works. This instructional approach provides a dual benefit by refining language skills and fostering a deep-seated enthusiasm for reading among students. As articulated by Maley and Duff (1990), the LBA strategically utilises literary texts as invaluable tools to forge connections between students and diverse linguistic dimensions, encompassing vocabulary and language skills.

According to McRae (1991), the LBA framework systematically deconstructs diverse elements within a text, directing students' attention towards understanding the interconnectedness of language aspects and their collective contribution to the overall meaning of the literary work. In this learner-centred and activity-based approach, teachers play a central role in organising tasks, promoting active involvement and directing students to express their ideas about the literary text. This approach focuses on practical language-oriented activities and aims to cultivate language proficiency in learners (Muthusamy & Ibrahim, 2017). While acknowledging the advantages of the LBA, such as its effectiveness in elevating language skills, it is crucial to discern its inherent limitations. There is a potential oversight of historical and contextual backgrounds embedded in literary texts. Aligned with Carter's advocacy (2007), it is crucial to consider learners' responses and experiences as essential elements of the teaching approach.

In summary, the LBA emerges as a transformative and pragmatic instructional strategy, treating literature as an instrumental tool for enhancing learners' language proficiency. Within the dynamic classroom environment created by the LBA, learners actively engage with literary texts, not merely as passive recipients, but as active contributors, thus strengthening their language proficiency. The seamless integration of literature and language skills within the LBA framework aligns with the contextualised literature prevalent in Malaysian educational settings. This approach leverages readers' background knowledge and experiences, making it particularly attractive to ESL primary learners. Navigating the landscape of ESL literature instruction, the LBA emerges as an effective approach, combining language acquisition with an enhanced appreciation for literary works. This scholarly exploration aims to provide educators with insightful perspectives, enabling them to thoughtfully choose, adapt and design activities that not only improve language proficiency but also cultivate a passionate enthusiasm for literature among ESL primary students.

Methodology

Recognising the importance of a structured and systematic approach, this study utilised the ADDIE model to develop the "Lit Up Your Adventures" learning kit. This choice aligns with the findings of Jais et al. (2022), who highlight the effectiveness of the ADDIE model for instrument, curriculum, and project development, particularly when tailored to specific contexts. Each of the five ADDIE stages - Analysis, Design, Development, Implementation, and Evaluation - were carefully adapted to fit the unique needs of this program, as illustrated in Figure 2. Further details regarding each stage and its customisation are provided in the following sections.

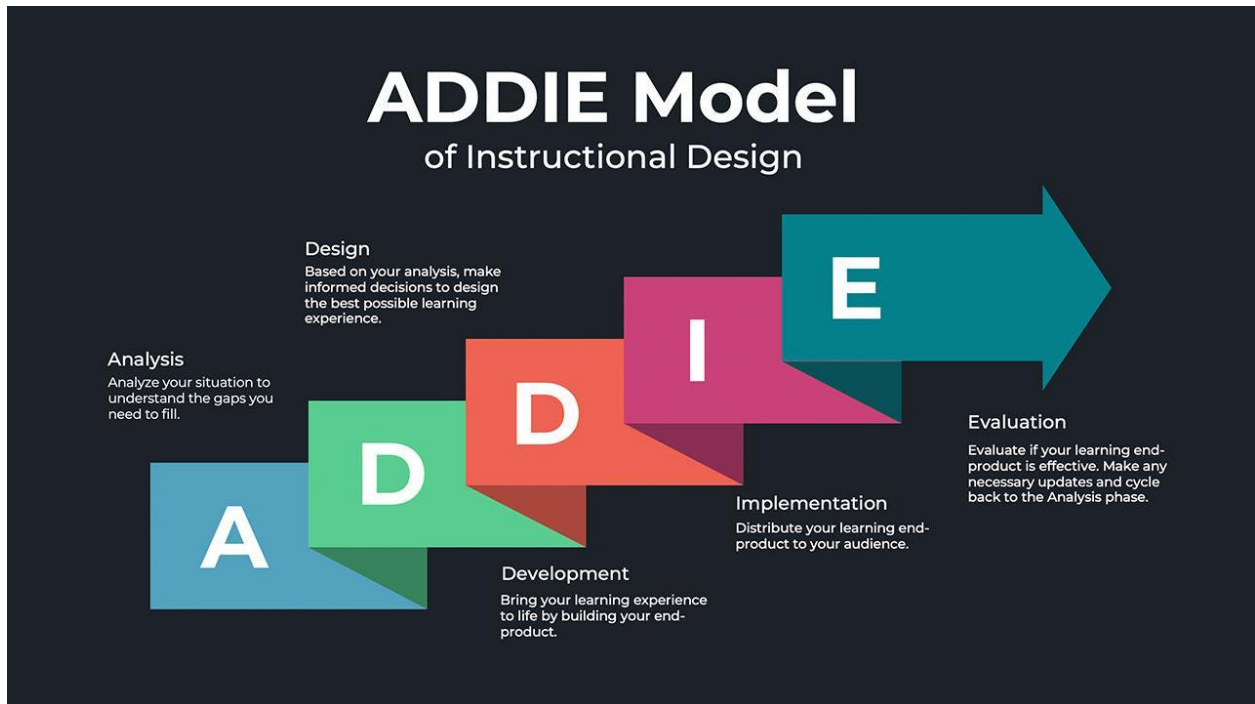


Figure 2: Summary of the ADDIE model

Analysis

The development of the "Lit Up Your Adventures" learning kit, designed to support the teaching of June Crebben's "Holiday Memories" poem for primary 4 students in Malaysia, was guided by a comprehensive analysis phase encompassing both needs assessment and content analysis. This phase served as the foundation for crafting engaging and effective language-based activities aligned with the poem's themes and language structures.

a. Needs Assessment: Listening to Teacher Voices

The initial step involved understanding the challenges and preferences of teachers in teaching literature to primary 4 students. This was achieved through a two-pronged approach.

Firstly, the approach encompassed the review of lesson plans. The scrutiny of existing lesson plans for "Holiday Memories" furnished valuable perspectives on prevailing pedagogical methodologies and pinpointed potential areas for enhancement. This examination highlighted a

prevalent reliance on conventional techniques, often deficient in prioritising language development and in-depth exploration of literary devices (Abd Rahman & Abdullah, 2018).

Subsequently, the researchers conducted semi-structured interviews. Engaging in open-ended discussions with a representative sample of primary 4 educators facilitated a more profound comprehension of their specific challenges. These interviews unveiled a widespread aspiration among educators to integrate more language-centric methodologies into their instructional practices. They acknowledged the important role played by vocabulary, sentence structure, and literary devices in nurturing comprehensive understanding and critical thinking skills (Ministry of Education Malaysia, 2017). Notably, educators evinced a keen interest in methodologies that foster active learning and student engagement (Marzano, 2009).

These findings confirmed the need for a learning kit that prioritises a language-based approach to literature instruction, aligning with current research on effective literacy practices (Nagy & Scott, 2000).

b. Content Analysis: Decoding the Poem's Language and Themes

To ensure the alignment of the kit's activities with the essence of the poem, an exhaustive content analysis of "Holiday Memories" was conducted. This multifaceted analysis encompassed the identification of themes, the examination of literary devices, and the scrutiny of vocabulary and structural elements.

The identification of themes such as nostalgia, family bonding, and sensory experiences served as a foundational framework. These themes were instrumental in bridging the content of the poem with the lived experiences and cultural contexts of the students (MoE Malaysia, 2017; Crebben, 2018).

A detailed examination of figurative language elements, including metaphors, similes, and personification, was undertaken to unravel their significance in contributing to the poem's depth of meaning and vivid imagery (Nippold et al., 2017).

Additionally, a comprehensive analysis of the poem's lexicon, sentence structures and rhythmic patterns unveiled its potential challenges for primary 4 students. This scrutiny informed the development of scaffolded activities aimed at incrementally fostering comprehension and an enhanced appreciation for the linguistic nuances embedded within the poem (Stahl & Nagy, 2013).

c. Alignment with Curriculum and CEFR

The learning kit was designed to align with the Malaysian Curriculum Standards for primary 4 literature (MoE Malaysia, 2017), specifically focusing on objectives related to vocabulary acquisition, comprehension development, and critical thinking skills. Additionally, consideration was given to the Common European Framework of Reference for Languages (CEFR), adopted by the Malaysian education system, to ensure the activities cater to students' developing English language proficiency (Council of Europe, 2001).

By understanding the needs of teachers, analysing the poem's content, and ensuring alignment with curriculum standards, the "Lit Up Your Adventures" learning kit lays a strong foundation

for engaging and effective language-based literature instruction for primary 4 students in Malaysia.

Design

Guided by the results of the needs analysis, the research team embarked on the crucial phase of designing innovative learning materials specifically tailored to address the identified needs of primary 4 students in Malaysia. This involved a meticulous process of formulating clear and measurable learning objectives, followed by the careful design and sequencing of engaging activities within the framework of the ADDIE model (Reigeluth & Moore, 1999).

a. Learning Objectives: Aligned with Curriculum and Poem's Key Features

The learning objectives were carefully crafted to ensure alignment with both the Malaysian curriculum standards for primary 4 literature and the key features of June Crebbs's poem "Holiday Memories" (Ministry of Education Malaysia, 2017). This holistic approach ensured coherence and relevance for both teachers and students.

The formulation of these objectives centred around three primary domains of focus. These encompassed the facilitation of vocabulary acquisition, the fostering of comprehension development and the cultivation of critical thinking skills. The integration of these key areas ensured a comprehensive approach to the learning process.

Recognising the importance of vocabulary development, the learning objectives prioritised the identification and understanding of key terms within the poem. Drawing on research by Nagy and Scott (2000), the activities employed best practices such as explicit instruction, multiple exposures, and contextualisation to effectively build students' vocabulary abilities.

Fostering a deeper understanding of the poem's meaning, structure and themes was another key objective. Guided by research on effective reading comprehension strategies (Klenk, 2004), the materials incorporated engaging activities with scaffolded comprehension questions, encouraging students to analyse specific lines and stanzas and facilitating collaborative discussions that draw connections between the poem and their own experiences.

Aligning with Bloom's Taxonomy (Anderson & Krathwohl, 2001), the learning objectives emphasised the development of critical thinking skills by encouraging students to make personal connections. Students are encouraged to analyse how the poem's themes resonate with their own experiences and cultural contexts, fostering personal reflection and deeper engagement with the text.

b. Engaging and Interactive Activities: A Sequenced Approach

The learning materials were carefully crafted as a sequential series of captivating, developmentally suitable and interactive activities, segmented into distinct phases within the learning kit. Commencing with set induction, these activities drew from research on effective engagement strategies (Marzano, 2009) and were designed to captivate students' attention while introducing the poem's theme. Leveraging multimedia presentations and the KWL chart, these

initiatives fostered excitement and anticipation among students, setting the stage for subsequent exploration of the poem.

Incorporated within the learning kit were pre-reading vocabulary tasks, acknowledging the vital role of pre-teaching key vocabulary for comprehension (Blachowicz & Fisher, 2000). Interactive activities such as matching games, role-play scenarios and illustrated flashcards with definitions were provided to equip students with an understanding of challenging words prior to encountering them within the poem.

Central to this phase were guided reading activities, integrating research-based questioning techniques (Almasi, 1995). Students actively engaged in collaborative reading, poem recitation, comprehension exercises and exploration of rhyming elements, fostering a comprehensive understanding of the poem's essence.

To prompt students towards deeper engagement beyond textual analysis, the materials offered avenues for creative and reflective tasks. These included crafting personal narratives inspired by the poem and engaging in reader's theatre, aligning with strategies to encourage profound meaning-making (Tomlinson, 2014).

The Closure phase aimed to solidify learning and fortify key concepts gleaned throughout the engagement with the poem. Activities such as summarising the poem's principal themes, sharing personal connections with classmates and collaborating on class presentations were employed. These activities drew upon research on effective review strategies (Marzano & Pickering, 2001), ensuring retention of crucial insights derived from the exploration of the poem.

Recognising the diverse learning styles and needs within a classroom, the materials were designed with differentiation in mind, incorporating elements of Gardner's multiple intelligences (1983) and Bloom's differentiation strategies (1956). Activities catered to visual, auditory, kinesthetic and linguistic learners, offering options like creating artwork, role-playing scenes, writing poems, or engaging in debates to ensure all students had opportunities for success and meaningful engagement.

The learning materials for "Lit Up Your Adventures" were crafted to be visually appealing and age-appropriate, ensuring accessibility for both teachers and students. Worksheets, flashcards, props and digital resources like interactive quizzes and multimedia presentations were designed with clear fonts, engaging visuals and interactive elements to keep students actively involved. Adhering to best practices for instructional design (Gagné & Merrill, 2004), the materials aimed to be both visually stimulating and cognitively stimulating, fostering a learning environment that was both enjoyable and effective.

Acknowledging the importance of sustainability and practicality in Malaysian classrooms, the research team prioritised the use of readily available and affordable materials. This ensured that the kit could be implemented by teachers without facing additional financial burdens, making it accessible to a wider range of schools and students.

Develop

Building upon the insights gained through needs analysis and content analysis, the next stage in the development of the "Lit Up Your Adventures" learning kit involved crafting a preliminary version and thoroughly testing its effectiveness. This phase, encompassing both prototyping and piloting, aimed to ensure the kit's alignment with student needs and its effectiveness in fostering desired learning outcomes.

The initial prototype of the learning kit was piloted with a carefully selected group of 15-20 primary 4 students. Drawing on Creswell and Creswell's (2018) recommendations for stratified sampling, the group included students representing a range of ability levels. This diversity allowed for a better understanding of how the kit catered to different learning styles and needs.

To gauge the impact of the learning kit, pre- and post-assessments were conducted. These assessments, aligned with the research of Nippold et al. (2017), measured students' vocabulary acquisition, comprehension of the poem's meaning and structure, and critical thinking skills related to interpreting figurative language and making personal connections. Additionally, student work samples, classroom observations and semi-structured interviews with participating teachers were collected. These diverse data sources, suggested by Marzano's (2009) focus on student work and teacher perspectives, provided rich insights into the strengths and weaknesses of the prototype.

Armed with the invaluable data from the pilot study, the research team embarked on the revision process to refine the learning kit. Drawing from Gagné and Merrill's (2004) principles of instructional design, the team ensured that instructions and materials were clear, concise and visually engaging for primary 4 students. Age-appropriate language and illustrations were prioritised to ensure accessibility and maintain student interest. The activities were then reviewed to ensure they aligned with the specific learning objectives formulated earlier in the design process. Additionally, each activity was analysed to determine its level of cognitive complexity, drawing on Bloom's Taxonomy (Anderson & Krathwohl, 2001) to ensure a balanced range of activities catering to different levels of thinking skills. Recognising the importance of catering to individual learner needs, the research team incorporated Tomlinson's (2014) differentiated instruction strategies. This involved creating multiple pathways for engagement within activities, offering options that catered to visual, auditory, kinesthetic and linguistic learners, ensuring all students had opportunities for success and meaningful participation.

To provide teachers with the necessary resources to effectively implement the learning kit in their classrooms, a comprehensive teacher's guide was developed. This guide included detailed instructions for each activity, along with variations for differentiation, assessment rubrics to facilitate student evaluation, and links to relevant digital resources. This comprehensive support material aimed to empower teachers and ensure the kit's smooth and successful integration into their curriculum.

Through this iterative process of prototyping, piloting and refinement, the "Lit Up Your Adventures" learning kit evolved from a promising concept into a polished and effective tool for primary 4 students to engage with "Holiday Memories" in a meaningful and enriching way. The data-driven approach, coupled with a focus on clarity, alignment and differentiation, resulted in

a learning experience that caters to diverse needs and fosters a love for language and literature in young learners.

Implement

Prior to the website launch, researchers conducted training sessions tailored for educators to effectively implement the learning kit within their classrooms. These sessions involved hands-on activities where researchers showcased how the language-centric approach employed within the kit is aligned with specific curriculum standards focusing on vocabulary, comprehension and critical thinking. This practical demonstration provided educators with a tangible comprehension of how to seamlessly integrate the kit into their existing lesson plans.

Additionally, the sessions delved into the theoretical foundations underpinning the language-based approach (Nagy & Scott, 2000). This allowed educators to grasp the fundamental principles and apply them within their classroom settings. This not only bolstered their comprehension of the kit's methodologies but also equipped them with the skills to adapt and customise activities to suit the unique needs of their student cohorts.

By implementing these comprehensive training and support strategies, "Lit Up Your Adventures" aimed to empower teachers to become confident and skilled facilitators of the learning kit. This holistic approach not only ensured the kit's effective implementation but also fostered a community of committed educators dedicated to enriching the learning experiences of their students.

Evaluation

The effectiveness of "Lit Up Your Adventures," is a learning kit designed to enrich student engagement with poetry. The Evaluation stage in the development of the learning kit represents a crucial phase, aiming to thoroughly assess the efficacy of the designed materials in achieving the specified learning objectives. The evaluation design incorporates a few approaches, combining both quantitative and qualitative data collection methods to comprehensively evaluate the impact of the learning kit on primary 4 students' literacy skills and overall learning experience.

The traditional perception of poetry as a dry and didactic subject has faced a refreshing challenge in the form of "Lit Up Your Adventures," a learning kit designed to revitalise student engagement through interactive games and colourful presentations. This innovative learning kit's success hinges on its unique approach, which leverages the power of play to foster an intrinsic interest in poetry rather than relying solely on rote memorization and forced interpretations.

a. Learning Through Play: A Paradigm Shift

Research in educational psychology emphasises the efficacy of game-based learning in enhancing student motivation and engagement (Chen & Lin, 2014; Prensky, 2007). "Lit Up Your Adventures" embodies this principle, transforming the typically passive experience of poetry

analysis into an active and enjoyable one. Classroom observations and teacher feedback sessions were conducted to gather insights into the qualitative aspects of the learning experience. This shift of students' perception is evident in the program's initial findings, which reveal a significant increase in student interest in exploring new poems, a stark contrast to the traditional apprehension towards poetry. Through the data collected, it is asserted that by incorporating dynamic visuals, interactive games and collaborative activities, the program removes the intimidation factor often associated with poetry and encourages students to actively explore the world of language and literature.

Besides, the evaluation of the "Lit Up Your Adventures" learning kit places a particular emphasis on assessing its impact on primary 4 students' literacy skills. This critical aspect of the evaluation aims to inspect how the learning kit contributes to the enhancement of students' abilities to comprehend, analyse, and engage with literary content.

One of the aspects in this evaluation is the improvement in students' vocabulary acquisition. Through a comparative analysis of pre- and post-assessment results, we were able to identify statistically significant improvements in students' performance. The learning kit prioritises the identification and understanding of key terms within the poem "Holiday Memories." The quantitative analysis focused on discerning whether students exhibit a measurable expansion in their vocabulary, employing established measures and benchmarks for vocabulary growth. The qualitative dimension of this assessment will involve scrutinising students' work samples and engagement during vocabulary-focused activities to capture the depth of their understanding. The learning objectives crafted for the kit also centre around fostering a deeper understanding of the poem's meaning, structure and themes. The evaluation assessed the extent to which students demonstrate improved comprehension through activities such as scaffolded comprehension questions, collaborative discussions and analytical tasks.

b. Teacher-Friendly and Differentiated Instruction

Beyond student engagement, "Lit Up Your Adventures" prioritises teacher ease of implementation. Teachers' feedback on the ease of integrating the learning kit into their existing lesson plans, the clarity of instructions and the adaptability of activities were gathered through a teacher feedback session. It is supported that readily available materials and clear instructions have saved valuable time and streamline lesson planning, allowing teachers to focus on facilitating learning rather than struggling with complex resources (Marzano, 2009). Also, it is asserted that the initial training sessions provided for teachers were not merely instructional; they served as a catalyst for creative exploration and professional development. By engaging in collaborative brainstorming and sharing best practices, teachers gained valuable insights into maximising the potential of the learning kit and tailoring it to their specific teaching styles and student needs. This collaborative spirit fosters a sense of ownership and continuous improvement within the program, ensuring its ongoing evolution and effectiveness (Fullan & Hargreaves, 2013). Additionally, the kit's diverse range of activities, catering to different learning styles and proficiency levels, aligns with Tomlinson's (2014) principles of differentiated instruction, ensuring inclusivity and accessibility for all students. This comprehensive approach supports both students and teachers, fostering a collaborative and supportive learning environment.

c. Looking Ahead: Expanding Horizons and Deepening Engagement

While the initial success of "Lit Up Your Adventures" is encouraging, the possibilities for future development remain vast. Teachers' valuable suggestions for incorporating additional activities and investigating deeper into literary concepts such as figurative language and poetic devices offer promising avenues for expansion. These additions would not only enrich the learning experience but also equip students with critical thinking skills and a deeper appreciation for the nuances of language (Blachowicz & Fisher, 2000).

"Lit Up Your Adventures" stands as a testament to the transformative power of play and engagement in learning. By reimagining the way poetry is presented and experienced, this program has not only rekindled student interest but also ignited a passion for exploration and discovery in both students and teachers. As the program continues to evolve, it holds immense potential to revolutionise the way we approach poetry education, making it a vibrant and enriching experience for students of all ages and backgrounds.

Analysis and Discussion

Development Phase Analysis

The development of "Lit Up Your Adventures" represents a carefully crafted learning kit from various threads of literature teaching models and methodologies, based on the Language-Based Approach (LBA).

This learning kit skillfully navigates the traditional instruction, retaining its core elements – close reading, vocabulary building and comprehension analysis – while infusing them with interactive activities and engaging presentations. This departure from passive lectures aligns with the principles of Marzano's (2009) framework for effective teaching, ensuring a shift from mere information transmission to active learning.

Constructivist and collaborative learning principles, as advocated by Brooks and Brooks (1993), thread through the very essence of the program. Student-centred tasks, discussions and collaborative activities encourage active exploration and knowledge construction, fostering a deep engagement with the poem that transcends surface-level comprehension.

Recognising the diverse needs of learners, "Lit Up Your Adventures" incorporates elements of differentiated instruction and technology integration, echoing Tomlinson's (2014) call for responsive classrooms. By catering to various learning styles through differentiated activities and leveraging technology for interactive games and digital resources, it ensures accessibility and optimises engagement for all students.

This elaborate synthesis is guided by the fundamental principles of the language-based model. "Lit Up Your Adventures" champions language as a tool for meaning-making, encouraging students to explore beyond the poem's surface and analyse its figurative language, imagery and sound devices, as espoused by Blachowicz and Fisher (2000). This active engagement with language fosters deeper understanding and appreciation for the poem's artistry.

Furthermore, this kit goes beyond mere vocabulary acquisition, focusing on the development of higher-order language skills such as critical thinking, analysis and interpretation. This aligns with the language-based model's emphasis on fostering strong language abilities, empowering students to engage with the text on a more detailed level.

Finally, "Lit Up Your Adventures" recognises the importance of positive emotions in promoting learning, a principle asserted by Hidi and Renninger (2006). Play, humour and interactive activities create a joyful and engaging learning environment, motivating students to actively participate and deepen their understanding of the poem.

The development phase of this learning kit presents a story of careful consideration and precise execution. By weaving together diverse models and approaches, all while remaining firmly anchored in the language-based model's guiding principles, this kit has the potential to revolutionise the way students engage with poetry, fostering a love for language and literature that transcends the confines of the classroom. Further research and evaluation will undoubtedly refine this program, ensuring its continued success in igniting young learners' imaginations and nurturing their love for the written word.

Implementation Phase Analysis

The Implementation Phase Analysis for "Lit Up Your Adventures" reveals a strategic and well-considered approach to introducing the learning kit to educators and ensuring its seamless integration into classrooms. The implementation strategy, characterised by tailored training sessions and theoretical foundations, is designed to empower teachers, fostering both comprehension of the kit's methodologies and the flexibility to adapt activities to meet diverse student needs.

The hands-on training sessions conducted before the website launch were instrumental in providing educators with practical insights into the application of the learning kit. Through these activities, researchers demonstrated how the language-centric approach aligns with specific curriculum standards, emphasising vocabulary, comprehension and critical thinking. This practical demonstration not only offered tangible examples but also facilitated a deeper understanding of how the kit could be effectively incorporated into existing lesson plans.

The sessions did not solely focus on practical aspects but investigate the theoretical underpinnings of the language-based approach, drawing from the work of Nagy and Scott (2000). This theoretical exploration enabled educators to grasp the fundamental principles that informed the design of the learning kit. By providing this theoretical foundation, the training aimed to equip educators with a comprehensive understanding, enabling them to navigate the intricacies of the language-based model within their classroom settings.

The emphasis on theoretical foundations not only enhanced educators' comprehension but also bestowed them with the skills necessary to adapt and customise activities according to the unique needs of their students. This adaptive capability is crucial, as it acknowledges the diversity of learning styles and preferences within any given classroom.

The comprehensive training and support strategies adopted during the implementation phase align with a holistic approach. The aim extends beyond mere instruction on using the kit; it

aspires to empower teachers, cultivating confidence and proficiency in facilitating meaningful learning experiences. The envisioned outcome is not only the effective implementation of the learning kit but the establishment of a community of committed educators dedicated to enriching the educational journey for their students.

In conclusion, the Implementation Phase Analysis reflects a thoughtful strategy that combines practical demonstrations with a solid theoretical foundation. By providing educators with the tools and knowledge needed for effective implementation, "Lit Up Your Adventures" aims to foster a community of educators who are not only capable at utilising the learning kit but are also passionate about enhancing the quality of education for their students.

Evaluation and Refinement

The "Lit Up Your Adventures" journey extends beyond the initial implementation. The evaluation phase serves as a crucible, scrutinising its effectiveness and paving the way for iterative refinement. This analysis investigates the learning kit's evaluation process, highlighting the crucial role of triangulated data and the dynamic feedback loop that propels this learning kit towards continual improvement.

"Lit Up Your Adventures" evaluation eschews the limitations of singular data points, embracing triangulation as its guiding principle (Denzin & Lincoln, 2011). Quantitative pre- and post-assessments of student learning provide a solid foundation, measuring changes in vocabulary acquisition, comprehension and critical thinking skills. This quantitative data is then enriched with qualitative insights gleaned from student interviews, classroom observations and teacher feedback. This multi-faceted approach ensures a comprehensive understanding of the kit's impact, revealing not just the "what" of student learning, but also the "how" and "why" behind it.

"Lit Up Your Adventures" evaluation process is not a static snapshot; it's a dynamic feedback loop that fuels continuous refinement (Fullan & Hargreaves, 2013). Emerging challenges and areas for improvement identified through data analysis and feedback are addressed through iterative adjustments to the program. For instance, pilot testing revealed concerns about time constraints, prompting the development of shorter, more focused activities. Similarly, teacher feedback on specific activities led to revisions for clarity and effectiveness. This continuous feedback loop ensures that it remains responsive to the evolving needs of its users, allowing it to adapt and thrive in diverse classroom settings.

The evaluation process has already yielded valuable insights that have informed this kit's refinement. Addressing the challenge of managing time constraints, the program has been modularised, allowing teachers to tailor the intervention to their specific needs and time limitations. Additionally, recognising the diverse needs of ESL learners, "Lit Up Your Adventures" has incorporated further differentiated instruction strategies and supplemental resources for language acquisition. The learning kit's commitment to continuous improvement extends beyond its core components. Inspired by teacher suggestions, "Lit Up Your Adventures" is currently exploring the development of additional activities and resources focused on deeper explorations of literary devices and figures of speech. This expansion aligns with the principles

of the Language-Based Approach (Blachowicz & Fisher, 2000), fostering a richer understanding and appreciation for the nuances of language within poetry.

"Lit Up Your Adventures" exemplifies a dynamic approach to program development and evaluation. By embracing triangulation and a continuous feedback loop, the program has moved beyond initial implementation to embark on a journey of refinement and growth. As it evolves to address emerging challenges and expand its horizons, this kit holds immense potential to revolutionise the way we engage students with poetry, igniting a love for language and literature that transcends the confines of the classroom.

Conclusion

"Lit Up Your Adventures" stands as a compelling case study in the transformative potential of innovative learning tools in the field of poetry education. From careful planning to initial implementation, its progression illustrates the effectiveness of an approach to program development that relies on data and is responsive to feedback. This research highlights this learning kit's promising prospects for enhancing student engagement, language development and critical thinking skills within the context of poetry instruction.

This learning kit's core strength lies in its ability to transcend traditional instruction and ignite student agency through interactive activities and game-based elements. This shift from passive learning to active exploration fosters intrinsic motivation and curiosity, transforming the study of poetry from a mere academic exercise into a captivating adventure. This engagement manifests in measurable learning gains, as evidenced by the pilot study's findings of significant improvements in vocabulary, comprehension and critical thinking skills. Such outcomes suggest that it goes beyond rote memorisation, facilitating genuine understanding and appreciation for language within the context of poetry.

However, "Lit Up Your Adventures" does not rest on its initial successes. Acknowledging the importance of continuous improvement, the program embraces a dynamic feedback loop, actively seeking input from teachers and students alike. This iterative process, fueled by triangulated data analysis (quantitative assessments, qualitative observations, and feedback), allows for the identification of strengths and weaknesses, leading to ongoing refinement and adaptation. This commitment to constant evolution ensures its relevance and effectiveness in diverse educational settings, catering to the specific needs of its users.

This learning kit's future holds immense potential for further growth and impact. As the program expands its scope to encompass deeper literary analysis and differentiated instruction strategies for diverse learners, its reach is poised to widen, igniting a love for language and literature in a broader spectrum of young minds. "Lit Up Your Adventures" is more than just a learning kit; it embodies a transformative movement, one that reimagines the way poetry is taught and experienced within the educational landscape. As each student embarks on their own literary journey, guided by the innovative design and playful spirit of "Lit Up Your Adventures", the future of poetry education shines increasingly bright with the promise of engagement, empowerment, and a lifelong love for language and its artistic expressions.

This study serves as a foundation for further research and development of "Lit Up Your Adventures," exploring its potential to revolutionise poetry education on a broader scale. Continued evaluation, refinement and exploration, informed by data-driven insights and stakeholder feedback, will propel this kit towards sustained impact and ensure its transformative power reaches a wider audience of young learners, illuminating their paths with the magic of language and literature.

References

- Abd Rahman, N. H., & Abdullah, R. (2018). The effectiveness of using a language-based approach in teaching literature for ESL students. *International Journal of Applied Linguistics & English Literature*, 7(1), 191-202.
- Anderson, L. W., & Krathwohl, D. R. (Eds.). (2001). *A taxonomy for learning, teaching, and assessment*. Allyn & Bacon.
- Almasi, J. F. (1995). The role of instruction in developing reading comprehension abilities. *Reading Research Quarterly*, 30(4), 843-872.
- Aydin, N. (2013). *Teaching Shakespeare: A qualitative meta-analysis* (Unpublished Master Thesis). Bilkent University, Ankara.
- Bagherkazemi, M., & Alemi, M. (2010). Literature in the EFL/ESL classroom: Consensus and controversy. *Linguistic and Literary Broad Research and Innovation*, 1(1), 30.
- Blachowicz, B. P., & Fisher, P. H. (2000). *Teaching vocabulary to all students: Strategies for reading and writing*. Merrill/Prentice Hall.
- Brooks, J. G., & Brooks, M. G. (1993). *In search of understanding: The case for constructivist classrooms*. Alexandria, VA: Association for Supervision and Curriculum Development.
- Cagri, T. M. (2019). Reader-Response Theory and literature discussions: A springboard for exploring literary texts. *The New Educational Review*, 78-87. <https://doi.org/10.15804/tner.19.56.2.06>
- Carter, R. & Long, M. (1991). *Teaching Literature*. London: Longman.
- Chen, Y.-C., & Lin, C.-Y. (2014). The effect of game-based learning on students' learning motivation: A meta-analysis. *Journal of Educational Technology & Society*, 4(1), 265-275.
- Chi-An, J. T. & Shu-Ying, C. (2009). Developing critical thinking through literature reading. *Feng Chia Journal of Humanities and Social Sciences*, 19, 287-317.
- Council of Europe. (2001). *Common European Framework of Reference for Languages: Learning, Teaching, Assessment*. Cambridge University Press.
- Crebben, J. (2018). *Holiday memories*. In J. Crebben (Ed.), *A kaleidoscope of kids' poems* (pp. 1-2). Book Pal.

- Creswell, J. W., & Creswell, J. D. (2018). *Research design: Qualitative, quantitative, and mixed methods approaches* (5th ed.). Sage Publications.
- Denzin, N. K., & Lincoln, Y. S. (2011). *The handbook of qualitative research* (4th ed.). Sage Publications.
- Edgar, E. (2003). Thriving beyond the crisis: teachers' reflections on literature and language education in the era of Artificial Intelligence (AI) and globalization. *Preprints 2023*. <https://doi.org/10.20944/preprints202307.2151.v1>
- Fullan, M., & Hargreaves, A. (2013). *Professional capital in education: Putting theory into practice*. Routledge.
- Gagné, R. M., & Merrill, M. D. (2004). *Instructional design: Theory in practice*. Pearson Merrill Prentice Hall.
- Gardner, H. (1983). *Frames of mind: The theory of multiple intelligences*. Basic Books.
- Hidi, S. & Renninger, K. A. (2006). The four-phase model of interest development. *Educational Psychologist*, 41(2), 111-127. https://doi.org/10.1207/s15326985ep4102_4
- Hwang, D., & Embi, M. (2007). Approaches employed by secondary schools teachers to teaching the literature component in English. *Jurnal Pendidik dan Pendidikan*, 22, 1-23.
- Jais, N. F. M., Ishak, S. A., & Yunus, M. M. (2022). Developing the self-learning interactive module using ADDIE model for Year 5 primary school students. *International Journal of Academic Research in Progressive Education and Development*, 11(1), 615–630. <http://doi.org/10.6007/IJARPED/v11-i1/11919>
- Janice, B. (2018). *The challenge of literature, introduction to using literature in English language education challenging reading for 8-18 year olds*. London: Bloomsbury Academic.
- Kaur, P., & Mahmor, N. (2014). Examining the role of the English literature component in the Malaysian English curriculum. *Procedia - Social and Behavioral Sciences*, 134, 119–124. <https://doi.org/10.1016/j.sbspro.2014.04.229>
- Kevin, M. R. (2018). *Using children's literature to promote cultural diversity and interest*. Retrieved from https://www.researchgate.net/publication/328495703_Using_Children's_Literature_to_Promote_Cultural_Diversity_and_Interest
- Klenk, L. E. (2004). *Enhancing comprehension through instruction*. Routledge.
- Lucas, B. (2020). *Why work with children's literature in an ESL-classroom?* (Independent Project with Specialization in English Studies and Education). Malmö Universitet.
- Maley, A., & Duff, A. (1990). *Literature*. Oxford University Press.
- Marzano, R. J., & Pickering, D. K. (2001). *Classroom instruction that works: Research-based strategies for increasing student achievement*. ASCD.

- Marzano, R. J. (2009). *The new art of classroom instruction: A framework for teaching and learning*. ASCD.
- McRae, J. (1991). *Literature with a small 'l'*. London: Macmillan
- Ministry of Education Malaysia. (2017). *Curriculum standard document for primary education (Year 4)*. Ministry of Education Malaysia.
- Muthusamy, R., & Ibrahim, A. (2017). Integrating Language-Based Approach in Literature Teaching: A Case Study of Malaysian Secondary Schools. *Journal of Applied Linguistics and Language Research*, 4(2), 17-25.
- Nagy, W. C., & Scott, J. A. (2000). *Transparent word study: Effective strategies for reading and spelling instruction*. Merrill.
- Nagy, W. C., & Scott, J. A. (2000). *Transparent word study: Effective strategies for reading and writing instruction* (3rd ed.). Merrill.
- Nippold, M. A., Ehlert, L. L., & Moats, L. C. (2017). *Teaching reading: A comprehensive guide to effective instruction (6th ed.)*. Pearson.
- Noer, D. I. (2012). Communicative approach: An alternative method used in improving students' academic reading achievement. *English Language Teaching*, 5(7), 90-101. <https://doi.org/10.5539/elt.v5n7p90>
- Olmedo, B. V. (2014). Content-based instruction: A relevant approach of language teaching. *La educación a distancia como una realidad en expansión, exige sistematización de su Desarrollo*, 15(20), 71-83. <https://doi.org/10.22458/ie.v15i20.515>
- Özlem, Z. G. & Sila, S. A. (2021). *Using digital short stories in teaching English vocabulary*. Developments In Educational Sciences. St. Kliment Ohridski University Press. <https://doi.org/10.5281/zenodo.4780891>
- Paramjit, K. & Mah, Z. J. (2002). The CEFR-aligned curriculum: Perspectives of Malaysian teachers. *Asian Journal of Research in Education and Social Sciences*, 4(1), 138-145. <https://doi.org/10.55057/ajress.2022.4.1.13>
- Paramji, K. & Nooraida, M. (2014). Examining the role of the English literature component in the Malaysian English curriculum. *Procedia - Social and Behavioral Sciences*, 134, 119-124. <https://doi.org/10.1016/j.sbspro.2014.04.229>
- Prensky, M. (2007). *Digital game-based learning*. McGraw-Hill.
- Pual, D. (2020). Building and justifying interpretations of texts: A key practice in the English language arts. *ETS Research Report Series*. <https://doi.org/10.1002/ets2.12304>
- Rashid, R. A., Vethamani, M. E., & Rahman, S. B. A. (2010). Approaches employed by teachers in teaching literature to less proficient students in Form 1 and Form 2. *English Language Teaching*, 3(4), 87-99. <https://doi.org/10.5539/elt.v3n4p87>

- Rashid, R.A., Rahmad, S.B.A., Ismail, H.H. (2020). *The Teaching of Literature to Less Proficient Students*. Kuala Terengganu: Penerbit UniSZA.
- Reigeluth, C. M., & Moore, D. M. (1999). *Instructional design theories and models: A new paradigm for theorizing instruction* (Vol. 2). Lawrence Erlbaum Associates.
- Siti, S., M., Ramlee, M. & Othman, L. (2018). Teacher's approaches in teaching literature: observations of ESL classroom. *Malaysian Online Journal of Educational Science*, 2(4).
- Stahl, S. A., & Nagy, W. C. (2013). *Teaching vocabulary to all students: Strategies for reading and writing* (3rd ed.). Routledge.
- Subarna, S. & Ganakumaran, S. (2008). The incorporation of literature in the English language program for engineering students: Learner interest and perception. *3L : Language, Linguistics, Literature*, 14, 45-73.
- Swarnananda, G. K, G. (2020). The pedagogical application of the grammar translation method as an effective instructional methodology in teaching English as a second language. *Open Access Library Journal*, 7(11), 1-10. <https://doi.org/10.4236/oalib.1106913>
- Thunnithet, P. (2011). *Approaches to criticality development in English literature education: A second language case study in a Thai university*. (Doctoral dissertation). University of Southampton
- Tomlinson, C. A. (2014). *The differentiated classroom: Responding to the needs of all learners* (2nd ed.). Pearson.



Development of a Learning Kit for Literature Learning

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Abstract: The development of the "Ele-mentor" learning kit is prompted by current issues, including declining student interest and teachers relying heavily on traditional teaching methods. Through interviews with four English teachers in secondary schools around Malaysia, we discovered that three out of four teachers choose not to teach literature at all, while the other teaches only the basics due to school requirements. The fundamental aim of this learning kit is to revive literature lessons by implementing the Reader- Response Approach in response to these concerns. Adapting Amer's (2003) seven literature classroom learning activities enables learners to express their personal response to the novel "The Elephant Man." Individual and group tasks, such as reading logs, literature circles, comprehension questions, personal responses and role play, are assigned to learners, aiming to improve student involvement, active participation, and, last but not least, deeper comprehension of the novel. In addition to addressing issues in literature education, the "Ele-mentor" learning kit has several other advantages, such as increasing student agency, providing educator-friendly materials in line with contemporary pedagogy, and improving accessibility for a variety of learning styles. All these factors contribute to the creation of a more enjoyable and valuable literature learning environment. With the goal of transforming passive reading into an engaging and dynamic experience, the theoretical framework, the Developmental Model of a Reader-Response Approach by Thompson (1987), is used as the framework for this learning kit.

Keywords: *Reading Response Approach, narrative text, literature in education, learning kit, personal responses*

Introduction

The search for new and efficient teaching techniques constantly influences how teachers approach their subjects in the changing world of modern education. As a fundamental component of language studies, literature has enormous potential to foster critical thinking, empathy, and a profound appreciation for a variety of narratives. However, conventional methods of teaching literature frequently fail to hold students' attention and generate significant participation. In order to close the gap between conventional teaching strategies and the changing requirements of today's students, this seminar article sets out to investigate a paradigm shift in literature education.

The reader-response approach is at the leading edge of modern literary pedagogy because of its emphasis on the reader's active engagement in meaning construction. The urgent need to incorporate this method into the study of literature through the creation of a thorough learning kit is discussed in this seminal paper. This designed learning kit, named 'Ele-Mentor' aims to be a dynamic and engaging tool that empowers teachers and students alike, going beyond traditional classroom techniques.

Techno-pedagogy, the term for the incorporation of technology into teaching methods, has created new opportunities to improve student learning. The creation of a learning kit is an innovative endeavour in the field of literature education, utilizing technology to create a more immersive and engaging platform. This learning kit offers a comprehensive approach to literature instruction and is not intended to be a mere add-on to conventional teaching techniques, but rather to act as a catalyst for transforming learning experiences.

The narrative of this seminal paper explores the learning kit's theoretical foundations, real-world applications, and developmental progression. Focused on fostering a dynamic literary community in the classroom, where students take an active role in interpreting and analyzing literary texts, the kit is based on the reader response technique. This article adds to the current conversation on creative teaching approaches by examining the connections between literature, pedagogy, and technology. It also encourages educators, researchers, and practitioners to investigate the transformative power of the learning kit in the context of literature learning.

The reader is welcome to join us as we explore pedagogical innovation, a field where literature, technology, and the reader come together to create meaningful and enriching learning experiences. With the promise of new perspectives, opportunities, and insights that could influence the direction of literary education, the process of creating a learning kit for literature study starts here.

Literature Review

Literature in Action

The Ministry of Education in Malaysia, in partnership with Cambridge English, United Kingdom, developed the Standard-Based English Language Curriculum (SBELC) aligned with the Common European Framework of References (CEFR). This curriculum, according to the

Ministry of Education in Malaysia (2017), incorporates Literature in Action (LiA) as an integral part of English lessons. LiA focuses on diverse literary genres like short stories, poems, dramas, graphic novels, and novels to cultivate reading habits and enhance critical thinking among students.

The primary objective of LiA, as stated by the Ministry of Education in Malaysia (2017), is to nurture students' appreciation for various text types, promote analytical and evaluative skills in response to texts, and encourage imaginative engagement. Although LiA was introduced in 2017, the reading list for secondary students has remained unchanged. However, as of 2019, there's a shift—literary texts and their elements will not be part of examinations, including the Pentaksiran Tingkatan 3 (PT3) year-end test. The Ministry of Education (2017) asserts that the literature component will now be assessed through the four language skills: reading, writing, listening, and speaking.

Even so, the incorporation of LiA into the Malaysian curriculum is considered a valuable enhancement due to its robust and relevant objectives. LiA aims to cultivate students' reading habits, foster both creative and critical thinking skills, encourage the appreciation of diverse literary texts, facilitate their analysis and evaluation, and prompt imaginative responses to these texts (Ministry of Education in Malaysia, 2017).

Simultaneously, while achieving these objectives, students also gain proficiency in the English language. Considering literature as a tool for language development, the literature component serves to bridge the gap between students and the target language. It acts as a resource to enrich language skills, exposing students to new vocabularies, syntax, and diverse writing styles that may not be present in non-literary texts. Lazar (1993) supports this perspective, suggesting that literature, when used as a resource, can inspire various engaging language activities in the classroom.

Furthermore, literature, often centered on themes related to human life, nature, or stories from different cultures, provides teachers with diverse perspectives to introduce language games or activities. These activities have the potential to significantly engage students with the English language, leveraging the unique themes present in literary works.

Learning Kit and Materials

Literature classes should be vibrant and thought-provoking. An ideal classroom environment should buzz with students actively participating, asking and answering questions, expressing opinions, agreeing and disagreeing, sharing laughter, and engaging in various in-class activities (Teh et al., 2018). Recently, there has been a lack of motivation among pupils for learning and a low memory of what they were taught (Joseph, 2015). This can be the outcome of the instructional strategies the instructor employed during the classroom's teaching and learning process. Teachers are urged to include images, quick videos, and social media tools into their lessons to improve student engagement and prevent boredom during lectures. The variety of teaching techniques employed in the modern classroom offers teachers the chance to grow and learn. This active environment allows students to exchange diverse viewpoints and expand their horizons. Based on Mohamad Jackie et al. (2016), the efficacy of student-centered learning is primarily determined by how well teachers select and implement the right learning kits.

A dynamic and enriching educational experience can be shaped by using a literary learning kit, especially when it is based on the reader response approach. Learning kit is made to motivate students to actively interact with literary texts. The reader-response method values and acknowledges the variety of viewpoints expressed by readers. Students become co-creators of meaning through interactive exercises, conversations, and response activities, encouraging engagement rather than passive consumption. Learning kits give students the chance to conduct independent research and enable them to analyze and react to texts in light of their own experiences, backgrounds, and cultural contexts. It has been shown that getting students actively involved in hands-on activities helps them to better understand technical subjects and develop higher-order thinking skills (Asok, et.al., 2016). Learning kits encourage students to examine, challenge, and consider their reactions to literature in order to foster critical thinking. Students gain analytical abilities and improve their ability to clearly and concisely express their interpretations through engaging in thought-provoking exercises. The reader-response method places a strong emphasis on the value of individual expression when interpreting literature. A classroom setting that is favorable to the development of a literary community is produced by learning kits. A sense of shared discovery and knowledge is fostered by collaborative activities, group discussions, and peer relationships, which improves the learning process as a whole. By including creative exercises like journaling, creative writing, or multimedia projects, learning kits help students express themselves creatively and help them communicate their feelings.

Further opportunities for students to communicate regarding their responses are offered by digital platforms, online discussion boards, and multimedia materials, which promote a technologically advanced and dynamic learning environment. When designed with cultural sensitivity in mind, learning kits can introduce students to a wide variety of literary works. This openness promotes a more thorough grasp of literature's function in reflecting society subtleties and aids students in appreciating various cultural viewpoints. In conclusion, learning kits that use the reader-response method are essential to developing an engaging, diverse, and interactive literature education. Through enabling learners to actively interact with texts and articulate their interpretations, these kits support the growth of critical thinking abilities, cultural sensitivity, and a lifetime appreciation of literature.

Reader Response Approach

The development of literary pedagogy has been marked by an ongoing search for approaches that actively include students in the process of meaning-making while also dispensing knowledge. In literature education, the reader response approach—a theoretical framework based on reader-centric readings of literary texts—has become a major paradigm shift. The study literature on the reader response strategy and its use in creating a literature learning kit is explored in this section.

The Reader-Response Approach in the well-and balanced classroom program allows students to have freedom and optimal chances to express their voices. Ideally, as Rosenblatt in 1978 strongly advocates, transacting the process of texts in a more non-threatening atmosphere can possibly nurture democratic participation (Raines, 2005). Readers play a significant and meaningful role in reconstructing and remaking meaning when they engage in the interpretation of assigned texts. This process of 'transacting' empowers readers to actively participate in the construction of meaning within the cognitive, metacognitive, and socio-affective framework. When readers

concentrate on extracting information from the text, they adopt an 'efferent' strategy, while when they seek to connect emotionally and personally with the text, they adopt an 'aesthetic' stance, as proposed by Rosenblatt in 1978. The reader response theory contradicts the traditional view that says literary meaning can only be found in the text itself. Rather, it suggests that meaning is something that the reader and the text jointly construct. The importance of readers' interpretations of texts is emphasized through their responses. According to the theory, no literary text has a single, unchanging meaning. Therefore, reader-response journals serve as a valuable tool for opening windows to nurture diverse perspectives (Shin, 2019). By integrating essential skills such as reading, speaking, writing, and presenting, this approach sparks a synergy among learners, allowing them to harness both their intellectual and emotional capacities. This, in turn, facilitates an aesthetic and creative reading experience that can inspire the creation of original works. This approach has the potential to inspire readers to become writers who can freely and joyfully express their personal and critical reflections, encompassing desires, interests, ideas, thoughts, and other individual insights (Fulps & Young, 1991). In doing so, readers tap into their own language capacity, creating a rich and authentic expression of their unique perspectives. The reader response technique has gained traction in the field of literature education due to its capacity to promote a more engaged and interactive learning environment. Through a shift in emphasis from a universal interpretation to recognition of readers' varied responses, educators can establish a classroom climate that is both inclusive and stimulating for learning. This is consistent with the modern conception of reading as a dynamic, socially situated activity in which readers actively negotiate meaning in light of their cultural origins.

Various activities and techniques can be employed to implement the Reader Response Approach in literature classrooms. Amer (2003, p. 63) provides the following examples: reading logs response journal, critical questioning and writing, self-questioning, role-play drama, letter-writing and rewriting narratives from another character's point of view. The developmental model of a reader-response approach is presented by Thompson (1987), who describes several levels of response to a literary text:

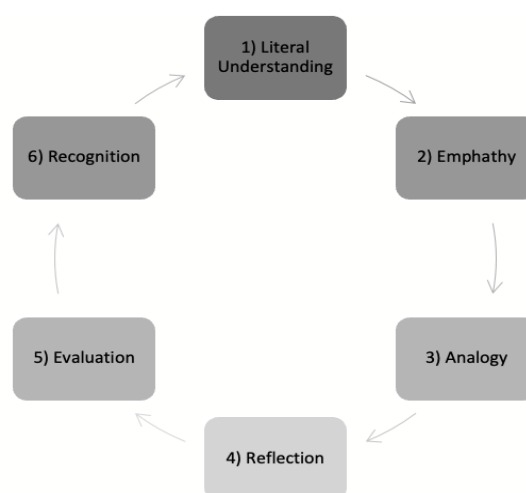


Figure 1: Developmental Model of a Reader-Response Approach by Thompson (1987)

Literal understanding involves understanding the information offered in a particular text. Thompson (1987) asserted that pupils read at a basic comprehension level without focusing on specifics or requiring analysis. According to Thomson (1987), at this point, characters are mostly viewed in terms of stereotypes and are solely classified as good or bad. When reading, readers only create extremely basic mental representations or briefly predict future behaviours. For empathy, it involves providing the book a personal touch, connecting it to the students' own experiences, and feeling sympathy for some of the characters. Readers are drawn to characters and their motivations in more nuanced ways, delving into the analysis of both acts and outcomes. Analogy is a stage in which readers interact with characters and draw parallels between real-life experiences and made-up events from literary works to gain insight into their own lives. In the stage of reflection, readers reflect on the actions and events in a text, assessing the characters and the story's topic in the process of developing a deeper understanding of other people and their motivations. The fifth step in evaluating fiction is to view the entire literary work as the author's creation. This step also entails comparing the values of the pupils with the author's social and cultural beliefs. Recognition is the phase in which readers comprehend the author's and reader's textual roles, analyze the connection between those roles, and investigate their own identities as readers. The readers also gain awareness of the reading process and their own perceptions of themselves.

Resolving the issues in conventional literature classrooms may be accomplished by including the reader response strategy into the creation of a learning kit. This theoretical foundation comes into reality in the learning kit, which provides an adaptable platform that inspires students to engage with literary texts in a meaningful and customized way. The learning package encourages readers to express their opinions, exchange viewpoints, and participate in group discussions through exercises, questions, and multimedia materials.

Technological developments are essential to improving the reader response approach's application. Often referred to as techno-pedagogy, the blending of technology and pedagogy offers chances to develop dynamic, multimedia-rich learning environments. The learning kit incorporates digital platforms, interactive e-books, and online discussion forums as essential elements that enhance reader participation and enable a more dynamic examination of literature.

According to Atek et al. (2020), the study of literature is sometimes seen as a potential distraction from the primary goal of learning English. This perception arises from the belief that learners may lose interest in reading due to a lack of prior knowledge, making it challenging for them to fully comprehend and enjoy literary content. To address this issue, Malaysian teachers have developed strategies to effectively teach literature without compromising the overall objectives of English instruction and the content of literary works (Atek et al., 2020). Over the years, the role of English literature in education has evolved significantly, transitioning from being a central component of the English curriculum to a more stagnant position. Additionally, some students have expressed concerns about certain teachers relying heavily on traditional teaching methods for literature, including note-taking, passive explanation, and discussion of task answers (Suliman & Md Yunus, 2014)

Positive results are shown in studies examining the effects of reader response strategies in literacy instruction. Pupils that participate in reader response exercises typically exhibit enhanced critical

thinking abilities, heightened empathy, and a stronger bond with the literature they are studying. Additionally, because these methods are interactive, they promote a more welcoming classroom environment by allowing for a variety of interpretations and giving students a sense of control over their education.

The creation of a learning kit can significantly alter conventional pedagogical procedures, as evidenced by the literature on reader response theory and its use in literature instruction. This section emphasizes the learning kit's role in fostering a dynamic and interactive literary learning environment, setting the tone for the investigation of the kit's practical application and developmental trajectory that follows.

Problem Statement

According to Atek et al. (2020), the study of literature is sometimes seen as a potential distraction from the primary goal of learning English. This perception arises from the belief that learners may lose interest in reading due to a lack of prior knowledge, making it challenging for them to fully comprehend and enjoy literary content. To address this issue, Malaysian teachers have developed strategies to effectively teach literature without compromising the overall objectives of English instruction and the content of literary works (Atek et al., 2020).

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According to Palardy (1997), exposure to literary texts allows students to comprehend cultures and people from across the globe. When used creatively in English classrooms in Malaysia, literature holds the potential to kindle students' interest in reading by uniquely captivating them with diverse thoughts, stories, and emotions. The Malaysian literature component, aimed at instilling a reading habit, serves as a window for students to explore various cultures and traditions worldwide.

Giddings (1992), in his work, emphasizes the importance of starting reading instruction with authentic and meaningful literature rather than teaching language in isolation. He suggests that this approach can assist students in adopting the traits of proficient readers from an early stage.

Materials and Method

The "Ele-Mentor" learning kit is designed to provide students with a comprehensive and engaging learning experience centered around the novel "The Elephant Man" by Tim Vicary, utilizing the Reader-Response Approach. The specific reason for choosing this novel is because according to the Standard-Based English Language Curriculum (SBELC) aligned with the Common European Framework of References (CEFR) set by the Ministry of Education in Malaysia (2017), LiA is an integral part of English lessons. LiA focuses on diverse literary genres like short stories, poems, dramas, graphic novels, and novels to cultivate reading habits and

enhance critical thinking among students. However, from the structured interview sessions that were conducted with 4 English teachers teaching in secondary schools in Malaysia, 3 of them were reluctant to teach it with 1 teacher teaching the component out of obligation.

Teacher A: I don't teach it since it doesn't come out in exams.

Teacher B: My students can barely understand simple English let alone a novel

Teacher C: No time and it serves no importance.

Teacher D: I ask them to read and answer some questions. Or else I'll be questioned by my HOP

This learning kit is supposed to help the ESL teachers who struggle to get their students to be interested in literature learning especially focusing on fiction reading with an approach to language acquisition, enriching students' linguistic, cognitive, and cultural development. From the outset, guiding students through the pre-reading stage lays a crucial foundation. Introducing the novel involves setting the context, activating prior knowledge, and fostering anticipation, which ignites curiosity and primes learners for engagement.

Throughout the learning stage, this novel becomes a centerpiece for language acquisition. It serves as a catalyst for vocabulary expansion, grammar comprehension, and overall language fluency. By delving into characters, plot intricacies, and themes, students not only improve their reading and comprehension skills but also grasp cultural nuances embedded within the narrative. This aids in their cultural awareness and empathy, vital aspects of language learning.

Transitioning to the post-reading stage allows students to deepen their understanding through extensive tasks that go beyond the text itself. Engaging in activities like discussions, debates, creative writing, or multimedia projects related to the novel fosters critical thinking, communication, and creativity. This phase encourages students to apply what they've learned, enhancing their language proficiency by employing it in diverse contexts.

The reader-response approach further amplifies the significance of teaching novels in an ESL setting. It empowers students to articulate their personal reactions, interpretations, and connections to the text, nurturing their confidence in expressing themselves in the target language. This approach acknowledges the diversity of perspectives among learners, creating an inclusive environment that values individual experiences.

The learning kit tailored for this purpose is a transformative tool for both ESL teachers and learners. It seamlessly blends technology and traditional learning methods, leveraging digital resources, interactive activities, audio-visual aids, and supplementary materials. This integration enhances engagement and accommodates diverse learning styles, ensuring a dynamic and comprehensive learning experience.

For ESL teachers, the learning kit streamlines lesson planning, providing structured modules, assessment tools, and adaptable resources. It empowers educators to cater to varying proficiency levels and encourages innovative teaching methodologies. Simultaneously, for ESL learners, this

kit offers a scaffolded learning journey, fostering autonomy and confidence in navigating the complexities of language and literature.

In essence, teaching novels in an ESL classroom, supported by a comprehensive learning kit, not only facilitates language acquisition but also cultivates critical thinking, cultural sensitivity, and self-expression. It harmonizes technology and traditional methods while nurturing a holistic approach to language learning that remains faithful to the intricacies of language, literature, and cultural understanding.

a. Novel “The Elephant Man”

The Elephant Man" is a novel based on the true story of Joseph Merrick, a man with severe deformities who lived in 19th century England. The story in the novel unfolds between the time Dr. Treves discovers Joseph Merrick in 1884 and Merrick's death in April 1890. This time frame falls within the period known as the Victorian era. The Times was the most influential newspaper during this period, and England was a peaceful and prosperous country. Industry assumed greater importance than agriculture. During this time, the medical field was not as advanced as it is today. Doctors did not have the knowledge to determine the cause of Joseph Merrick's severe disfigurement. “The Elephant Man” is listed in the latest Malaysian Literature Component for Malaysia Secondary School Syllabus KSSM English subject for Form 3.

b. Designed learning kit: “Ele-Mentor”

The purpose of implementing the Reader-Response Approach is to extract learners' individual responses to literary texts and their experiences interacting with them. The objectives also include finding out the views, attitudes, and individual responses of the students to a certain text. The designed learning kit based on Reader Response Approach, “Ele-Mentor” is named based on the novel “The Elephant Man”, where developers hope that this learning kit might play the role of a mentor and provide students with an engaging learning experience that enhances students’ understanding of the novel. The tasks and activities provided in this learning kit are designed and adapted based on Amer (2003) reading response activity lists. Students can express their unique responses to literary texts through all of the activities prepared. “Ele-Mentor” is based in Google Classroom, where students have to join the class in Google Classroom in order to access the six stages of learning activities and tasks prepared.

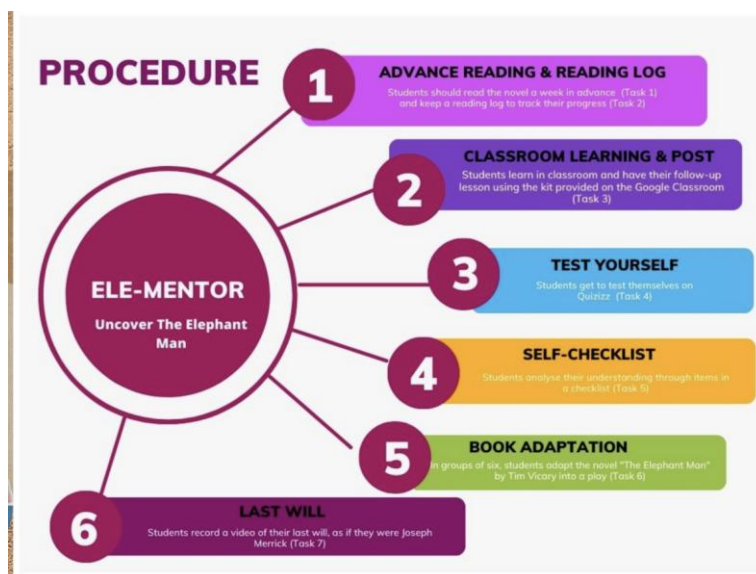


Figure 2: Tasks and activities in Ele-Mentor

Stage 1: Advanced reading and reading log

All materials are available on Google Classroom for the ease of ESL teachers to track each student's progress. This convenience allows the materials to be accessed using any device at any time. Moreover, it enables students to interact with each other and stay updated with their individual learning progress.

For the first stage, students are required to read the novel a week in advance independently. Developers uploaded two versions of the novel in Google Classroom, the PDF version and the video version via YouTube link for students that have different learning styles and preferences. There is no doubt that learners learn differently in various ways. Learning styles have a big impact on learners' lives. When a student's learning style and the structure of their education align, it is expected that the student would learn more effectively (Pasher et al, 2009). The two versions of the novel uploaded can meet the requirements of both visual and auditory learners. While students read the novel, they have to fill in a reading log in a response journal form to track their progress on reading. This should happen concurrently with task 1 where they write down their emotions, feelings and how the novel connected with their own experiences while answering some short questions in the response journal. This encourages active reading and stimulates students to engage with the novel text while reading. Students might read at a level appropriate for their fundamental comprehension, lacking in detail-oriented reading comprehension or analytical thinking at this point. After reading, readers only create basic mental representations or vaguely predict their future actions (Thompson, 1987). Students can read their own physical copy of the novel or the ebook version of it. See Figure 3.

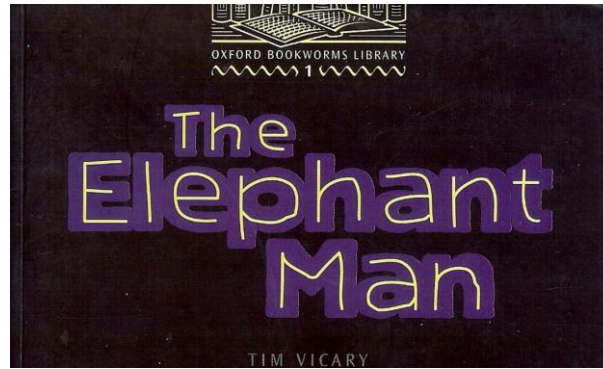


Figure 3: Novel in PDF format uploaded in the kit

At the same time, students are provided with a YouTube link of the novel in video format to help visual learners who struggle to visualize the scenes from the novel. Not only that, but this video also helps to enhance the students' experience and allows them to engage better with the novel. This view is supported by Baratta (2010) who identifies visual learning as an engaging and dynamic approach. Kant underscores the fusion of 'vision and thinking,' asserting their inseparability and continuity as a singular process. It involves the capacity to arrange, structure, and attribute significance to observable elements. Proficiency in reading written language exemplifies a specialized visual skill. Various media and presentation styles prove advantageous for language learners, as articulated by Wright (1976) and Cakir (2006), emphasizing the positive impact of audio-visual materials when employed appropriately. See Figure 4.

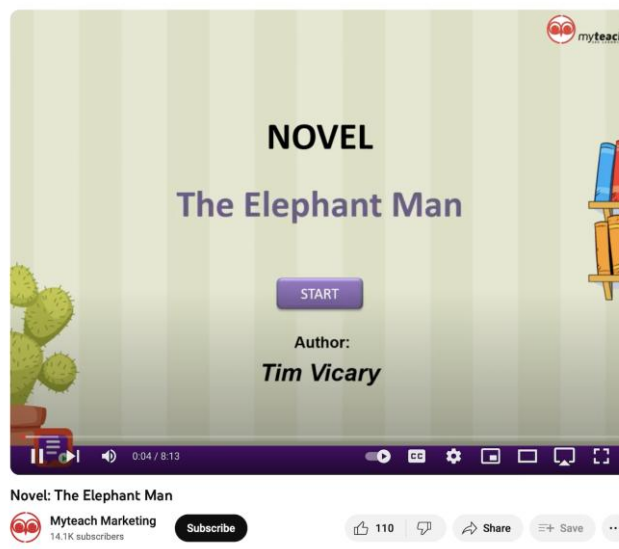
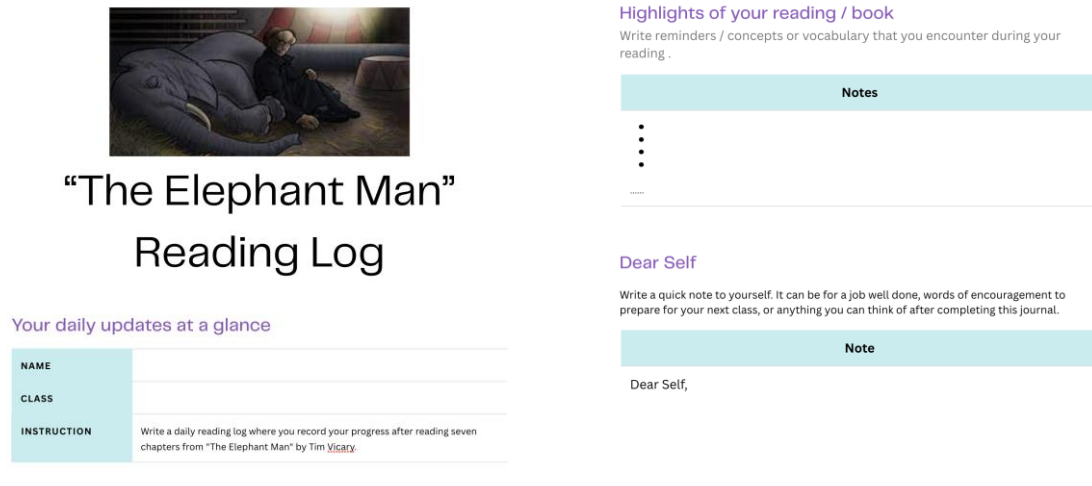


Figure 4: Youtube link of the novel in video format uploaded in the kit

Based on Kalsum (2023) research study, students can keep track of exactly what they read by keeping a reading log and receive excellent work for the amount of reading they reported in their

reading logs. Students started to find reading texts relevant and pleasurable because they found them enjoyable. The students acknowledged that they became engrossed in their books as they realized how enjoyable and meaningful the novels were (Gabiella et al., 2019). So, as the students read the novel, they can document their journey in the Google Doc link provided, which is available on their Google Classroom platform. See Figure 5 & 6.



The image shows a reading log form for the novel "The Elephant Man". At the top left is a small illustration of a man sitting next to a large elephant. Below the illustration is the title "The Elephant Man" and "Reading Log".

The form is divided into two main sections:

- Highlights of your reading / book:** This section includes a heading, a sub-heading "Write reminders / concepts or vocabulary that you encounter during your reading .", and a text area with a light blue header labeled "Notes".
- Dear Self:** This section includes a heading, a sub-heading "Write a quick note to yourself. It can be for a job well done, words of encouragement to prepare for your next class, or anything you can think of after completing this journal.", and a text area with a light blue header labeled "Note".

At the bottom left, there is a section titled "Your daily updates at a glance" which contains a table with the following structure:

NAME	
CLASS	
INSTRUCTION	Write a daily reading log where you record your progress after reading seven chapters from "The Elephant Man" by Tim Vicary.

Figure 5-6: Reading log in response journal forms

Stage 2: Classroom learning and post-classroom/independent learning

ESL teachers have the opportunity to conduct literature-based reading activities where various student groups engage in discussions about the same literary text. As these discussions might yield different interpretations of the story, students are encouraged to present their outcomes and subsequently discuss the similarities and differences between them. This process extends the time dedicated to developing critical thinking skills. One common activity that can be used is Literature Circle.

Additionally, Asselin (2002) discovered that when students documented their responses to a literary text—such as making connections between story events, writing about favored characters, and posing further questions—it notably enhanced their thinking abilities. Awang and Ramly (2008) further argued that to foster creative thinking, students must engage with learning materials that expose them to diverse perspectives and viewpoints, ultimately transforming them into more perceptive readers (Damuri & Wahyuni, 2021). This underscores the significance of including literature in the Malaysian English curriculum.

Moreover, research conducted between 2014 and 2015 revealed that many students acknowledged how literature contributes to the development of critical thinking skills. It provides them with the time and space to contemplate issues they might not otherwise encounter, highlighting the value of literature learning (Bloemert et al., 2017).

For post-classroom/independent learning, students recap what they have read using the Google Slides specially prepared for them to help them recap the important elements in the novel, such as summary, settings, characters, values, ect.. See Figure 7, 8 and 9.



Figure 7-9: Google Slides for recap.

Stage 3: Test yourself

After students recap the information of the novel from the Google Slides, teachers will assess their understanding of the novel by assigning them to do a self-test and answer comprehension questions regarding the content of the novel in Quizizz. Self-testing is a powerful learning approach, according to a variety of research (Dunlosky et al., 2013). Various researchers (Falchikov et al., 1997; Stefani, 1998) also agreed that self-assessment is thought to have an impact on students' learning outcomes.

Oscarson (1997), who emphasizes the value of student accountability, contends that evaluation is a shared duty between students and teachers rather than the teacher's exclusive responsibility. This shared accountability will lead to a democratic learning environment and educational system. Self-assessment benefits the institution and the professors in addition to the students. Besides that, Butler and Li (2001) looked into how well young EFL learners used self-assessment. They discovered that self-evaluation had some beneficial effects on students' confidence in their ability to learn English as well as their performance in English. Self-assessment is thought to promote a rise in the sophistication of learner awareness, assisting students in accurately evaluating their own abilities, learning how to conduct comprehensive assessments that encompass the entire learning process, and coming to view mistakes as opportunities for growth. Given that it offers details on learning styles, areas in need of improvement, and feedback, it was also considered a potentially helpful tool for educators (Barbot, 1991).

Students' motivation and autonomy or independence are increased by the integration of web-based games, and they can also self-evaluate based on the feedback they receive following an immediate evaluation (Chaiyo & Nokham, 2017). Zhao (2019) also mentioned that teachers can conduct their students' language studies with Quizizz, as it is an easy-to-use formative online evaluation application that is available for free.

By utilizing a self-test for students to answer comprehension questions in Quizizz, students can acquaint themselves with the topic and obtain brief inputs to their degree of understanding of the novel content.



Figure 10: Comprehension questions in Quizizz.

Stage 4: Self checklist

For task 5, students are required to do a self-analysis to assess their understanding of the novel through a checklist via Google Form. The questions consist of different sections to assess students' understanding of the novel thoroughly, which include character understanding, plots and events, setting, etc. Assessing oneself plays a crucial role in the learning process as it involves gathering information and reflecting on personal learning experiences. This practice fosters lifelong learning and promotes the development of learners (Boud, 2013).

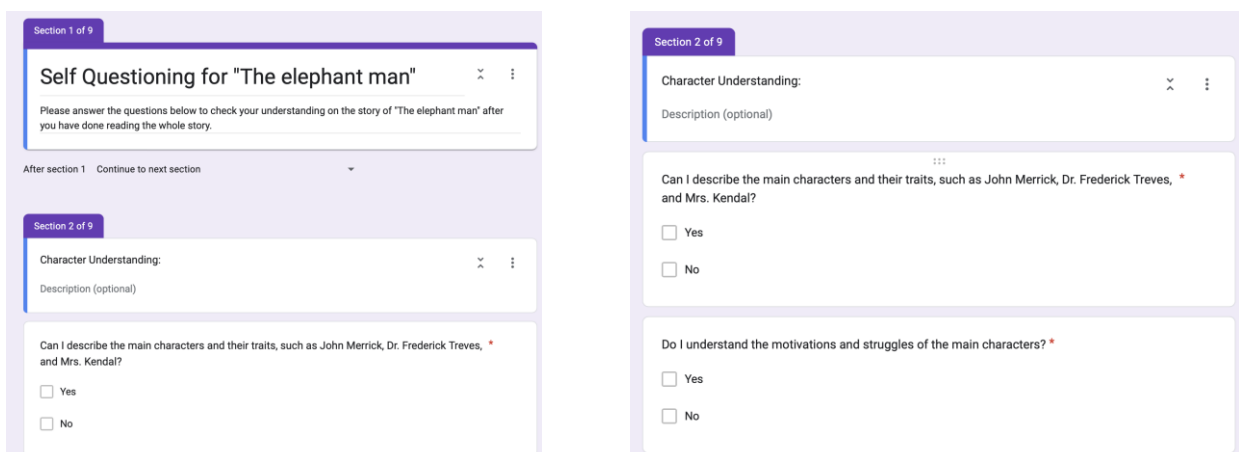


Figure 11-12: Checklist questions for self-analysis

Stage 6: Book-to-play adaptation

In this task, students are tasked with transforming the novel "The Elephant Man" into a play. They must collaborate with their group members to craft a script, assign roles, and plan the performance. The resulting video performance is expected to be uploaded to Youtube, and the video link should be attached in the comment section of the Google Classroom. This directive aligns with Dewey (2012) assertion of a connection between children's innate play activities and the scientific inquiry process, a concept established over a century ago. Additionally, Vygotsky (1978) underscored the profound impact of play on child development, emphasizing its role in nurturing speech development, cognitive processing, self-awareness, and self-regulation. This can be done as part of their project, which allows them to realize that English learning is not only about pen and paper. Incorporating YouTube into this activity enables students to record and review their performance, facilitating both self-reflection and learning from the recordings of other groups. This approach aids in alleviating anxiety associated with group projects, as it allows for meticulous planning in contrast to the spontaneous nature of traditional classroom activities.

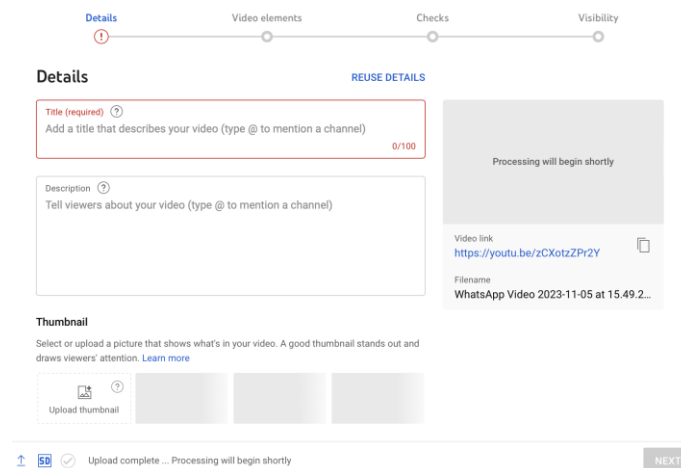


Figure 13: Book adaptation video performance to be uploaded in Youtube

Stage 7: Free Expression

This stage involves the reader's recognition of the text's significance, meaning, or emotional impact. At this point, the reader not only comprehends the text but also establishes a deeper connection with it, often resonating with its themes, characters, or messages. Recognition implies a personal engagement where the reader identifies elements that align with their own experiences, beliefs, or emotions. It's when the text transcends mere words on a page, becoming a mirror reflecting something profound back to the reader.

To culminate their engagement with the novel, students are tasked with creating a video titled "Joseph Merrick's Last Will" and are required to upload the video using the "Flip" application. This final project serves as a comprehensive assessment of the students' understanding of the

novel and encourages them to articulate their emotions, fostering a meaningful connection with the literary text.

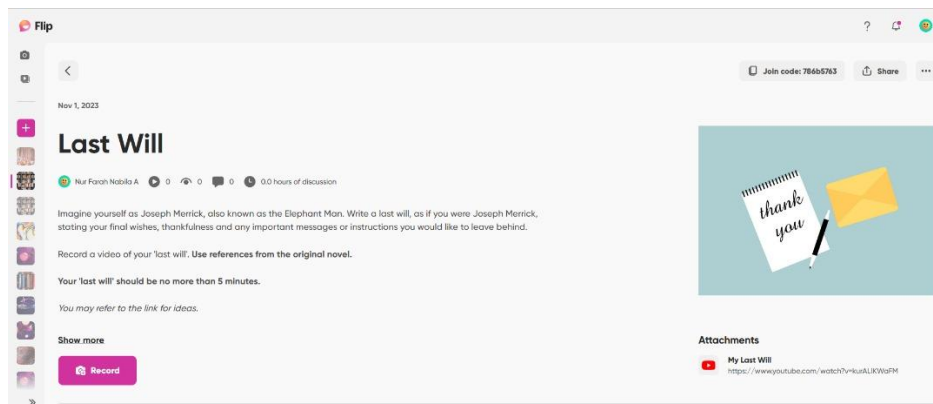


Figure 14: Task 7 “Joseph Merrick’s Last Will”

Our Personal Experiences in Developing Ele-Mentor Learning Kit

As teachers working in primary and secondary schools across Malaysia, the experience of developing this learning kit has been both challenging and enlightening. Like many of our fellow educators, we often found ourselves grappling with the difficulty of teaching literature to students. The task of instilling a love for reading and critical thinking in young minds seemed daunting, especially considering the diverse learning styles and preferences within our classrooms.

However, as we delved into the research to create this learning kit, our perspectives began to shift. The process of exploring innovative approaches to teaching literature has opened our eyes to a myriad of creative and effective ways to engage students. Initially, we shared the common concern that literature might be a challenging subject for students, given the varied backgrounds and abilities in our classrooms.

The realization that learners have diverse preferences in how they consume information guided our decision to integrate technology. Collaboratively, we brainstormed and experimented with platforms like Google Classroom, YouTube, and Quizizz, realizing the potential of these tools to cater to different learning styles. The incorporation of various media, such as video versions of the novel and interactive response journals, emerged as solutions to address the individualized needs of our students.

The journey of developing this learning kit also allowed us to rediscover the joy and effectiveness of literature-based reading activities. The concept of Literature Circles, discussions, and self-assessment tools became valuable additions, transforming our teaching approach. As we delved deeper into research, we found inspiration from studies that emphasized the positive impact of literature on critical thinking skills and overall development.

While acknowledging the challenges, the process of creating this kit became a collaborative venture that brought our teaching community closer. We discovered that teaching literature need not be confined to traditional methods. The stages involving the transformation of the novel into a play and the creation of reflective video projects represented a shift towards experiential learning, aligning with the idea that English learning extends beyond pen and paper.

In essence, the experience of developing this learning kit has been a journey of growth and realization as teachers. Our initial concerns about the difficulties of teaching literature have been replaced with a newfound enthusiasm for creative and impactful teaching methods. We are excited to share this learning kit with our colleagues, hoping to inspire a fresh perspective on teaching literature in Malaysian classrooms.

Conclusion

The primary aim of this learning kit is to provide ESL teachers and students with a comprehensive and interactive approach to advanced reading. By incorporating various learning styles (such as visual and auditory methods), and leveraging technology through Google Classroom, YouTube, Google Docs, and Quizizz, the kit aims to enhance students' reading experiences and comprehension, apart from their critical thinking, self-assessment, and creativity. Through a structured progression, the kit aims to cultivate a deeper connection with literature, ultimately fostering a love for reading and lifelong learning. This learning kit offers a multifaceted and engaging journey for ESL students to delve into the novel "The Elephant Man." The incorporation of diverse learning materials (such as PDFs, video versions, and interactive response journals) caters to individual learning styles, along with other use of literature-based reading activities, literature circles, and self-assessment tools that further reinforces reflective learning. The integration of technology, including Google Slides, Quizizz, Google Forms, and YouTube, not only facilitates learning but also empowers students to take ownership of their progress.

The concluding stages, involving the transformation of the novel into a play and the creation of a reflective video project, extend beyond traditional reading comprehension. They encourage students to synthesize their understanding, collaborate creatively, and articulate their emotional connections to the text. Through this holistic approach, the learning kit aims to instill a profound appreciation for literature, foster independent learning, and equip students with skills that extend beyond the realm of language acquisition. Overall, the kit strives to create a dynamic and enriching educational experience for ESL students, emphasizing the significance of literature in personal and intellectual development.

While the learning kit presents a comprehensive and interactive approach to advanced reading for ESL students, it's essential to acknowledge its limitations. One significant constraint lies in its dependence on technology. Although the integration of platforms (e.g. Google Classroom, YouTube, and Quizizz) enhances learning experiences, not all students may have consistent access to these resources due to varying technological limitations or internet connectivity issues. This discrepancy in access might create disparities among students, affecting their engagement

and the uniformity of learning experiences. Moreover, its emphasis on diverse learning styles, while commendable, might not fully cater to the spectrum of individual preferences and needs. Some students might possess learning styles or preferences that fall outside the provided visual and auditory options, potentially hindering their optimal engagement with the materials. This one-size-fits-all approach might inadvertently exclude or disadvantage certain learners who could benefit from alternative learning modalities.

The focus of the learning kit on a specific novel might limit the exploration of diverse literary works and genres. While engaging deeply with a single text is valuable, it might restrict exposure to a broader range of literature that could cater to varying interests and expand students' horizons. Therefore, modification to suit the ESL teacher's and students' needs is required to ensure effective learning. Recognizing these limitations can guide educators in refining the kit to address diverse needs, ensure inclusivity, and offer a more comprehensive learning experience for all ESL students.

References

- Amer, A. A. (2003b). Teaching EFL/ESL literature. *The Reading Matrix : An International Online Journal*, 3(2). <http://www.readingmatrix.com/articles/amer/article.pdf>
- Asok, D., Abirami, A. M., Angeline, N., & Lavanya, R. (2016). Active learning environment for achieving Higher-Order thinking skills in engineering education. *Innovation and Technology in Education*. <https://doi.org/10.1109/mite.2016.020>
- Asselin, L.-M. (2002). Multidimensional Poverty: Composite Indicator of Multidimensional Poverty. Institut de Mathématique Gauss, Lévis.
- Atek, E. S. E., Hassan, I., Azmi, M. N. L., Azmi, N. J., & Alias, M. H. Y. (2020). Students' perceptions of the English literature component in Malaysian secondary schools. *جستارهای زبانی*, 11(5), 125–144. <https://doi.org/10.29252/lrr.11.5.125>
- Awang, H., & Ramly, I. (2008). Creative Thinking Skill Approach through Problem-Based Learning: Pedagogy and practice in the engineering classroom. *Zenodo (CERN European Organization for Nuclear Research)*. <https://doi.org/10.5281/zenodo.1084906>
- Baratta, A. (2010). *Visual writing*. Cambridge Scholars Publishing.
- Barbot, M. J. 1991. New approaches to evaluation in self-access learning (trans. form. French). *Études de Linguistique Appliquée*, 79: 77-94.
- Bloemert, J., Paran, A., Jansen, E., & Van De Grift, W. (2017). Students' perspective on the benefits of EFL literature education. *Language Learning Journal*, 47(3), 371–384. <https://doi.org/10.1080/09571736.2017.1298149>

- Boud, D. (2013). Enhancing learning through self-assessment. In *Routledge eBooks*. <https://doi.org/10.4324/9781315041520>
- Boud, D., & Falchikov, N. (2005). Redesigning assessment for learning beyond higher education. *Research and Development in Higher Education*.
- Butler, Y. G., & Lee, J. (2010). The effects of self-assessment among young learners of English. *Language Testing*, 27(1), 5–31. <https://doi.org/10.1177/0265532209346370>
- Çakır, İ. (2006). The use of video as an audio-visual material in foreign language teaching classroom. *Turkish Online Journal of Educational Technology*, 5(4), 67–72. <http://files.eric.ed.gov/fulltext/ED501362.pdf>
- Chaiyo, Y., & Nokham, R. (2017). The effect of Kahoot, Quizizz and Google Forms on the student's perception in the classrooms response system. *International Conference on Digital Arts, Media and Technology (ICDAMT)*. <https://doi.org/10.1109/icdamt.2017.7904957>
- Damuri, D and Wahyuni, D. (2021). Rural High School Students' Attitude toward Literature in English; A Descriptive Study at SMA N 1Batipuh. *Journal of English Language Teaching*,10(4), 566- 577, <https://doi.org/10.24036/jelt.v10i4.114763>
- Boud, D., & Molloy, E. (2013). Rethinking models of feedback for learning: the challenge of design. *Assessment & Evaluation in Higher Education*, 38(6), 698–712. <https://doi.org/10.1080/02602938.2012.691462>
- Dearing, R. 1997. *Higher Education in the Learning Society*. London: HMSO.
- Dewey, J. (2012). *How we think*. Wyatt North Publishing, LLC.
- Dewey, M. (1997). Towards a post-normative approach: Learning the pedagogy of ELF. *Journal of English as a Lingua Franca*, 1(1), 141–170. <https://doi.org/10.1515/jelf-2012-0007>
- Dunlosky, J., Rawson, K. A., Marsh, E. J., Nathan, M. J., & Willingham, D. T. (2013). Improving students' learning with effective learning techniques. *Psychological Science in the Public Interest*, 14(1), 4–58. <https://doi.org/10.1177/1529100612453266>
- Education, O. M. O. (2002). *Ontario Curriculum Unit Planner: Special Education Companion*.
- Falchikov, N. (1997). *Why do lecturers involve students in assessment? 2nd North Umbria Assessment Conference, Encouraging Partnership in Assessing Learning*, 3–5, University of Northumbria, Newcastle.
- Fulps, J. S., & Young, T. A. (1991). The what, why, when and how of reading response journals. *Reading Horizons*, 32(2). <https://eric.ed.gov/?id=EJ435633>
- Gabriella, & Diptoadi, V. L. (2019). Students' perception of extensive reading activity through reading log. *Magister Scientiae*, 46. <https://doi.org/10.33508/mgs.v2i46.2227>
- Giddings, L. R. (1991). Literature-based reading instruction: An analysis. *Reading Research and Instruction*, 31(2), 18–30. <https://doi.org/10.1080/19388079209558076>

- Jackie, A. Z. M., Ghani, M. F. A., & Elham, F. (2017). Keberkesanan pengajaran guru tadika: Satu kajian awal. *JuPiDi: Jurnal Kepimpinan Pendidikan*, 3(4). <https://ijie.um.edu.my/index.php/JUPIDI/article/view/8447>
- Joseph, O. (2015). Teaching Aids: a special pedagogy of brain development in school children, interest and academic achievement to enhance future technology. *Journal of Education and Practice*, 6(29), 92-101.
- Kalsum, K., Rauf, F. A., & Sardi, A. (2023). Implementation of Reading-Log to increase students' interest on literacy at Islamic Boarding School. *Ideas: Journal on English Language and Learning, Linguistics and Literature*, 10(2), 1887-1898. <https://doi.org/10.24256/ideas.v10i2.3202>
- Lazar, G. (1993). *Literature and language teaching: A Guide for Teachers and Trainers*. Cambridge University Press.
- Ministry of Education Malaysia [MOE]. (2017). *Dasar pendidikan kebangsaan [National education policy] (4th ed)*. Putrajaya: Ministry of Education Malaysia.
- Oscarson, M. (1997b). Self-Assessment of foreign and second language proficiency. In *Springer eBooks* (pp. 175–187). https://doi.org/10.1007/978-1-4020-4489-2_17
- Palardy, J. M. (1997). Another look at Literature-Based instruction. *Education 3-13*, 118(1), 67-70. <https://www.questia.com/library/journal/1G1-20381957/another-look-at-literature-based-instruction>
- Pashler, H., McDaniel, M. A., Rohrer, D., & Bjork, R. A. (2008). Learning styles. *Psychological Science in the Public Interest*, 9(3), 105–119. <https://doi.org/10.1111/j.1539-6053.2009.01038.x>
- Priem, R. L., & Butler, J. E. (2001). Is the Resource-Based “View” a Useful Perspective for Strategic Management Research? *Academy of Management Review*, 26(1), 22–40. <https://doi.org/10.5465/amr.2001.4011928>
- Raines, A. S. (2005). Louise Rosenblatt: An advocate for nurturing democratic participation through literary transactions. *Talking Points*, 17(1), 28-31.
- Rivers, W. M. (1981). *Teaching Foreign Language skills Rev ed*. <https://doi.org/10.7208/chicago/9780226518855.001.0001>
- Rosenblatt, L. M. (1978). *The reader, the text, the poem: The transactional theory of literary work*. Carbondale, IL: Southern Illinois University.
- Shin, J. (2019). Journey to the unexplored world: an English Learner's L2 reader-response journals. *Pedagogies: An International Journal*, 14(3), 173–190. <https://doi.org/10.1080/1554480x.2019.1625268>
- Stefani, L. (1998). Assessment in Partnership with Learners. *Assessment & Evaluation in Higher Education*, 23(4), 339–350. <https://doi.org/10.1080/0260293980230402>

- Teh, N. C., Isa, N. H., & Omar, A. (2018). Promoting higher order thinking skills in literature class via Critical Thinking Module (CTM). *ASIAN TEFL: Journal of Language Teaching and Applied Linguistics*, 1(1). <https://doi.org/10.21462/asianteftl.v1i1.52>
- Thomson, J. (1987). *Understanding Teenagers' reading: reading Processes and the Teaching of literature*. <http://ci.nii.ac.jp/ncid/BA07624507>
- Vygotsky, L. S. (2012). *Mind in society: Development of Higher Psychological Processes*. Harvard University Press.
- Vygotsky, L. S. (1978). [*Mind in society: The development of higher psychological processes*](#). Cambridge, MA: Harvard University Press.
- Wright, A. (1975). *Visual materials for the language teacher*. https://openlibrary.org/books/OL4591066M/Visual_materials_for_the_language_teacher
- Yunus, M. M., & Suliman, A. (2014). Information & Communication Technology (ICT) Tools in Teaching and Learning Literature Component in Malaysian Secondary Schools. *Asian Social Science*, 10(7), 136-152 <https://doi.org/10.5539/ass.v10n7p136>
- Zhao, F. (2019). Using Quizizz to integrate fun multiplayer activity in the accounting classroom. *International Journal of Higher Education*, 8(1), 37-43. <https://doi.org/10.5430/ijhe.v8n1p37>



The Future of Education: Augmented Reality (AR) in Game-Based Learning for English as a Second Language (ESL)

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Abstract: AR stands for "Augmented Reality", a technology that integrates virtual objects into the real world, allowing users to interact with them in real time. This innovation aligns with the objectives of Industrial Revolution 4.0, aiming to generate high quality human capital capable of navigating digital transformation and competing globally. In teaching English as Second Language (ESL), game-based learning is a current educational approach that incorporates elements of games into the learning process in order to motivate and enhance students' understanding and promote the development of various skills while catering to their technological needs and understanding. Since the integration of AR and game-based learning in education is widely celebrated across the globe, educators are now exploiting the combination of both to maximum capacities to enable a new form of learning and teaching method. By integrating new forms of 3D imaging and recognition into interactive game-based learning approaches for English Language teaching, multiple possibilities can be ventured and discovered. This paper explores the implementation of Augmented Reality in Game-Based Learning for ESL, how the technology is utilised in the classroom, and the effectiveness of Augmented Reality in

teaching ESL. Additionally, this paper addresses the application of Game-Based Learning and how combining it with Augmented Reality fosters productivity in English language teaching.

Keywords: Augmented Reality (AR), English as a Second Language (ESL), English Language Teaching (ELT), Game-Based Learning (GBL), Technology Integration in ESL Classroom

Introduction

Technology in education has long evolved into a peculiar material yet in alignment with the current modernization scene. The result of the preceding COVID-19 pandemic highlighted the importance of incorporating technology into English language teaching (Mohd Nabil et al., 2023). The nation has experienced a period of significant educational development through the integration of technologies and digital tools. Our educational system has undergone constant modifications and reinvention, as far as traditional chalk-and-board classrooms to virtual learning settings, and note-taking to skill-based pedagogies (Suhaidi, 2023). Furthermore, technology offers students unrestricted access to many materials and technologies that promote language acquisition (Hashim et al., 2017).

The Education Act 1996 (Act 550) is a Malaysian law that controls the education system. It includes the legal foundation for the creation, and operation, and governance of educational organisations, as well as the enforcement of education legislation and procedures (Suhaidi, 2023). The Act has been revised multiple times to suit the evolving requirements of the process through the educational system. Whilst augmented reality (AR) technology continues to develop and has not been completely discovered, preliminary evidence has indicated that AR is a useful tool to utilise in digital circumstances and remote learning (Mohd Nabil et al., 2023).

Augmented Reality was first utilised in education in potentially harmful or unsafe situations where real involvement could be risky, for example, surgery or flight training (Huertas-Abril et al., 2021). Additionally, several ways can be taken to implement AR in education, thus AR should be viewed as a digital tool based on the simultaneity of the real and virtual worlds, allowing for the overlapping of 3D virtual objects over real situations (Huertas-Abril et al., 2021). This promotes real-time interaction and provides additional, contextualised information to increase students' learning experiences. Moreover, Salmee & Majid (2022) indicate that incorporating augmented reality (AR) into education can boost student enthusiasm and engagement as motivation aspects in successful second language learning (SLA). AR is used in English language learning around the world, especially in the United States, Europe, Africa, and Asia (Hasbi & Md Yunus, 2021). For example, in China, augmented reality is used to teach phonics to English learners by combining virtual objects and video clips. In India, teachers use augmented reality (AR) for language training through simulations (Mohd Nabil et al., 2023). Following the growth of technology in education, students are prepared to be proficient in the evolving literacy skills of modern technologies (Sulaiman et al., 2023). As a result, the Malaysian government has made necessary changes to the syllabus to address such issues by introducing the Malaysian Education Blueprint 2013-2025 under Shift 7 to equip students with language skills and introduce more purposeful and significant learning (Sulaiman et al., 2023).

Investments by the Malaysian Ministry of Education (MOE) on education chronically in technology and ICT has given multiple choices in teaching approaches. Following this, the value of AR as a teaching tool stems from its capacity to provide blended learning experiences in the classroom by combining virtual and actual settings or content (Hasbi & Md Yunus, 2021). This is unavoidably useful in line with the Ministry of Education's efforts to close the gap between students from various backgrounds and geographical settings. Currently, games are having an impact on the educational scene. Instructional games can enhance motivation and involvement among learners by combining fun and instructional topics (Ramli et al., 2021). From research conducted by Ooi et al (2021), a study conducted in a primary school on primary 4, primary 5 and primary 6, using AR with Game-Based Learning approach had a successful result. In short, the research found out that Augmented Reality technology enables students to use every single sense during learning tasks. As a result, by integrating AR into the classroom, teachers will be able to widen students' horizons and improve their experiences while teaching and learning by merging the real and virtual worlds (Hasbi & Md Yunus, 2021).

Technology advancements have provided several benefits to language classes, resulting in significant implications for second language acquisition (Sulaiman et al., 2023). Proving that technology plays an important role in the teaching and learning process for students both inside and outside of the classroom. The advancement of technology has led to a shift in classroom learning methods (Salmee & Majid, 2022). Therefore, AR has enabled learners to better understand concepts, phenomena, and theories through new applications as the new technology in education could help them in classrooms.

Literature Review

Augmented Reality (AR) In English as a Second Language Learning (ESL)

For ESL learners, a new approach to learning language away from the traditional pedagogies could enhance their cognitive and comprehension skills. The involvement of AR in the curriculum with the help of teachers fundamentally boosts up motivation and increases learners' knowledge as ESL learners. Using AR in learning can significantly improve the acquisition of new knowledge (Hasbi & Md Yunus, 2021). Digital tools are a crucial aspect of educational reform, integrally influencing the procedure of language development and increasing language abilities (Qureshi et al., 2021). According to Sulaiman et al. (2023), AR is an educational device that enhances representations of genuine surroundings allowing teachers to develop a collaborative learning environment in language classes. The use of technology has led to significant improvements in teaching subjects, particularly ESL learners. Advanced technologies have improved Teaching English as Second Language (TESL) pedagogy through interactivity, immediacy, cooperation, and many functional instruments (Abdelmagid et al., 2021). As the involvement of AR in education is increasing, research found that AR has multiple abilities. The first one is to facilitate an understanding of intricate interactions and obscure ideas and manipulate time, position, angles, and rotations (Huertas-Abril et al., 2021). AR is also involved in scaffolding able to develop various types of abilities among other things (Huertas-Abril et al., 2021). This can be supported by a study conducted in Kuwait in 2021. The findings of this research conducted by Abdelmagid, Abdullah & Aldaba (2021) indicated that students actively participated in different engaging lessons. To strengthen this finding, Lai & Chang (2021)

conducted a study on first graders proving that AR increases students' motivation in ESL learning. The primary explanation for the increase in interest among students appeared to be AR's technological qualities, which include technological uniqueness and a deeply engaging environment (Lai & Chang, 2021). Additionally, adopting AR in the classroom positively encourages student autonomy by demonstrating greater self-reliance in learning. ESL students can improve their involvement in interactive AR-based learning by utilising relational tasks and peer guidance (Abdelmagid et al., 2021). Besides, researchers discovered that AR can effectively teach vocabulary using games, knowledge exercises, and location-based activities which leads to improved long-term memory (Karacan & Akoglu, 2021). In short, AR is a medium in education that helps to maximise language learning outcomes among ESL learners in stimulus, academic success, cognitive skill, enjoyment, and collaboration (Karacan & Akoglu, 2021).

Augmented Reality in Game-Based Learning Approach on ESL Learners

Game-based learning uses digital video games for teaching, whereas gamification incorporates game design principles into other types of learning (Alper et al., 2021). Moreover, the Game-based learning approach incorporates cognitive tools, the use of technology for communication, and internet-based distance education, thus games can be used in a variety of ways during the learning process (Alper et al., 2021). Several researches were conducted to view the practicality of AR and Game-Based Learning in applying the tool and approach in an English classroom environment. For instance, Stylianidou, Sofianidis & Manoli (2020) investigated the effect of AR using Alternate Reality Games in learning English among primary school students in Cyprus. Another study was conducted by Mohd Nordin, Nordin & Omar (2021) among Computer Management undergraduate students of Universiti Utara Malaysia on the implementation of educational board games with web-based AR. This portrays that game-based learning integrated with AR elements is able to offer collaborative lessons in classrooms that caters to students' unique personalities, capacities, and learning styles (Mohd Nordin et al., 2021). A game-based AR educational setting may either explicitly or implicitly promote collaborative learning. It is discovered that the properties of AR technology could increase students' excitement for English learning, hence encouraging English classroom collaboration (Wang & Khambari, 2022). Furthermore, the game-based AR classroom allows greater interaction, and provides additional resources for students, so collaborative learning was increased by the situation. According to Syafii, Kusnawan, and Syukroni (2020), games can improve skills such as listening, speaking, reading, and writing. It is also efficient for teaching and learning different kinds of discourse, including criticism, explanation, encouragement, and agreement. Using game components in classes can help ESL teachers to establish an enjoyable, engaging, and dynamic atmosphere for learning, which is crucial for effective language development (Yaacob et al., 2022). Previous research suggests that Game-Based Learning (GBL) can assist students in organising their information and distinguishing between learning objectives (Azhar & Ab Jalil, 2022). Combining games with instructional information can enhance learner learning and create immersive experiences. It is progressively emerging as an excellent method for developing insightful and motivating education (Yaacob et al., 2022). This can be supported by Rahmani (2020) as game-based learning in lessons using 21st-century tools successfully emerged from interaction among peers and boosted competition in the classroom. In short, game-based learning activities should

support achievement goals in classrooms by implementing AR in English classrooms resulting in a more engaging learning environment.

Technology Acceptance Model (TAM) Among ESL Learners

Technology Acceptance Model (TAM) is a recognized theoretical framework for explaining and predicting the user's acceptance of a technology system that was created in 1986 by Fred D. Davis (Haleman & Yamat, 2021). This model is particularly relevant when considering the integration of Augmented Reality (AR) in English as a Second Language (ESL) learning environments, where AR offers novel and interactive learning experiences (El-Imran et al., 2021). Figure 1 illustrates the Technology Acceptance Model.

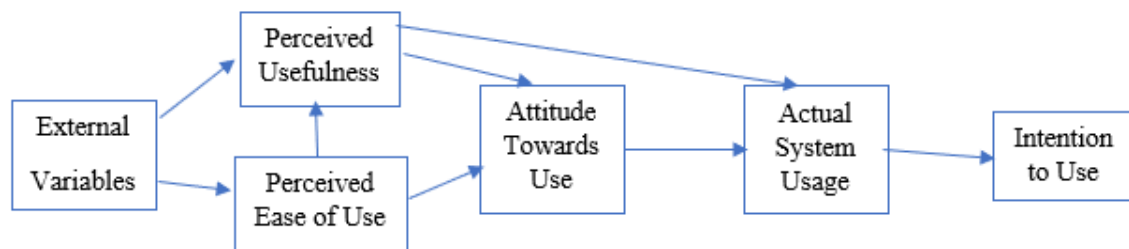


Figure 1: Technology Acceptance Model (AlShamsi, 2021 as cited in Davis, 1989)

TAM suggests that Perceived Usefulness (PU) and Perceived Ease of Use (PEOU) are key determinants of users' attitudes toward a technology, which in turn influence their Behavioral Intention to Use (BI) and actual usage behavior (Davis, 1989; Al-Emran et al., 2021). When all elements are included, the model indicates that once a learner considers an unfamiliar technology to be effortless to comprehend and valuable, the learner is more inclined to have a favourable perspective, which impacts an increased degree of desire to begin using the technology (Jang et al., 2021). Perceived Usefulness (PU) in the context of AR for ESL learners refers to the extent to which students believe that AR can enhance their language learning outcomes (Liu & Tsai, 2020). AR can significantly improve educational experiences by providing immersive and contextual learning opportunities (Liu & Tsai, 2020). Moreover, AR can simulate real-life conversations in diverse settings, enabling learners to practise language skills in authentic, yet controlled environments. Additionally, Perceived Ease of Use (PEOU) reflects how students can interact with AR applications as such, a user-friendly interfaces and intuitive designs are essential to ensure that students can navigate these tools without excessive difficulty, allowing them to focus on learning rather than the mechanics of the technology itself (Huang et al., 2020). Moreover, Attitude Toward Using (ATU) AR technology in ESL learning is significantly influenced by students' perceptions of its usefulness and ease of use. Therefore, students are more likely to develop positive attitudes towards these technologies (Chen & Tsai, 2020). Positive experiences with AR can make the learning process more enjoyable and less daunting. For example, AR can enhance storytelling sessions by bringing stories to life with animated characters and interactive elements, making it easier for learners to understand and remember narratives and associated vocabulary (Cheng & Tsai, 2020). Besides that, studies have shown that students who engage with AR-based learning tools demonstrate a higher intention to use these tools regularly compared to traditional methods (Lin & Wang, 2020). For instance, AR can

immerse ESL learners in cultural experiences by simulating real-world interactions in English-speaking environments. This exposure helps learners understand contextual usage and cultural nuances, which are often challenging to grasp through traditional learning methods (Huang et al., 2020). Additionally, the influence of peers and educators can reinforce these intentions, encouraging wider adoption of AR technologies in language learning. In general, the application of the Technology Acceptance Model to AR in ESL learning provides critical insights into the factors driving the adoption of AR technologies in educational contexts.

Advantages of Augmented Reality

Teaching can be more engaging by utilising technology as study has found that integration of modern technological applications and their adoption in educational settings challenged the effectiveness of traditional educational systems, approaches, and methodologies in terms of aligning to new educational and societal requirements while satisfying students' demands for more active, engaging, and insightful learning (de Castro & García-Peñalvo, 2022). Izwan Nurli Mat Bistaman et al. (2018) also found that the traditional approach to teaching and learning needs to evolve. Previous reviews have indicated that AR technology holds potential as a valuable tool for enhancing students' motivation, engagement, and interaction while offering more opportunities for personalised and collaborative learning. (Lampropoulos & Kinshuk, 2024).

Enhanced Engagement

Sanak, Nabil, Nordin, and Faizahani (2023) conducted a study on teaching English language skills using augmented reality technology, focusing on the experiences of secondary school teachers. In the context of education, particularly in English classes, one of the benefits AR can provide is enhanced engagement. It fosters deeper comprehension, as students engage with digital content within their tangible surroundings. Not only that, AR's scaffolding capabilities allow for the seamless integration of digital elements into real-life contexts, thus crafting immersive learning environments. In a study by Wang, D., and Khambari, M. N. M. (2020), it was found that the majority of students responded positively to the new AR-based role of the teacher. In-depth interviews revealed that students found this approach more interactive and engaging for learning English sentence structures. Additionally, this method was noted to enhance their learning motivation.

Improve Learning Motivation

Studies have shown that integrating AR technology positively influences students' motivation to learn, thanks to its ability to offer captivating and interactive educational content. Wang, D., & Md. Khambari, M. N. (2020). Furthermore, active engagement between teachers and students in the gaming environment further enhances motivation. Additionally, utilising AR-based gamified approaches encourages collaborative learning through stimulating discussions and creating a relaxed and conducive learning environment. A study by Lai, J. Y., & Chang, L. T. (2021) demonstrated that two motivational elements, attention and relevance, significantly enhance students' learning motivation. By using 3D stereoscopic images in the classroom, educators can capture students' attention and spark their interest in learning. Additionally, augmented reality (AR) creates an interactive and immersive environment, allowing students to connect learning with their personal experiences, thereby boosting the motivation related to relevance.

Disadvantages of Augmented Reality

Human Challenges and Limitations

Teachers often hesitate to adopt new technologies like Augmented Reality (AR) in classrooms due to its potential to replace traditional methods (Alzahrani, 2020). Despite AR's potential to improve learning outcomes, studies comparing AR flashcards to traditional methods show no significant difference in effectiveness (Chen & Chan, 2019). Additionally, managing distractions posed by AR elements can be challenging for teachers (Chen & Chan, 2019). While AR technology has advanced, the availability of AR content for ESL learning remains limited compared to traditional resources (Chang & Hwang, 2018). The absence of established pedagogical frameworks and insufficient educator training hinder the effective integration of AR into language education (Gómez & Medina, 2022). Financial considerations, including investments in software, hardware, and teacher training, further complicate AR implementation (Tsai, 2020). Despite investments, the availability of AR-incorporated curriculum materials remains limited (Chen & Chan, 2019), impacting effective classroom integration (Alzahrani, 2020).

The potential for distractions within Augmented Reality (AR) systems poses a significant concern, diverting students' focus from intended learning objectives (Tsai, 2020). Additionally, combining AR with game-based learning environments introduces further distractions through complex game mechanics and immersive elements, jeopardising educational focus (Chen & Chan, 2019). The absence of robust experimental studies in educational science complicates drawing clear conclusions about students' knowledge acquisition (Greipl et al., 2020). Individual preferences also influence AR adoption, with students potentially overlooking learning objectives due to sensory immersion (Chen & Chan, 2019). Developers must consider users' physical constraints, with prolonged AR use raising concerns about eye strain and discomfort (Tsai, 2020), emphasising user well-being in AR learning environments.

Integration of AR into education requires careful consideration of inclusivity and accessibility, ensuring equitable access for all students, including those with disabilities (Chen & Chan, 2019; Tsai, 2020). Non-visual students may face challenges deriving benefits from AR, potentially hindering language learning endeavours (Chen & Chan, 2019). Therefore, ensuring AR experiences enhance engagement without acting as distractions is crucial for effective language learning (Chen & Chan, 2019).

Technical and Physical Disadvantages

The integration of Augmented Reality (AR) technology in education offers exciting potential but is accompanied by significant technical and physical challenges. Tracking and design issues, compounded by children's movements, can impact AR application accuracy and reliability (Schorr et al., 2024; Yadav et al., 2020). Cognitive overload and synchronisation deficits between visual perception and manual dexterity further complicate AR adoption (Alzahrani, 2020; Yadav et al., 2020). Additionally, AR implementation requires meticulous consideration of infrastructure, compatibility, and resource allocation, which may pose financial burdens (Schorr et al., 2024). Technical challenges, including connectivity issues and high costs, hinder seamless AR integration in educational environments (Gómez & Medina, 2022). However, advancements

in AR technology, such as more stable and portable devices, offer promising solutions (Alzahrani, 2020). Ensuring compatibility and providing educator training are crucial for successful AR adoption (Schorr et al., 2024).

Addressing teachers' reluctance, limited AR content, and pedagogical frameworks are essential for effective AR implementation (Schorr et al., 2024; Alzahrani, 2020; Chang & Hwang, 2018; Gómez & Medina, 2022). Moreover, mitigating distractions and considering users' physical constraints are vital for creating inclusive learning environments (Tsai, 2020; Chen & Chan, 2019). Innovative solutions and ongoing research efforts are needed to optimise AR-enhanced learning experiences (Alzahrani, 2020; Schorr et al., 2024). By addressing these challenges, educators can create immersive and engaging learning environments, ultimately improving student outcomes.

Implementation of AR into Game-Based Learning

Compatibility of AR Game Design

Empirical studies (Costa et al., 2020, Hu et al., 2022) have been done and support the implementation of AR into Game-Based Learning. The researchers had designed and used AR devices for targeted learning, either for specific content learning or language studies. From the studies, positive feedback had been received from both teachers and students. By designing educational games that incorporate realistic AR elements, educators can create interactive and immersive learning experiences. This may involve developing game scenarios, storylines, characters, gameplay, and environments that utilise AR technology to overlay digital content onto the real-world environment.

AR Content and User Interface (UI) components

Educational contents with suitable UI that adapt different components such as 3D models, animations, videos, and simulations can be overlaid onto physical objects or environments using AR technology. Content creation may involve using specialised software or platforms designed for developing AR experiences. In the study (Costa et al., 2020) 3D images of celestial bodies were used to provide better insides to students. Modern technology provides numerous methods to enhance teaching and learning within the classroom (Lefebvre et al., 2006). According to Dawes (2001), contemporary technologies have the capability to enhance educational experiences across various subjects and create opportunities for effective communication between teachers and students that were previously unattainable.

Collaborative Learning

An empirical study (Wen, 2020) has reported that the superiority of the AR-supported environment in promoting highly collaborative and peer engagement was more obvious than the non-AR environment, as students were more interested in browsing AR artefacts created by peers during sharing activities. In previous studies (Lee, 2020; Duncan, 2020) where the effect of integrating AR games into twenty-first century education, collaboration and teamwork are factored in as one of the variables that impacted students' engagement. Student engagement is

important in language learning education setting as students' participation in learning will usually lead to academic achievement (Filsecker & Kerrs, 2014).

Diversity, Equity, and Inclusion (DEI)

AR technology enables personalised learning experiences by adapting game content and challenges to individual students' needs, preferences, and learning styles while ignoring the constriction such as race, social status, health issues and cultural background. A previous study from the USA (Harteveld et al., 2020) had shown a positive empirical DEI result pertaining to the use of game-based learning in engineering education. A systematic review (Tlili et al., 2022) had also reported that game-based learning is able to enhance motor and cognitive skills and social interaction of special-need students, even stating a huge possibility in fulfilling STEM subjects and moving towards science, technology, engineering, arts, and mathematics (STEAM).

Professional Development

Professional development opportunities can enable educators to utilise AR as a tool to enhance teaching and learning outcomes (Udeozor et al., 2023). However, the adoption of this educational technology remains limited due to insufficient teacher training (Kaminskienė et al., 2022). With sufficient continuous training and guidance will be able to support teaching approaches on professional development (Marques & Pombo, 2021). Educators interested in incorporating Augmented Reality in their classrooms often need to acquire this knowledge independently, outside of school hours, and frequently without adequate resources (González-Segredo & Hernández-Cabrera, 2022). Previous studies have identified teacher knowledge, social norms, and motivational support as key factors influencing teachers' integration of technology (Jang et al., 2021). These studies also found that external factors, such as technological pedagogical and content knowledge (TPACK) and social norms, significantly affect teachers' willingness to implement new technology in their teaching practices (Mayer & Girwidz, 2019; Scherer et al., 2019).

Implementation and Pedagogical Implication in ELT

Augmented reality (AR) is often referred to as one of the avant-garde of interactive experiences (Martó & Gonçalves, 2022). Its features such as immersiveness and interactivity make it popular in the field of education at the same time. According to the literature review from a previous study (Nesenbergs et al., 2020) conducted, the integration of Augmented Reality (AR) into Game-Based Learning (GBL) has several positive pedagogical implications that can enhance the learning experience and outcomes for students.

Promote Students' Engagement and Motivation

AR in GBL creates immersive and interactive learning experiences that capture students' attention and maintain their engagement (Natale et al., 2020) for longer periods by creating opportunities to enrich students' learning and enhancing stimuli and motivation (Araiza-Alba et al., 2022). In the study by Hu et al. (2022) has introduced Game Transfer Phenomena (GTP) in learning psychology. GTP refers to a cluster of involuntary phenomena related to playing video

games, including sensory and cognitive intrusions, transient changes in perception and self-agency (De Gortari & Diseth, 2022). GTP often occurs more in augmented reality games that require switching between the virtual and the real world (Sifonis, 2018; Ortiz de Gortari, 2019a). The usage of game elements, for example, levels, points, badges, leaderboards, avatars, quests, social graphs, or certificates provide a sense of novelty and excitement that motivates students to participate actively in learning activities, deriving from the shifting between the physical and the virtual view and the overlaying of digital images (De Gortari, 2018; Krath et al., 2021).

Promote Active Learning

AR technology promotes active learning by enabling students to manipulate virtual objects, explore simulations, and interact with digital content in real-time. According to multiple reviewed articles from a study by Nesenbergs et al. (2020), kinaesthetic learning allows students to conduct experiments more effectively, either independently or with teachers in a 3D environment, compared to traditional methods. 3D virtual worlds (3DVWs) have been widely adopted for language learning because they provide a platform where learners engage in language acquisition through social practices based on Sociocultural theory (Vygotsky, 1962; Sykes et al., 2013). Using scaffolding strategies, teachers can support language learners by adjusting the level of assistance according to the learners' current proficiency level (Wang et al., 2019). The benefits of virtual reality facilitate real-time communication and interaction between teachers and students, which traditional learning methods cannot replicate (Fan et al., 2015; Freina & Ott, 2015; Han, 2020). In these safe, interactive, and controlled settings, students engage in experiential learning and practise complex tasks to enhance their cognitive skills (Çaliskan, 2011; Hamilton et al., 2021). Additionally, empirical research by Wen (2020) demonstrates that students stay more consistently engaged in learning activities designed to foster self-generated contexts. Games frequently incorporate visual, auditory, and tactile realism, including touch interfaces for mobile games, which can help students re-experience tactile sensations (De Gortari, 2018).

Personalised Self Learning

AR technology enhances inquiry-based learning by allowing students to explore, investigate, and discover information independently within the game's context. A study by Wen et al. (2023) found that students' self-directed learning and creative thinking skills improved significantly after participating in AR-integrated QIMS (questioning, investigating, making, and synthesising) inquiry-based lessons. The use of AR and QIMS notably boosted students' critical thinking and knowledge creation efficacy, particularly for low-progress students, as they experienced a sense of inquiry while engaging in authentic problem-solving scenarios. AR offers substantial opportunities to create authentic learning environments by accurately replicating real-world objects, contexts, and tasks. The visual fidelity of AR content, seamlessly integrated into the real world, enhances its perceived authenticity (Moser & Lewalter, 2024). Through experiential learning activities, students develop practical skills, gain insights, and internalise concepts through direct observation and experimentation.

Assessment and Feedback

AR games can serve as formative assessment tools that monitor student progress, assess understanding, and provide immediate feedback on performance (Udeozor et al., 2023). Through

embedded assessment features, AR games enable teachers to track learning outcomes, identify areas for improvement, and tailor instruction to meet individual learning needs (Yu et al., 2022). In the study (Costa et al., 2020) multiple choice questions were posted after touching the 3D images of planets and marks will be obtained for every correct question. The player with the best score and the best time wins the game. Gamified learning will not only help to assess students' learning, but also help to provide pupils feedback on content and language learning.

Content and Language Integrated Learning (CLIL)

AR in GBL allows integration of Content and Language Integrated Learning (CLIL) by incorporating content from multiple subject areas with language learning. By combining elements of cross-curricular such as science, technology, engineering, art, and mathematics (STEAM) related subjects (López et al., 2021), other subject disciplines like history and cultural heritage education (Bonacini & Giaccone, 2021; Moseikina et al., 2022) and even vocational education (Jayalath & Esichaikul, 2020) with targeted languages (Dehganzadeh & Dehganzadeh, 2020) across all educational levels and in several subjects (Lampropoulos et al., 2022), AR games promote interdisciplinary learning and help students make connections across different domains of knowledge. Recent empirical study (Çelik & Ersanlı, 2022) showed that using an AR-based mobile application improved the language achievements of the learners. The learners who used AR have gathered better results in the CLIL lessons.

Conclusion

In conclusion, while the integration of Augmented Reality (AR) technology in educational settings presents significant advantages such as enhanced engagement, improved learning motivation, and personalised learning experiences, it also poses considerable challenges. These include human factors like teacher reluctance and potential distractions for students, as well as technical and physical limitations such as unreliable connectivity, high costs, and the physical constraints of young learners. Effective implementation requires strategic planning, substantial investment in infrastructure, and dedicated research and development efforts. By addressing these challenges and leveraging the transformative potential of augmented reality, educators can create immersive, interactive, and inclusive learning environments that enhance student outcomes and align with modern educational needs.

References

- AIDakhil, M., & AlFadda, H. (2022). EFL Learners' Perceptions Regarding the Use of Busuu Application in Language Learning: Evaluating the Technology Acceptance Model (TAM). *English Language Teaching*, 15(1), 1-15.
- Alzahrani, N. M. (2020). Augmented reality: A systematic review of its benefits and challenges in e-learning contexts. *Applied Sciences (Switzerland)*, 10(16). <https://doi.org/10.3390/app10165660>

- Araiza-Alba, P., Keane, T., & Kaufman, J. (2022). Are we ready for virtual reality in k12 classrooms? *Technology Pedagogy and Education*. <https://doi.org/10.1080/1475939x.2022.2033307>
- Anthony Pragasam, J., & Ainil Sulaiman, N. (2023). Integrating Technology in ESL Reading Classroom: Accounting Pupils' Perspectives. *Arab World English Journal (AWEJ) Special Issue on Communication and Language in Virtual Spaces*.
- Bonacini, E., & Giaccone, S. C. (2021). Gamification and cultural institutions in cultural heritage promotion: A successful example from Italy. *Cultural Trends*, 31(1), 3–22. <https://doi.org/10.1080/09548963.2021.1910490>.
- Çelik, F., & Ersanlı, C. Y. (2022). The use of augmented reality in a gamified CLIL lesson and students' achievements and attitudes: a quasi-experimental study. *Smart Learning Environments*, 9(1). <https://doi.org/10.1186/s40561-022-00211-z>
- Chang, S. C., & Hwang, G. J. (2018). Impacts of an augmented reality-based flipped learning guiding approach on students' scientific project performance and perceptions. *Computers and Education*, 125(June), 226–239. <https://doi.org/10.1016/j.compedu.2018.06.007>
- Chen, R. W., & Chan, K. K. (2019). Using Augmented Reality Flashcards to Learn Vocabulary in Early Childhood Education. *Journal of Educational Computing Research*, 57(7), 1812–1831. <https://doi.org/10.1177/0735633119854028>
- Costa, C., Manso, A., & Patrício, J. (2020). Design of a Mobile Augmented Reality Platform with Game-Based Learning Purposes. *Information*, 11(3), 127.
- de Castro, M. G. A., & García-Peñalvo, F. (2022). Metodologías educativas de éxito: Proyectos erasmus+relacionados con e-learning o TIC. *Campus Virtuales*, 11(1), 95. <https://doi.org/10.54988/cv.2022.1.1022>.
- Dehganzadeh, H., & Dehganzadeh, H. (2020). Investigating effects of digital gamification-based language learning: A systematic review. *Journal of English Language Teaching and Learning*, 12(25), 53–93.
- De Gortari, A. B. O., & Diseth, Å. (2022). Multidimensional assessment of Game Transfer Phenomena: Intrusive cognitions, perceptual distortions, hallucinations and dissociations. *Frontiers in Psychology*, 13. <https://doi.org/10.3389/fpsyg.2022.896238>
- De Gortari, A. B. O. (2018). Empirical study on Game Transfer Phenomena in a location-based augmented reality game. *Telematics and Informatics*, 35(2), 382–396. <https://doi.org/10.1016/j.tele.2017.12.015>
- Duncan, K. J. (2020). Examining the effects of immersive Game-Based learning on student engagement and the development of collaboration, communication, creativity and critical thinking. *TechTrends (Online)*, 64(3), 514–524. <https://doi.org/10.1007/s11528-020-00500-9>
- Fan, K. K., Xiao, P., & Su, C. (2015). The effects of learning styles and meaningful learning on the learning achievement of gamification health education curriculum. *EURASIA Journal*

of Mathematics Science and Technology Education.
<https://doi.org/10.12973/eurasia.2015.1413a>

- Farros, H., Shinta, A., Zaid, Z., & Al Bahy, M. P. (2022). Evaluating the effect of EFL college students' intention to utilize mobile English vocabulary in the learning process: A TAM framework. *VELES (Voices of English Language Education Society)*, 6(1), 91-101.
- Filsecker, M., & Kerres, M. (2014). Engagement as a volitional construct. *Simulation & Gaming*, 45(4–5), 450–470. <https://doi.org/10.1177/1046878114553569>
- Gómez, V., & Medina, J. (2022). *International Journal of Linguistics Studies* The Application of Augmented Reality (AR) to Language Learning and its Impact on Student Motivation. <https://doi.org/10.32996/ijls>
- Greipl, S., Moeller, K., & Ninaus, M. (2020). Potential and limits of game-based learning. *International Journal of Technology Enhanced Learning*, 12(4), 363–389. <https://doi.org/10.1504/IJTEL.2020.110047>
- Harteveld, C., Javvaji, N., Machado, T., Zastavker, Y. V., Bennett, V., & Abdoun, T. (2020). *Gaming4All: Reflecting on Diversity, Equity, and Inclusion for Game-Based Engineering Education*. Conference: 2020 IEEE Frontiers in Education. <https://doi.org/10.1109/fie44824.2020.9274176>
- Hashim, H., Yunus, M. M., Embi, M. A., & Ozir, N. A. M. (2017). Mobile-assisted language learning (MALL) for ESL learners: A review of affordances and constraints. *Sains Humanika*, 9(1-5).
- Huertas-Abril, C. A., Figueroa-Flores, J. F., Gómez-Parra, M. E., Rosa-Dávila, E., & Huffman, L. F. (2021). Augmented reality for ESL/EFL and bilingual education: an international comparison. *Educación XX1*, 24(2), 189-208.
- Hu, L., Yuan, Y., Chen, Q., Xiang-Ying, K., & Zhu, Y. (2022). The practice and application of AR games to assist children's English pronunciation teaching. *Occupational Therapy International*, 2022, 1–12. <https://doi.org/10.1155/2022/3966740>
- Izwan Nurli Mat Bistaman, Syed Zulkarnain Syed Idrus, & Salleh Abd Rashid. (2018). The Use of Augmented Reality Technology for Primary School Education in Perlis, Malaysia. *Journal of Physics: Conference Series*, 1019, 012064. DOI: 10.1088/1742-6596/1019/1/012064.
- Jang, J., Ko, Y., Shin, W. S., & Han, I. (2021). Augmented Reality and Virtual Reality for Learning: An examination using an Extended Technology acceptance model. *IEEE Access*, 9, 6798–6809. <https://doi.org/10.1109/access.2020.3048708>
- Kaminskienė, L., Järvelä, S., & Lehtinen, E. (2022). How does technology challenge teacher education? *International Journal of Educational Technology in Higher Education*, 19(1). <https://doi.org/10.1186/s41239-022-00375-1>
- Lai, J. Y., & Chang, L. T. (2021). Impacts of augmented reality apps on first graders' motivation and performance in English vocabulary learning. *Sage Open*, 11(4), 21582440211047549.

- López, P., Rodrigues-Silva, J., & Alsina, Á. (2021). Brazilian and Spanish mathematics teachers' predispositions towards gamification in STEAM education. *Education Sciences*, 11(10), 618. <https://doi.org/10.3390/educsci11100618>.
- Lampropoulos, G., Keramopoulos, E., Diamantaras, K., & Evangelidis, G. (2022). Augmented reality and gamification in education: A systematic literature review of research, applications, and empirical studies. *Applied Sciences*, 12(13), 6809. <https://doi.org/10.3390/app12136809>
- Lee, J. (2020). Problem-based gaming via an augmented reality mobile game and a printed game in foreign language education. *Education and Information Technologies*, 27(1), 743–771. <https://doi.org/10.1007/s10639-020-10391-1>
- Marques, M. M., & Pombo, L. (2021). The impact of teacher training using mobile augmented reality games on their professional development. *Education Sciences*, 11(8), 404. <https://doi.org/10.3390/educsci11080404>
- Moseikina, M., Toktamysov, S., & Danshina, S. (2022). Modern technologies and gamification in historical education. *Simulation & Gaming*. <https://doi.org/10.1177/10468781221075965>
- Marto, A., & Gonçalves, A. (2022). Augmented Reality Games and Presence: A Systematic review. *Journal of Imaging*, 8(4), 91. <https://doi.org/10.3390/jimaging8040091>
- Moser, S., & Lewalter, D. (2024). The impact of instructional support via generative learning strategies on the perception of visual authenticity, learning outcomes, and satisfaction in AR-based learning. *European Journal of Psychology of Education (Lisboa)*. <https://doi.org/10.1007/s10212-024-00813-w>
- Muñoz, E. G., Fabregat, R., Bacca-Acosta, J., Duque-Méndez, N., & Avila-Garzon, C. (2022). Augmented Reality, Virtual Reality, and Game Technologies in Ophthalmology Training. *Information (Switzerland)*, 13(5), 1–19. <https://doi.org/10.3390/info13050222>
- Natale, A. F. D., Repetto, C., Riva, G., & Villani, D. (2020). Immersive virtual reality in k-12 and higher education: A 10-year systematic review of empirical research. *British Journal of Educational Technology*, 51(6), 2006–2033. <https://doi.org/10.1111/bjet.13030>.
- Neto, L. V., Fontoura, P. H. F., Bordini, R. A., Otsuka, J. L., & Beder, D. M. (2019). Details on the design and evaluation process of an educational game considering issues for visually impaired people inclusion. *Educational Technology and Society*, 22(3), 4–18.
- Nesenbergs, K., Abolins, V., Ormanis, J., & Mednis, A. (2020). Use of augmented and Virtual reality in Remote Higher Education: A Systematic umbrella review. *Education Sciences*, 11(1), 8. <https://doi.org/10.3390/educsci11010008>
- Nugraha, U., Ekawarna, E., Ali, M., & Adhanegara, T. A. (2022). The effect of teachers' perceptions of the TAM learning model seen on the student's learning outcomes in high school. *Jurnal Keolahragaan*, 10(2), 282-291.

- Sanak, N., Nabil, M., Nordin, H., & Faizahani, A. B. (April 2023). Teaching English Language Skills Using Augmented Reality: Secondary Schools Teachers Experience. In *Bridging XR Technology To Practice Gap: Methods and Strategies For Blending Extended Realities into Classroom Instructions* (pp. 135-144). AACE – Association for the Advancement of Computing in Education.
- Salmee, M. S. A. B., & Abd Majid, F. (2022). A Study on In-Service English Teachers' Perceptions towards the Use of Augmented Reality (AR) in ESL Classroom: Implications for TESL Programme in Higher Education Institutions. *Asian Journal of University Education*, 18(2), 499-509.
- Schorr, I., Plecher, D. A., Eichhorn, C., & Klinker, G. (2024). Foreign language learning using augmented reality environments: a systematic review. *Frontiers in Virtual Reality*, 5(February). <https://doi.org/10.3389/frvir.2024.1288824>
- Tsai, C. C. (2020). The effects of augmented reality on motivation and performance in EFL vocabulary learning. *International Journal of Instruction*, 13(4), 987–1000. <https://doi.org/10.29333/iji.2020.13460a>
- Tlili, A., Denden, M., Duan, A., Padilla-Zea, N., Huang, R., Sun, T., & Burgos, D. (2022). Game-Based Learning For Learners With Disabilities—What is next? A Systematic Literature Review from the Activity Theory perspective. *Frontiers in Psychology*, 12.
- Wang, C., Lan, Y., Tseng, W., Lin, Y. R., & Gupta, K. C. (2019). On the effects of 3D virtual worlds in language learning – a meta-analysis. *Computer Assisted Language Learning*, 33(8), 891–915. <https://doi.org/10.1080/09588221.2019.1598444>
- Udeozor, C., Chan, P., Abegão, F. R., & Glassey, J. (2023). Game-based assessment framework for virtual reality, augmented reality and digital game-based learning. *International Journal of Educational Technology in Higher Education*, 20(1). <https://doi.org/10.1186/s41239-023-00405-6>
- Wang, D., & Md. Khambari, M. N. (2020). An AR-based Gamified English Course in Vocational College through Interest-driven Approach. *Universal Journal of Educational Research*, 8(1A), 132-137. DOI: 10.13189/ujer.2020.081317.
- Wang, D., & Khambari, M. N. M. (2020). The Application of a Game-Based AR Learning Model in English Sentence Learning. *Malaysian Online Journal of Educational Technology*, 8(1), 63-71.
- Wen, Y. (2020). Augmented reality enhanced cognitive engagement: designing classroom-based collaborative learning activities for young language learners. *Educational Technology Research and Development*, 69(2), 843–860. <https://doi.org/10.1007/s11423-020-09893-z>
- Wen, Y., Wu, L., He, S., Ng, N. H., Teo, B. C., Looi, C., & Cai, Y. (2023). Integrating augmented reality into inquiry-based learning approach in primary science classrooms. *Educational*

Technology Research and Development, 71(4), 1631–1651.
<https://doi.org/10.1007/s11423-023-10235-y>

- Yacob, N. S., Rahman, S. F. A., Mohamad, S. N. A., Rahim, A. A. A., Rashid, K. K. A., Aldaba, A. M. A., ... & Hashim, H. (2022). Gamifying ESL Classrooms through Gamified Teaching and Learning. *Arab World English Journal*.
- Yadav, S., Chakraborty, P., Kochar, G., & Ansari, D. (2020). Interaction of children with an augmented reality smartphone app. *International Journal of Information Technology (Singapore)*, 12(3), 711–716. <https://doi.org/10.1007/s41870-020-00460-6>
- Yu, J., Denham, A. R., & Searight, E. (2022). A systematic review of augmented reality game-based Learning in STEM education. *Educational technology research and development*, 70(4), 1169-1194.
- Ying, O. L., Hipiny, I., Ujir, H., & Juan, S. F. S. (2021, June). Game-based learning using augmented reality. In *2021 8th International Conference on Computer and Communication Engineering (ICCCE)* (pp. 344-348). IEEE.



Online Gamification Tools in English Language Learning: Benefits and Challenges

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Abstract: The emergence of multiple online gamification tools have sparked interest among educators to use this approach in teaching and learning process, regardless of the education level. This scenario can be clearly observed, especially during the COVID-19 pandemic outbreak, where most of the teaching and learning sessions were being conducted online. These online gamification tools were being embedded in the lesson as one of the ways to attract pupils' interest. Nowadays, these tools are still being used, both online and physical learning. As a result, different perspectives on the use of these online gamification tools in education can be perceived, as it can be categorised as a new and modern teaching aids among educators. This paper focuses on different dimensions of English Language learning using gamification tools, including definitions and applications in teaching and learning. Online gamification tools in education are still developing as some of the platforms are still in the process of improving their features. This paper provides discussions on the benefits of using online gamification tools in assisting English Language learning as well as the challenges encountered by educators and learners based on

multiple existing studies. Through a review of the benefits, challenges, implementation and pedagogical implications of technology integrated in English Language Teaching (ELT), this paper highlights the potential and capacity of online gamification tools in English language learning.

Keywords: *English language learning, gamification, gamified learning, online gamification tools, teaching and learning*

Introduction

In recent years, it can be perceived that the use of technology has greatly impacted the education system. The relationship between technology and education has grown vastly for the past 15 years and inevitably contributed significant changes towards the current teaching and learning process (Arrington, 2022). According to Vivek & Bhattacharjee (2021), rapid growth on investments to initiate multiple forms of information and communication technologies (ICTs) in the education system around the world can be observed over the last two decades and witnessed significant expansion during the COVID-19 pandemic due to several challenges of under-resourced environments. Due to movement restrictions, there was an urgent need for educators around the world to adapt with the new norm of remote working by carrying out e-learning to sustain pupils' education (Sofiadin & Azuddin, 2022). In relation to this issue, gamification has been used widely by educators as it helps in motivating students to actively participate in learning as well as improving their educational experience (Rincon-Flores & Santos-Guevara, 2021). This adaptation process is also applicable to second language teaching and learning, as gamification can support an authentic target language input (Dressler et al., 2023).

Online gamification tools are digital platforms or applications that integrate game-like elements and mechanics into various contexts, such as education, marketing, or employee training (Krath et al., 2021). Several game mechanics that can facilitate effective gameplay and promote engagement in gamification are avatars, points, levels, badges, rewards and leaderboards (Christopoulos & Mystakidis, 2023). These game mechanics do help participants to better engage with the gamification program (Boudadi & Gutiérrez-Colón, 2020). It is also mentioned that the combination of motivational and failure mechanics in gamification may help in sustaining player's engagement (Christopoulos & Mystakidis, 2023). In the context of English language learning, gamification does give a positive impact as it helps in enhancing pupils' learning motivation and engagement, thus increasing their interest in language learning and has potential in improving English vocabulary (Jabali & Walker, 2021).

Nowadays, pupils are more digitally literate compared to those in past decades due to the enhancement of technology (Nilubol & Sitthitikul, 2023). As a result, some approaches and materials used before may not be relevant anymore. Learning environment which incorporates computers or internet, simulations, games, smartphones, 3D technologies does attract pupils' interest and enjoyment in learning compared to the traditional methods (Nawaila et al., 2020). Muhammad Bello also mentioned that Incorporating those elements in learning English allows pupils to utilize different instruments in learning, thus helping them to effectively develop four main skills which are speaking, listening, reading and writing. Thus, it will be a waste if educators

nowadays do not take into consideration to embed and utilise digital tools in their teaching and learning.

While gamification does not necessarily include the use of online games, online gamification tools such as Nearpod, Kahoot and Quizizz do increase pupils' interest in learning. These online gamification tools do incorporate most of the game mechanics such as points and badges, which help in increasing student's engagement in learning (Almufareh, 2020). In relation to the statement mentioned, using online gamification tools such as nearpod helps students to eliminate boredom, thus improving their engagement and motivation during distance learning and conventional learning (Abdullah et al., 2022). Gamification tools in ESL aim to enhance pupils' motivation, retention and proficiency through the use of game dynamic and principles (Thurairasu, 2022).

However, it can't be denied that the implementation and integration of online gamification tools in English learning also have its own challenges. Online gamification tools may cause less physical and emotional connectedness between students and teachers due to continuous virtual interactions (Kauffman, 2018). Besides, developing and designing an effective online gamification platform is not easy. This process requires high budget investments and needs a long time to be completed (Smiderle et al., 2020).

This paper will further discuss issues related to using online gamification tools in English language learning. The discussion will start with the benefits and challenges of using online gamification tools. There will also be a discussion on the integration of technology, specifically online gamification platforms in the process of learning English language.

Underpinning Theories

Pavlov Conditioning Theory

Behaviorism is the study of human behaviour, as the name suggests. It developed from a cause and effect positivist mindset (Pavlov, 1987). To put it simply, activity leads to reaction. Behaviourism in education focuses on how pupils act when they are learning (Picciano, 2017). To be more precise, behaviourism is the study of how pupils react to certain stimuli that can be repeated, measured, and ultimately controlled for each individual (Pavlov, 1927). Behaviorism places more focus on what can be observed than on the mind or cognitive functions. In summary, anything cannot be researched if it cannot be observed (Huitt & Hummel, 1999).

It is common knowledge that behaviourism originated with Ivan Pavlov, who is well-known for his studies involving dogs, food, and auditory cues like bells. Dogs in his trials started salivating when they learned to associate food or feeding time with the sound of the bell. Early in the 20th century, Pavlov carried out his tests, which were later repeated by countless other scientists. One of the first Americans to follow Pavlov's research was John B. Watson, who considered it an element of natural science (Picciano, 2017). Watson developed into an influential advocate of Pavlov and is widely acknowledged for coining the concept of behaviourism.

Based on the theory of behaviourism, Watson maintained that everything can be understood in terms of stimulus and response and that the mind and consciousness had no bearing on the process of learning (Ameen & Ismael, 2023). Online gamification tools get the pupils to have excitement in learning as they acknowledge that games with specific sound and interactions are associated with challenges and rewards. With the implementation of subject content in online gamification tools, according to Pavlov, it makes a change in education as their senses trigger their mind to feel excited when they see colourful and exciting animations on their screen like they are having fun with online games.

Behaviorism views language learning in children as an ongoing stimulus-response process (Gardner, 2011). As an example, teachers can employ children's keen observation in their learning by enforcing colourful yet simple online games to grab their attention, especially young learners. When this familiar picture appears frequently, pupils will naturally correlate the two, and the next time they hear the word, they will be able to immediately understand the contents of the lesson. As a result, pupils will be motivated to learn novel phrases and will take advantage of this opportunity to learn from and mimic one another (Zhang, 2024).

Taxonomy Bloom

Benjamin Bloom (1956) was among the early psychologists to establish a taxonomy of learning that related to the development of intellectual skills and to stress the importance of problem solving as a higher order skill. Bloom's (1956) Taxonomy of educational objectives handbook: Cognitive domains remains a foundational text and essential reading within the educational community. Since its debut in 1956, it has been extensively utilised throughout the world to categorise test items and curriculum objectives in order to show the wide range of the objectives and items across different categories (Krathwohl, 2002).

Since the taxonomy consists of six cognitively challenging stages that must be mastered in a hierarchical manner, it appears that the taxonomy can generate game challenges. The best environment for implementing gamification in learning, according to Hamari, Shernoff, Rowe, Coller, Asbell-Clarke, and Edwards (2016), is learning to solve tricky problems, which typically begin with easy tasks and progressively increase in difficulty. The taxonomy may be helpful in this situation in defining the progressive challenge. The taxonomy can assess cognitive performance as a consequence of learning in a hierarchical manner, with the less demanding levels required to be mastered before moving on to the more complex levels (Ahmad & Hussin, 2017).

In addition, higher levels of the Revised Taxonomy (analyse, evaluate and create) were used in the game play by creating games with three levels: first-level task, second-level task and third-level task. They claim that this can promote knowledge learning of different learning objectives in an interesting and meaningful way. They revealed that the games enhanced students' learning attitudes and learning achievements (Ahmad & Hussin, 2017). Moreover, students found the games enjoyable and provided realistic learning environments for developing skills and establishing knowledge (Hwang, Sung, Hung, Yang, and Huang, 2013).

The UK National Curriculum (1999) states that by providing diverse contexts for students to acquire, develop, and utilise an extensive spectrum of knowledge, understanding, and skills, the curriculum ought to allow students to think creatively and critically, solve problems, and make a positive difference. The existing English learning framework such as the Common European Framework of References for Languages (CEFR) includes objectives for developing higher order thinking skills; it might lay the road for their practical application in English lessons (Divsar, 2020). Furthermore, teachers must plan and implement class activities such that all thinking skills are adequately addressed in every English class.

Taxonomy Bloom and online gamification tools are pivotal in modern education, aiming to enhance pupils' engagement and learning outcomes. In this theory, a framework for categorising educational goals, helps educators structure their teaching and learning strategies. On the other hand, gamification tools leverage game mechanics to motivate and engage pupils' interest to learn and focus on the topic learned that day. Furthermore, online gamification tools incorporate elements such as points, badges, leaderboards and challenges to increase pupils' motivation and engagement. Other than that, gamification activities are aligned with the different levels of Taxonomy bloom. For instance, Quizlet and Kahoot! offer engaging ways to test memory and reinforce learning that use flashcards and quizzes that can help pupils recall facts and basic concepts. Platforms like Padlet facilitate collaborative evaluation and feedback through peer reviews and discussion forums that can help pupils justify their decisions and critically evaluate information. By aligning gamification tools activities with Taxonomy Bloom's theory, teachers can ensure that their teaching and learning strategies promote higher order thinking skills and foster a deeper understanding of the material.

Gardner Theory of Multiple Intelligences

As Howard Gardener states in the Multiple Intelligence Theory, people have different intelligence types and need to be activated individually (Gardner, 1983). Gardner (2011) identified that there are nine distinctive types of intelligences: linguistic intelligence, logical-mathematical intelligence, musical-rhythmic intelligence, bodily kinesthetic intelligence, spatial intelligence, naturalist intelligence, interpersonal intelligence, intrapersonal intelligence, and existential intelligence. He understands intelligence as several abilities and skills that are necessary to solve genuine problems or to overcome difficulties in a certain cultural environment (Knowles, Holton, & Swanson, 1998). This includes the ability to recognize new circumstances and thus lay the foundation for the acquisition of new knowledge.

Gardner's (1983) observation serves as a central approach to the link between using motivational tools, such as gamification, and increasing the valuation of each student's various virtues, which may differ from what has previously been considered 'traditional intelligence,' which Gardner (1983) would classify as logical-mathematical intelligence. The understanding of multiple intelligences in the classroom goes beyond simply acknowledging the range of abilities possessed by individuals. It involves putting into reality the relationships and interactions between persons with diverse abilities and multiple intelligences. This allowed for the creation of a small-scale model of a future workplace or social adult setting (Macías Borrego, 2023).

Multiple intelligences provide instructors or educators with the power and potential to construct flexible and comprehensive methodologies and approaches to this diversified audience with varying skill sets or potentials (Haley, 2004). The application of multiple intelligences, as reported by Haley (2004), attests to the power of Gardner's theory as the most applicable and effective platform for 21st century educational and instructional methodologies. Second language learners, more than many other groups in the classroom, represent the extensive diversity that characterises today's classrooms and schools. It is undeniable that pupils learn in different ways. Some students are auditory learners, while others are visual learners, and yet others use a blend of learning techniques depending on their specific intelligences. In order to effectively reach their pupils and fulfil accountability standards, educators must adapt their approach. (Griggs, Barney, Brown-Sederberg, Collins, Keith & Iannacci, 2009). Hence, online gamification tools have those elements combined in learning which can cater to each learner's learning preferences. If multiple intelligences exist, it should be easy to broaden this endeavour to include different motivations (Rückert, Hülsmann & Junker, 2021). Because incentive drives cognitive development, and enjoyment is essential for lifelong learning.

Benefits and Challenges of Online Gamification Tools

a. Benefits

Online gamification tools have become increasingly popular in ESL learning due to their potential to enhance pupils' engagement and motivation. Several recent studies (Almufareh, 2020; Almusharraf, 2021; Zohud, 2019) have explored the impact of gamification on ESL learners' motivation and found promising results. According to a study by Yaccob et al. (2022), gamified language learning platforms significantly increased pupils' engagement and enthusiasm compared to traditional methods. This increase in engagement can be attributed to the intrinsic motivation provided by gamified elements such as points, badges, leaderboards, progress bars and performance graphs, quests and meaningful stories (Almufareh, 2020). These elements pique pupils' interest to explore and do well in classes thus creating a sense of achievement and progress, encouraging pupils to actively participate in language learning activities.

One of the key benefits of online gamification tools is their ability to provide immediate feedback to ESL learners (Zhang & Hasim, 2023). Immediate feedback is crucial for language acquisition as it allows pupils to correct errors and reinforce learning in real-time. For example, an exploration by Zou (2020) on primary pupils' and teachers' perception of gamified flipped classroom in EFL context in China found that using Kahoot and Edpuzzle as platforms for English activities allow the pupils to get immediate and continuous feedback which encourage them to perform better and learn from their previous mistakes. Singh et al. (2020) and Degirmenci (2021) found that gamified assessments with instant feedback not only helped ESL students identify their mistakes but also motivated them to improve their performance as well as their attitude in language learning. This personalised feedback mechanism enhances the learning experience and contributes to increased motivation among ESL learners (Krishnan et al., 2019).

The immersive and interactive nature of online gamification tools contributes significantly to language acquisition among ESL learners (Shortt et al., 2021; Chen, 2021). These tools provide

authentic language contexts through gameplay, leading to improved vocabulary retention and comprehension skills. Studies conducted by Leon (2020), Ahmed (2021), and Pingmuang et al. (2022) revealed that ESL learners demonstrated increased proficiency in speaking and writing tasks after engaging with gamified language learning platforms. This improvement can be attributed to the exposure to diverse language scenarios and contexts provided by gamified activities.

Moreover, online gamification tools promote collaborative learning environments, fostering peer interaction and cooperation among ESL pupils (Dindar et al., 2021; Li et al., 2021; Shorrt, 2021). Features such as multiplayer games and team challenges encourage learners to work together towards common language learning goals. Rahmani (2020) and Zhao et al. (2022) found that collaborative gameplay not only enhanced linguistic skills but also promoted social interaction and cultural exchange among ESL learners. This collaborative aspect of gamification contributes to a more dynamic and engaging learning environment, facilitating language acquisition and cultural understanding simultaneously.

As pupils go into higher grades, they are expected to complete homework or school assignments at expected times as well as master the learning content in order to excel (Urban, 2016). Each pupil has a different type of intelligence, different styles of pupils' motivation exist (Urban, 2016). The obstacles that they experienced such as time management concerns, competitive learning environment and society's assumption that most pupils will become an independent learner as they grew older leading to the pent up frustration and anxiety in learning (Kortemeyer, 2016). Since the beginning of time, it is widely known that games are invented to break and overcome high levels of discomfort (Granic, Lobel & Engels, 2014). In education, games are being used, if it is in reasonable quantities within suitable time. It can serve as a healthy escape, reducing stress and pressure especially since pupils have to chase education deadlines all the time for all subjects. Online gamification not only lowers the barrier to engaging in the school task or assignment, it provides the pupils to focus, fading unnecessary cravings into the background far behind their aims and concentration.

It is important for educators to create tasks and assignments that suit the learning objectives and goals. According to Kaufmann (2018), differentiation in habits, daily tasks and to-do lists that need to be completed that can be gained from online gamification allows pupils to join larger goals with the smaller task. For example, online gamification applications such as Habitica or similar apps allow collaborative approach and autonomy for teachers to create objectives and goals that cater according to the needs of the pupils, pushing out unnecessary activity that is unfair to them. Traditional teaching and learning, teacher and educators simply explaining the pupils about the task that they need to do whether in physical or traditional e-learning class (Urh et al, 2015). However, through online gamification, pupils will be given the list of linked tasks, opening the pathways of what is needed to achieve learning goals. With time comes, technology and online gaming applications will evolve, advance and continue to support all kinds of pupils.

b. *Challenges*

It is undeniable that today's nature of learning through online is becoming popular (Urh et al., 2015). However, lack of psychological connection which traditional learning could offer may

detain pupils' tasks from engaging in the provided activities (Kauffman, 2018). Badges, leaderboards and scores from the online gamification will cause the pupils lack of understanding in communication which is one of most important soft skills a pupil needs to have (Daniel Plevier, 2019). The issues of lack of communication will also lead to ethical issues where cheating can also happen due to the weakness of online gamification systems, (Bati et al., 2022). Hence, it is difficult for the educators to evaluate the pupils to differ from what they know and what they have looked up from online sources since the pupils' urge to win beats the need for them to communicate with other people and learn.

Online gamification supporters argue that pupils become more motivated to learn English due to its attractive features, others claim that assessment on pupils using online gamification is not valid (Sabornido et al, 2022). This is because pupils are only learning for the sake of getting the rewards of badges, stars and scores, just enough to get the prized achievement and complete challenges and not retain the information from learning (Muhammad Dafit et al, 2020). The pupils will then dispose of the information immediately after the mission is achieved, forgetting the knowledge that they should uphold in the long term.

Pupils are learners of the 12 years old and below. Hence, pupils' privacy will always be the number one concern of teachers and educators (Bati et al., 2022). Current online gamification offers least to almost none protection to pupils' personal information (Ahmad Karam Yusof, 2020). This is because, almost all online gamification accounts require the pupils to create an account with full name, email address, district where they live and other personal information which can be misused if the information gets into the wrong hands. Since most of the online gamification websites and applications are free, the online gamification developers need other ways of funding, introducing advertising and paid endorsement to the educational setting in online gamification systems (Bati et al., 2022). This may influence both pupils and educators, to filter out unbiased influence and set up suitable educational settings for the pupils.

The budget to develop online gamification technology that could suit local pupils is highly expensive (Sonia Barghani, 2020). Besides the high budget it also demands much time to design online gamification that follows local pupils' attitude and need. Among the matters that need to be paid and cost money are graphics, animations, music and videos. (Smiderle et al, 2020). The cost to maintain the online gamification system is also relatively high (Smiderle et al, 2020). It does not take much time before the current online gamification tools start to look old and are not relevant to the current educational setting. This quick and fast update of online gamification tools may widen the gap of digital literacy among pupils from different backgrounds as well as the accessibility for the educators and pupils to the online gamification tools (Subash et al, 2018).

Implementation and pedagogical implications of technology integrated in ELT

Technology and education has been going hand in hand for so long. Many educators choose to integrate technology into their teaching and learning practices. The usage of technology in education has evolved in so many ways as there are many choices educators have in using

technology. According to Pradana et al. (2022), there has been a rapid development and adoption of new technologies in education and there remain persistent gaps in their implementation, especially in the least developed countries. Moreover, implementing technology in teaching and learning offers significant opportunities for both pupils and teachers to explore novel concepts and gain enriching experiences (Merzifonluoglu & Gonulal, 2018).

Technology has emerged to be one of the most important tools in the teaching and learning session in recent years as educators choose to use flipped classroom approaches. The flipped classroom approach is a teaching method where traditional learning roles are reversed. Instead of the teacher delivering lectures during class time and assigning homework for pupils to complete independently, in a flipped classroom, pupils engage with instructional content outside of class, typically through videos, readings, or other multimedia resources, and then use class time for active learning activities, discussions, and hands-on exercises (Bergmann & Sams, 2012). The basic idea is that pupils gain exposure to new concepts at home through pre-recorded lectures or other materials, allowing them to go through the content at their own pace and potentially multiple times if needed. Then, during class time, they can apply what they've learned, ask questions, engage in discussions, collaborate with peers, and receive guidance and feedback from the teacher.

Technology plays a vital role in the flipped classroom, providing access to diverse and rich resources such as educational videos, language apps, and online exercises. Platforms like YouTube, Edmodo, and Quizlet enable students to explore new concepts at their own pace, allowing for differentiated learning. Instructors can track progress and tailor in-class activities to address specific needs, fostering a more personalised learning experience.

Therefore, by integrating technology into the teaching and learning process, the learners are able to enhance their language competence and cooperative learning as they are able to do things at their own pace. The flipped classroom model aims to make better use of class time by focusing on higher-order thinking skills, problem-solving, and deeper understanding rather than just passive consumption of information. It also allows for more personalised learning experiences, as pupils can progress through the material at their own pace and receive individualised support from the teacher.

Other than that, another approach that educators use in the teaching and learning session is a blended learning approach. Blended learning is an educational approach that combines traditional face-to-face instruction with online learning activities. It seeks to integrate the best aspects of both traditional classroom teaching and digital technology to create a more flexible and personalised learning experience. In a blended learning environment, pupils engage in a mix of in-person interactions with teachers and peers, as well as online learning activities, often through a learning management system (LMS) or other digital platforms.

In this approach, technology integration plays a crucial role in providing diverse and interactive learning experiences. Digital tools such as language apps, online exercises, and multimedia resources enrich the curriculum, catering to different learning styles and paces. This personalised approach helps address different learning needs and paces, making language acquisition more efficient and effective (Anderson, 2013). Platforms like Google Classroom, Zoom, and language

learning software facilitate real-time collaboration and communication, essential for practising language skills. This method allows for more personalised instruction, where teachers can offer tailored feedback and support. Moreover, blended learning promotes pupils' autonomy, encouraging learners to take an active role in their education by accessing resources and completing tasks at their convenience. Immediate feedback reinforces learning and aids in the retention of new language concepts (Shute, 2008). This dynamic combination of in-person and digital learning environments not only enhances language proficiency but also prepares pupils for the demands of a technologically advanced world.

This approach has been widely used especially after the outbreak of COVID-19 where pupils and teachers' interactions were limited to prevent the spread of the virus. In addition, the integration of technology in this teaching approach has helped many pupils around the world in enhancing their knowledge. One of the most used LMS in Malaysian context is Google Classroom (GC). The use of GC in a blended learning approach during the Covid-19 pandemic revolutionised English language classrooms. As schools transitioned to remote learning, GC provided a seamless platform for integrating online and offline educational activities. Teachers could easily share resources, assignments, and feedback, while students benefited from structured, accessible content. This digital tool enables real-time communication and collaboration, which are critical for language learning. The flexibility of GC allowed educators to maintain engagement and continuity, despite the physical separation, fostering an environment where students could continue developing their English skills effectively. The Minister of Education encouraged the use of GC in the classroom even before the pandemic outbreak. This is clearly seen that the integration of technology has long been into our education system.

Integrating online gamification tools into the English Language teaching and learning process can significantly enhance the learning experience. By making learning fun, engaging and personalise, gamification can help pupils achieve better language proficiency. As technology continues to evolve, the potential for gamification in education will only grow. Teachers are encouraged to explore and experiment with different gamification tools to find the best fit for their classrooms. The future of language learning is exciting, and gamification is at the forefront of this transformation.

Conclusion

Finally, it may be concluded that the use of online gamification tools contributes towards effective English learning. These tools can help in enhancing pupils' engagement and motivation in learning due to the present of gamified elements such as badges and points. As a result, students can actively participate in the process of learning the English language. Besides, gamification tools allow immediate feedback from the teachers to the pupils. This type of feedback encourages students to perform better as they are well informed about their mistakes and allow them to make an effort to improve their performance. Next, immersive and interactive online gamification tools also provide authentic language context. Playing games as pupils learn English helps in

improving their vocabulary retention and comprehension skills, thus leading towards the improvement of their English proficiency.

Furthermore, collaborative learning which fosters peer interaction is also one of the benefits of using online gamification tools. The multiplayer game mode in gamification platforms allows students to work together and participate in social interactions virtually. Consequently, this process may help in facilitating language acquisition among learners. Gamification tools can also help pupils to feel more comfortable as they are learning. Through breaking and overcoming pupils' high levels of discomfort in learning English, educators are able to create goals and objectives that can cater to the needs of the pupils.

Nonetheless, the usage of online gamification tools in assisting English language learning also has its own challenges. Frequent virtual interactions may lead towards lack of psychological connection. Compared to the traditional learning that needs pupils to be physically present in the class together with the teacher, using these online tools may lead towards ineffective communication when it comes to face to face interaction. In addition, one's private information can easily be gained by other parties as they are using these online platforms. Other than that, developing and maintaining online gamification tools also requires a large amount of money. This can be a challenge for the game developers to maintain their platform's relevance due to rapid technological development. As a result, it may widen the gap of digital literacy among pupils from different backgrounds as well as the accessibility for the educators and pupils to the online gamification tools.

In relation to the above statements, educators and learners need to utilise the presence of gamification tools as it may be helpful in assisting one's teaching and learning process. Nevertheless, there is still a big room for improvement that can be done to enhance the positive impacts of online gamification tools' usage among teachers and learners, especially for English language learning.

References

- Abdullah, M. I., Inayati, D., & Karyawati, N. N. (2022). Nearpod use as a learning platform to improve student learning motivation in an elementary school. *Journal of Education and Learning (Edisi Elektronik)/Journal of Education and Learning*, 16(1), 121–129. <https://doi.org/10.11591/edulearn.v16i1.20421>
- Ahmad, T. S., & Hussin, A. A. (2017). Application of the Bloom's taxonomy in online instructional games. *International Journal of Academic Research in Business and Social Sciences*, 7(4), 1009-1020.
- Ahmed, S. A. M. (2021). A Gamification Program to Enhance Speaking Skills of EFL Secondary Stage Students and their Motivation towards Learning these Skills: A Research. *مجلة كلية التربية بالمنصورة*, 116 (3), 21–43.

- Almufareh, M. (2020). The Impact of Gamification on Second-Language Learning. *CGU Theses & Dissertations*, 663. https://scholarship.claremont.edu/cgu_etd/663.
- Almusharraf, N. (2021). Incorporation of a game-based approach into the EFL online classrooms: Students' perceptions. *Interactive Learning Environments*, 1–14. doi: 10.1080/10494820.2021.1969953
- Ameen, S. T., & Ismael, A. M. (2023). Philosophy of Teaching as an ESOL Teacher. *المجلة الدولية للعلوم الإنسانية والاجتماعية*, (44), 95-106.
- Anderson, T. (2013). *The theory and practice of online learning*. Athabasca University Press.
- Arrington, Q. (2021). The Impact of Modern Technology on Education. In *Education Resources Information Center (ERIC)* (No. ED619067). Retrieved May 5, 2024, from <https://files.eric.ed.gov/fulltext/ED619067.pdf>
- Bergmann, J., & Sams, A. (2012). *Flip Your Classroom: Reach Every Student in Every Class Every Day*. International Society for Technology in Education.
- Bloom, B. S. (1956). *Taxonomy of educational objectives handbook: Cognitive domains*. New York: David McKay.
- Boudadi, N. A., & Gutiérrez-Colón, M. (2020). Effect of Gamification on students' motivation and learning achievement in Second Language Acquisition within higher education: a literature review 2011-2019. *EUROCALL Newsletter*, 28(1), 40. <https://doi.org/10.4995/eurocall.2020.12974>
- Chen, Y. (2021). Understanding foreign language learners' perceptions of teachers' practice with educational technology with specific reference to Kahoot! and Padlet: A case from China. *Education and Information Technologies*, 25, 1–27. doi: 10.1007/s10639-021-10649-2
- Christopoulos, A., & Mystakidis, S. (2023). Gamification in education. *Encyclopedia*, 3(4), 1223–1243. <https://doi.org/10.3390/encyclopedia3040089>
- Daniel Plevier, Merlijn Mac Gillavry Thomas van Tussenbroek, Abri Bharos, Tim Pelsers Bent Engbers (2019). *Gamification of Social Interaction*. CupHunt, Barcelona,
- Degirmenci, R. (2021). The use of Quizizz in language learning and teaching from the teachers' and students' perspectives: A literature review. *Language Education and Technology*, 1(1), 1–11.
- Dindar, M., Ren, L., & Järvenoja, H. (2021). An experimental study on the effects of gamified cooperation and competition on English vocabulary learning. *British Journal of Educational Technology*, 52, 142–159. doi: 10.1111/bjet.12977
- Divsar, H. (2020). Bloom's revised taxonomy across the learning objectives in English translation curricula. *Iranian Journal of English for Academic Purposes*, 8(4), 136-152.

- Dressler, R., Guida, R., & Chu, M. (2023). Canadian second language teachers' technology use following the COVID-19 pandemic. *Canadian Modern Language Review the Canadian Modern Language Review*, 79(3), 228–246. <https://doi.org/10.3138/cmlr-2022-0069>
- Hamari, J., Shernoff, D. J., Rowe, E., Coller, B., Asbell-Clarke, J., & Edwards, T. (2016). Challenging games help students learn: An empirical study on engagement, flow and immersion in game-based learning. *Computers in Human Behavior*, 54, 170–179. <http://doi.org/10.1016/j.chb.2015.07.045>
- Garavalia, L. S., Hummel, J. H., Wiley, L. P., & Huitt, W. G. (1999). Constructing the course syllabus: Faculty and student perceptions of important syllabus components. *Journal on Excellence in College Teaching*, 10(1), 5-21.
- Gardner, H. (1983). *Frames of mind: The theory of multiple intelligences*. New York: Basic Books.
- Gardner, H. (2011). *Frames of mind: The theory of multiple intelligences*. New York, NY: Basic Books.
- Garmen, P., Rodriguez, C., Garcia-Redondo, P., & San-Pedro-Veledo, J. C. (2019). Multiple Intelligences and Video Games: Assessment and Intervention with TOI Software. *Comunicar: Media Education Research Journal*, 27(58), 95-104.
- Granic, I., Lobel (A) & Engels, R.C.M.E (2014) Playing video games. *American Psychologist*, 69(1), 66–78. doi:10.1037/a00.
- Griggs, L., Barney, S., Brown-Sederberg, J., Collins, E., Keith, S., & Iannacci, L. (2009). Varying pedagogy to address student multiple intelligences. *Human Architecture*, 7(1), pp. 55-60. Retrieved from <http://search.proquest.com/docview/210172456?accountid=14129>
- Hwang, G.-J., Sung, H.-Y., Hung, C.-M., Yang, L.-H., & Huang, I. (2013). A knowledge engineering approach to developing educational computer games for improving students' differentiating knowledge. *British Journal of Educational Technology*, 44(2), 183–196. <http://doi.org/10.1111/j.1467-8535.2012.01285.x>
- Jabali, M., & Walker, C. (2021). An Exploratory Cross-Sectional study: FlipQuiz as a digital tool for learning English vocabulary in language classroom. *International Journal of Technology in Education*, 4(3), 516–526. <https://doi.org/10.46328/ijte.149>
- Kaufmann, Daniel. (2018). Reflection: Benefits of Gamification in Online Higher Education. *A Journal of Instructional Research*, v7 p125-132 7. 10.9743/JIR.2018.12.
- Knowles, M.S., Holton, E.F. & Swanson, R.A. *The adult learner* (5th Edition). Houston: Butterworth-Heinemann Publishers, 1998.
- Kortemeyer, G. (2016). Work habits of students in traditional and online sections of an introductory physics course: A case study. *Journal of Science Education and Technology*, 25(5), 697–703. doi:10.1007/s10956-016-9624-6'.

- Krath, J., Schürmann, L., & Von Korfflesch, H. F. (2021). Revealing the theoretical basis of gamification: A systematic review and analysis of theory in research on gamification, serious games and game-based learning. *Computers in Human Behavior*, 125, 106963. <https://doi.org/10.1016/j.chb.2021.106963>
- Krathwohl, D. R. (2002). *A Revision of Bloom's Taxonomy: An Overview. Theory Into Practice*, 41(4), 212–218. <http://doi.org/10.1207/s15430421tip4104>
- Krishnan, S. D., Norman, H., & Md Yunus, M. (2021). Online gamified learning to enhance teachers' competencies using classcraft. *Sustainability*, 13, 1–24. doi: 10.3390/su131910817
- León, E. P. G., Rojas, M. T. C., Granda, G. K. A., & Aristega, J. E. M. (2020). Gamifying formative assessment to improve speaking accuracy and motivation in EFL learners. *Journal of Science and Research: Revista Ciencia e Investigación*, 5(1), 562–577.
- Li, X., & Chu, S. K. W. (2021). Exploring the effects of gamification pedagogy on children's reading: A mixed-method study on academic performance, reading-related mentality and behaviors, and sustainability. *British Journal of Educational Technology*, 52, 160–178. doi: 10.1111/bjet.13057
- Macías Borrego, M. (2023). Computer-Assisted Language Learning (CALL) and multiple intelligences theory: Curricular design in vocational formation in Spain. *Journal of Digital Educational Technology*, 3(2).
- McFarlane, D. A. (2011). Multiple Intelligences: The Most Effective Platform for Global 21st Century Educational and Instructional Methodologies. *College Quarterly*, 14(2), n2.
- Merzifonluoğlu, A., & Gonulal, T. (2018). Review of digital language learning and teaching: Research, Theory, and Practice. *Language Learning & Technology*, 22(2), 65–68. <https://scholarspace.manoa.hawaii.edu/server/api/core/bitstreams/8f4be89d-132b-4570-bcc3-ead2c3c97c61/content> [Google Scholar](#)
- Muhammad Dafit Pitoyo. Web-Based Gamification: Problems in EFL Classroom of Higher Education Due to Online Assessment Employment. International Summit on Science Technology and Humanity (ISETH 2018). *Integrating Knowledge for Future Sustainable Development. International Summit on Science Technology and Humanity*, 2018; 118-24
- National Curriculum, UK. (1999). *Values, aims and purposes*. Retrieved June 29, 2013, from <http://curriculum.qca.org.uk/key-stages-1-and2/values-aims-and-purposes/index.aspx>
- Nawaila, M. B., Kanbul, S., & Alhamroni, R. (2020). Technology and English Language Teaching and Learning: A content analysis. *Journal of Learning and Teaching in Digital Age*, 5(1), 16–23. <https://dergipark.org.tr/en/download/article-file/1175700>
- Nilubol, K., & Sitthitikul, P. (2023). Gamification: Trends and opportunities in language teaching and learning practices. *PASAA Journal*, 67, 378–400. <https://files.eric.ed.gov/fulltext/EJ1413891.pdf>
- Pavlov, I. P. (1897). *The work of the digestive glands*. London: Griffin.

- Pavlov, I. P. (1927). *Conditioned reflexes* (G.V. Anrep, Ed. & Trans.). London: Oxford University Press.
- Picciano, A. G. (2017). Theories and frameworks for online education: Seeking an integrated model. *Online Learning*, 21(3), 166-190. doi: 10.24059/olj.v21i3.1225
- Pingmuang, P., & Koraneekij, P. (2022). Mobile-Assisted Language Learning using Task-Based Approach and Gamification for Enhancing Writing Skills in EFL Students. *Electronic Journal of e-Learning*, 20 (5). <https://doi.org/10.34190/ejel.20.5.2339>
- Pradana, M., Rintaningrum, R., Kosov, M., Bloshenko, T., Rogova, T., & Singer, N. (2022). Increasing the effectiveness of educational technologies in the foreign languages learning process by linguistic students (comparative analysis of Russian, Indonesian and Egyptian experience). *Frontiers in Education*, 1–12. <https://doi.org/10.3389/educ.2022.1011842>
- Rahmani, E.F. (2020). The Benefits of Gamification in the English Learning Context. *IJEE (Indonesian Journal of English Education)*, 7(1), 32-47. doi:10.15408/ijee.v7i1.17054
- Rincon-Flores, E. G., & Santos-Guevara, B. N. (2021). Gamification during Covid-19: Promoting active learning and motivation in higher education. *Australasian Journal of Educational Technology*, 37(5), 43–60. <https://doi.org/10.14742/ajet.7157>
- Rückert, F. U., Hülsmann, X., & Junker, A. (2021, November). Multiple intelligence theory for gamification of online STEM modules. In *2021 1st Conference on Online Teaching for Mobile Education (OT4ME)* (pp. 78-81). IEEE.
- Sabornido, Elna B. and Garma, Vernel A., Niepes, Gendolf L., Cabria, Florie May N. (2022). Key Challenges and Barriers in Gamification: A Systematic Review (March 16, 2022). *Asia Pacific Journal of Advanced Education and Technology*, 1(1), pp.13- 19, 2022, Available at SSRN: <https://ssrn.com/abstract=4059193>.
- Sofiadin, A., & Azuddin, M. (2021). An initial sustainable e-learning and gamification framework for higher education. In *Education Resources Information Center (ERIC)* (no. ed622429). International Association for Development of the Information Society. Retrieved May 20, 2024, from <https://files.eric.ed.gov/fulltext/ED622429.pdf>
- Shortt, M., Tilak, S., Kuznetcova, I., Martens, B., and Akinkuolie, B. (2021). Gamification in mobile-assisted language learning: A systematic review of Duolingo literature from public release of 2012 to early 2020. *Computer Assisted Language Learning*, 1–38. doi: 10.1080/09588221.2021.1933540
- Shute, V. J. (2008). Focus on formative feedback. *Review of Educational Research*, 78(1), 153-189.
- Singh, C. K. S., Ong, E., & Singh, C. K. S. (2020). A review of research on teachers' views on integrating gamification and technology in English as second language classroom. *Journal of Critical Reviews*, 7, 4333–4341. doi:10.31838/jcr.07.19.508.

- Smiderle, R., Rigo, S.J., Marques, L.B. et al. The Impact of Gamification on Students' Learning, Engagement and Behavior Based on Their Personality Environment. 2020;7:3. traits. Smart Learn. <https://doi.org/10.1186/s40561-019-0098-x>.
- Subhash, Sujit; Cudney, Elizabeth (2018) A. "Gamified learning in higher education: A systematic review of the literature". *Computers in Human Behavior*. 2018;87: 206. doi:10.1016/j.chb.2018.05.028.
- Thurairasu, V. (2022). Gamification-Based Learning as the Future of Language Learning: An Overview. *European Journal of Humanities and Social Sciences*, 2(6), 62–69. <https://doi.org/10.24018/ejsocial.2022.2.6.353>
- Urh, M., Vukovic, G., Jereb, E., & Pintar, R. (2015). The model for introduction of gamification into e-learning in higher education. *Procedia-Social and Behavioral Sciences*. 197, 388–397. doi:10.1016/j.sbspr0.2015.07.154
- Vivek, K., & Bhattacharjee, P. (2021). Use of Information and Communication Technologies in Education: Effectively Integrating Technology in Under-Resourced Education Systems. In *Education Resources Information Center (ERIC)* (No. ED612475). World Bank. Retrieved May 5, 2024, from <https://files.eric.ed.gov/fulltext/ED612475.pdf>
- Yacob, N. S., Abd Rahman, S. F., Mohamad, S. N. A., Abdul Rahim, A. A., Abdul Rashid, K. K., Mohammed Aldaba, A., Md Yunus, M., & Hashim, H. (2022). Gamifying ESL Classrooms through Gamified Teaching and Learning. *Arab World English Journal*. 8, 177-191 DOI: <https://dx.doi.org/10.24093/awej/call8.12>
- Yousof, A. K. (2020). *Benefits and Disadvantages of Utilizing Gamified Learning in Higher Education: A Systematic Analysis*. *Handbook of Research on Adult Learning in Higher Education*, 2020.
- Zhang, L. (2024). An analysis of the problems and effectiveness of children's English education from the perspective of behaviorism. *Journal of Education, Humanities and Social Sciences*, 27, 495-500.
- Zhang, S., & Hasim, Z. (2023) Gamification in EFL/ESL instruction: A systematic review of empirical research. *Frontiers in Psychology*. 13:1030790. doi: 10.3389/fpsyg.2022.1030790
- Zhao, X., & McClure, C. D. (2022). Gather.Town: A Gamification Tool to Promote Engagement and Establish Online Learning Communities for Language Learners. *RELC Journal*. 55(1), <https://doi.org/10.1177/00336882221097216>
- Zohud, N. W. (2019). Exploring palestinian and Spanish Teachers' perspectives on using online computer games in learning English vocabulary. *Publicaciones* 49, 93–115. doi: 10.30827/publicaciones.v49i2.11346
- Zou, D. (2020). Gamified flipped EFL classroom for primary education: Student and teacher perceptions. *Journal of Computers in Education*. 7, 213–228. doi: 10.1007/s40692-020-00153-w



Digital Task-Based Approach in Teaching English as a Second Language (ESL): Systematic Literature Review on Benefits and Challenges (2020 - 2024)

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Abstract: Shifting the spotlight from mere language knowledge to meaningful communication, this systematic literature review paper advocates for a fresh perspective on language learning. It introduces Task-Based Language Teaching (TBLT), a dynamic approach that empowers learners to master the language through engaging in real-world and pedagogical tasks. In the ever-evolving landscape of teaching English as a second language (ESL) in the digital era, this paper highlights the intersection of digital technologies and TBLT, discussing the myriad challenges and opportunities presented by the integration of digital tools in ESL contexts. This paper explores how technology-enhanced and technology-mediated TBLT offers unique opportunities for learning and performance, emotion, interpersonal and teaching aspects. Additionally, challenges faced by learners and educators in navigating issues in the approach are presented. By

critically reviewing the challenges and opportunities of technology-enhanced and technology-mediated TBLT approach, this paper contributes to the ongoing discourse on innovative approaches to ESL instruction in the digital age.

Keywords: *Task-Based Language Teaching (TBLT); technology; English as a Second Language (ESL), challenges, opportunities*

Introduction

Language learning in the 21st century has brought various new innovations and this includes the integration of technology into the English Language Teaching (ELT). Technology has provided teachers the opportunity to discover and utilise new and innovative pedagogical strategies to improve their teaching techniques and classroom instructions. Technology is typically most successfully used when it is easily accessible and user-friendly (Qu & Wu 2024). Teachers around the world have started to shift to using gadgets like mobile phones, tabs, and computers to deliver lessons and also assign tasks. Technological advancement characterised by widespread online learning and learning technologies becomes a significant trend to achieve language learning goals (Mulyadi et al., 2021). This allows students to have control on their own learning and to move at their own pace.

In order to cater to this shift in education and language learning, teachers have begun to prioritise meaningful communications and interactions for more authentic experience. Therefore the task-based language teaching (TBLT) technique has emerged to be a popular pedagogical technique.

TBLT is an approach to language teaching that prioritises the use of tasks as a central unit of teaching, rather than focusing solely on language structures (Putri and Refnaldi, 2021). TBLT emphasises the importance of tasks that have coherence, unity, meaning, clear language learning goals, defined beginnings and endings, while actively engaging learners (Carless, 2004). This pedagogical approach is based on the belief that language learning is most effectively achieved through interaction, which emphasises the importance of communication in language learning (Huang, 2022). TBLT aims to improve students' functional competence by providing opportunities for authentic language use and interaction (Han, 2018).

TBLT promotes learner-centred activities, encourages active participation, and develops students' communicative competence (Anjum et al., 2019). Hence, it is an effective technique to teach, especially in speaking skill. Lume & Hisbullah (2022) stated that TBLT is effective in various contexts, such as teaching speaking skills, where it has been shown to improve the learning process by integrating authentic texts, emphasising interactive communication and focusing on the learning process itself. TBLT has gained a place in language teaching, especially in East Asia, where there is more and more emphasis on effective communication in English (Littlewood, 2007). This approach is consistent with learner-centeredness, which moves from teacher-led instruction to student participation in authentic language use through tasks (Ellis, 2009). TBLT has been found to be particularly useful for developing speaking skills and promoting language ability in language learners (Omar et al., 2021).

The purpose of this systematic literature review is to investigate how TBLT and digital technology interact in ESL learning and teaching. This paper explores the benefits and problems

associated with integrating technologies in TBLT by synthesising existing research. This study is guided by the following research questions:

1. How do technology-enhanced and technology-mediated TBLT offer benefits for language teaching?
2. What are the challenges faced by learners and educators when the technology-enhanced and technology-mediated TBLT approach is utilised?

Literature Review

Integrating technological tools into the English as a Second Language (ESL) classroom

The demands imposed on the education sector nowadays include teaching students 21st-century skills and digital competency so they can participate fully in the impending fourth industrial revolution (Callista Anak Yunus & Kim Hua, 2021). Therefore, teachers have a duty to give the next generation of learners the tools they need to succeed, including digital proficiency, problem-solving abilities, and the capacity for both critical and creative thought. Thus, they are forced to amend their pedagogy techniques as these practices are highly influenced by an ever-updating technology. The incorporation of Information and Communications Technology (ICT) in teaching and learning has become more convenient for educators as a result.

In order for students to increase their proficiency in the ESL classroom, instructors must assist students in developing digital reading and learning abilities. Girón-García & Boghiu-Balaur (2021) suggested that by utilising ICT in conjunction with Content-Based Instruction (CBI) may enable students to apply digital literacy skills in order to achieve that goal. In addition, e-learning content-based instruction and training can enhance learners' motivation and facilitate their learning autonomy and comprehension of new concepts by connecting them to their existing knowledge (Girón-García & Boghiu-Balaur, 2021; Rovai et al., 2007). Similarly, incorporating meaningful learning activities into the instruction and training process helps motivate students to develop understanding and build knowledge based on their own experiences, thereby enhancing their academic performance.

Furthermore, research indicate that Mobile-Assisted Language Learning (MALL) effectively involves students, enhances motivation, and greatly enhances language acquisition (Garcia-Ponce et al., 2023; GencIlter, 2009; Liu & Chen, 2014; Motallebzadeh et al., 2011). MALL facilitates cooperative learning by utilising the Second generation of the World Wide Web (Web 2.0) or 3.0 technology such as social media platforms. As an illustration, WhatsApp operates as a Mobile-Assisted Language Learning (MALL) environment to encourage oral output and research accuracy and fluency using a task-repetition method. Meanwhile, Sletten (2017) as cited in Mohammad Hosseini et al., (2020) proposed that a constructivist teaching strategy can increase student engagement in the learning process by giving students video lectures in a flipped learning environment. Moreover, flipped classrooms also boost academic success by moving learners from passive to active learning, resulting in higher student satisfaction post-course (Mohammad Hosseini et al., 2020; Teng, 2017). Hence, the flipped-learning strategy promotes self-efficacy by allowing students to use cognitive techniques such as encoding, organising, and elaborating

more constructively. This technique enables students to prepare, be aware of their learning process, evaluate their learning, and make the optimal use of study time.

In addition, integrating virtual reality (VR) can boost students' immersion by establishing a sense of presence and authenticity in simulated settings (Dhimolea et al., 2022; Divekar et al., 2021; Morton, Gunson, & Jack, 2012). It can offer contextualised language learning experience, hence it can produce a good impact on the effectiveness of second language (L2) acquisition. Mobile apps (MAs) such as Duolingo, Quizlet, Kahoot and Quizizz can be used to learn many types of languages, including vocabulary. Based on the previous research conducted by Huei, Yunus, and Hashim (2021) as cited in Al-Jarf (2022), Quizizz is used to enhance the English vocabulary achievement of primary English as a Foreign Language (EFL) students in rural schools during the COVID-19 pandemic. Likewise, Quizlet's contextualised vocabulary questions with whole sentences were more beneficial to upper-intermediate EFL students than learning individual English terms with synonyms (Al-Jarf, 2022; Solhi Andarab, 2019). As a result, it is critical to employ the online tools mentioned above in order to maximise the Internet's potential as a modern digital tool and assist ESL students in navigating this electronic world in order to better understand the course content.

Technology-Enhanced TBLT

Online language learning and teaching have been accomplished using a variety of instructional strategies, one of which is TBLT (Robillos & Bustos, 2023). Implementing this TBLT can improve students' motivation for language learning by providing authentic tasks (Aliasin et al., 2019; Mulyadi et al., 2021; Page & Mede, 2018). Scholars suggest several pedagogical stages for applying TBLT, including pre-task, primary task, post-task, educational tasks, real-world target tasks, pre-task phase, task cycle, and linguistic focus. The primary purpose of this TBLT is to improve learners' target language performance through meaningful tasks.

The "technology-mediated TBLT" framework integrates task-based language teaching with modern language education and digital technology (González-Lloret & Ortega, 2014; Subrahmanyam Vellanki & Bandu, 2021). Integrating technology into language instruction has numerous benefits, including meeting diverse learner needs and abilities, inspiring and engaging students. The integration of technology and TBLT has significantly improved students' motivation and practice of oral language skills, particularly through mobile-assisted tasks, according to Chen & Lin's (2018) study as cited in Mulyadi et al., (2021). This technology-enhanced TBLT has increased fun English learning activities and reduced anxiety among EFL learners.

In addition to mobile devices, implementing technology-enhanced TBLT requires the use of a learning management system (LMS). This LMS is widely used for teaching with the inclusion of blended teaching methods, such as online learning, blended instruction, and flipped classrooms, has been shown to improve EFL students' learning engagement and motivation (Mulyadi et al., 2021). Through the use of online classrooms in TBLT, students can improve their language accuracy in a variety of task completion scenarios (Khoram & Zhang, 2019; Mulyadi et al., 2021).

In addition, researchers and educators have effectively linked TBLT with a variety of technologies, including emails, chats, forums, blogs, wikis, Google Docs, social media, and online games, to meet TBLT principles (Subrahmanyam Vellanki & Bandu, 2021). These technologies have enhanced learner participation and shifted the way teachers and students think about second language writing, emphasising engagement, meaning, authentic language, and a clear aim. Therefore, this study aims to explore how technology-enhanced and technology-mediated task-based approaches offer unique opportunities for authentic language engagement, collaborative learning, and personalised feedback. Besides, it will also discuss the challenges faced by learners and educators in navigating issues related to technology access, digital literacy, and ethical considerations.

Methodology

This literature study employs the Systematic Literature Review (SLR) method, utilising a review procedure that adheres to the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) framework. The PRISMA framework, as outlined by Higgins et al. (2021) and Newman & Gough (2020), guides the stages of planning, implementation, and reporting to address the research questions effectively. By adopting the PRISMA framework, this study aims to enhance the rigour and transparency of the review process, ensuring a systematic and thorough approach to data collection and analysis. The primary focus of this paper is to explore the technology enhanced or mediated task-based approach in teaching ESL and to investigate the opportunities and challenges faced by Malaysian teachers in implementing this approach. The review process began with a meticulous article identification phase, specifically targeting literature on technology enhanced or mediated TBLT in both Malaysian and non-Malaysian school contexts. To gather relevant scholarly sources, renowned databases such as Sage, ERIC (Education Resources Information Center), Scopus, and ScienceDirect were utilised for their comprehensive coverage of education, language teaching, and technology-related content. The selection process involved four distinct phases: identification, screening, eligibility, and inclusion. This systematic approach was crucial in narrowing down the vast pool of available literature to a focused selection of articles that directly addressed the research objectives. By leveraging the capabilities of these databases and following a structured review methodology, this study aims to provide valuable insights into the challenges and opportunities associated with the integration of technology enhanced or mediated task-based approaches in ESL instruction, particularly in the Malaysian educational context.

Phase 1: Identification Phase

To locate relevant literature for this research, several academic databases were searched, including Sage, Scopus, ERIC, and ScienceDirect, with ERIC being the most frequently used due to its focus on educational research. Keywords such as "TBLT," "Task-based Language Teaching," "Technology," and "English" were employed in the search process (see *Table 1*). The initial screening process involved evaluating the relevance of each identified research paper based on its title. Subsequently, the content of the articles was examined to ascertain the subject matter and determine suitability for inclusion in the study.. Given the narrow research scope and

limited available information, no restrictions were placed on the publication dates of the materials; relevance was the sole inclusion criteria rather than recency.

Table 1: Keywords used to find related articles.

Database	Search String
ERIC	“Task-based language teaching” “technology” “English”
Scopus	TBLT AND technology AND English “Task-based language teaching” AND “technology” AND “English”
ScienceDirect	“Task-based language teaching” AND “technology” AND “English”
Sage Journals	“Task-based language teaching” “Technology” “English” “TBLT technology English”

Phase 2: Screening Phase

The initial literature search yielded a total of 179 potentially relevant articles. Through a screening process, 58 studies were identified that met the inclusion criteria for this research. These 58 articles were documented and their relevance to the study objectives was noted to facilitate subsequent analysis of the findings. To ensure the search captured all articles meeting the researchers' criteria, supplementary information was incorporated into the search strategy for related studies. *Table 2* provides full details on this additional search information.

Table 2: Inclusion and exclusion criteria

Inclusion criteria	Exclusion criteria
Articles from journals	Conference proceedings, review articles conceptual papers, book chapters, reports
Related to TBLT	Not related to TBLT
Focus on technology TBLT	Studies without integration of technology
Focus on English learners	Redundant articles

Phase 3: Eligibility Phase

The next step after acquiring the pertinent studies was to skim the full-text articles for additional assessment. The primary purpose was to evaluate the quality and eligibility of the research. In this regard, only articles published in reputable journals were selected, after carefully scrutinising the credibility of the publishers. Prior to including the articles in the study, multiple iterations were performed. Both forward and backward searches were conducted to identify the literature

review techniques used in the analyses. This process also served to filter out articles related specifically to technology, TBLT, and English. Through this step, the selection was further narrowed down to 33 articles that were considered appropriate for a full-text review

Phase 4: Exclusion Phase

The inclusion criteria focused on academic and peer-reviewed publications that explored the integration of technology and TBLT in English learning. Conversely, the exclusion criteria targeted non-academic materials, poorly conducted research studies, and publications from disreputable sources. The primary databases utilised for sourcing materials were Scopus, ERIC, and ScienceDirect due to their provision of academic resources and the ability to filter peer-reviewed content. Out of the 33 articles reviewed in full-text, 17 were deemed directly relevant to the study’s investigation into the implementation of technology-integrated TBLT in English learning. These 178 key articles underwent detailed analysis to extract insights on the integration of technology in TBLT, the associated opportunities and challenges, and the pedagogical implications for ESL instruction within the Malaysian context. The PRISMA framework, illustrated in *Figure 1*, outlines the search process and the quantity of literature identified.

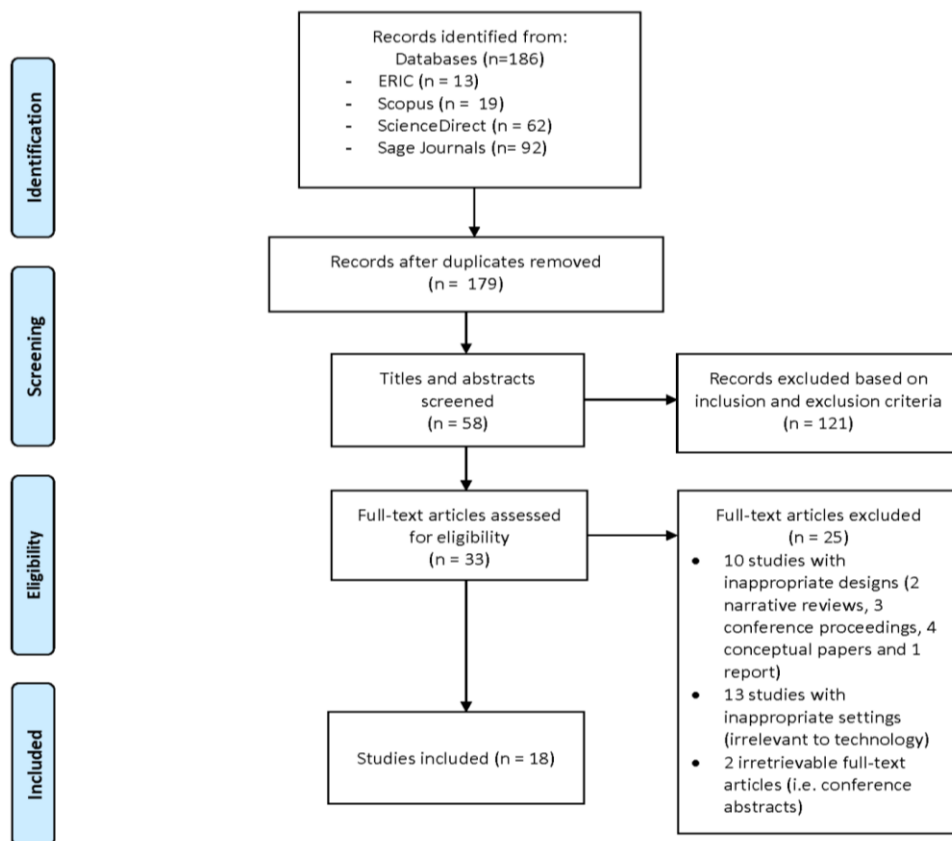


Figure 1: PRISMA procedure

Following data extraction, the information was categorised, evaluated, compared, analysed, synthesised, and summarised holistically. The extracted and analysed data from the primary

articles were utilised to address the literature study's research questions. It is important to note that this article's analysis employed statistical techniques and search engine queries, rather than manual reading of articles published in various journals. The objective of this SLR was to analyse literature related to technology enhanced or mediated TBLT in ESL using statistical methods and search string queries. However, as the SLR did not involve manually reading articles from different journals, it is possible that some relevant articles on technology enhanced or mediated TBLT in ESL may have been overlooked.

Findings

Table 3: Background of Previous Literature on Technology-enhanced and Technology-mediated TBLT

No	Study / Article	Database	Design	Participants	Country
1	Giron-Garcia & Boghiu Balaur (2021)	Scopus	Quantitative & qualitative	University (undergraduates)	Spain
2	Shehni (2021)	Scopus	Not mentioned	Not mentioned	Not mentioned
3	Azis & Husnawadi (2020)	Scopus	Quantitative & qualitative	University (undergraduates)	Indonesia
4	Wiboolyasarini (2023)	Scopus	Quantitative research	University	Thailand
5	Robillos & Bustos (2023)	Scopus	Quantitative & qualitative	University	Thailand
6	Garcia-Ponce et al. (2023)	Scopus	Quantitative	University (bachelors, masters and doctorate)	Mexico
7	Timpe-Laughlin et al (2023)	Scopus	Quantitative & qualitative	Tertiary level	Not mentioned
8	Widiastuti et al. (2022)	Scopus	Quantitative & qualitative	University (undergraduates)	Indonesia
9	Mulyadi et al. (2023)	Scopus	Quantitative & qualitative	University	Indonesia
10	Vellanki & Bandu (2021)	ERIC	Not mentioned	Not mentioned	Not mentioned

11	Krengel (2021)	ERIC	Not mentioned	Not mentioned	Not mentioned
12	Hosseini et al. (2020)	ERIC	Not mentioned	University	Saudi Arabia
13	Al-Naabi (2020)	ERIC	Quantitative & qualitative	Tertiary (Foundation level)	Oman
14	Belda-Medina (2021)	ERIC	Quantitative & qualitative	University (undergraduates)	Spain
15	Mulyadi et al. (2021)	ERIC	Quantitative	University	Indonesia
16	Rodriguez-Penarroja (2022)	ERIC	Quantitative	University (undergraduates)	Spain
17	Ericsson & Johansson (2023)	Science Direct	Qualitative & quantitative	Seventh grad (primary school)	Sweden

Table 3 portrays the outline of the background of previous literature of 17 articles studied in this paper on technology-enhanced and technology-mediated TBLT. Scopus database accounts for the highest number of articles (9 articles), followed by the second highest, ERIC database (7 articles) and the least, Science Direct (1 article). Majority of the past articles focused on the university level for their participants. Majority of the articles used a mixed method of qualitative and quantitative data. The country of origin of the past articles includes Indonesia, Spain, Thailand, Sweden, Oman, Saudi Arabia, and Mexico. Indonesia accounts for the highest number of articles (4 articles), followed by Spain (3 articles) and Thailand (2 articles).

RQ1: How do technology-enhanced and technology-mediated TBLT offer benefits for language teaching?

Table 4: Benefits of Technology-enhanced and Technology-mediated TBLT

Category	Benefits	Study / Articles
Learning and performance	Enhance language learning and language proficiency	[1], [2], [3], [4], [5], [6], [8], [9], [10], [14], [15], [16], [17]
	Develop important skills	[2], [3], [4], [5], [8], [10], [14], [16]

	Self-reflective to evaluate own performance, identify areas for improvement and find solutions	[4], [8], [10], [11], [12], [17]
	Promote critical thinking & creative production	[5], [14], [16]
	Increase learner autonomy	[8], [10], [12], [16], [17]
	Students as active participants	[2], [5], [10], [15], [16]
Emotion (feeling, judgement)	Increase students' engagement	[1], [3], [4], [5], [7], [8] [10], [14], [15], [16], [17]
	Increase learning motivation	[1], [8], [9], [10], [14], [15] [16]
	Participate in significant and meaningful tasks	[2], [17]
	Greater sense of satisfaction	[8], [14], [17]
	Nurture other positive attitudes toward language learning	[3], [5], [8], [9], [10], [14]
Interpersonal	Enhance communication mutually	[2], [5], [8], [14]
	Promotes collaborative learning	[3], [4], [5], [7], [8], [10] [14], [17]
Teaching (feedback, content)	Helps teachers' assessment & scaffolding	[4], [5], [11]
	Authentic (related to real-life situations)	[4], [5], [7], [8], [10], [15] [17]
	Aligned with learners' needs, goals and course expectations/ related to content adaptable and flexible	[2], [4], [16], [11], [17]

Table 4 explains the benefits of utilising technology-enhanced and technology-mediated TBLT in the classroom with reference to past studies. This paper divided the benefits into 4 categories,

namely learning and performance, emotional, social and teaching. The categories are outlined by referring to the categories used in the study by Hamed et al. (2020).

For learning and performance category, the benefit, enhancing language learning and improving language proficiency, accounts for the highest number of past articles (13 articles), whereas the second highest is developing and improving important skills.

Next, the emotional category discusses the feelings and judgements learners have when technology-enhanced and technology-mediated TBLT approach is used. The benefit in this category with the highest number of past articles is to increase students' engagement (11 articles), followed by increased learning motivation (7 articles) and nurture other positive attitudes towards language learning (6 articles).

For social category, technology-enhanced and technology-mediated TBLT is shown to promote collaborative learning with the highest number of past articles (8 articles) and followed by the benefit enhancing communication mutually (4 articles).

For teaching category, the benefit of technology-enhanced and technology-mediated TBLT of being authentic or related to real-life situations, accounts for the highest number of past articles, namely 7 articles. The second highest number of articles is aligned with learners' needs, goals and course expectations with 5 articles.

RQ2: What are the challenges faced by learners and educators when the technology-enhanced and technology-mediated TBLT approach is utilised?

Table 5: Challenges faced by learners and educators in Technology-enhanced and Technology-mediated TBLT utilisation

Category	Challenges	Study / Articles
Learners	Demotivation	[1], [12], [15], [9]
	No qualified guidance or lack of explanation	[1], [9]
	Lower accuracy level in learning (Focus meaning over form)	[6]
	Difficult for beginners/ not user-friendly	[1], [8], [9], [12], [13], [14]
	Lack of engagement and face-to-face interaction with teachers	[9], [10], [14], [15], [17]
	Disruptions and distractions / heavy cognitive load	[10], [12], [14], [17]

Other issues (not exam-oriented [2], [3]
plagiarism, etc.)

Educators	Lack of creativity and adaptability	[10]
Learners & educators	Technical issues / Internet and technological problems	[9], [14], [17]
	Time consuming	[2], [3], [12], [16]
	Lack of technological skills, digital literacy or unfamiliar with TBLT approach	[2], [3], [10], [16]

Table 5 explains the challenges faced by learners and educators when technology-enhanced and technology-mediated TBLT approach is utilised, with reference to past studies. The challenges are divided into two categories, namely learners and educators. For learners' category, the challenge with the highest number of articles (6 articles), is that TBLT is difficult for beginner learners and not user-friendly. For educators' category, lack of creativity and adaptability is the challenge in TBLT. Both learners and educators face the same challenges, which are technical issues, time consuming and lack of digital literacy or are unfamiliar with the TBLT approach.

Discussion

Emerging Need of Infusing Technology in Education

To address the global demands and national policies, the Ministry of Education (MoE) has always been committed to shaping the digital education landscape in Malaysia by harnessing the potential of technology in the current millennium. As stated in the Sustainable Development Goal 4 (SDG4), inclusive and equitable quality education should be provided to learners, thus substantiating the need to infuse the element of technology in the local education context (MoE, 2023).

The government also aims to leverage ICT to scale up quality learning in primary and secondary learning institutions (Shift 7) based on the Malaysia Education Blueprint 2013 - 2025 (MoE, 2013). Students are aspired to be able to personalise their learning experiences via distance and self-paced learning through the provision of devices to schools to ensure a low student-to-device ratio (MoE, 2013). As for teachers, they are expected to be ICT literate, hence meeting the National Education Technology Standards (NETS) in order to facilitate the integration of ICT in education (MoE, 2013). In other words, the usage of ICT in the curriculum and pedagogy of the education system will be intensified by 2025 according to the blueprint (MoE, 2013).

Besides, in tandem with the implementation of the Malaysia Digital Economy Blueprint (MyDIGITAL) and the National Fourth Industrial Revolution Policy (4IR), Digital Education Policy (DEP) was initiated by MoE aiming to produce digitally fluent students and digitally competent educators with respect to the following strategies:

1. Cultivating the integrated, creative, innovative and ethical use of digital technology in student-centred learning
2. Empowering educators as experts in digital education

(MoE, 2023:34)

Recent studies have shown that the positive impact of ICT on students' learning is deemed undeniable, hence justifying the significance of addressing ICT by the MoE to achieve national expectations and global benchmarks (Kulik, 2003). With regards to this, educators must adapt their teaching methods by incorporating ICT in the classroom.

Significance of TBLT in Relation to Malaysian Context

The national English curriculum of Malaysia is considered to be a communicative curriculum (MoE, 2011). This is because the Malaysian National Curriculum strives to cultivate students' proficiency in English language activities, enabling them to communicate clearly and effectively (Richards & Rodgers, 2001). Communicative Language Teaching (CLT) prioritises the enhancement of learners' ability to communicate effectively (Larsen-Freeman, 2000; Lindsay & Knight, 2006; Nguyen, 2010). The majority of activities and tasks are carried out with the explicit purpose of promoting communication and it emphasises the significance of various classroom activities that provide learners with opportunities to use the language in a relevant and realistic context, in order to enhance their communication skills. It offers learners a range of communicative activities and chances to practise language skills in the classroom (Littlewood, 2007). Therefore, TBLT is suitable in the Malaysian context as it is a communicative approach to language teaching in which tasks are used to facilitate language acquisition (Ellis, 2003; Nunan, 2004)

Similar to CLT, TBLT also emphasises the use of the target language by learners to fulfil specific tasks, with a focus on the communication process (Lindsay & Knight, 2006). The learners will utilise the target language in conveying their thoughts and in the process, they will acquire proficiency in the target language. The activities range from tasks that involve exchanging missing information to tasks that require solving problems. When done effectively, task-based language teaching creates an environment where students engage in interactions that independently promote the learning process. The essence of task-based language learning lies in assigning students with specific activities that need them to effectively utilise the target language (Lindsay & Knight, 2006). The task-based technique also requires learners to complete activities that have a practical purpose. By successfully completing these tasks, learners are able to use the language they are learning to convey meaning. This, in turn, improves their overall language skills (Skehan, 1998).

Implementation of Technology-Enhanced and Technology-Mediated TBLT

In what follows, the implementation of technology-enhanced and technology-mediated TBLT in an ESL classroom is discussed. The ESL lessons in primary and secondary schools which are based on the Scheme of Work, designed by the Curriculum Development Division (CDD) can be divided into textbook-based lessons and non-textbook-based lessons. Teachers conduct textbook-based lessons based on the textbooks prescribed by MoE while they can develop their own materials for non-textbook-based lessons. Non-textbook based lessons can be further categorised into skill-based lessons, Language Art lessons/ Literature in Action lessons, Language Awareness lessons and Project Based Learning (PBL) lessons (CDD (2015); CDD (2021)).

Technology-enhanced and technology-mediated TBLT can be incorporated into non-textbook-based lessons, specifically skill-based lessons and Project Based Learning lessons. The skill-based lessons usually involve both receptive and productive skills in the following order: Listening, Speaking, Reading, Writing, Literature in Action, Language Awareness (CDD, 2021). TBLT with the aid of technology can be extended throughout the cycle of the non-textbook-based lessons revolving around a certain theme. Learners can benefit from this approach as recycling of language is maximised and reproduction to creation of language is enabled (Nunan, 2005).

As for the Project Based Learning lessons, they require completion of tasks outside the classroom for a long period of time (more than 60 minutes). Via technology-enhanced and technology-mediated TBLT, teachers can provide adequate scaffolding and ample opportunities for integration of language skills to the students (Nunan, 2005). Learners can be active learners and reflect upon their learning, which are key principles of TBLT (Nunan, 2005). PBL can be planned based on the six steps proposed by Nunan (2005): 1) Build the learner's schema, 2) Provide learners controlled practice, 3) Administer authentic listening practices, 4) Focus on linguistic forms, 5) Provide learners more flexible practice, 6) Introduce the real-life or pedagogical task. Projects can serve as a complement to the textbooks which cater to students' needs and learning objectives as they realise experiential learning and promote 21st century learning (Rodríguez-Peñarroja, 2022).

Suggestion of Strategies for Malaysian English Teachers

Merging technology and TBLT to design technology-mediated or technology-enhanced communicative tasks or Cybertasks, promotes active learning, improves task performance and increases students' motivation (Oskoz & Eola, 2014; Rodríguez-Peñarroja, 2022). The following section discusses how technology and TBLT can be introduced in an ESL classroom based on the Malaysia context after taking the factors of accessibility and equity into consideration.

By employing the flipped classroom model, students can personalise their learning experiences and extend the time of learning when they watch instructional videos prior to the class via Asynchronous Computer-Mediated Communication (ASCMC) (Al-Naabi, 2020; Basal, 2015). YouTube can serve as a multimodal source for accessible videos to be used to exemplify and conceptualise topics (Rodríguez-Peñarroja, 2022). However, the length of the video should be short in order not to impose cognitive load on students (Akshaya & Scholar, 2019; Basal, 2015). The time spent in class can be used to empower students to communicate using the language

rather than being used to teach the linguistic component of the language (Herreid & Schiller, 2013).

The Digital Educational Learning Initiative Malaysia (DELIMa), a digital learning platform of the Ministry of Education of Malaysia, initially with Google Classroom was launched on 15 June 2020 to enable teaching and learning online (Kamar, 2020). As of 4 August 2022, 99 percent of teachers and 85 percent of students have used DELIMa in their online teaching and learning (Kamar, 2020). On that account, it is of great importance to create e-learning content-based materials in order to take advantage of the potential of the Internet as a modern digital tool and help students to manage their way through this electronic environment (Hinkelman, 2018). Teachers can positively engage students in learning relevant subject matter by adding authentic materials (e.g. online resources) integrated into a task-based language activity (i.e. Cybertask) to help increase their engagement, level of motivation and their academic achievement (González-Lloret, 2016; Tavakoli et al., 2019).

Furthermore, Synchronous Computer-Mediated Communication (SCMC) can be performed when the teacher and students are at home or when the school has enough devices for students to have simultaneous online communication. This type of multimodal interaction (video- and text-based) promotes integration of all language skills (Belda-Medina, 2021). Nevertheless, the infusion of technology and online platforms with TBLT should be carefully planned while ensuring the learners' motivation throughout the session (Mulyadi et al., 2021). To illustrate, online presentations and group discussion as well as role play can encourage students to communicate in the target language, thus improving their speaking ability (Bao & Du, 2015; Kazemi & Zarei, 2015; Ke, 2009). For a better illustration in SCMC, infographics can be employed to deliver subject content (Bicen & Beheshti, 2022). To promote active learning, learners can use technology in a transformative manner by creating infographics for a topic to learn new content as well as to be competent in digital tools (Belda-Medina, 2021).

Similar to that, Digital Storytelling (DST), which refers to the practice of using digital apps or software to create or tell stories (Nishioka, 2016; Robin, 2008; Smeda et al., 2014) can be used to help improve students' speaking, as demonstrated by studies conducted by Eissa (2019), Hwang et al. (2016), Razmi et al. (2014), Rokni and Qarajeh (2014), and Thariri et al. (2015). The use of DST in classrooms, which involves students in the process of creating the digital tale from planning, gathering photographs, telling the story, recording, reviewing, and editing, demonstrates the connection between technology and TBLT. The method of creating digital stories aligns with the principles of TBLT, which involves involving students in active learning. Specifically, students learn English through the completion of communicative activities that necessitate the use of communicative language in order to reach the desired outcome (Azis & Hu, 2020).

Challenges Upon Implementation

However, some concerns and issues have been raised in integrating ICT in TBLT for both learners and educators, which can be categorised under digital literacy. According to Luzón et al., (2010) and Kim et al., (2019), learners should get adequate instruction in digital literacies to effectively do online tasks, such as cybertasks, in a meaningful way. This is because searching for material

online to complete school tasks without proper direction can be a challenging endeavour for numerous learners, occasionally resulting in a loss of motivation. Therefore, in order to avoid learners from experiencing a sense of discouragement while seeking information on the internet, educators should foster digital reading comprehension and support the cultivation of essential literacy abilities in the classroom by using a practical pedagogical language learning approaches to guide them for a more effective results (Gonzales-Lloret & Ortega, 2014; Ross et al., 2017).

As for educators, according to M. C. Shehni (2021), language educators may lack familiarity with the TBLT approach and may require further training to effectively integrate ICT into their lesson and implement it in class. In addition, it is typically the responsibility of the educators to organise the task or modify the existing teaching material to fit the TBLT approach, which necessitates specialised knowledge and is therefore time-consuming as the selection of technological tools and materials should stimulate learners, capture their interest, offer an appropriate level of intellectual and linguistic difficulty, and promote their language development. In addition to that, educators and learners both face technical issues, Internet and technological problems when technology enhanced or mediated TBLT is used (Al-Naabi, 2020; BEricsson & Johansson, 2023; D. Mulyadi et al., 2023).

Conclusion

Based on the review by UNESCO (2012), in Malaysia, the usage of current technologies merely involves using Microsoft PowerPoint as an instructional tool by teachers rather than using technology to foster learners' critical thinking and creativity. Hence, this paper provides an overview to English educators in Malaysia on how to utilise technology in the classroom setting by employing the TBLT approach which is central to CLT.

Technology-enhanced and technology-mediated TBLT can be incorporated into non-textbook-based lessons, specifically skill-based lessons and Project Based Learning lessons. Merging technology and TBLT to design technology-mediated or technology-enhanced communicative tasks promotes active learning, improves task performance and increases learners' motivation (Oskoz & Eola, 2014; Rodríguez-Peñarroja, 2022). Additionally, integrating technology in TBLT through different ways such as using DELIMA, flipped classroom, SCMC and DST helps to promote collaborative learning among learners and enhance their communication skills (Belda-Medina, 2021; Robillos & Bustos, 2023; Widiastutiet al., 2022).

However, integrating ICT in TBLT raises concerns for both learners and educators, particularly in digital literacy. Learners need adequate instruction in digital literacies to effectively complete online tasks, as searching for material online can be challenging and lead to loss of motivation (Kim et al., 2019; Luzón et al., 2010). Educators should foster digital reading comprehension and support essential literacy abilities in the classroom using practical pedagogical language learning approaches. In addition to that, educators may lack familiarity with TBLT and may require further training to effectively integrate ICT into lessons (Shehni, 2021). Additionally, the similar issues that both educators and learners face are technical issues and internet problems when infusing technology in TBLT (Al-Naabi, 2020; D. Mulyadi et al., 2023; Ericsson & Johansson, 2023).

While utilising technology in TBLT, it is imperative that learners' satisfaction towards the approach is continuously evaluated (Al-Jarf, 2022). Learners might lose interest in the technology per se when the novelty effect wears off (Al-Naabi, 2020; Ericsson & Johansson, 2023). Technology should only be a tool for the teaching and learning and it does not teach by itself, hence live communication between the teacher and learners is essential (Mulyadi et al., 2021). Technology should not only be just a tool to deliver content, but also it should be utilised to promote creativity and critical thinking (Hamilton et al., 2016). When shifting from a traditional classroom to an online platform, contextualised and specific materials in the form of tasks should be carefully designed by teachers to provide meaningful learning for learners, as advocated by TBLT since the use of technology is sometimes time-consuming (Belda-Medina, 2021; Ericsson & Johansson, 2023; Moore, 2018; Rodríguez-Peñarroja, 2022). With regards to videos, the teachers should spend time selecting appropriate and meaningful videos instead of just randomly picking some (Rodríguez-Peñarroja, 2022).

In order for TBLT to promote learner engagement, teachers should be the facilitator and provide immediate feedback with regards to using technology (Calderon & Sood, 2020; Mulyadi et al., 2021). To prevent learner disengagement and poor interaction in SCMC, shorter conversational turns between peers are advised and learners as well as teachers should be equipped with the knowledge of the technology per se (Belda-Medina, 2021; Zou et al., 2021).

References

- Al-Jarf, R. (2022). Online vocabulary tasks for engaging and motivating EFL college students in distance learning during the pandemic and post-pandemic. *International Journal of English Language Studies*, 4(1), 14–24. <https://doi.org/10.32996/ijels.2022.4.1.2>
- Al-Naabi, I. S. (2020). Is it worth flipping? The impact of flipped classroom on EFL students' grammar. *English Language Teaching*, 13(6), 64-75. <https://doi.org/10.5539/elt.v13n6p64>
- Akshaya, R., & Scholar, M. P. (2019). Flipped learning through mobile phones in ESL Classrooms. *Language In India*, 19(3), 9–13.
- Azis, Y. A., & Hu, S. (2020). Collaborative digital storytelling-based task for EFL writing instruction: outcomes and perceptions. *The Journal of AsiaTEFL*, 17(2), 562–579. <https://doi.org/10.18823/asiatefl.2020.17.2.16.562>
- Bao, R., & Du, X. (2015). Implementation of task-based language teaching in Chinese as a foreign language: benefits and challenges. *Language, Culture and Curriculum*, 28(3), 291–310. <https://doi.org/10.1080/07908318.2015.1058392>
- Basal, A. (2015). The implementation of a flipped classroom in foreign language teaching. *Turkish Online Journal of Distance Education*, 16(4), 28–37. <https://doi.org/10.17718/tojde.72185>
- Belda-Medina, J. (2021). Enhancing multimodal interaction and communicative competence through Task-Based Language Teaching (TBLT) in Synchronous Computer-Mediated

- Communication (SCMC). *Education Sciences*, 11, 723. <https://doi.org/10.3390/educsci11110723>
- Bicen, H., & Beheshti, M. (2022). Assessing perceptions and evaluating achievements of ESL students with the usage of infographics in a flipped classroom learning environment. *Interactive Learning Environments*, 30(3), 498-526. <https://doi.org/10.1080/10494820.2019.1666285>
- Calderon, O., & Sood, C. (2020). Evaluating learning outcomes of an asynchronous online discussion assignment : a post-priori content analysis. *Interactive Learning Environments*, 28(1), 3–17. <https://doi.org/10.1080/02602938.2011.590878>
- Callista Anak Yunus, C., & Kim Hua, T. (2021). Exploring a gamified learning tool in the ESL classroom: the case of Quizizz. *Journal of Education and E-Learning Research*, 8(1), 103–108. <https://doi.org/10.20448/journal.509.2021.81.103.108>
- Carless, D. (2004). Issues in teachers’ reinterpretation of a task-based innovation in primary schools. *TESOL Quarterly*, 38(4), 639. <https://doi.org/10.2307/3588283>
- Curriculum Development Division (CDD). (2015). English language scheme of work: Primary year 6 SK. Retrieved from <http://bpk.moe.gov.my/index.php/terbitan-bpk/bahan-sokongan-mata-pelajaran/category/530-tahun-6>
- Curriculum Development Division (CDD). (2021). English language scheme of work: Secondary form 5. Retrieved from <http://bpk.moe.gov.my/index.php/terbitan-bpk/bahan-sokongan-mata-pelajaran/category/444-tingkatan-5>
- Eissa, H. M. S. (2019). Pedagogic effectiveness of digital storytelling in improving speaking skills of Saudi EFL learners. *Arab World English Journal*, 10(1), 127-138. DOI: <https://dx.doi.org/10.24093/awej/vol10no1.12>
- Ellis, R. (2009). Task-based language teaching: sorting out the misunderstandings. *International Journal of Applied Linguistics*, 19(3), 221-246. <https://doi.org/10.1111/j.1473-4192.2009.00231.x>
- Ericsson, E., & Johansson, S. (2023). English speaking practice with conversational AI: Lower secondary students’ educational experiences over time. *Computers and Education: Artificial Intelligence*, 5, 100164. <https://doi.org/https://doi.org/10.1016/j.caeai.2023.100164>
- García-Ponce, E. E., Lengeling, M. M., Mora-Pablo, I., & Conaway Arroyo, L. M. (2023). Use of Whatsapp as a platform to promote English oral fluency and accuracy: A task repetition approach. *Íkala, Revista De Lenguaje Y Cultura*, 28(1), 69–85. <https://doi.org/10.17533/udea.ikala.v28n1a04>
- Girón-García, C., & Boghiu-Balaur, S. (2021, July 8). A mixed-methods study of online learning in the EFL classroom. *Revista De Lingüística Y Lenguas Aplicadas*, 16, 95–122. <https://doi.org/10.4995/rlyla.2020.13950>

- González-Lloret, M. (2016). Conceptos clave de la Lingüística aplicada. *Elia*, 16, 133–138. <https://doi.org/10.12795/elia.2016.i16.06>
- Han, Z. (2018). Task-based learning in task-based teaching: training teachers of Chinese as a foreign language. *Annual Review of Applied Linguistics*, 38, 162-186. <https://doi.org/10.1017/s026719051800003x>
- Hamilton, E. R., Rosenberg, J. M., & Akcaoglu, M. (2016). The Substitution Augmentation Modification Redefinition (SAMR) Model: A critical review and suggestions for its use. *TechTrends*, 60(5), 433-441. <https://doi.org/10.1007/s11528-016-0091-y>
- Herreid, C. F., & Schiller, N. A. (2013). Case studies and the flipped classroom. *Journal of College Science Teaching*, 42(5), 62–66.
- Higgins, J. P., López-López, J. A., & Aloe, A. M. (2021). Meta-regression. In C. H. Schmid, T. Stijnen, & I. White (Eds.), *Handbook of Meta-Analysis* (pp. 129-150). CRC Press.
- Hinkelman, D. (2018). Blending technologies in second language classroom. *London: Palgrave Macmillan*. <https://doi.org/10.1057/978-1-137-53686-0>
- Huang, J. (2022). Task-based language teaching and rigorous instruction in beginning English as a second language classrooms. *New Directions for Adult and Continuing Education*, 2022(175-176), 59-70. <https://doi.org/10.1002/ace.20468>
- Inclusive digital transformation and future skills development through the Digital Educational Learning Initiative Malaysia | *South-South Galaxy*. (n.d.). <https://my.southsouth-galaxy.org/en/solutions/detail/inclusive-digital-transformation-and-future-skills-development-through-the-digital-educational-learning-initiative-malaysia#:~:text=The%20Government%20responded%20quickly%20and,enable%20teaching%20and%20learning%20online>.
- Kazemi, S. A., & Zarei, L. (2015). The efficacy of topic familiarity on oral presentation: Extensive speaking assessment task of Iranian EFL learners in TBLT. *International Journal Applied Linguistics and English Literature*, 4(3), 93–97. <https://doi.org/10.7575/aiac.ijalel.v.4n.3p.93>
- Ke, C. (2009). A model of formative task-based language assessment for Chinese as a foreign language. *Language Assessment Quarterly*, 2(2), 207–227. <https://doi.org/10.1207/s15434311laq0302>
- Kulik, J. (2003). Effects of using instructional technology in elementary and secondary schools: What controlled evaluation studies say.
- Littlewood, W. (2007). Communicative and task-based language teaching in East Asian classrooms. *Language Teaching*, 40(3), 243-249. <https://doi.org/10.1017/s0261444807004363>
- Lume, L. and Hisbullah, M. (2022). The effectiveness of task-based language teaching to teach speaking skills. *Journal of Languages and Language Teaching*, 10(1), 85. <https://doi.org/10.33394/jollt.v10i1.4399>

- Milarisa, S. (2019). The effectiveness of task based language teaching (TBLT) toward ESP students' writing achievement. *English Language in Focus (Elif)*, 1(2), 121. <https://doi.org/10.24853/elif.1.2.121-126>
- Ministry of Education (MoE). (2013). *Malaysian education blueprint 2013 - 2025 (Preschool to post-secondary education)*. Retrieved from <https://www.moe.gov.my/storage/files/shares/Dasar/PPPM/Malaysia%20Education%20Blueprint%202013-2025.pdf>
- Ministry of Education (MoE). (2023). *Digital education policy*. Retrieved from <https://anyflip.com/ncosr/fkhr/>
- Mohammad Hosseini, H., Ejtehad, A., & Mohammad Hosseini, M. (2020). Flipping microlearning-based EFL classroom to enhance learners' self regulation. *Language Teaching Research Quarterly*, 20, 43–59. <https://doi.org/10.32038/ltrq.2020.20.03>
- Moore, P. J. (2018). Task-based language teaching (TBLT). *The TESOL Encyclopedia of English Language*. <https://doi.org/10.1002/9781118784235.eelt0175>
- Mulyadi, D., Wijayatiningsih, T. D., Singh, C. K. S., & Prastikawati, E. F. (2021). Effects of technology enhanced task-based language teaching on learners' listening comprehension and speaking performance. *International Journal of Instruction*, 14(3), 717–736. <https://doi.org/10.29333/iji.2021.14342a>
- Newman, M., & Gough, D. (2020). Systematic reviews in educational research: Methodology, perspectives and application. In O. Zawacki-Richter, M. Kerres, S. Bedenlier, M. Bond, & K. Buntins (Eds.), *Systematic reviews in educational research: Methodology, perspectives and application* (pp. 3-22). Springer Fachmedien Wiesbaden. https://doi.org/10.1007/978-3-658-27602-7_1
- Nishioka, H. (2016). Analysing language development in a collaborative digital storytelling project: Sociocultural perspectives. *System*, 62, 39-52.
- Noroozi, M. and Taheri, S. (2021). The distinguishing characteristic of task-based language assessment. *Journal of Language Teaching and Research*, 12(5), 688-695. <https://doi.org/10.17507/jltr.1205.07>
- Nunan, D. (2005). Task-based language teaching. *Cambridge University Press*.
- Oskoz, A., & Elola, I. (2014). Promoting foreign language collaborative writing through the use of Web 2.0 tools and tasks. In M. González-Lloret & L. Ortega (Eds.), *Technology-mediated TBLT* (pp. 115-148). Amsterdam: John Benjamins.
- Putri, S. (2021). Developing task based language teaching worksheet as the solution in teaching and learning English. [Proceedings of the Eighth International Conference on English Language and Teaching \(ICOELT-8 2020\)](#), pp. 103-107.

- Qu, K. & Wu, X. (2024). ChatGPT as a CALL tool in language education: A study of hedonic motivation adoption models in English learning environments. *Education and Information Technologies*: 1-33.
- Razmi, M., Pourali, S., & Nozad, S. (2014). Digital storytelling in EFL classroom (Oral presentation of the story): A pathway to improve oral production. *Procedia - Social and Behavioral Sciences*, 98, 1541-1544. DOI:<http://dx.doi.org/10.1016/j.sbspro.2014.03.576>
- Rodríguez-Peñarroja, M. (2022). Integrating project-based learning, task-based language teaching approach and YouTube in the ESP Class: A study on students' motivation. *Teaching English with Technology*, 22(1), 62-81.
- Robin, B. R. (2008). Digital storytelling: A powerful technology tool for the 21st century classroom. *Theory Into Practice*, 47(3), 220-228. DOI:10.1080/00405840802153916
- Rokni, S. J. A., & Qarajeh, M. (2014). Digital storytelling in EFL classrooms: The effect on the oral performance. *International Journal of Language and Linguistics*, 2(4), 252-257. DOI: 10.11648/j.ijll.20140204.12
- Shehni, M. C. (2021). EAP learners' perceptions towards the use of tasks in their books: focusing on needs analysis. *Theory and Practice in Language Studies*, 11(3), 268. <https://doi.org/10.17507/tpls.1103.06>
- Smeda, N., Dakich, E., & Sharda, N. (2014). The effectiveness of digital storytelling in the classrooms: A comprehensive study. *Smart Learning Environments*, 1(1), 1-21. doi:10.1186/s40561-014-0006-3
- Subrahmanyam Vellanki, S., & Bandu, S. (2021). Engaging students online with technology-mediated task-based language teaching. *Arab World English Journal*, 1, 107–126. <https://doi.org/10.24093/awej/covid.8>
- Tavakoli, P., & Foster, P. (2008). Task design and second language performance: The effect of narrative type on learner output. *Language Learning*, 61(1), 37–72. <https://doi.org/10.1111/j.14679922.2011.00642.x>
- Thariri, A., Tous, M. D., & MovahedFar, S. (2015). The impact of digital storytelling on EFL learners' oracy skills and motivation. *International Journal of Applied Linguistics & English Literature*, 4(3), 144-153. DOI: <http://dx.doi.org/10.7575/aiac.ijalel.v.4n.3p.144>
- United Nations Educational Scientific and Cultural Organization (UNESCO). (2013). *Malaysia: education policy review; abridged report*. Retrieved from <https://unesdoc.unesco.org/ark:/48223/pf0000221132>
- Zou, C., Li, P., & Jin, L. (2021). Online college English education in Wuhan against the COVID-19 pandemic: Student and teacher readiness, challenges and implications. *PLOS ONE*, 16(10), e0258137. <https://doi.org/10.1371/journal.pone.0258137>



Primary School Students' Expectancy-value Beliefs and Anxiety in Learning Malay Language

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Abstract: Most students have very low self-confidence and relatively high anxiety about learning the Malay language. Therefore, the study aimed to investigate primary school students' expectancy beliefs, task value and anxiety in learning the Malay language. A total of 420 primary school students consisting of 211 boys and 209 girls aged between 10 to 12 years old from two SJK and two SK in Kuching, Sarawak involved in this study. The Malay version of the Expectancy-Value Model Questionnaire (EVMQ) adapted from Rarujanai et al. (2020) and the Malay Language Classroom Anxiety Scale (MLCAS) adapted from Sri Aiswarrya Achanan et al. (2021) were used. Descriptive analysis, independent sample t-test and one-way ANOVA were conducted. Results revealed that there was significant difference between gender on utility value, $p = .019$, and intrinsic value, $p = .031$. Besides, there was significant difference between age groups on attainment value, $p = .001$, and intrinsic value, $p < .001$. Furthermore, there was significant difference between schools on expectancy beliefs, $p < .001$, attainment value, $p < .001$, utility value, $p < .001$, and intrinsic value, $p < .001$. In conclusion, highly motivated individuals will have high self-confidence and low anxiety towards learning Malay language. The study's findings suggest that BM teachers are encouraged to create a positive learning atmosphere to increase students' beliefs, values and reduce anxiety in learning BM to improve achievement performance among students.

Keywords: *Anxiety, expectancy, Malay language, primary school, students.*

Introduction

Malay language is the official national language for all Malaysian citizens. This is in line with the government's desire to develop Malay language, as it plays an important role as the basis for building a united nation and harmonious community culture. Article 152 of the Federal Constitution has played a significant role in establishing, recognizing, and declaring Malay language as the official and national language of the country. This is because Malaysia is a multi-ethnic country and having one common language is necessary as a unifying guide that can be understood by people of all races. The inclusion of Malay language as the national language is also based on the fact that the Malay population makes up more than 50% of the total population in Malaysia.

With the role of Malay language as the national language, the official language of the country and the language of instruction in the education system which is increasing nowadays, motivation is a major factor in learning Malay language which is considered as a "device" used by students to learn Malay language (Seven, 2020). This is supported by empirical studies that emphasize that motivation is an effective tool in improving learning Malay language among students. The proof is that to motivate students to follow the teaching and learning Malay language, teachers can give encouragement and rewards such as giving certificates of appreciation and praise to students (Ali et al., 2011). Therefore, it is clear that motivation is very necessary as an effort to hone listening and speaking skills, writing skills and reading skills and achieve the goals of learning language in addition to improving Malay language proficiency among students.

Motivation refers to a combination of effort coupled with desire and determination to achieve language learning goals with a positive attitude towards language learning (Achmad & Yusuf, 2016; Ulfa & Bania, 2019; Usman et al., 2016). Motivation has been widely accepted by teachers and researchers as the main factor that affects the rate and success in learning a first and second language as well as a foreign language. This clearly proves that motivation is the main key to explain success or failure in language learning activities (Alizadeh, 2016). Motivation provides the main impetus to start learning a language and then becomes the driving force to maintain a long and easily boring learning process (Seven, 2020). Therefore, motivation is a major psychological affective variable in playing an effective and significant determining role in language learning and academic achievement among students, especially students who study Malay language (Ezzah' Afifah Nasrudin & Rohaida Kamaruddin, 2020).

With motivation, students will always involve themselves in the learning process actively and continuously even if they have completed or achieved the targeted goals in learning (Taib et al., 2022). This is because motivation functions as a driving force that affects the overall performance of a student. The proof is that highly motivated students have a strong drive, are positive and are more interested in learning Malay language faster than less motivated students (Mohd Uzir Zubir et al., 2018). This clearly shows that motivation is an important contributor in helping students to learn and succeed in mastering Malay language in addition to their mother tongue, especially in terms of linguistics which consists of knowledge of language structure, namely vocabulary, grammar and pronunciation as well as four skills basics in language, namely listening and speaking skills, writing skills and reading skills (Gardner, 1985; Rohaidah Kamaruddin, 2012). With the motivational stimulation that leads to the formation of a person's self-awareness to learn,

positive behavior changes will be fostered in each student. This is because motivation is an aspect that can form positive beliefs in students and can reduce anxiety about language learning (Nadhilah Abdul Pisal & Kamarul Shukri Mat Teh, 2018).

The field of belief studies affects the learning outcomes of Malay language among students. Certain beliefs can affect a student's language learning outcomes (Horwitz, 1988; Huang, 2006; Javadi et al., 2012). However, it was found that most teachers and students do not realize that the beliefs of an individual that are formed lead to a significant and good influence on students' language learning results (Javadi et al., 2012). This is because individual beliefs that are positive or negative can affect their attitude and efforts towards Malay language learning. The proof is that highly motivated individuals will have high self-confidence in learning Malay language and vice versa. This point is supported by Wenden (1986) who states that belief can encourage and motivate certain individuals to set appropriate actions to progress in language learning either consciously or unconsciously. This statement clearly proves that beliefs can influence a student's motivation towards learning Malay language without them realizing it (Nadhilah Abdul Pisal & Kamarul Shukri Mat Teh, 2018).

Many previous studies have been conducted to examine various aspects that contribute to anxiety about learning a language (Anwar & Abdullah, 2021). In learning Malay language, anxiety is the main issue that has been the focus of scientific research since the early 1970s (Shabani, 2012). However, anxiety is still considered a complex psychological phenomenon. Based on the facts above, this study examines the factors that cause anxiety about learning Malay language among primary school students. Many lecturers have a variety of strategies that they use in their classrooms to identify students' concerns about learning Malay language. According to Riasati (2011), more than half of second language students experience some anxiety. Pupils are said to experience anxiety because they have the impression that learning Malay language is less fun and their performance is negatively affected by anxiety about learning Malay language. Anxiety belongs to the affective domain which is related to the emotional aspect of human behavior (Brown, 2007). This clearly shows that anxiety is considered as an uncomfortable feeling that makes a person tense and helpless in the face of challenges (Zabardast, 2014).

Overall, Malay language is a subject that must be taken and passed in the exam by all students at the primary and secondary school levels. In this context, motivation plays a significant role in encouraging students to obtain positive academic achievements. Thus, this study aims to investigate expectancy beliefs and anxiety in learning Malay language among primary school students.

Literature Review

Alice et al. (2016) studied the relationship between value-expectation beliefs and English language performance among students in Maiduguri Metropolis, Borno State, Nigeria. The study involved 400 students (192 males, 208 females) from 8 secondary schools participated in this study. The results of the study show that the correlation matrix has conducted shows that there is a significant difference between belief in hope and academic performance ($r = .647, p = .000$), belief in task difficulty and academic performance ($r = .61, p = .000$), past experience and

academic performance ($r = .65, p < .001$). The ANOVA test revealed significant differences between interrelated variables, namely hope belief, task difficulty, past experience and English language performance, $F(3, 392, 399) = 334.365, p < .05$.

Chin et al. (2020) conducted a study on the belief of hope and subjective task value among trainee Physical Education teachers from the Tun Abdul Razak Campus Teacher Education Institute, Malaysia. 300 trainee teachers (60 male, 240 female) aged between 18 and 25 years old with a mean value (M) of 21.94 and a standard deviation (SP) of 1.64. 13.3% of trainee teachers are between 18 and 19 years old, 19.6% of trainee teachers are between 20 and 21 years old, 62.5% of trainee teachers are between 22 and 23 years old and 4.3% of trainee teachers are between 24 and 25 years old. The findings of the study show that there is no significant difference between genders for hope belief, $t = 1.191, p = .407$, and subjective task value, $t = 1.069, p = .629$. The one-way ANOVA test conducted also did not show a significant difference between age for hope belief, $F = 1.005, p = .391$, and subjective task value, $F = 1.086, p = .355$.

Elaheh Tahernezhad et al. (2014) conducted a study to examine the level of anxiety among Iranian intermediate EFL learners and its relationship with motivation. A total of 80 EFL students (35 male, 45 female) were randomly selected from two language classes at Islamic Azad University, Sardasht Branch, Hormozgan, Province, Iran as participants in this study. The results showed that the percentage of participants in the low anxiety, medium anxiety and high anxiety groups were 18.8%, 52.5% and 28.8%. One-way ANOVA analysis showed that there was a significant difference between the mean scores for the three anxiety groups, $F(2, 77) = 197.65, p < .001$. The t test showed that there was no significant difference between genders for the aspect of anxiety level, $t(78) = -0.42, p = .674$. Therefore, both genders have the same level of language learning anxiety.

Sri Aiswaryya Achanan et al. (2021) conducted a study to examine the level and cause of anxiety in speaking BI as a second language among students studying *Teaching English as a Second Language* (TESL) at a private university. This study uses quantitative methods to collect data through the ELCAS questionnaire which consists of 23 items. A total of 100 TESL students (62 male, 38 female) from a private university were involved in this study. The findings of the study show that a large number of students (64%) have a high level of anxiety to communicate in BI, followed by a moderate level of anxiety to communicate (31%) and a low level of anxiety to communicate (5%). The findings showed that the main cause of speaking anxiety in BI among TESL students is anxiety about negative evaluation ($M = 2.55 - 4.35$), followed by anxiety about the evaluation test ($M = 2.40 - 4.22$) and anxiety in communicating ($M = 4.20 - 4.31$). In addition, this study suggests that students should learn how to overcome speaking anxiety by practicing speaking freely and not feeling inferior about themselves. A high level of speaking anxiety is worrying and has a great influence on students' ability to place themselves in BI situations and their willingness to interact (Cagatay, 2015; Fatinah Dellah et al., 2020).

Yeo et al. (2017) used the ELCAS questionnaire to study gender differences in learning a second language, namely BI among higher education students in Malaysia. This study involved 149 respondents (56 males, 93 females) from Mara University of Technology, Sarawak. Based on the findings, the comparison of mean scores in terms of gender shows that male students ($M = 2.21$) are higher than female students ($M = 2.13$) in language learning. However, the results of the t -

test show that there is no significant difference between male and female students ($t = 1.076, p = .283$). This finding is also consistent with previous studies that showed non-significant results on the level of anxiety towards language learning between genders (Dewaele & Ip, 2013; Elaheh Tahernezhad et al., 2014). This shows that both male and female students are aware of their language performance and face the same signs of anxiety in language classes regardless of gender (Mahfuzah Rafek, 2009). This study also examined the level of anxiety between genders based on four anxiety factors. The results of the t -test showed that there is a significant difference between genders for the factor of anxiety in negative evaluation ($t = 2.217, p = .028$) and anxiety in communication ($t = 2.777, p = .006$).

Methodology

Research Design

The quantitative sampling in this survey study utilized a probability sampling technique, namely simple random sampling.

Sample and Data Collection

The study participants were primary school students drawn from two national-type Chinese (SJK) schools and two national (SK) schools. The total sample comprised 420 respondents, consisting of 211 males and 209 females, all within the age range of 10 to 12 years old and studying in Year 4 to Year 6. The age distribution of the respondents was as follows: 32.4% were 10 years old, 33.3% were 11 years old, and 34.3% were 12 years old. The respondents' participation in this study was voluntary, without any coercion from any party.

The Expectancy-Value Model Questionnaire (EVMQ; Rarujanai et al., 2020) grounded under the Expectancy-Value Model was utilized. The EVMQ consisted of 19 items that were divided into five constructs, which are expectancy beliefs (7 items; e.g., "If you were to list all the students in your class from the worst to the best in BM, where would you put yourself?"), attainment value (3 items; e.g., "Some things that you learn in school help you do things better outside of class. In general, how useful is learning BM?"), utility value (3 items; e.g., "Compared to most of your other subjects, how important is it for you to be good at BM?"), intrinsic value (3 items; e.g., "How much do you like BM?") and cost value (3 items; e.g., "Studying BM takes a lot of energy and time."). All items were rated on a 5-point Likert scale, ranging from 1 (Strongly disagree) to 5 (Strongly agree). The EVMQ and five constructs revealed acceptable to excellent internal consistency with alpha values of .900, .897, .792, .884, .812 and .546, respectively.

The Malay Language Classroom Anxiety Scale (MLCAS; Sri Aiswaryya Achanan et al., 2021) derived from the Theory of Foreign Language Anxiety (Horwitz et al., 1986) was used to assess the individuals' anxiety in learning the Malay language. The questionnaire comprises 23 items with three subscales, which are as follows: Communication apprehension (7 items; "I get nervous when the English language teacher asks questions which I haven't prepared in advance."), fear of negative evaluation (9 items; e.g., "I keep thinking that the other students are better at speaking in Malay language than I am.") and test anxiety (7 items; e.g., "I am worried about being left behind when I lack speaking skills in Malay language."). Participants indicated their responses

on a 5-point Likert scale ranging from 1 (Strongly Disagree) to 5 (Strongly Agree). The overall MLCAS and three subscales demonstrated acceptable to excellent internal consistency with alpha values of .912, .788, .910 and .810, respectively.

Analyzing of Data

The Statistical Package for the Social Science (SPSS) version 28 software was used to analyze the study data obtained from the questionnaires. The research findings resulting from the analysis were reported using descriptive statistics and inferential statistics. The statistical significance level was set at $p < .05$.

Findings / Results

Table 1: Socio-Demographic Characteristics of the Respondents

Characteristics	Frequency (F)	Percentage (%)	<i>M(SD)</i>
Gender			1.50 (0.50)
Male	211	50.2	
Female	209	49.8	
Age groups			2.02 (0.82)
10	136	32.4	
11	140	33.3	
12	144	34.3	
Ethnicity			1.97 (0.72)
Chinese	203	48.3	
Malay	115	27.4	
Bumiputera Sarawak	102	24.3	
Type of Schools			1.50 (0.50)
SJK	210	50.0	
SK	210	50.0	
Frequency in speaking Malay Language			1.53 (0.50)
Often	221	52.6	
Seldom	199	47.4	
Attending Tuition Class			1.50 (0.59)

1 – 2 times	225	53.6	
3 – 4 times	181	43.1	
5 – 6 times	11	2.6	
7 times	3	0.7	
Revision per week			1.72 (0.72)
1 – 2 times	171	40.7	
3 – 4 times	205	48.8	
5 – 6 times	33	7.9	
7 times	11	2.6	

Table 1 shows the demographic characteristics of the participants. A total of 420 participants were involved in this study, comprising of 211 (50.2%) males and 209 (49.8%) females. The age group categories showed that 136 (32.4%) were 10 years old, 140 (33.3%) were 11 years old and 144 (34.3%) were 12 years old. In terms of ethnicity, the Chinese formed the largest percentage with 48.3%, followed by Malay and Bumiputera Sarawak who comprised 27.4% and 24.3% of the population, respectively. The sample consisted of 210 participants each from SJK (50.05%) and SK (50.0%). 221 (52.6%) respondents were classified in the category of frequent Malay speakers, while 199 (47.4%) respondents were in the category of infrequent Malay speakers. The findings also showed that the majority of respondents (53.6%) attended Malay language tuition classes 1 to 2 times a week, followed by 3 to 4 times (43.1%), 5 to 6 times (2.6%), and only 3 respondents (0.7%) attended tuition classes 7 times. In terms of the frequency of weekly revision, 205 (48.8%) respondents revised 3 to 4 times a week, followed by 1 to 2 times (40.7%), 5 to 6 times (7.9%), and 7 times (2.6%).

Table 2: Mean, Standard Deviation and Reliability for EVMQ and MLCAS

Variables	M	SD	α
EVMQ (19 items)			.900
Expectancy beliefs (7 items)	3.44	0.91	.897
Attainment value (3 items)	3.94	0.83	.792
Utility value (3 items)	3.60	1.01	.884
Intrinsic value (3 items)	4.18	0.76	.812
Cost value (3 items)	3.19	0.85	.546
MLCAS (23 items)			.912

Communication apprehension (7 items)	3.49	0.80	.788
Fear of negative evaluation (9 items)	3.65	0.91	.910
Test anxiety (7 items)	3.90	0.76	.810

Table 2 shows the mean, standard deviation and reliability of EVMQ and MLCAS. For EVMQ, intrinsic value (4.18 ± 0.76) was the most crucial factor that influenced the students' participation in learning Malay language, followed by attainment value (3.94 ± 0.83), utility value (3.60 ± 1.01), expectancy beliefs (3.44 ± 0.91), and cost value (3.19 ± 0.85), respectively. The overall EVMQ showed a good internal consistency of .900 while subscales alpha coefficients for expectancy beliefs, attainment value, utility value, intrinsic value and cost value revealed acceptable to high internal consistency ranging from 0.546 to 0.897.

For MLCAS, test anxiety (3.90 ± 0.76) was the most essential factor that influenced the students' situational motivation toward physical activity during PE classes, followed by fear of negative evaluation (3.65 ± 0.91) and communication apprehension (3.49 ± 0.80). The overall questionnaire showed an excellent internal consistency of 0.912, while subscales alpha coefficients for communication apprehension, fear of negative evaluation and test anxiety were 0.788, 0.910 and 0.810, respectively.

Table 3: Independent T-Test of EVMQ and MLCAS based on Gender

Variables	Male		Female		<i>t</i> -test	
	M	SD	M	SD	<i>t</i> (df)	<i>p</i>
EVMQ						
Expectancy beliefs	3.38	0.89	3.49	0.92	-1.218 (418)	.224
Attainment value	3.96	0.85	3.92	0.82	0.572 (418)	.568
Utility value	4.10	0.78	4.27	0.72	-2.363 (418)	.019*
Intrinsic value	3.50	1.07	3.71	0.94	-2.165 (418)	.031*
Cost value	3.25	0.88	3.13	0.81	1.359 (418)	.175
MLCAS						
Communication apprehension	3.47	0.78	3.51	0.82	-0.539 (418)	.590
Fear of negative evaluation	3.75	0.88	3.58	0.93	1.875 (418)	.061
Test anxiety	3.91	0.76	3.88	0.75	0.473 (418)	.637

Note. M = Mean; SD = Standard Deviation.

* $p < .05$.

Table 3 shows the independent *t*-test of EVMQ and MLCAS based on gender. For EVMQ, the results revealed there was no statistically significant difference between schools in expectancy beliefs, attainment value, and cost value with $p > .05$. Conversely, there was significant difference between gender in utility value, $t(418) = -2.363, p = .019$, whereby the male (4.10 ± 0.78) rated 0.17 points lower than the female (4.27 ± 0.72). Besides, there was also significant difference between gender in intrinsic value, $t(418) = -2.165, p = .031$, whereby the male (3.50 ± 1.07) rated 0.21 points lower than the female (3.71 ± 0.94).

For MLCAS, results revealed that there was no significant difference between schools in communication apprehension, fear of negative evaluation, and test anxiety with $p > .05$.

Table 4: One-Way ANOVA of EVMQ and MLCAS based on Age Groups

Variables	Age Groups			<i>F</i> (2, 417)	<i>p</i>
	10	11	12		
	M (SD)	M (SD)	M (SD)		
EVMQ					
Expectancy beliefs	3.35 (0.88)	3.40 (0.99)	3.56 (0.84)	1.964	.142
Attainment value	3.91 (0.70)	3.77 (0.95)	4.13 (0.79)	6.781	.001*
Utility value	4.24 (0.77)	4.07 (0.83)	4.23 (0.65)	2.192	.113
Intrinsic value	3.21 (0.91)	3.54 (1.11)	4.04 (0.80)	27.561	< .001*
Cost value	3.28 (0.91)	3.24 (0.88)	3.06 (0.73)	2.705	.068
MLCAS					
Communication apprehension	3.54 (0.81)	3.38 (0.83)	3.55 (0.75)	2.071	.127
Fear of negative evaluation	3.70 (0.86)	3.62 (0.93)	3.68 (0.93)	0.273	.762
Test anxiety	3.95 (0.74)	3.83 (0.77)	3.91 (0.77)	0.801	.450

Note. M = Mean; SD = Standard Deviation.

* $p < .05$.

Table 4 shows the one-way ANOVA of the EVMQ and MLCAS based on age groups. Results revealed that there was no statistically significant difference between the three age groups in expectancy beliefs, utility value and cost value with $p > .05$. In contrast, results revealed that there was significant difference between age groups in attainment value, $p = .001$. Post-hoc Tukey HSD adjusted comparisons for attainment value indicated that the mean score for 11 years old group (3.77 ± 0.95) was significantly lower than the 12 years old group (4.13 ± 0.79), $\mu = -0.36$.

Next, there was significant difference between age groups in intrinsic value, $F(2, 417) = 27.561$, $p < .001$. Post-hoc Tukey HSD adjusted comparisons for intrinsic value indicated that the mean score for 10 years old group (3.21 ± 0.91) was significantly lower than the 11 years old group (3.54 ± 1.11), $\mu = -0.33$, and the 12 years old group (4.04 ± 0.80), $\mu = -0.84$.

For MLCAS, results revealed that there was no significant difference between age groups in communication apprehension, fear of negative evaluation, and test anxiety with $p > .05$.

Table 5. Independent T-Test of EVMQ and MLCAS based on Type of Schools

Variables	SJK		SK		<i>t</i> -test	
	M	SD	M	SD	<i>t</i> (df)	<i>p</i>
EVMQ						
Expectancy beliefs	2.90	0.81	3.98	0.63	-15.126 (393.63)	< .001*
Attainment value	3.60	0.87	4.27	0.65	-8.944 (387.50)	< .001*
Utility value	4.03	0.82	4.33	0.65	-4.126 (398.26)	< .001*
Intrinsic value	3.23	0.96	3.98	0.92	-8.272 (418)	< .001*
Cost value	3.13	0.87	3.25	0.82	-1.497 (418)	.135
MLCAS						
Communication apprehension	3.43	0.80	3.55	0.79	-1.512 (418)	.131
Fear of negative evaluation	3.64	0.93	3.69	0.89	-0.603 (418)	.547
Test anxiety	3.83	0.78	3.97	0.73	-1.882 (418)	.061

Note. SJK = Sekolah Jenis Kebangsaan; SK = Sekolah Kebangsaan; M = Mean; SD = Standard Deviation.

* $p < .05$.

Table 5 shows the independent *t*-test of EVMQ and MLCAS based on the type of schools. For EVMQ, the results revealed there was statistically significant difference between schools in expectancy beliefs, $p < .001$, whereby the SJK (2.90 ± 0.81) rated 1.08 points lower than the SK (3.98 ± 0.63). Besides, there was significant difference between schools in attainment value, $p < .001$, whereby the SJK (3.60 ± 0.87) rated 0.67 points lower than the SK (4.27 ± 0.65). Next, results also showed significant between schools in utility value, $p < .001$, whereby the SJK (4.03 ± 0.82) rated 0.30 points lower than the SK (4.33 ± 0.65). Similarly, there was significant difference between gender in intrinsic value, $p < .001$, whereby the SJK (3.23 ± 0.96) rated 0.76

points lower than the SK (3.98 ± 0.92). However, there was no significant difference between schools in cost value with $p > .05$.

For MLCAS, results revealed that there was no significant difference between schools in communication apprehension, fear of negative evaluation, and test anxiety with $p > .05$.

Discussion

Based on the research findings, female students placed a higher utility value on learning Malay language compared to male students. This finding is consistent with previous studies which have shown that female students have a higher perception that acquiring knowledge is useful for their future compared to male students (Hulleman et al., 2017; Schunk et al., 2007). Therefore, female students are more motivated to engage in Malay language learning tasks or activities that they believe their efforts will lead to the desired results or achievement goals, compared to male students. This may be due to sociocultural factors, personal interests and goals, and perceived career opportunities (Naderi et al., 2008). In terms of sociocultural factors, there is a biased perception among the community that females are better in Malay language learning. Females are also expected to have stronger Malay language learning skills and demonstrate linguistic competence as something necessary and compulsory for success in the education field (Noorhidayah Abu Hasim et al., 2020). In terms of personal interests and goals, it was found that females are more inclined to participate with full interest, actively and diligently in Malay language learning as it allows them to communicate using grammatically correct and fluent Malay with students of different ethnicities (Ai, 2004). Clearly, utility value is a factor that influences motivation and engagement. When individuals perceive a task or activity as having high utility value, students are more likely to be motivated and engaged in that task. This is because students believe that the task is meaningful, relevant and has practical value for their current or future goals (Mohd Uzir Zubir et al., 2018). This perception can increase their intrinsic motivation and make them more likely to engage in the task for their own benefit.

In addition, the research results also show a significant difference between genders in terms of intrinsic value, with female students exhibiting higher intrinsic value than male students in Malay language learning. This finding is supported by Kluag and Koon (2003) that female students tend to be driven by intrinsic motivation in teaching and learning, while male students tend to be driven by extrinsic motivation. This finding is consistent with previous studies conducted by Gillet et al. (2012) and Monazami et al. (2012). Therefore, it can be seen that intrinsic value is influenced by motivational factors consisting of intrinsic and extrinsic elements. This is because motivation is seen as a process that drives an individual to achieve the desired success in teaching and learning (Othman & Ismail, 2012; Slameto, 2013). In the context of Malay language learning, female students are driven by intrinsic motivation associated with natural student behavior formed by internal factors such as enjoying the teaching and learning process and seeing it as an opportunity to learn without involving any external factors, while male students are driven by extrinsic motivation associated with student behavior formed by external factors, such as punishment and rewards (Suwatno, 2011; Zulkifley Hamid et al., 2010).

Next, students aged 11 years old have a lower level of achievement value compared to students aged 12 years old in Malay language learning. The analysis of these research findings is consistent with the findings of previous researchers that students' academic achievement increases with age (Eccles et al., 1993). This may be because students have begun to realize the importance of learning Malay language. This statement is supported by Zulkifley Hamid et al. (2010), who stated that Malay language plays a significant role as the national official language and the medium of instruction in the education system, as stipulated in Article 152 of the Malaysian Constitution (Noraien Mansor & Noor Rohana Mansor, 2013). Therefore, Malay language must be learned by every individual regardless of race, as it represents the national identity of Malaysians (Noor Azmira Mohamed & Nor Azlili Hassan, 2019). Evidently, Malay language is a compulsory subject taught in all schools because it acts as an asset in fostering unity among the multiracial society and a tool for the formation of national identity in Malaysia (Siti Nor Azhani Mohd Tohar & Siti Nor Baya Mat Yacob, 2019). By being aware of the importance of Malay language, students will become more diligent and active in the Malay language learning process, making every effort to understand and delve deeper into the Malay language knowledge taught by the teachers. Evidently, students also actively ask the teachers when facing difficulties in completing assignments and voluntarily answer questions asked by the teachers in the classroom. This clearly shows that students have a strong determination and perseverance to advance themselves in Malay language learning, and are not easily discouraged when facing learning obstacles (Nadhilah Abdul Pital & Kamarul Shukri Mat Teh, 2018). This is associated with the motivation that drives a student to be constantly diligent and progressive to achieve a certain goal (Mustaffa, 2017; Robbins & Judges, 2007).

Furthermore, students aged 10 years old have lower intrinsic value compared to students aged 11 and 12 years old in Malay language learning. This finding is supported by Eccles et al. (1993) that students' interest increases with age. This may be due to the factor of intrinsic motivation. Intrinsic motivation is able to drive individuals to continue learning and improve their language skills (Bruner, 1966). Based on the increase in age, students begin to enjoy the personal enjoyment and satisfaction obtained from Malay language teaching and learning activities and are more inclined to be motivated to participate in the Malay language learning process meaningfully without requiring extrinsic motivation involving any external factors such as rewards, recognition, and competition (Ryan & Deci, 2000). Previous studies have stated that intrinsic motivation is the main factor in the success of Malay language learning because intrinsically motivated students tend to have better academic performance results than students who are not intrinsically motivated (Mardziah Abdullah et al., 2021; Umami Salehah Hamzah & Nurfaradilla Mohamad Nasri, 2020). It is clear that intrinsic motivation is a naturally occurring motivation from internal stimuli that encourages individuals to carry out certain activities without any external benefits. In essence, intrinsic motivation can build self-confidence in students and have a positive impact on Malay language teaching and learning.

Moreover, students in SK schools have higher expectancy beliefs compared to students in SJK schools in Malay language learning. This suggests that SK students possess a more positive perspective and become more mature in facing difficulties throughout the Malay language learning process (Nadhilah Abdul Pital & Kamarul Shukri Mat Teh, 2018). This may stem from the factor of the frequency of students using Malay language in their daily lives. This statement

is supported by Muhammad Norhazim Izman and Zamri Mahamod (2023), who stated that Malay and Sarawak Bumiputera students not only use Malay language in school, but they also use Malay language in their daily conversations and interactions from a young age. On the other hand, Chinese students only learn Malay language in school for a limited time and rarely use Malay language in their daily lives, but frequently use the Chinese language to communicate with family members and other friends. This is because Chinese students are more inclined to communicate in their mother tongue, which is the Chinese language, with others, especially during the teaching and learning process, causing the level of proficiency and learning progress of SJK students to be slower compared to SK students due to less practice in Malay language (Juwairiah Osman et al., 2018). This is supported by previous studies stating that students from Malay and Sarawak Bumiputera backgrounds are more inclined to study in SK schools, while students from Chinese backgrounds are more inclined to study in SJK schools (Ngien & Ching, 2016; Zulkifley Hamid et al., 2010). This indirectly shows that SK students have more trust and confidence in Malay language learning. This high level of confidence indicates that students have a positive belief towards Malay language learning. High positive beliefs have a positive impact in encouraging and motivating students to learn Malay language more progressively and with the ability to face challenges in Malay language learning with steadfastness and diligence (Nadhilah Abdul Pital & Kamarul Shukri Mat Teh, 2018).

Lastly, SK students have higher achievement value, utility values and intrinsic value compared to SJK students. This research finding is consistent with previous studies that have stated that SK students have better academic achievement in Malay language compared to SJK students (Zaiton Sharif, 2017; Zukina Yusoff, 2003). This may also be due to family factors, where SK students' parents are more frequently concerned about their academic achievements over time. According to Nguon (2012), parental involvement in motivating children in the education system is closely related to the positive impact on students' academic performance. This finding is also supported by previous studies stating that parental involvement in providing a comfortable learning environment at home, providing encouragement and motivation to their children in school, is highly prioritized as it influences students to follow Malay language learning with full commitment, thus achieving excellent academic achievements (Jhang & Lee, 2018). Therefore, comprehensive parental involvement is crucial in children's learning as it can improve socio-emotional development in terms of increased self-confidence and courage in consistently engaging in Malay language teaching and learning activities, thus stimulating positive and excellent academic performance at school (Zaiton Sharif, 2017). According to Umami Salehah Hamzah and Nurfaradilla Mohamad Nasri (2020), student-centered strategies that emphasize the use of cooperative learning methods are more suitable to be used in the current education system's teaching and learning, as they incorporate elements of creative and critical thinking skills and improve the ability to communicate between students (Mohammad Shah, 2016). With the diversity of teaching and learning initiatives and strategies, the teaching and learning process can run smoothly and effectively as students can understand and master the input on the topics delivered by Malay language teachers in the classroom more accurately and effectively, thus achieving the teaching and learning objectives and obtaining excellent marks during examinations, while also contributing to the improvement of self-confidence and skills in each student (Guay et al., 2003; Nurull Salmi Md. Dazali & Isha Awang, 2017).

To increase students' interest in Malay language learning, teachers are encouraged to integrate the use of ICT in line with 21st-century learning, as it makes teaching and learning activities more interesting, thus successfully attracting students' attention to fully participate in Malay language learning (Syed Lamsah Syed Chear & Melor Md Yunus, 2019). In essence, teachers must constantly improve their teaching professionalism. With this, teachers will be able to select and use the most appropriate and suitable teaching strategies and methods in the Malay language teaching and learning process to ensure that the teaching and learning objectives are achieved, while also increasing students' motivation, interest, and self-confidence to actively engage in Malay language teaching and learning. This will be able to reduce students' anxiety during Malay language teaching and learning.

Conclusion

As a conclusion, the findings of this study are highly significant, particularly for Malay language teachers in primary schools, to understand and recognize students' beliefs and anxieties towards Malay language learning. With this information, Malay language teachers can develop suitable, engaging, and effective strategies to enhance students' beliefs and reduce their anxieties towards Malay language learning, thereby increasing their interest, motivation, and active participation in the classroom. Additionally, the results of this study can be considered by the District Education Office (PPD) and the Sarawak State Education Department (JPN) to formulate policies that can help increase students' involvement in Malay language learning.

Recommendations

The researcher hopes that future research in this field can be conducted comprehensively across all national-type Chinese (SJK) and national (SK) schools, involving all districts within Malaysia. Besides, the researcher hoped that other researchers investigate the differences in these value-expectancy beliefs and anxieties between ethnic groups in Malay language learning among Level II primary school students. Furthermore, it is hoped that future research in this field can continue to examine the relationships between expectancy beliefs, achievement value, utility value, intrinsic value, cost value, communication anxiety, negative evaluation anxiety, and test anxiety towards Malay language learning among Level II primary school students, using Pearson correlation statistical analysis at a significance level of $\alpha = .05$, or a 95% confidence level.

Limitations

The limitation of this study is that it was only conducted in primary schools under the Kuching PPD. This study only involved Level II students (Years 4 to 6) from primary school.

References

- Achmad, D., & Yusuf, Y. Q. (2016). Exploring the motivational factors for learning English in Aceh. *Dirasat, Human and Social Sciences*, 43, 2223-2234.
- Ai, X. (2004). Creativity and academic achievement: An investigation of gender differences. *Creativity Research Journal*, 12(4), 329-337.
- Ali, Z., Tatlah, I. A., & Saeed, M. (2011). Motivation and student's behavior: A tertiary level study. *International Journal of Psychology and Counselling*, 3(2), 29-32.
- Alice, M. K. J., Nwachukwu, K. I., & Domiya, G. A. (2016). Expectancy beliefs and English performance of secondary school students in Maiduguri Mropolis, Borno State, Negeria. *Journal of Education and Practice*, 7(26), 62-68.
- Alizadeh, M. (2016). The impact of motivation on English language learning. *International Journal of Research in English Education*, 1(1), 11-15.
- Anwar, G., & Abdullah, N. N. (2021). Inspiring future entrepreneurs: The effect of experiential learning on the entrepreneurial intention at higher education. *International Journal of English Literature and Social Sciences*, 6(2), 183-194.
- Brown, D. H. (2007). *First language acquisition: Principles of language learning and teaching*. Pearson ESL.
- Bruner, J. S. (1966). *Towards a theory of instruction*. Bellnap Press of Harvard University Press.
- Cagatay, S. (2015). Examining EFL students' foreign language speaking anxiety: The case at a Turkish State University. *Procedia - Social and Behavioral Sciences*, 199, 648-656.
- Chin, N. S., Wee, E. H., Kuan, G., & Lim, B. H. (2020). Expectancy beliefs, task values, achievement motivation and motivation climate in physical education among Malaysian trainee teachers. *Physical Education in Universities: Researches – Best Practices – Situation*, 107-114.
- Eccles, J. S., Wigfield, A., Harold, R. D., & Blumenfeld, P. (1993). Age and gender differences in children's self- and task perceptions during elementary school. *Child Development*, 64, 830-847.
- Elaheh Tahernezhad, Fatemeh Behjat & Ali Asghar Kargar. (2014). The relationship between language learning anxiety and language learning motivation among Iranian intermediate EFL learners. *International Journal of Language and Linguistics*, 2(6-1), 35-48. <https://doi.org/10.11648/j.ijll.s.2014020601.16>
- Ezzah' Afifah Nasrudin & Rohaida Kamaruddin. (2020). Ekstralinguistik dalam personaliti mempengaruhi pembelajaran bahasa Melayu di Institusi Pengajian Tinggi Swasta. *Jurnal Dunia Pendidikan*, 2(2), 158-169. <http://myjms.moe.gov.my/index.php/jdspd>
- Fatinah Dellah, N., Zabidin, N., Afifa Nordin, N., Hana Amanah, F., & Amirul Atan, M. (2020). Glossophobia: Evaluating university students' speaking anxiety in English oral presentations. *Journal of Ilmi Jilid*, 10(1) , 116–126.

- Gillet, N., Vallerand, R. J., & Lafreniere, M. A. K. (2012). Intrinsic and extrinsic school motivation as a function of age: The mediating role of autonomy support. *Social Psychology Education, 15*(1), 77 – 95.
- Guay, F., Marsh, H. W., & Boivin, M. (2003). Academic self-concept and academic achievement: Developmental perspectives on their causal ordering. *Journal of Educational Psychology, 95*(1), 124.
- Horwitz, E. K. (1988). The beliefs about language learning of beginning university foreign language students. *The Modern Language Journal, 72*(3), 283-294.
- Horwitz, E. K., Horwitz, M. B., & Cope, J. (1986). Foreign language classroom anxiety. *The Modern Language Journal, 70*(2), 125-132.
- Huang, Z. (2006). Learner beliefs of language learning revisited. *Sino-US English Teaching, 3*(3), 62-67.
- Hulleman, C. S., Kosovich, J. J., Barron, K. E., & Daniel, D. B. (2017). Making connections: Replicating and extending the utility value intervention in the classroom. *Journal of Educational Psychology, 109*(3), 387–404.
- Javadi, J., Jahandar, S., & Khodabandehlou, M. (2012). A study on the relationship between Iranian EFL learners' beliefs and their writing ability. *International Journal of Applied Linguistics & English Literature, 1*(4), 161-172.
- Jhang, F. H., & Lee, Y. T. (2018). The role of parental involvement in academic achievement trajectories of elementary school children with Southeast Asian dan Taiwanese mothers. *International Journal of Educational Research, 89*, 68-79.
- Juwairiah Osman, Jamilah Bebe Mohamad, Anis Nabilla Ahmad & Jamal Rizal Razali. (2018). Malay language teaching and learning strategy among international students at Universiti Malaysia Pahang. *Journal of Malay Language, Education and Literature, 9*, 61-79.
- Kluag, J., & Koon, L. (2003). Evaluation of the relationship between expectancy-value and academic achievement.
- Mahfuzah Rafek. (2009). *Anxiety level towards learning a foreign language: A focus on learning Japanese language among UTM students*. Faculty of Education. UTM.
- Mardziah Abdullah, Mariani Md Nor & Fonny Dameaty Hutagalung. (2021). Pendekatan pengajaran bermain di bilik darjah dalam kalangan guru prasekolah. *Jurnal Penyelidikan Pendidikan, 39*, 64-74.
- Mohammad Shah. (2016). Etika kerja guru dan hubungannya dengan pembelajaran dan pengajaran berkesan abad ke-21. *Jurnal Pendidikan Majlis Pengetua Sekolah Malaysia*. Bintang Printing Sdn. Bhd.

- Mohd Uzir Zubir, Rohaidah Kamaruddin & Sharil Nizam Sha'ri. (2018). Motivasi dan sikap terhadap pembelajaran bahasa Melayu murid tingkatan satu, sekolah menengah persendirian Kwang Hua. *Jurnal Kesidang*, 3, 82-91.
- Monazami, M., Hedayatikatooli, A., Neshati, A., & Beiki, Y. (2012). A comparison of the motivation of male and female athletes in Golestan, Iran. *Annals of Biological Research*, 3(1), 31-35.
- Muhammad Norhazim Izman & Zamri Mahamod. (2023). The value of the Malay language as the basis of self-identity among students of the National University of Malaysia. *PENDETA*, 14(2), 11-25. <https://doi.org/10.37134/pendeta.vol14.2.2.2023>
- Naderi, H., Abdullah, R., Hamid, T. A., & Aizan, T. (2008). Male and female intelligence among undergraduate students: Does gender matter? *Asian Journal of Scientific Research*, 1(5), 539-543.
- Nadhilah Abdul Pital & Kamarul Shukri Mat Teh. (2018). Tahap kepercayaan pelajar sekolah menengah terhadap pembelajaran bahasa Arab. *Issues in Language Studies*, 7(1), 57-75.
- Ngien, M. M., & Ching, T. H. (2016). Learning Chinese language in SJKC: A case study of Bumiputera students in Sarawak. *Journal of Chinese Literature and Culture*, 4(1), 63-84.
- Nguon, S. C. (2012). Parental involvement and students' achievement in Cambodia: Focusing on parental resourcing of public schooling. *International Journal of Educational Research*, 53, 213-224. <https://doi.org/10.1016/j.ijer.2012.03.011>
- Noor Azmira Mohamed & Nor Azlili Hassan. (2019). Penguatan bahasa Melayu sebagai bahasa perpaduan di Institusi Pengajian Tinggi Swasta. *Malaysian Journal of Social Sciences and Humanities*, 4(4), 19-28. <https://doi.org/10.47405/mjssh.v4i4.227>
- Noorhidayah Abu Hasim, Nurul Huda Adnan, Nor Izzuani Izhar & Abdul Muhaimin Abu Bakar. (2020). Pengaruh persekitaran dalam penggunaan strategi memori kosa kata pelajar KUIM. *Jurnal Kesidang*, 5, 1-9.
- Noraïen Mansor & Noor Rohana Mansoor. (2013). *Bahasa Melayu realiti dan harapan*. Universiti Malaysia Terengganu.
- Nurull Salmi Md. Dazali & Isha Awang. (2017). Self-confidence level among education's undergraduate in Universiti Utara Malaysia. *Journal of Social Science*, 3, 30-40.
- Othman, M. S., & Ismail, M. F. (2012). Faktor-faktor yang mempengaruhi pencapaianpelajar dalam pengajaran & pembelajaran bahasa Arab: Satu tinjauan di SMAP Kajang. *Persidangan Kebangsaan Pengajaran dan Pembelajaran Bahasa*.
- Rarujanai, K., Teo, E. W., Ling, A., Chin, N. S., & Mansur. (2020). Validation of the Malay-translated expectancy value model questionnaire and multi-dimensional sportspersonship orientations scale among Malaysian adolescence field hockey players. *Cakrawala Pendidikan*, 39(1), 230-241. <https://doi.org/10.21831/cp.v39i1.26866>

- Riasati, M. J. (2011). Language learning anxiety from EFL learners' perspective. *Middle-East Journal of Scientific Research*, 7(6), 907-914.
- Rohaidah Kamaruddin. (2012). *Hubungan Faktor ekstralinguistik bahasa kedua dengan pencapaian bahasa Melayu pelajar-pelajar Melayu di Negeri Sembilan*. Universiti Putra Malaysia.
- Ryan, R. M., & Deci, E. L. (2000). Intrinsic and extrinsic motivations: Classic definitions and new directions. *Contemporary Educational Psychology*, 25(1), 54-67.
- Seven, M. A. (2020). Motivation in language learning and teaching. *African Educational Research Journal*, 8(2), 62-71. <https://doi.org/10.30918/AERJ.8S2.20.033>
- Shabani, M. B. (2012). Levels and sources of language anxiety and fear of negative evaluation among Iranian EFL learners. *Theory and Practice in Language Studies*, 2(11), 2378-2383.
- Siti Nor Azhani Mohd Tohar & Siti Nor Baya Mat Yacob. (2019). Sistem pendidikan dan pemertabatan bahasa Melayu sebagai bahasa kebangsaan di Malaysia. *Seminar Tamadun, Etnik dan Turath Islami*, 299-310.
- Slameto. (2013). Utilizing ICT to improve influential cooperative learning toward student's achievement in Satya Wacana Christian University Salatiga. *International Journal of e-Education, e-Business, e-Management and e-Learning*, 3(4), 330-332.
- Sri Aiswarrya Achanan, Punitha Ramuloo & Ayu Rita Mohamad. (2021). Second language speaking anxiety among TESL undergraduates in a private university. *Selangor Humaniora Review*, 5(2), 124-145.
- Suwatno, H. (2011). *Manajemen SDM dalam Organisasi Publik dan Bisnis*. Alfabeta.
- Syed Lamsah Syed Chear & Melor Md Yunus. (2019). Strategies to implement 21st century skills in preschool teachers training. *Southeast Asia Early Childhood Journal*, 8(1), 1-10.
- Taib, N. A. M., Ismail, S., Isa, H. M., Zakaria, N. N. N., Rahmat, N. H., & Idris, N. (2022). Exploring belief, expectation and behaviour in learning a foreign language. *International Journal of Academic Research in Business and Social Sciences*, 12(8), 1289-1299.
- Ulfa, M., & Bania, A. S. (2019). EFL student's motivation in learning English in Langsa, Aceh. *Studies in English Language and Education*, 6(1), 163-170.
- Umami Salehah Hamzah & Nurfaradilla Mohamad Nasri. (2020). Kajian meta analisis: Keberkesanan pembelajaran koperatif terhadap motivasi pembelajaran murid. *Jurnal Penyelidikan Sains Sosial*, 3(9), 21 - 33.
- Usman, B., Silviyanti, T. M., & Marzatillah. (2016). The influence of teacher's competence towards the motivation of students in learning English. *Studies in English Language and Education*, 3(2), 134-146.
- Wenden, A. (1986). Helping language learners think about learning. *ELT Journal*, 40(1), 3-12.

- Yeo, J. Y., Chin, V., & Ting, H. L. (2017). The role of gender in English language learning anxiety among tertiary students. *e-Academia Journal*, 6(2), 14-22.
- Zabardast, S. (2014). Foreign language use anxiety in teachers' and students' attitude. *International Journal on New Trends in Education and Their Implications*, 5(4), 74-84.
- Zaiton Sharif. (2017). Sokongan ibu bapa terhadap pendidikan anak pendidikan khas. *Proceedings of the International Conference on Special Education*, 2(1), 354-364.
- Zukina Yusoff. (2003). *Hubungan antara latar belakang keluarga dengan pencapaian akademik pelajar Melayu dalam PMR*. Universiti Utara Malaysia.
- Zulkifley Hamid, Rahim Aman & Karim Harun. (2010). Sikap terhadap bahasa Melayu: Satu kajian kes di Pantai Timur Semenanjung. *Jurnal Melayu*, 5, 163-176.



SMILE as an Innovative Pedagogy to Enhance English young learners' Reading Competence

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Abstract: The incorporation of technology into the education field has brought a significant impact on the teaching and learning experience. Teachers' perceptions towards different modes of teaching and learning literature in ESL classrooms have also transformed. Various pedagogical approaches have been introduced for learners to foster increased enthusiasm and engagement in literature education. Consequently, a learning kit called the SMILE e-book was developed using the ADDIE model as a valuable tool for enhancing literature education in the Malaysian context. This e-book was then used among primary and secondary school students. Technology Acceptance Model (TAM) 2 was employed to assess its efficacy. The researchers also conducted a survey among the student participants and carried out an interview with the teachers. This helped the researchers to anticipate learners' perceived ease of use, perceived usefulness, attitude and behavioural intentions towards using the SMILE e-book in the ESL literature classroom. The findings revealed that teachers show positive attitudes as the e-book supports teachers in delivering effective literature lessons; in addition, students exhibit a similar attitude and perceive SMILE as a useful and user-friendly tool, aiding comprehension and understanding of literature elements. This study highlights the importance of using technology to enhance the learning experience in ESL literature classrooms and provide valuable insights for ESL educators to align their teaching strategies with innovative pedagogies.

Keywords: *English as a Second Language, literature component in ESL classrooms, multimodal elements, technology, Technology Acceptance Model*

Introduction

The emergence of technology in the 21st century has revolutionised the way teachers look at teaching and learning literature in English classrooms. Literature is said to be an alternative to further enhance language learning which develops learners' comprehension, interpretation, critical thinking and communication skills. Different methodologies and pedagogies have been introduced for the teaching and learning of literature such as Critical Cosmopolitan Pedagogies (CPP), Culturally Responsive Pedagogy (CRP) and Culturally Responsive Teaching Pedagogy (CRT). Serious efforts have been considered to develop learners' interest in learning literature and the most prominent initiative in this age is the use of technology. Technology is an essential and powerful tool to make learning literature more effective and interactive (Kasih et al., 2021). It provides broader access to a range of resources. Furthermore, technology enhances the learners' learning experience through different means such as visual, audio and kinesthetic. It is designed to cater to multiple learning strategies for an inclusive classroom experience.

However, the objectives derived by the Malaysian Ministry of Education (MOE) have not been achieved through the literature component in the teaching of English as a second language. Research validates this. Salleh and Ismail (2022) shared that learners are not enjoying literature lessons and their interests decline day by day due to multiple challenges such as lack of vocabulary knowledge and non-suitable reading materials. Sivapalan et al. (2017) stated that students do not have any interest in learning literature due to those difficulties they encounter in the literary texts such as stated in the study by Sidhu (2003) "literary texts that did not fit the interest of learners, linguistic difficulty and cultural alienation" (p.30). PISA reported that students' performance for reading literacy among Malaysian 15-year-olds is 415 points, which is low compared to an average of 487 points in OECD nations (OECD PISA, 2018). With a statistically significant difference of 26 points, girls outperform boys, whereas the average OECD is 30 points higher for girls. The report suggested that the reading performance among Malaysians is at an alarming rate.

Nagayar et al. (2015) observed that Malaysian students were not keen to read literary texts during ESL classrooms. This resulted teachers' needing to read the texts in the classroom, along with the provision of synopsis for the students. This situation has reaped the immersive reading experience in literature. Over time, MoE observed the significance of using literature in English language education (ELE) because it helps students in terms of personal growth, cultural enrichment and language development (Sivapalan & Subramaniam, 2008). Moreover, there is a scarce number of innovative projects utilising technology in the teaching and learning of literature in ESL classrooms, including a debate on maintaining literature component in ELE (Rashid & Vethamani, 2010). Therefore, this study investigates the usefulness of the SMILE e-book as an alternative to enhance learners' competence in reading short stories and novels.

Literature Review

Literature Education in Malaysia

Literature education refers to the teaching and learning of literature as an academic subject. It is the study of written works such as plays, novels, poems, short tales and non-fiction pieces, with an emphasis on the topics, structure and literary devices used by the authors. Suliman et al. (2019) propose that literature can be defined as learning that is associated with language and linguistics. Meanwhile, MoE (2006) defines children literature as materials created for and widely read, viewed and listened to by children that have an imaginative element. Therefore, literature involves all four main skills: listening, speaking, reading and writing combined for holistic language learning.

According to a study by Stefanova et al. (2017), literature aims to develop learners' skills in comprehension, interpretation, critical thinking and communication. Thus, it includes a range of activities such as listening to different perspectives, engaging in discussions, reading different texts and writing essays. It also serves to develop language proficiency and becomes a channel to express appreciation for culture (Tshering, 2023). Short et al. (2023) also added that learners can explore and experience different cultures and perspectives through literature which in turn will teach them about appreciation, empathy and understanding. It also helps learners to develop their creativity, aesthetic sense and imaginative thinking (Carter & McRae, 2014). Overall, literature education aims to foster a deep understanding and appreciation of literature and to develop students' abilities to engage with texts critically and effectively.

Since the 1970s, literature has made its way into the Malaysian curriculum as a component in English (Salleh & Ismail, 2022). Teaching literature to Malaysian learners is oftentimes met with hurdles. It is well known that literature education in Malaysia is a topic most teachers tend to avoid. Nevertheless, literature plays a significant role in the Malaysian education context. It is regarded as an important component of the English language curriculum and is taught extensively in schools and universities. Learners are exposed to a range of literary texts such as novels, poems, short stories and plays from various genres and periods. According to the Malaysian Education Blueprint 2015- 2025 (2015), the Malaysian English language curricular includes both local and international literature in the curriculum, aiming to provide students with a well-rounded understanding of literary works.

The curriculum for literature in Malaysian ELE includes the instruction of drama, poetry and short stories. The MOE (2003) specified the goals of the component, along with its objectives and learning outcomes that helps learners become more adept at reading, comprehending and responding to literary works. They can better understand human values and concerns by investigating the problems raised in the selected literary texts. The MOE has highlighted the objectives of literature education to “foster learners’ appreciation and pleasure for reading literary works; a deeper understanding of important human concerns and human relationships; the ability to appreciate values that would enhance one's understanding of oneself and their relationships with others; a beginning ability to communicate one's response to texts supported by reasons; and a deeper understanding of important human concerns and human relationships.” (Ministry of Education Malaysia, 2013).

Multimodal technology in the teaching and learning of literature

Teaching strategies and approaches have shifted from the traditional teaching methods to the use of technology in teaching literature (Haleem et al., 2022). Technology has currently evolved in the education setting, helping to improve teaching and learning methods in various interesting ways. Ahmad et al. (2019) believe that the wide range of learning style options in the 21st-century English classroom is suitable and applicable for learners. It offers teachers to choose and adapt appropriate content and activities for their students (Altinpulluk, 2019). Learning literature through the use of videos, social media and interactive e-learning are widely incorporated, shifting the traditional teacher-centred approach to a student-centred learning method. Salleh and Ismail (2022) further support this notion with findings that “engaging activities eventually may boost students’ confidence level and ensure successful literature learning in the classroom” (p.1869).

Technology-based learning activities offer more benefits and opportunities for natural learning compared to traditional learning activities. In addition, they are effective, fast and have a greater impact on student performance (Rahamat et al., 2017). According to Ilmi and Dewi (2022), implementing technology-enhanced learning is beneficial as it promotes a positive learning attitude among learners. This is because, with the use of technology, learners have more interest and motivation to learn the language skills as they find it enjoyable. It is indeed important to design lessons in a way that arouses and captivates learners' interest as this helps in developing learners' motivation to learn. Fadzli and Ismail (2023) and Idris et al. (2020) found that competition and rewards help learners instil motivation to learn.

There are several methods for instructing and learning English literature, and one of them is multimodal. The term multimodality was coined by Cazden (1996) through a discussion of evolving means of communication due to technologies. They argued for a much broader view of literacy than the traditional printed text and advocated for a new approach to engage students and use all available resources, especially multimedia technologies (Cazden, 1996). The multimodal approach encompasses the utilisation of various modes of communication and representation to enrich language acquisition and comprehension. Within this approach, "modes" encompass a range of channels and mediums through which information is conveyed, including spoken language, written text, images, gestures and more. The fundamental objective of a multimodal approach is to accommodate the varied learning styles and preferences of English language learners by actively engaging them through a multitude of sensory and cognitive pathways.

Md Salleh and Ismail (2022) concluded that incorporating ICT and technology in literature learning aids in education and curriculum and provides effective literature learning. Roy (2019) highlighted the effectiveness of using multiple technology tools in ESL classrooms to encourage students to comprehend and self-immense in the lesson while continuing their interest in the lessons. Therefore, teachers need to design tools that promote motivation and stimulate learners' interest, as this is a driving factor in developing good learning habits among learners. Incorporating technology in literature not only enhances students' engagement and understanding but also benefits them in a technology-driven world by developing digital literacy skills and higher-order thinking skills (Yunus & Suliman, 2014). The integration of various modes of communication has proven to be an enriching endeavour. One such mode is the use of videos,

which have gained prominence as a potent educational tool. Freyn (2017) has introduced the use of video poem clips from YouTube and commercial advertisements in literature classes among university students. It is found that students' attitudes towards poetry have significantly improved through a multimodal approach.

Teachers now harness the power of video to bring literary works to life, offering visual and auditory dimensions that enhance comprehension (Bobkina & Romero, 2023; Hoglund, 2022; Rajan & Ismail, 2022). Two studies (Hoglund, 2022; Rajan and Ismail, 2022) explored the use of videos by secondary school students in responding to literary work. On the other hand, Bobkina and Romero (2022) conducted a study among postgraduate students. Rajan and Ismail (2022) utilised TikTok as the platform for video production while the other two studies mainly focused on the production of offline videos. Nevertheless, all three studies concluded that video production among students in literature classes has shown a positive impact on students' understanding and effective expressions towards literary texts.

Visual aids also have become instrumental in elucidating complex narratives and themes, injecting vibrancy and clarity into the literary learning experience. Many studies (e.g. Albufalasa 2019; Bobkina & Romero, 2023; Melor & Salehi, 2013; Umar & Iyere, 2021) have investigated the variety of visual aids in literature classrooms. By employing a mixed-method approach, these studies conducted research among university students (Albufalasa 2019; Bobkina & Romero, 2023) and school teachers (Melor & Salehi, 2013; Umar & Iyere, 2021). All studies concluded both teachers and students involved in the studies have shown positive perceptions towards the use of visual aids as a pedagogical tool in ESL literature components.

Multimodality in teaching literature extends beyond video and visual aids. It encapsulates a diverse range of modes, including text, images, sound and movement. This comprehensive approach caters to the diverse learning styles and preferences of students. For example, text mode introduces students to the written word, while image mode adds a visual layer to their understanding. Sound mode, on the other hand, employs auditory elements, such as narration and music, to engage learners on a deeper level. Tao (2020) explored the use of a multimodal approach in English and American Literature classrooms and discovered that this approach has made the classrooms become "vivid, lively, and effective" (Tao, 2020, p. 5). Tao (2020) also concluded that a multimodal approach has enhanced students' comprehension towards plain texts.

The cornerstone of this multimodal approach lies in its ability to interweave language, images, music, sound and movement. In essence, this approach transforms the teaching of literature into a multi-sensory and dynamic journey of discovery. Firmansyah (2021) employed an experimental research method whose implementation uses a quasi-experiment type. This study was conducted among 52 university students in Indonesia where the participants were segregated into experimental and control groups. Findings showed that the students in the experimental group have shown better learning outcomes than the control group.

Technology Acceptance Model 2

Technology Acceptance Model 2 (TAM 2) identifies four major variables that influence the use of technology. Perceived ease of use (PEoU) and perceived usefulness (PU) determine teachers'

intention to use the technology which will influence the usage behaviour. All these will impact their actual usage of the technology. Perceived ease of use refers to the consumer's perception of the tool's ease of use. It is widely accepted that tools that are easier to use are more likely to be adopted. Perceived usefulness, on the other hand, is explained as the degree to which teachers believe that the tool will be useful to them. Venkatesh and Davis (2000) proposed the incorporation of the subjective norm, voluntariness, and image, which are three interrelated social forms. These forms help to determine if an individual will adopt or reject a new system. In this study, the PEOU and PU of the SMILE e-book will determine teachers' attitudes and behavioural intentions in continuing the use of the e-book in the future.

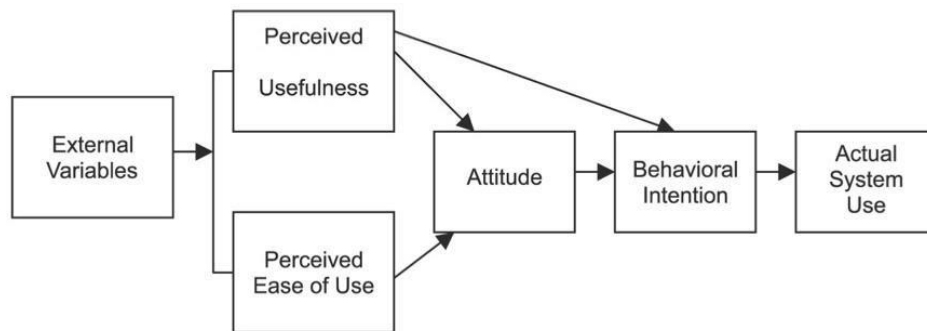


Figure 1: Technology Acceptance Model 2 (TAM 2)

Methodology

The SMILE e-book has been developed by employing the systematic ADDIE model. ADDIE is a learning development model commonly used for research and studies due to its highly effective instructional design (Jais et al, 2022). ADDIE consists of five stages: analyse, design, develop, implement and evaluate. Figure 2 below provides the summary of each stage of the model.

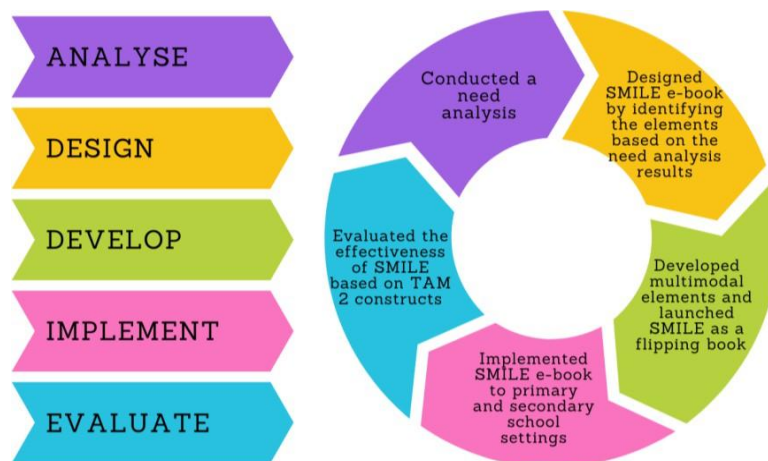


Figure 2: Summary of the stages in the ADDIE model

Analysis

At the analysis stage, a need analysis was conducted among ESL primary and secondary school teachers. The items in the need analysis were constructed to investigate the issues faced by these teachers when teaching literature components in ESL classrooms. By conducting the need analysis, researchers have better insights to develop the materials that suit the needs of the end consumers. With the results of this need analysis, researchers were able to make important decisions at the Design and Develop stages.

Design

At this stage, researchers designed the SMILE e-book based on the findings from the need analysis. Firstly, teachers expressed their concerns about preparing a stimulating learning environment when teaching short stories and novels in the literature component; therefore, the researchers identified the multimodal elements to be incorporated into the SMILE e-book. Tao (2020) has outlined the use of multimodal elements in literature classrooms, including videos, infographics and text modes to create an interesting learning ambience. Secondly, the researchers are governed by the idea that the SMILE e-book should be able to assist teachers in saving their time searching for teaching aids. Hence, the SMILE e-book should serve as a one-stop centre for teachers when teaching short stories and novels in ESL literature classrooms. In addition, learners may be able to employ the SMILE e-book on their own too, outside the classrooms, to promote independent learning.

Develop

To develop the SMILE e-book and to ensure the originality of the product, researchers have created videos, infographics and worksheets that align with multimodal elements. These multimodal elements were incorporated into the e-book before it was launched on a platform named Heyzine. This platform allows PDF books to be transformed into flipping books. The choice of this platform was also driven by its features that allow multimodal elements such as YouTube videos to be integrated with the e-book smoothly. With this platform, the SMILE e-book may be distributed easily to other teachers regardless of their geographical locations. Also, it aligns with the need analysis results where the teachers mentioned the convenience of having one sole resource to refer to when teaching short stories and novels to their students.

The researchers also provided a QR code that directs the teachers and students to Google Drive where worksheets can be downloaded for free. These worksheets allow the teachers to summarise the short story or novel introduced in the class. Figure 3 below shows some pages from the SMILE e-book that was developed by the researchers.

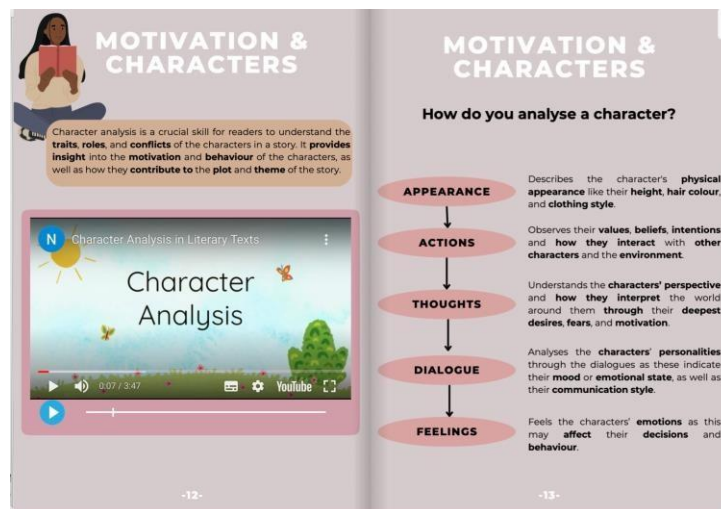
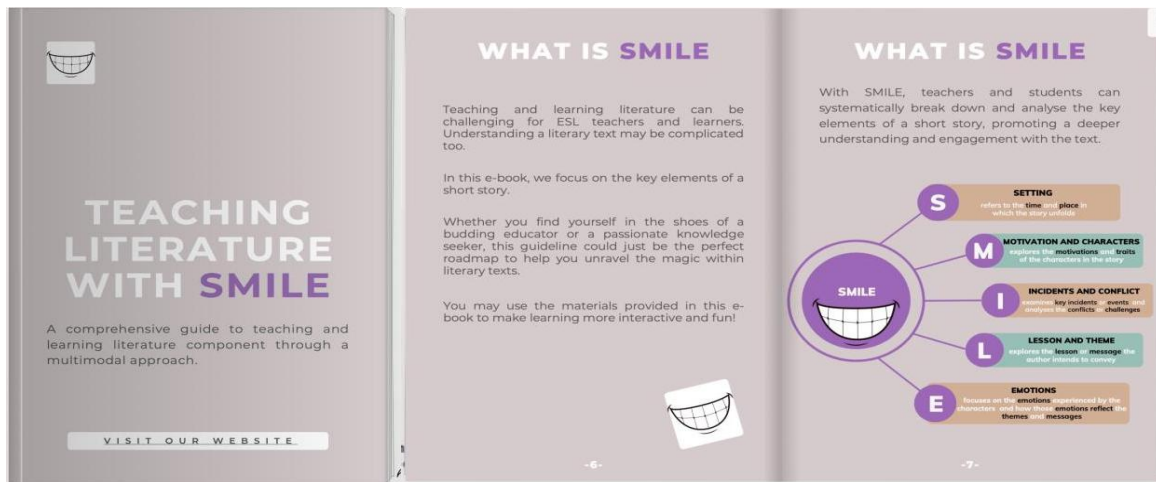


Figure 3: Some snapshots from the SMILE e-book

Implement

The implementation of the SMILE e-book was conducted on two groups of learners with the involvement of their teachers. The researchers were able to reach participants from both educational levels which are primary and secondary. The involvement of both educational contexts is perceived as essential as it will help the researchers gain better insights into the effectiveness of the SMILE e-book.

The teachers were given time to experience the use of the SMILE e-book with their students, particularly in the teaching of short stories and novels. The teacher from secondary school had a chance to teach two different short stories with her students using the SMILE e-book, while the other teacher from primary school incorporated the material to teach one short story. Figure 4 below shows some photos taken when the SMILE e-book was employed by the teachers in their classrooms.

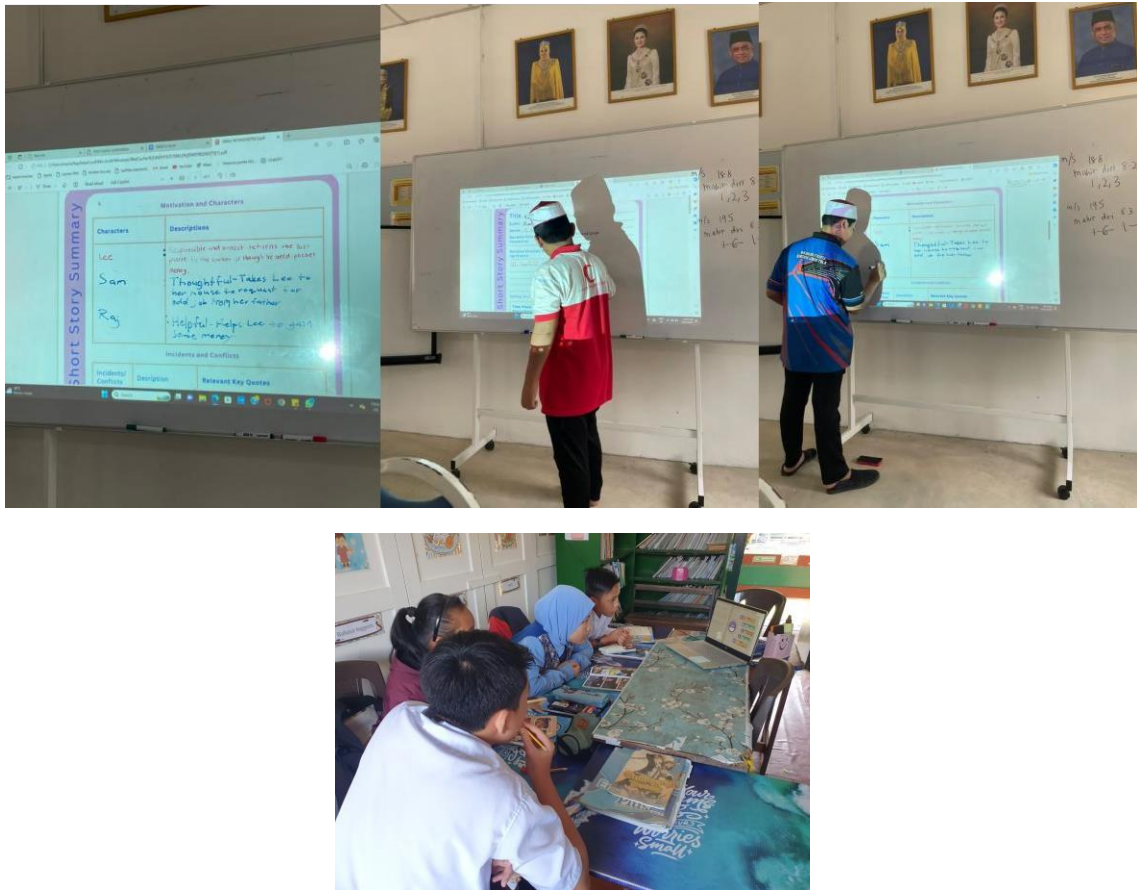


Figure 4: Some snapshots at school sites

Evaluate

At the final stage of the ADDIE model, the researchers gathered feedback and insights from the participants. The feedback from these participants is considered significant for the researchers to measure the effectiveness of the SMILE e-book and to further develop improvement of the content in the e-book. To uphold the credibility and validity of the research findings through triangulation, the researchers administered a survey questionnaire to the students and conducted semi-structured interview sessions with the teachers.

Both instruments were developed based on the TAM 2 framework. The TAM 2 framework is widely used to investigate the perceptions of users towards the use of technology. Since this e-book integrates elements of multimodal and technology, the use of this framework is deemed appropriate in the study.

a. Administering Survey Questionnaires with Students

There were 14 items developed in the survey questionnaire. There were two demographic items while the other remaining items were developed on Perceived Usefulness (PU), Perceived Ease of Use (PEoU), Attitude (Att) and Behavioural Intention (BI). This survey questionnaire was

administered to 32 students from both primary and secondary backgrounds who have experienced the use of the SMILE e-book.

The data yielded from the survey questionnaire were analysed using descriptive analysis. The results of the survey questionnaire are displayed in the tables below.

Table 1: Perceived Usefulness

No.	Items	Strongly Agree	Agree	Disagree	Strongly Disagree
1.	The content of the e-book is clear.	6 (18.8%)	25 (78.1%)	1 (3.1%)	0
2.	Using the e-book has improved my understanding of the short story/novel.	2 (6.3%)	27 (84.4%)	3 (9.4%)	0
3.	The use of the e-book saves my time.	7 (21.9%)	24 (75%)	1 (3.1%)	0
4.	I find the e-book is useful.	7 (21.9%)	24 (75%)	1 (3.1%)	0

The findings in Table 1 show that the majority of the student participants strongly agree (21.9%) and agree (75%) that the use of the SMILE e-book is perceived as useful for three reasons: the content of the e-book is clear, helps to improve their understanding and saves their time. However, a small number of students disagree (9.4%) that the SMILE e-book had improved their understanding of the short story.

Table 2: Perceived Ease of Use

No.	Items	Strongly Agree	Agree	Disagree	Strongly Disagree
1.	The e-book is easy to use.	6 (18.8%)	25 (78.1%)	1 (3.1%)	0
2.	Learning how to use the e-book is easy for me.	2 (6.3%)	30 (93.8%)	0	0
3.	Learning short story/ novel using the e-book is easy.	10 (31.3%)	19 (59.4%)	3 (9.4%)	0

Table 2 shows that most of the students who have experienced the SMILE e-book strongly agree (18.8%) and agree (78.1%) that the e-book is easy to use. In addition, more students expressed strong agreement (31.3%) that learning short stories and novels became easier by using the e-book. Nevertheless, only three students (9.4%) disagree that the SMILE e-book eased their learning of short stories or novels.

Table 3: Attitude

No.	Items	Strongly Agree	Agree	Disagree	Strongly Disagree
1.	I feel positive using the e-book to learn literature.	5 (15.6%)	26 (81.3%)	1 (3.1%)	0
2.	I believe that using the e-book helps me to be better in literature.	7 (21.9%)	22 (68.8%)	2 (6.3%)	1 (3.1%)
3.	I believe that it is a good idea for me to use the e-book when learning a short story/ novel in literature class.	10 (31.3%)	20 (62.5%)	1 (3.1%)	1 (3.1%)

In Table 3, it is evident that most of the students projected a positive attitude towards the use of the SMILE e-book. 81.3% of students agree that they feel positive when using the e-book, 68.8% of students believe that using the e-book helps them to be better in literature, and 62.5% agree that it is a good idea to use the e-book when learning a short story or novel. Only 3.1% (n=1) expressed a negative attitude towards the use of the SMILE e-book.

Table 4: Behavioural Intention

No.	Items	Strongly Agree	Agree	Disagree	Strongly Disagree
1.	I will continue using the e-book when learning a short story/ novel.	7 (21.9%)	24 (75%)	1 (3.1%)	0
2.	I will promote the use of this e-book to other friends.	13 (40.6%)	18 (56.3%)	1 (3.1%)	0

The findings in Table 4 are significant to measure the behavioural intention among the students. These results help the researchers to gauge the effectiveness of the SMILE e-book. Most of the students expressed strong intentions to keep using the e-book in the future and will promote the e- book to other friends. Only 3.1% (n=1) showed disagreement to continue using the e-book.

b. Conducting semi-structured interview sessions with the teachers

Apart from administering the questionnaire to the students, semi-structured interview sessions were also conducted with the teachers. Two teachers were involved in the interview, representing each of the educational contexts. Teacher A was from primary school while Teacher B was from private secondary school. Both teachers A and B shared the same notion on the usefulness of the SMILE e-book. This is evident in their expressions as seen below.

“Yes, the e-book helps to analyse the story in detail. It helps the students to understand better.”
(Teacher A)

“It was a fun, easy and interactive experience while using the e-book for literature class. It does really help me to give basic information about literature to the class.” (Teacher B)

When these teachers were asked about their opinions on whether it was challenging to use the SMILE e-book, both agreed that it was easy to use the e-book.

“It was very easy to use the SMILE e-book.” (Teacher A)

“It is easy since the students already read the short story. They can even give answers that are related to the short story while I’m using the e-book.” (Teacher B)

However, Teacher B suggested that ‘Incident and Conflicts’ part could be further improved by adding a graph plot. With this suggestion, researchers may further improve the content of the SMILE e-book. Below is the suggestion by Teacher B:

“I would just like to add on Incidents and Conflicts part where it would be better to add on the graph plot so that the students could see clearly when they try to relate to the short story.”

Both teachers also displayed a positive attitude toward the implementation of the SMILE e-book in their literature classes. Teacher B described the effectiveness of interactive features in the e-book has enhanced the learning experience as can be seen in the excerpt as follows:

“Interactive features. Since this e-book includes multimedia elements, annotations, and interactive features that can enhance the learning experience. For example, the SMILE e-book includes links to relevant websites, audio pronunciations and video clips.”

The SMILE e-book is considered a success since both teachers and students exhibited behavioural intention to continue using the e-book. Excerpts below are the evidence from both teachers.

“Yes, I will continue using the e-book in my literature class. It will help me to fully analyse the story.” (Teacher A)

“Absolutely, based on the experience that I had with the students, I will definitely use the e-book to help me teach basic information or introduction on literature of short story. With interactive features that could catch the students’ attention, and all the important points that are provided in one e-book, it really helps me a lot. Then I just need to relate with the short story that they studied.” (Teacher B)

Discussion

The quantitative and qualitative data were triangulated to increase the reliability of the findings. The findings revealed that both students and teachers perceived the SMILE e-book as an effective teaching aid for learning short stories and novels. As mentioned previously, the SMILE e-book serves as a one-stop centre for the teachers as it incorporates different multimodal elements such as videos and visual aids. Thus, teachers reduced the hassle of searching for reliable teaching aids when employing the e-book. This aligns with prior studies that advocated the success of using videos in literature classes (Freyn, 2017; Hoglund, 2022; Rajan and Ismail, 2022). Other scholars (Bobkina and Romero, 2023; Hoglund, 2022) discovered that videos stimulate students’

visual and auditory responses which enhancing the comprehension of literary texts.

Aside from incorporating videos, visual elements are also proven to enhance the learning experience in literature classes for both teachers and students. Studies have shown that visual aids and infographics have made the process of comprehending literary text easier (Albufalasa 2019; Bobkina and Romero, 2023; Melor and Salehi, 2013; Umar and Iyere, 2021). In the development stage of the SMILE e-book, researchers have considered the use of relevant images and fonts that may alleviate the fun and interactive mood when the e-book is employed. Hence, the researchers believe that this is one of the factors that made the SMILE e-book is favoured by both students and teachers.

The development of the SMILE e-book is perceived as appropriate in this fast-paced technological advancement. Compared to years ago, incorporating technology in the classrooms might be seen as a challenge for many teachers, but now, technology-based learning activities are advantageous for students and teachers (Rahamat et al., 2017). Ilmi and Dewi (2022) also discovered in their study that this pedagogical method boosts learners' interest and motivation in learning literature.

Conclusion

In conclusion, the innovation of the SMILE e-book to improve literature learning is considered effective. Both teachers and students gained benefits when using the SMILE e-book when dissecting a short story in the class. The e-book enhanced the students' comprehension of literary texts and reduced teachers' burden in preparing teaching materials for literature classes. Thus, other scholars and innovators are encouraged to explore similar innovations to feed the current demand in the education field.

Nevertheless, there were only 32 students and two teachers involved in the implementation and evaluation stage. To enhance the credibility of this study, more respondents should be reached to experience the use of the SMILE e-book. This will ensure rich data are gathered to further investigate the effectiveness of this innovation. It is also recommended that experts' views and insights are involved at develop stage. Their insights will validate the multimodal elements developed by the researchers for the SMILE e-book. It is hoped that these efforts will help the teachers to provide an effective learning environment to the students and uphold the value of the literature component in the Malaysian education system.

References

- Albufalasa, M. (2019). The impact of implementing graphic organizers on improving EFL students' reading comprehension of narrative texts and motivation. *International Journal of Applied Linguistics and English Literature*, 8(4), 120-129.
- Ab Rashid, R., Vethamani, M. & Basree, S. (2010). Approaches Employed by Teachers in Teaching Literature to Less Proficient Students in Form 1 and Form 2. *English Language Teaching*. 3. <https://doi.org/10.5539/elt.v3n4p87>

- Altınpulluk, H. (2019). Determining the trends of using augmented reality in education between 2006-2016. *Education and Information Technologies*, 24, 1089-1114. <https://doi.org/10.1007/s10639-018-9806-3>
- Bobkina, J., & Romero, E. D. (2019). Video-literature teaching in the EFL/ESL classroom: A multimodal framework for teaching visual literacy and literature through films. In *Teaching literature and language through multimodal texts* (pp. 35-53). IGI Global.
- Carter, R., & McRae, J. (2014). *Language, literature and the learner: Creative classroom practice*. Routledge.
- Cazden, C. (1996). *A Pedagogy of Multiliteracies: Designing Social Futures*. Harvard Educational Review, 66. 10.17763/haer.66.1.17370n67v22j160u.
- Fadzli, N. M. A., & Ismail, H. H. (2023). Minnie Sites and Enhancing Malaysian Upper Primary ESL Learners Vocabulary during VUCA Times. *Creative Education*, 14, 2037-2056. <https://doi.org/10.4236/ce.2023.1410130>
- Firmansyah, B. (2021). The effectiveness of multimodal approaches in learning. *EDUTEC: Journal of Education And Technology*, 4(3), 469-479.
- Frey, A. L., & Ed, D. (2017). Effects of a Multimodal Approach on ESL/EFL University Students' Attitudes towards Poetry, 8 (8), 80–83. Retrieved from ISSN, 2222-1735.
- Haleem, A., Javaid, M., Qadri, M. A., & Suman, R. (2022). Understanding the role of digital technologies in education: A review. *Sustainable Operations and Computers*, 3, 275-285.
- Höglund, H. (2022). The heartbeat of poetry: Student videomaking in response to poetry. *Written Communication*, 39(2), 276-302.
- Idris, M., Hussain, S. & Ahmad, N. (2020). Relationship between Parents' Education and their children's Academic Achievement. *Journal of Arts & Social Sciences*, 7(2), 82-92. [https://doi.org/10.46662/jass-vol7-iss2-2020\(82-92\)](https://doi.org/10.46662/jass-vol7-iss2-2020(82-92))
- Ilmi, K. A., & Dewi, D. N. (2022). The Integration of multimodality in efl classes: Students' perception. *Jo-ELT (Journal of English Language Teaching) Fakultas Pendidikan Bahasa & Seni Prodi Pendidikan Bahasa Inggris IKIP*, 9(2), 150-159.
- Kasih, E. N. E. W., Amelia, D., & Fitratullah, M. (2021). Unraveling Students' Attitude of Using Blog for Online Learning in Literature Class. *Universitas Riau International Conference on Education Technology (URICET)*, 419-424. <https://doi.org/10.1109/URICET53378.2021.9865946>.
- Ministry of Education Malaysia. (2010a). Policy: A glimpse of history. <http://www.moe.gov.my>
- Ministry of Education Malaysia. (2010b). Memperkasa bahasa Inggeris [Strengthening the English language]. <http://www.moe.gov.my/bpk>
- Ministry of Education. (2013). *Malaysia Education Blueprint 2013-2025 (Preschool to post-secondary education)*. Kementerian Pendidikan Malaysia.
- Ministry of Education Malaysia. (2015). *English language education reform in Malaysia: The*

- Roadmap 2015-2025. (M. Orey, Ed.). English Language Standards and Quality Council, Ministry of Education Malaysia. Ministry of Education Malaysia
- Naafan, K. J. (2018). Developing reading strategies to improve upon reading culture among upper primary pupils of Malshegu Kidz Active Foundation School in Tamale, Northern Region, Ghana. Doctoral dissertation, University of Development Studies, Ghana.
- Nagayar, S., Aziz@Ahmad, A. & Kanniah, M. (2015). Young Adult Literature and Higher-order Thinking Skills: A Confluence of Young Minds. *International Journal of Language Education and Applied Linguistics*. <https://doi.org/10.15282/ijleal.v3.475>
- Pillai, S., & Vengadasamy, R. (2010). Developing understanding and appreciation of literature and critical reading concepts multimodal approaches. *Malaysian Journal of ELT Research*, 6(1)
- Rahamat, R., Shah, P.M., Din, R., & Aziz, J.A. (2017). STUDENTS' READINESS AND PERCEPTIONS TOWARDS USING MOBILE TECHNOLOGIES FOR LEARNING THE ENGLISH LANGUAGE LITERATURE COMPONENT. *The English teacher*, 16.
- Rajan, S. T., & Ismail, H. H. (2022). TikTok Use as Strategy to Improve Knowledge Acquisition and Build Engagement to Learn Literature in ESL Classrooms. *International Journal of Learning, Teaching and Educational Research*, 21(11), 33-53.
- Roberts, B. W., Wood, D., & Caspi, A. (2008). The development of personality traits in adulthood. In O. P. John, R. W. Robins, & L. A. Pervin (Eds.), *Handbook of personality: Theory and research* (pp. 375–398). The Guilford Press.
- Salleh, P. N. A. B. M., & Ismail, H. H. (2022). Paddling through the Learning of Literature Using ICT: A Review on Students' Perception.
- Serafini, F. (2014). *Reading the visual: An introduction to teaching multimodal literacy*. Teachers College Press.
- Short, K. G., Alexander, J., Edwards, A., Griffith, J., & Thomas, L. (2023). Developing intercultural understanding through global children's literature. In *Teaching Globally* (pp. 295-314). Routledge.
- Sidhu, G. K. (2003). Literature in the language classroom: Seeing through the eyes of learners. In M.E. Vethamani, & G. Subramaniam (Eds.), *Teaching of literature in ESL/EFL contexts* (pp. 88-110). Petaling Jaya: Sasbadi MELTA ELT Series
- Sivapalan, S. & Subramaniam, G. (2008). The Incorporation of Literature in the English Language Program for Engineering Students: Learner Interest and Perception. 14.
- Stefanova, S., Bobkina, J., & Pérez, F. J. S. V. (2017). The effectiveness of teaching critical thinking skills through literature in EFL context: A case study in Spain. *International Journal of Applied Linguistics and English Literature*, 6(6), 252-266.
- Suliman, A., Yunus, M. & Nor, M. (2019). Scrutinising the Preferences in Literature Approaches and Activities: From the Lenses of ESL Teachers. 3L *The Southeast Asian Journal of*

English Language Studies. 25. 38-48. <https://doi.org/10.17576/3L-2019-2502-03>

- Suliman, A. & Yunus, M. M. (2014). A Glimpse on the Re-Introduction of English Literature in Malaysian Secondary Schools. *International Journal of Languages and Literatures*. Vol. 2(2), 151 – 164.
- Susanto, M. A., Yuwana, S., & Pairin, U. (2022, November). Multimodal Approach to Poetry Learning for Students of Indonesia Language and Literature Education Program. In *International Conference on Language, Education, and Social Science (ICLESS 2022)* (pp. 46-53). Atlantis Press.
- Tao, Y. (2020). Exploration of Multimodal English and American Literature Teaching Based on Computer Network. *Journal of Physics: Conference Series*. 1533. 022050. <https://doi.org/10.1088/17426596/1533/2/022050>
- Tshering, U. (2023). Teaching Critical Reading in Bhutanese Middle Secondary Schools: An Integrated Approach.
- Umar, A. D., & Iyere, J. M. (2021). The teaching of poetry through information technology systems in secondary schools. *East African Scholars Journal of Education, Humanities and Literature*, 4(12), 477-483.
- Wu, S. (2020). Exploration of Multi-modal English and American Literature Teaching Based on Computer Network. *Journal of Physics: Conference Series*. 1648. <https://doi.org.10.1088/1742-6596/1648/3/032036>
- Yunus, M. M., Salehi, H., & John, D. S. A. (2013). Using visual aids as a motivational tool in enhancing students interest in reading literary texts. arXiv preprint arXiv:1305.6360.



Demystifying The Myth: Culturally Responsive Pedagogy in The Teaching of Literature

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Abstract: This paper attempts to demystify a widely held false belief or idea on culturally responsive pedagogy (CRP) in teaching literature in the lower secondary level of an urban secondary school in Kuala Lumpur. This paper also attempts to examine the “myths” of CRP in the teaching literature, which occurred among the teachers in the same secondary school. The research investigates the implementation and impacts of incorporating culturally relevant texts and teaching strategies by demystifying the prevailing myth that literature instruction is disconnected from diverse cultural backgrounds. Findings reveal that a culturally responsive approach fosters a deeper understanding of literature and promotes inclusivity and equity in the classroom. Through a comprehensive review of literature and case studies, this study reveals the potential of culturally responsive pedagogy in bridging the gap between traditional literary instruction and the rich tapestry of cultural diversity, making literature education a more inclusive and relevant experience.

Keywords: *Culturally Responsive Pedagogy (CRP), teaching literature, secondary school, Malaysian education system*

Introduction

Culturally responsive pedagogy is an approach that existed back in 2000 by Geneva Gay based on the disadvantages of the African American educational context. She wrote, "When academic knowledge skills are situated within the lived experiences and frames of reference for students to be more personally meaningful, have high-interest appeal, and are learned more thoroughly. Culturally responsive pedagogy uses students' cultural backgrounds, characteristics, daily life experiences and student's perspectives as tools for better classroom instruction. The notion that

literature is culturally neutral as it also carries the imprints of the societies and the people who have shaped it over the centuries. By recognising this, educators and scholars have increasingly turned to culturally responsive pedagogy to bridge the gap and provide students with a more enriching and inclusive literary education.

Culturally responsive pedagogy is an essential approach in education that aims to create inclusive and effective learning environments for diverse students. It involves acknowledging and valuing students' cultural backgrounds, incorporating their cultural references into the learning process, and addressing social injustices. This pedagogy is crucial for promoting equity and social justice in educational settings (Deraney, 2021; Jackson et al., 2021; Burns et al., 2020; Zhu, 2020). Culturally responsive pedagogy goes beyond curriculum content and instructional strategies; it encompasses a comprehensive understanding of students' cultural orientations, prior experiences, and performance styles. It aims to make learning encounters more relevant and effective by using ethnically diverse students' cultural knowledge and frames of reference (Deraney, 2021; Jackson et al., 2021; Burns et al., 2020; Zhu, 2020).

Additionally, it involves promoting equity and social justice by challenging inequities perpetuated by educational institutions. Furthermore, culturally responsive pedagogy is about repertoire selection, understanding the contextual factors in which learning occurs and conceiving learning as socially constructed. It facilitates students' cognitive, cultural, and political learning, emphasising the importance of affirming their cultural identity while developing critical perspectives (Zhu, 2020). In summary, culturally responsive pedagogy is a student-centred teaching approach that values diverse cultural backgrounds, promotes equity and social justice, and aims to make learning more relevant and practical by incorporating students' cultural knowledge and challenging inequities in educational institutions.

The exploration of CRP is about challenging conventional teaching methods and recognising the power of literature as a dynamic medium for reflecting the multifaceted narratives of diverse societies. As literature mirrors the human experience, this study seeks to unravel how CRP can bridge the gap between traditional pedagogy and the rich tapestry of cultural diversity, creating a more vibrant and relevant literary education for students. With a specific focus on the Malaysian context, characterised by its diverse ethnic and linguistic landscape, this research aims to shed light on CRP's practical application and implications in a multicultural educational setting. Through this journey, we aim to contribute to the broader discourse on literature education, advocating for a shift towards pedagogical approaches that acknowledge and celebrate the diverse cultural influences that shape the narratives of our collective human story.

With that, in this paper, the focus of this study was guided by the following research question: What are the myths of culturally responsive pedagogy in teaching literature among secondary school teachers? Descriptive in nature, this paper investigated the popular “myths” of CRP in teaching literature among secondary school teachers.

Literature Review

Culturally responsive pedagogy in teaching literature is essential to make learning more relevant and effective for diverse students by incorporating cultural references (Schirmer & Lockman, 2022). This pedagogy has evolved into culturally sustaining pedagogy, which values the evolution of culture among diverse learners and aims to achieve equity through critical pedagogy (Ervin, 2021; Coffey & Barnes, 2021). It is a student-centred teaching approach sensitive to students' cultural orientations, including their cultural references and backgrounds, to facilitate their cognitive, cultural, and political learning (Zhu, 2020; Jia & Nasri, 2019). Gay (2010) asserts the central role of culture in the learning process, defining "Culturally Responsive Pedagogy" as an approach that leverages cultural knowledge, past experiences, and performance styles of various ethnic groups to enhance the relevance and efficacy of learning. This student-centred pedagogical approach emphasises the importance of recognising and integrating students' cultural backgrounds in the learning environment, with a foundational objective of ensuring students feel valued and embraced in the classroom. The research underscores the effectiveness of "Culturally Responsive Pedagogy" in classrooms with diverse students, addressing academic achievement gaps and fostering positive ethnic identities (Dickson & Fernandez, 2015; Sleeter, 2012).

Despite many studies on this pedagogical approach, research linking its impact on student academic achievement remains limited, primarily consisting of small-scale case studies. In conclusion, teaching students from varied ethnic and racial backgrounds is significant for multi-ethnic countries like Malaysia, aligning with the National Philosophy of Education's overarching goal of holistic student development. "Culturally Responsive Pedagogy," a well-studied teaching method, has demonstrated efficacy in the teaching and learning process, prompting this systematic review to explore its impact on students' learning and academic achievement, shedding light on current research trends in this domain. As Finn (2023) mentioned, culturally responsive pedagogy widely adopted in New Zealand shifts towards recognising and supporting ākonga cultures to bring about positive changes in the education system, highlighting the significance of changing our mindset in adopting suitable teaching pedagogy for our students.

Furthermore, culturally responsive teaching is a comprehensive endeavour encompassing various educational system dimensions, including curriculum content, instructional strategies, and performance assessment (Penderi & Kokouvinou, 2019). Incorporating multicultural literature in the classroom can validate the manifestation of cultural knowledge, standpoints, and diversity, thereby enhancing cross-cultural understanding (Mandarani & Munir, 2021). Additionally, critical race pedagogy integrates race and culture with critical pedagogy to deliver culturally relevant teaching with emancipatory objectives (Gabriel, 2019). The literature also emphasises the importance of creating a positive and welcoming environment for students, especially in Mathematics, to reduce anxiety and facilitate open discussions (Atoyebi & Atoyebi, 2022). Moreover, developing a multicultural-based curriculum should consider clear objectives sensitive to current conditions ("The Development of Multicultural Curriculum for Islamic Religious Education: A Literature Review", 2022). Inclusive teaching strategies are advocated to address diverse characteristics and learning needs within the classroom, emphasising values and attitudes, management and environment, and teaching and instruction (Li et al., 2022).

The implications for teaching practice and academic development, as well as the relevance of diversity in Eastern European classrooms, are also discussed (Rymarenko & Dunajeva, 2022). In conclusion, culturally responsive pedagogy in teaching literature encompasses a comprehensive and student-centred approach that values diverse cultural backgrounds and aims to achieve equity through critical pedagogy. It emphasises the importance of creating inclusive and welcoming environments, incorporating multicultural literature, and considering clear objectives in curriculum development to address diverse student needs. Manuel et al. (2023) agreed that teachers have to design learning experiences that celebrate students' social, cultural, and linguistic backgrounds. Rejecting deficit thinking, teachers embracing cultural competence view students' cultures and experiences as assets to their learning. The third pillar focuses on developing students' sociopolitical and critical consciousness, encouraging engagement in academic discourse and challenging power dynamics. Teachers who integrate CRP create opportunities for students to question social inequities, empowering them to address personal experiences or witnessed injustices. While this tenet suggests that teachers should also develop their sociopolitical consciousness, it is recognised that many educators struggle with this aspect, often implementing only the first two tenets.

The primary objective of this study is to investigate the implementation and impact of Culturally Responsive Pedagogy (CRP) in the teaching of literature. Specifically, the research aims to demystify the prevailing myth that literature instruction is culturally neutral by exploring the benefits and challenges of integrating diverse cultural perspectives into the curriculum. The study seeks insights into how CRP can enhance student engagement, promote inclusivity, and contribute to more meaningful learning outcomes in literature education. Through a focused examination of practices and experiences through past literature review, this research aims to contribute valuable knowledge to the ongoing discourse on practical and culturally relevant pedagogical approaches in literature instruction, particularly emphasising its application in Malaysian education.

Methodology

Method

A qualitative research methodology was used to address the research issues in this study. In order to gather and evaluate data to answer the research question, this paper performs a high-level examination of the pertinent information that is already available (Schaefer & Myers, 2017). The steps of research synthesis (Cooper, 2016) include (1) formulating a research question, (2) choosing journals, (3) defining inclusion and exclusion criteria, (4) defining search keywords, (5) extracting data, coding, doing a thematic analysis, and (6) synthesis.

Settings and Participants

The participants of this study were secondary school teachers in one of the secondary schools in Kuala Lumpur. A total of 5 teachers were interviewed. The selection of the respondents used controlled sampling as this project is a focused group targeting the views and perspectives of the teachers in that particular school. The medium of instruction used in the interview is English.

Personal information such as name, origin, school or institution's name, email address and date of birth are not included in the interview transcription as the researchers abide by the code of ethics in conducting the research project. However, the respondents are informed of the need to include their education level, teaching experience, their age and gender to provide information for the researchers to analyse the data gathered later.

Instrument

A semi-structured interview was used to collect data on the teachers' knowledge, experiences, perceptions, and readiness regarding the inclusion of CRP in the teaching of literature. Eight pre-determined open questions allow the interviewer to explore particular themes further. To demystify the myths clouding the understanding of the CRP concepts in teaching literature among secondary school students, this small-scale research confronts the reality of the teachers' beliefs and competencies that will or will not affect the implementation of CRP in their teachings.

Procedure

Since this paper looks into demystifying the myths of CRP, a pedagogy in which teachers utilise consciously or subconsciously in the teaching of literature, the first step was to identify the potential participants. Considering teachers' power and influence in the teaching and learning processes, researchers managed to locate and narrow down to 5 participants who teach English at the lower level of the particular secondary school. Then, both the interviewer and the participants held the interview sessions on an agreed date and time. Further, questions in the survey were validated by two selected experts (an experienced English teacher who is currently teaching in the secondary school and an officer at the Pejabat Pendidikan Daerah who is also a SISC+ mentor for English subjects) to validate the questions for quality assurance. Next, the researchers consulted the head of the school and institutions for permission to get the teachers to be the respondents for this paper. The data collection period lasted for two weeks. Through exploring the various strategies and pedagogies for teaching literature, the researchers agreed on Culturally Responsive Pedagogy (CRP), which is best suited to the needs of the teachers in the school. Hence, the researchers adapted the ADDIE model to create a learning kit that will assist in teaching and learning literature based on the pedagogical approach.

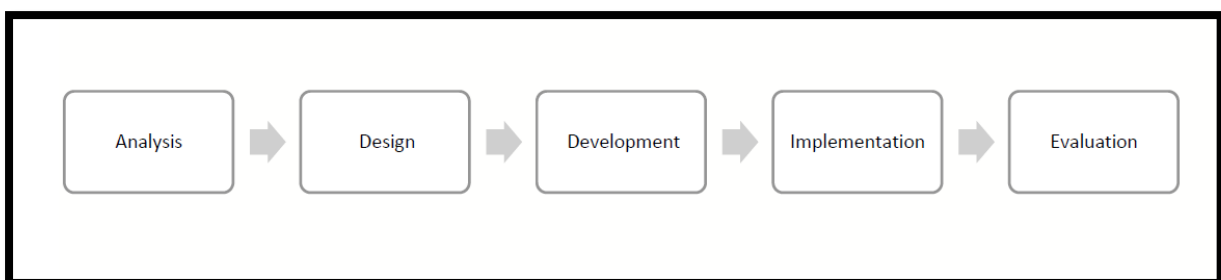


Figure 1: ADDIE Model

Analysis - There are many methodologies or pedagogical approaches administered by teachers in teaching literature at schools; one precisely that has been done consciously or subconsciously

is the Culturally Responsive Pedagogy (CRP). Through examining and comprehending the concepts of CRP, this study aims to reveal the myths (implementation and impact) of CRP in teaching literature among secondary school teachers. A learning kit is developed and created based on the principles of CRP. Teachers in the school utilise the learning kit in their classes. Students' work post-implementation of the learning kit is collected, and the interviews with the teachers who implemented the learning kit are transcribed to obtain data for further data analysis. Since this is a small-scale implementation of the learning kit developed, the data will be analysed using the thematic analysis.

Design - It is essential to note the level of the student's proficiency prior to deciding the complexity of the literary texts used. The researchers took a few considerations, including the learning standards from the document standards, the choices of animation, the storyboard of the intended contents to be included, and the user-friendly apps so that they do not require heavy-duty accessories. It can be used in the absence of network coverage. The questions constructed in the learning kit serve as a medium for the students to express themselves, as they might have different responses. This also indicates that the process of CRP follows as the teaching of literature continues in the class.

Development - The learning kit is designed on the Microsoft PowerPoint app as it can be used offline, and almost all the teachers know how to go around this app. Using the Tom and Jerry cartoon as animation and a poem titled "A Poison Tree" by William Blake as the literary text, students are taught the poem; the background information of the poem, line by line, the theme and the lessons, the language and styles used before proceeded with comprehension questions and higher order thinking skills (HOTS) questions. The learning kit is developed to allow students to discuss and express their views on how much they understand the persona, the poem's tone, their visualisation upon reading it, and their personal opinions. With this inclusion of CRP into teaching literature, teachers can learn more about their students (student-centered).



Figure 2: Front page of the learning kit

Implementation - The participants for implementing this learning kit are Year 7 students from one of the secondary schools in Kuala Lumpur. There are 28 students, and they are divided into eight groups. At the end of the lesson, students are given a group task. Students must discuss and create a poem based on one of the five themes; friendship, family, nature, school and ambition. Once the poem is created, students present the poetry recital in groups with their teachers.

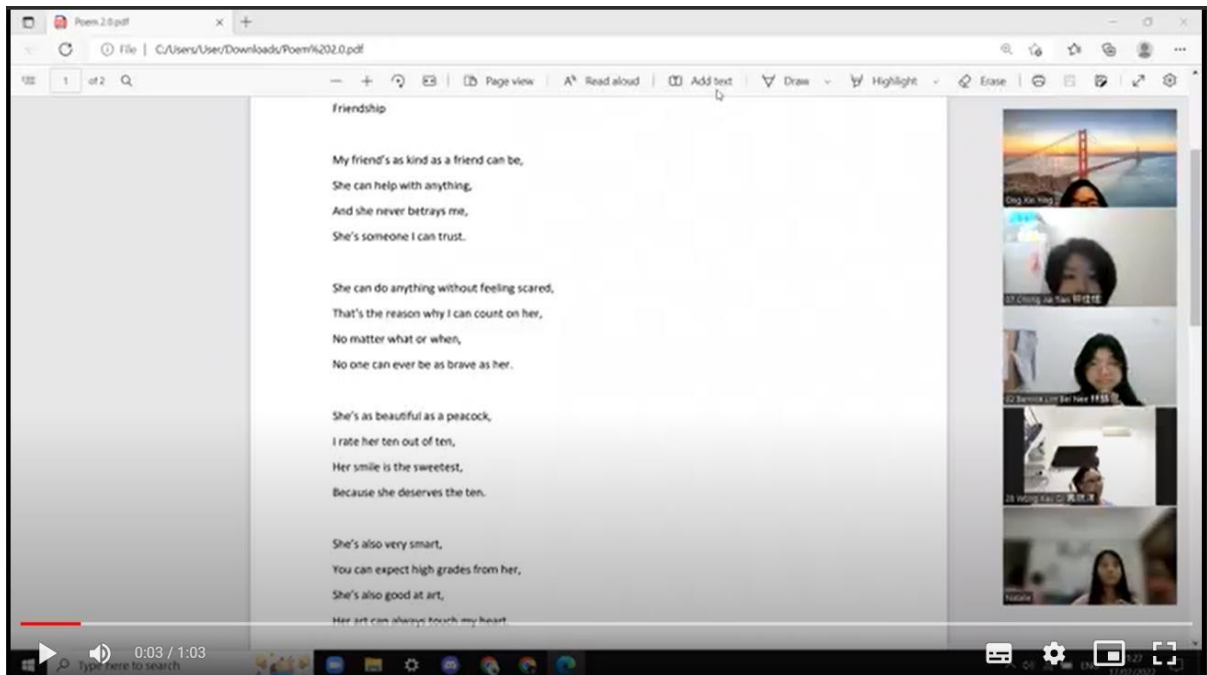


Figure 3: One of the presentations of the poem that has been created by the students (in groups)

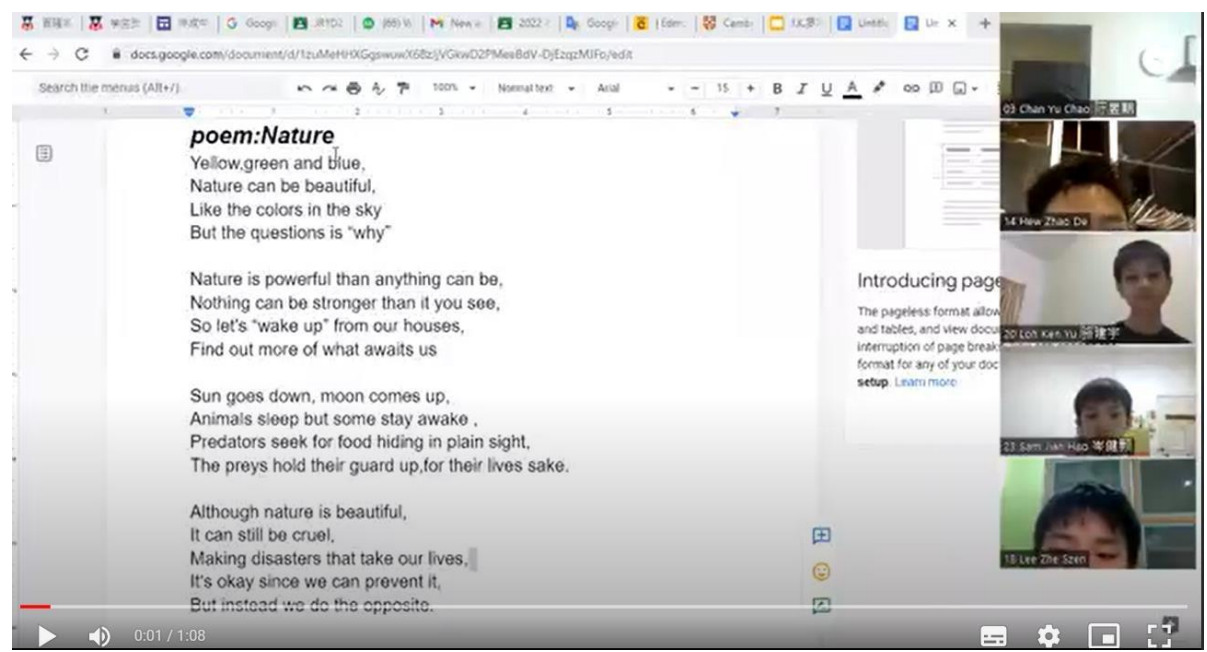


Figure 4: Another presentation of the poem that has been created by the students (in groups)

Evaluation - The evaluation stage focuses on the teaching part of the teachers, and this is done via semi-structured interviews with three teachers and the analysis of students' works (process-based evaluation) rather than observing the success rate of CRP as compared to other pedagogy in teaching literature.

Results and Discussion

Based on the synthesis and thematic analysis, the reviewed studies have been grouped according to the following thematic categories for discussion: (1) Teachers' Perceptions of Culturally Responsive Pedagogy among secondary school students and (2) Emergent Tensions of Practising Culturally Responsive Pedagogy in the current Malaysian education settings.

Theme 1: Teachers' Perceptions of Culturally Responsive Pedagogy among secondary school students

a. Cultural Sensitivity in Classroom Dynamics

The process involves acknowledging the impact of culture on students' learning styles, communication patterns and overall classroom dynamics. In developing the learning kit, it is essential to recognise and value the learners' cultural backgrounds, experiences, and perspectives. Cultural sensitivity in classroom dynamics is boosted through the learning kit designed due to inclusive curriculum design. The content represents various perspectives and applies to all cultures. Therefore, teachers' cultural sensitivity in classroom dynamics is significantly enhanced as they can acknowledge and create a more personalised learning experience using the learning kit.

b. Recognition of cultural diversity and cultural sensitivity in classroom dynamics

The process involves acknowledging the impact of culture on students' learning styles, communication patterns and overall classroom dynamics. In developing the learning kit, it is essential to recognise and value the learners' cultural backgrounds, experiences, and perspectives. Cultural sensitivity in classroom dynamics is boosted through the learning kit designed due to inclusive curriculum design. The content represents various perspectives and applies to all cultures. Therefore, teachers' cultural sensitivity in classroom dynamics is significantly enhanced as they can acknowledge and create a more personalised learning experience using the learning kit. Teachers' recognition extends beyond ethnic or racial differences and encompasses various aspects of culture such as socioeconomic backgrounds, linguistic diversity and individual learning preferences.

c. Promotion of equity, inclusion and cultural competence

The development and implementation of the learning kit encourages teachers to create an environment where all students feel valued, respected, and included, irrespective of their cultural backgrounds. Teachers can promote continuous learning about different cultures, examine personal biases, and adapt instructional strategies to cater to the diverse needs of students.

Cultural competence is closely associated with implementing culturally relevant pedagogy in teaching English literature. It refers to effectively understanding, communicating, and interacting with people across different cultures. In this multiracial country, Malaysia, where learners comprise different races and cultural backgrounds, it is essential for educators to have cultural competence before it is taught and inculcated among the learners.

The questions in the learning kit encourage students to connect their learning outcomes with their lived experiences and interests. This way, cultural bridges can be built as students share their opinions and views with their peers. In addition to that, the literature content is made more relatable and meaningful as the world is represented more comprehensively. Through the students' responses and interactions, teachers can adapt their teaching approaches to accommodate various learning styles and preferences, making learning equally accessible to all students.

In short, the teachers perceive the effectiveness of the learning kit positively as they can contribute to a more inclusive, equitable, and culturally competent learning environment by incorporating culturally responsive pedagogy into teaching practices.

Theme 2: Emergent Tensions of Practising Culturally Responsive Pedagogy in the current Malaysian education settings

a. The generational gap between teachers and students (Gen X or Gen Y teachers versus Gen Z or Gen Alpha students)

The existence of misconceptions by teachers with the different generations' experience to teach current contributes to a mutual understanding gap. One notable tension lies in the diverse cultural fabric of Malaysia. The country is home to various ethnic groups with cultural nuances and practices. As educators, we must grapple with understanding and addressing the specific needs of students from various cultural backgrounds without inadvertently enforcing cultural biases or perpetuating inequalities. Practising culturally responsive pedagogy in Malaysian education settings introduces emergent tensions, particularly concerning the generational gap between teachers and students. This gap is characterised by a contrast in cultural experiences, preferences, and communication styles between teachers from Generations X or Y and students from Generations Z or Alpha.

One prominent tension stems from the disparity in technological proficiency. Gen Z and Alpha students, born into a digital era, often possess a natural affinity for technology, incorporating it seamlessly into their daily lives. In contrast, Gen X and Y teachers may find it challenging to keep pace with the rapidly evolving technological landscape. Integrating technology into culturally responsive teaching methods becomes crucial, but the generation gap may hinder the effective use of digital tools in the classroom. Moreover, differences in cultural references and communication styles present challenges. Gen Z and Alpha students are immersed in a globalised, internet-driven culture, often characterised by rapid information consumption and a preference for multimedia communication. On the other hand, Gen X and Y teachers may have been shaped by different cultural references and communication norms. Bridging this gap

requires educators to adapt their teaching strategies to align with the younger generations' cultural preferences and communication modes, ensuring that the learning environment remains relevant and engaging.

Thus, the development of a literature learning kit bridged the gap between teachers and students by associating them with their common language. Students can commit to the teacher's task and work cooperatively to finish. Additionally, the literature learning kit incorporates multimedia elements and digital resources, aligning with the technological preferences of Gen Z and Alpha students. By integrating it, teachers can cater to the digital literacy skills inherent in younger generations. Besides, selecting diverse literary works that resonate with teachers and students across generations allows for shared experiences and discussions. This approach facilitates cultural exchange and enables educators to tap into the cultural references that students are familiar with.

b. Challenging extensive assessments

With the broader group of multiculturalism in the class to teach literature, the assessments must be more rigorous and extensive, with more options for answers subject to students' background knowledge and experience. Other than it promotes HOTS, it also opens up more challenging tasks for teachers to assess students' performance. The challenge of extensive assessment practices compounds these tensions. The traditional reliance on standardised assessments may not effectively capture the diverse skills, knowledge, and cultural competencies that CRP seeks to nurture. There is a need to reevaluate assessment methods to ensure they align with the principles of CRP, valuing varied forms of expression, critical thinking, and cultural understanding. This shift challenges the established assessment norms in the Malaysian education system and requires a paradigm shift toward more inclusive and culturally sensitive evaluation methods.

c. Selection of Materials

As mentioned by Teacher B, with the absence of textbooks for literary texts, the teachers need to carefully search for suitable and related literary texts to be taught in the class—another challenging task is selecting the materials given the generational gap mentioned earlier. There have been concerns about the cultural sensitivity and relevance of the selected English literature materials. With the increasing emphasis on globalisation and the need for students to be exposed to diverse perspectives, it is essential to ensure that the English literature materials adequately represent a variety of cultural voices. Also, educators have to explore ways to select materials that resonate with the interests and experiences of the students so that students' engagement in learning literature is enhanced.

Conclusion

In conclusion, exploring Culturally Responsive Pedagogy (CRP) in the context of teaching literature in Malaysia reveals its profound potential to reshape and enrich the educational landscape. This study underscores the importance of incorporating diverse voices and perspectives into the curriculum by addressing the prevailing myth of cultural neutrality in

literature. The findings illuminate the transformative impact of CRP in fostering a deeper connection between students and literary texts, transcending cultural barriers and promoting a more inclusive understanding of the human experience.

Furthermore, in the Malaysian context, where cultural diversity is a defining feature, the application of CRP emerges as a pedagogical strategy and a necessity. Integrating works by Malaysian authors in various languages gives students a more nuanced understanding of their cultural heritage and encourages linguistic diversity. As the study delves into the experiences of educators implementing CRP, it becomes evident that this approach enhances academic engagement and contributes to cultivating critical thinking skills and cultural empathy among students.

To conclude, this study calls for a paradigm shift in literature education, urging educators and policymakers to embrace CRP as an integral part of the pedagogical toolkit. The journey through the Malaysian context serves as a microcosm, demonstrating the broader implications of incorporating cultural responsiveness in literature instruction worldwide. As we demystify the myth surrounding literature's supposed cultural neutrality, we pave the way for a more inclusive, meaningful, and culturally relevant literacy education that empowers students to navigate the globalised world with a deep appreciation for diverse perspectives.

References

- Atoyebi, O. and Atoyebi, S. (2022). The link between mathematics teaching strategies and students' anxiety. *Asian Journal of Education and Social Studies*, 48-57. <https://doi.org/10.9734/ajess/2022/v33i4716>
- Coffey, H. & Barnes, M. (2021). Chapter 8: wobbling with culturally proactive teaching: Facilitating social justice through youth participatory action research with middle school students. *Teachers College Record*, 123(13), 1–22. <https://doi.org/10.1177/0161468121112301309>
- Ervin, J. (2021). Critically reading the Canon: culturally sustaining approaches to a prescribed literature curriculum. *Journal of Adolescent & Adult Literacy*, 65(4), 321-329. <https://doi.org/10.1002/jaal.1208>
- Gabriel, D. (2019). Enhancing higher education practice through the 3d pedagogy framework to decolonise, democratise and diversify the curriculum. *International Journal of Technology and Inclusive Education*, 8(2), 1459-1466. <https://doi.org/10.20533/ijtie.2047.0533.2019.0178>
- Jia, Y. and Nasri, N. (2019). A systematic review: competence of teachers in implementation of culturally responsive pedagogy. *Creative Education*, 10(12), 3118-3130. <https://doi.org/10.4236/ce.2019.1012236>

- Li, D., Gavaldà, J., & Martín, M. (2022). Listening to students' voices on inclusive Teaching strategies in Chinese primary schools. *International Journal of Chinese Education*, 11(2), 2212585X2211209. <https://doi.org/10.1177/2212585x221120971>
- Mandarani, V. and Munir, A. (2021). Incorporating multicultural literature in EFL classroom. *Ijeltal (Indonesian Journal of English Language Teaching and Applied Linguistics)*, 6(1), 1. <https://doi.org/10.21093/ijeltal.v6i1.832>
- Penderi, E. and Kokouvinou, E. (2019). Greek primary school teachers' reported practices concerning the implementation of culturally responsive teaching: the culturally responsive practices questionnaire (crpq). *World Journal of Educational Research*, 6(2), 270. <https://doi.org/10.22158/wjer.v6n2p270>
- Rymarenko, M. and Dunajeva, J. (2022). Faculty approaches to diversity in eastern European education: implications for teaching sensitive topics. *Society Register*, 6(1), 129-148. <https://doi.org/10.14746/sr.2022.6.1.07>
- Schirmer, B. and Lockman, A. (2022). Culturally responsive teaching in an undergraduate online general education course. *Online Learning*, 26(3). <https://doi.org/10.24059/olj.v26i3.2805>
- Zhu, G. (2020). "educate your heart before your mind": The counter-narratives of one African American female teacher's asset-, equity- and justice-oriented pedagogy in one urban school. *Urban Education*, 58(6), 1151–1179. <https://doi.org/10.1177/0042085920902244>



Enhancing Higher Education through Online Collaborative Learning: Fostering Competence, Engagement, and Synthesis Writing Skills

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Abstract: Online collaborative learning has become a cornerstone of educational innovation in higher education, providing students with opportunities to construct knowledge, enhance critical skills, and foster a supportive learning environment. This paper investigates the impact of online collaborative learning on synthesis writing and overall learner competence, motivation, and adaptability. Drawing on recent studies, including findings on mobile learning and technology-supported peer feedback, the analysis highlights the effectiveness of collaborative learning in promoting deep understanding, increasing student comfort and competence, and integrating technology to support interactive and flexible learning experiences. The findings suggest that collaborative learning not only prepares students for academic challenges but also equips them with essential skills for their professional futures.

Keywords: *collaborative learning, higher education, synthesis writing.*

Introduction

In the context of higher education's dynamic transformation, online collaborative learning has emerged as a pivotal pedagogical approach. It shifts the focus from passive knowledge consumption to active knowledge construction, promoting an educational environment where students collectively build understanding through interaction and shared effort. This learning mode aligns well with the needs of a digital-first generation, who thrive in interactive and

technologically integrated settings. Herrera-Pavo (2021) emphasizes that collaborative learning strategies have shown considerable promise in enhancing students' synthesis writing capabilities, a critical skill in academic discourse, as also supported by findings from Barzilai et al. (2018) and Musaljon et al. (2021). Richards and Pun (2021) further underscore that English as a medium of instruction has long been foundational in universities, highlighting the importance of synthesis writing as a key academic skill. Similarly, Muamaroh et al. (2020) highlight that effective synthesis writing demands not only language proficiency but also critical thinking and organizational abilities.

Moreover, studies underscore the benefits of technology-supported peer feedback in collaborative learning settings. Cuocci et al. (2023) note that asynchronous feedback tools, such as blogs and other computer-mediated platforms, enhance students' revision processes, allowing for more reflective and detailed feedback that supports synthesis writing. Similarly, Rahman et al. (2024) highlight the potential of mobile-based instruction, particularly in defence university contexts where adaptable learning methods are essential. These mobile and digital tools complement collaborative learning approaches by providing structured support and feedback, crucial for developing synthesis skills. Bakar (2021) discusses the effectiveness of integrating collaborative learning strategies and technology tools, particularly during the global shift to online learning prompted by the COVID-19 pandemic. This study explores the broad impact of online collaborative learning, focusing on synthesis writing, competence, comfort in learning, motivation, academic performance, and adaptability in digital learning environments.

Synthesis Writing

Synthesis writing, a complex skill that requires integrating information from multiple sources, plays a critical role in academic success. This skill involves organizing diverse ideas into a coherent argument or narrative, an ability that is greatly enhanced through collaborative learning. Students must communicate and reconcile varying viewpoints in group settings, resulting in a more nuanced and well-rounded perspective. Barzilai et al. (2018) and Musaljon et al. (2021) demonstrate that collaborative learning environments significantly support the development of synthesis writing by fostering critical thinking and organizational skills.

Van Ockenburg et al. (2019) demonstrate that collaborative learning environments significantly support the development of synthesis writing by fostering critical thinking and organizational skills. Luo and Kiewra (2019) emphasize the importance of training in specific skills—selection, organization, and connection—to enable students to create synthesized texts effectively. Furthermore, digital tools, such as mobile applications, have proven instrumental in supporting synthesis writing. Elaish et al. (2019) highlight the accessibility and interactivity of mobile apps, which provide structured guidance and resources essential for synthesis tasks. These findings align with the notion that technology integration fosters enhanced learning experiences.

Rahman et al. (2024) emphasize the benefits of mobile applications that support synthesis writing, as they offer structured resources and guidance. These tools help students organize and integrate diverse information sources, essential for synthesis writing. Cuocci et al. (2023) further underscore the value of technology-supported peer feedback, particularly through asynchronous

tools, which provide students with opportunities for reflective revision. Such platforms allow students to consider peer comments thoroughly, leading to deeper engagement with synthesis tasks and improved quality in their writing.

Enhanced Knowledge Construction

Collaborative learning fosters active engagement and shared knowledge construction, foundational to academic growth and synthesis writing proficiency. When learners collaborate, they pool diverse insights and perspectives, which promotes deeper, more comprehensive understandings of complex topics. Barzilai et al. (2018) and Musaljon et al. (2021) find that collaborative learning significantly supports synthesis writing by encouraging students to integrate information from multiple sources, organize thoughts coherently, and present well-rounded arguments. Clarke et al. (2023) note that synthesis writing not only enhances academic performance but also mitigates risks like plagiarism by encouraging proper integration of ideas from multiple sources.

Rahman et al. (2024) highlight how mobile applications facilitate seamless access to and organization of resources, enabling students to engage effectively in knowledge construction. This is particularly valuable in environments requiring high adaptability. Similarly, Cuocci et al. (2023) suggest that technology-supported peer feedback provides a structured environment for students to evaluate both local and global aspects of their writing, contributing to a more comprehensive synthesis process and facilitating robust knowledge construction.

Fostering Engagement and Motivation

Collaborative learning also plays a critical role in enhancing student engagement and motivation. Promoting active participation transforms the learning process into a dynamic experience where students are motivated to contribute their insights and perspectives. This shared ownership of the learning process helps in creating a sense of belonging and responsibility, which increases intrinsic motivation. This engagement is especially valuable in synthesis writing, where students must deeply engage with diverse information sources to construct cohesive and compelling arguments.

Rahman et al. (2024) emphasize that mobile applications for synthesis writing can increase engagement by providing interactive features that facilitate peer feedback and structured tasks. This technology integration allows students to engage with the material more flexibly and actively, enhancing the quality of their interactions and supporting sustained motivation. Similarly, Cuocci et al. (2023) report that asynchronous peer feedback platforms, such as blogs and discussion boards, encourage students to participate more fully, as they have time to thoughtfully consider feedback and respond at their own pace.

Adaptability and Technological Integration

The adaptability of collaborative learning to digital platforms is crucial in the context of modern education. As technological advancements continue to reshape educational environments, online collaborative tools facilitate seamless communication and support group-based learning from diverse locations. Koole (2009) discusses the role of digital tools in enabling collaboration and interactive learning experiences, a perspective that aligns well with contemporary higher education needs. Jeong (2022) highlights the importance of digital tools in enabling collaboration and interactive learning experiences, a perspective that aligns well with contemporary higher education needs.

Rahman et al. (2024) underscore the importance of mobile applications for synthesis writing, particularly in contexts requiring adaptability, such as defence universities. Mobile-Assisted Language Learning (MALL) applications enable students to engage with structured resources at their own pace, maximizing adaptability and accommodating diverse learning needs. Cuocci et al. (2023) echo this adaptability, highlighting how asynchronous feedback tools support flexible collaboration, allowing students to engage with feedback at times most convenient for them. Together, these digital tools prepare students for digital workplaces, equipping them with the collaborative and adaptive skills critical for academic and professional success.

Improved Performance and Quality of Work

The collaborative learning model has a significant impact on students' academic performance and the quality of their work. Collaborative efforts in tasks like essay editing and synthesis writing result in higher-quality outputs due to the iterative process of peer feedback and improvement. Polakova and Klimova (2022) suggest that collaborative learning fosters academic excellence by providing students with a framework for continuous reflection and enhancement.

Rahman et al. (2024) find that mobile applications specifically designed for synthesis writing improve the quality of students' work by offering templates, guided prompts, and feedback systems that streamline the revision process. This allows students to focus on refining their arguments, resulting in more polished synthesis essays. Cuocci et al. (2023) also support this, noting that technology-supported peer feedback enhances students' ability to make both local and global revisions, leading to higher-quality work and stronger writing skills.

Increased Competence and Comfort in Learning

Collaborative learning creates a supportive environment that enhances learners' competence and comfort in handling academic tasks. For instance, Bakar (2021) demonstrates that students participating in collaborative and feedback-rich online environments report higher levels of confidence and comfort in academic writing tasks. By sharing knowledge and strategies, peers support each other in developing synthesis writing skills and in overcoming individual challenges.

According to Rahman et al. (2024), mobile applications tailored for synthesis writing provide students with accessible tools that minimize writing-related anxiety. These tools enable students to practice synthesis writing in a structured, non-intimidating format, fostering greater academic confidence. Cuocci et al. (2023) also note that students using asynchronous feedback tools feel more comfortable providing and receiving feedback in a digital environment, as it allows for thoughtful engagement without the immediate pressures of face-to-face interactions. Together, these technologies create a safe learning environment, enhancing students' academic comfort and competence.

Conclusion

Online collaborative learning is a powerful pedagogical tool in higher education, offering a comprehensive framework that promotes synthesis writing, enhances knowledge construction, and fosters a supportive and motivating learning environment. By embracing collaborative approaches and integrating digital tools, educators can create enriching learning experiences that prepare students for academic success and equip them with essential skills for their future careers. As higher education institutions continue to adapt to digital transformations, collaborative learning strategies, complemented by mobile applications and computer-mediated tools, remain instrumental in meeting the evolving needs of students. As highlighted in Vandermeulen et al. (2023), synthesis writing remains a cornerstone skill for academic and professional success, necessitating innovative and technology-driven instructional strategies.

References

- Barzilai, S., Zohar, A., & Mor-Hagani, S. (2018). Promoting transfer by integrating heuristic processes in teaching for conceptual change. *Learning and Instruction*, 56, 83-96.
- Bakar, E. W. (2021). Towards Digital Engagement – Exploring Academic Writing Conferencing and Collaborative Writing Using Google Docs. *International Journal of Academic Research in Business and Social Sciences*, 11(9), 1291–1306.
- Clarke, C., Cuocci, S., Fattahi Marnani, P., Khan, I., & Roberts, S. (2023). A Meta-Synthesis of Technology-Supported Peer Feedback in ESL/EFL Writing Classes Research: A Replication of Chen's Study. *Languages*, 8(114). DOI: <https://doi.org/10.3390/languages8020114>
- Elaish, M. M., Ghani, N. A., Shuib, L., & Al-Haiqi, A. (2019). Mobile Learning for Collaborative Writing in ESL Contexts. *Computers & Education*, 128, 111–122.
- Herrera-Pavo, M. A. (2021). Collaborative learning strategies and their impact on knowledge construction: A systematic review. *Educational Research Review*, 32, 100394.
- Jeong, H. (2022). Enhancing Digital Competency through Mobile Learning. *Journal of Digital Education*, 12(4), 567-582.

- Koole, M. L. (2009). A model for framing mobile learning. In M. Ally (Ed.), *Mobile learning: Transforming the delivery of education and training* (pp. 25-47). Athabasca University Press.
- Luo, L., & Kiewra, K. (2019). Developing Synthesizing Skills in Higher Education: The Role of Instructional Scaffolding. *Journal of Cognitive Learning*, 8(1), 45-63.
- Musaljon, H., Aliev, M., & Zhao, H. (2021). The role of collaborative learning in synthesis writing development. *Journal of Writing Research*, 13(2), 345-367.
- Polakova, P., & Klimova, B. (2022). Enhancing learner satisfaction and academic success through collaborative educational apps. *Educational Technology Research and Development*, 70(1), 121-140.
- Rahman, E. A., Yunus, M. M., Hashim, H., & Ab. Rahman, N. K. (2024). A Digital Approach to Teach Synthesis Writing for a Defence University: A Needs Analysis. *Arab World English Journal*, 15(1), 327-351. DOI: <https://dx.doi.org/10.24093/awej/vol15no1.21>
- Richards, J. C., & Pun, J. (2021). Teaching English as a Second Language: Adapting to Modern Educational Demands. *Journal of Language and Learning*, 14(3), 55-67.
- Romanowski, P., & Yaccob, Z. (2023). Addressing Plagiarism through Enhanced Synthesis Writing Skills. *Journal of Academic Integrity*, 18(2), 150-165.
- Vandermeulen, J., Ockenburg, M. V., & Hartshorn, J. (2023). Cognitive Models of Synthesis Writing: A Review of Recent Advances. *Writing Research Quarterly*, 29(2), 200-222.
- Vygotsky, L. S. (1978). *Mind in Society: The Development of Higher Psychological Processes*. Harvard University Press.



The Evolution of Speaking Skills Training in the Military: Digital Tools and the Teaching Speaking Cycle

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Abstract: In an increasingly interconnected world, communicating effectively in English is vital, particularly for military personnel operating in diverse, high-stakes environments. This paper explores the Teaching Speaking Cycle as a framework for enhancing speaking skills among military personnel through the integration of digital tools. The paper discusses the evolution of speaking instruction, emphasizing the shift from traditional methods to more interactive, technology-enhanced approaches that foster learner engagement and autonomy. It examines the critical components of speaking competence, including language knowledge, core speaking skills, and communication strategies, while highlighting military educators' unique challenges in implementing these methods. Furthermore, the review underscores the significance of mobile learning in providing flexible, context-specific training opportunities that cater to the needs of military personnel. By synthesizing current literature and case studies, this paper aims to provide insights into effective pedagogical practices that can enhance English-speaking proficiency in military contexts, ultimately contributing to improved operational effectiveness and communication within the armed forces.

Keywords: *digital tools, military education, mobile learning, speaking skills, teaching-speaking cycle*

Introduction

In the contemporary global landscape, English has solidified its status as the lingua franca, facilitating communication across diverse cultures and professional domains, particularly in military contexts where precise communication can be critical for operational success (Frățiță,

2022). The importance of speaking skills cannot be overstated, as they are often the primary measure of language proficiency, especially in high-stakes environments such as military operations (Kawa, 2023). Practical speaking skills enable military personnel to convey commands, negotiate with allies, and interact with local populations, enhancing mission effectiveness and operational safety. As military operations increasingly involve multinational forces and diverse linguistic backgrounds, communicating clearly and effectively in English becomes paramount.

Technological advancements have significantly influenced the evolution of pedagogical approaches in teaching speaking, mainly through the integration of digital tools and mobile applications. These innovations have transformed traditional methodologies into more interactive and learner-centred practices, allowing personalized learning experiences that cater to individual needs (Celik, 2023). Mobile learning, for instance, allows military personnel to practice speaking skills at their own pace and convenience, fostering greater autonomy and motivation (Umar et al., 2019). Moreover, incorporating gamification elements in language learning applications enhances engagement and retention of language skills, making learning more enjoyable and effective (Santos, 2024). As such, integrating technology into language instruction not only addresses the unique challenges faced by military personnel but also equips them with the necessary skills to thrive in their roles, ultimately contributing to improved communication and operational success in diverse environments.

Speaking Skills in Military Context

Speaking skills are paramount in military settings, where effective communication can mean the difference between mission success and failure. Language proficiency plays a crucial role in military leadership and operational effectiveness, as highlighted by Frăţilă (2022). Clear articulation and real-time responsiveness are essential for coordination and collaboration, particularly in joint operations with international forces. In high-pressure environments, military personnel must convey critical information succinctly and accurately, as miscommunication can lead to dire consequences, including operational failures or loss of life (Kopchak et al., 2022; Skilleås, 2024). This necessity underscores the importance of developing robust speaking competencies across all military roles, from tactical operations to strategic planning.

Moreover, the dynamic nature of military operations necessitates that personnel adapt their communication styles to accommodate diverse cultural contexts and varying levels of language proficiency among team members. Intercultural competence has become increasingly vital to effective communication during multinational military collaborations. Military leaders must possess strong language skills and the ability to navigate the complexities of cross-cultural interactions, including understanding non-verbal cues, adapting language to suit different audiences, and employing strategies that promote clarity and comprehension (Prykhodko et al., 2021). As Alim (2023) highlighted, training programs that enhance speaking skills and intercultural communication are essential for preparing military personnel to operate effectively in diverse environments, ultimately contributing to mission success and operational readiness. Furthermore, the integration of technology into military training can significantly enhance

speaking skills by providing innovative platforms for practice and feedback. These technological advancements ensure that personnel are well-equipped to meet the challenges of modern warfare and international cooperation, fostering a more adaptable and competent military force capable of thriving in complex operational landscapes (Lee et al., 2021)

Evolution of Teaching Approaches for Speaking Skills

The teaching of speaking skills has evolved significantly, shifting from traditional rote learning methods to more communicative and task-based approaches. This transformation is especially critical in military training, where practical language use in realistic, mission-specific contexts is essential for operational success (Kawa, 2023). Task-Based Language Teaching (TBLT) has emerged as a preferred pedagogical approach because it emphasizes real-world tasks that closely mirror the communication demands faced by military personnel. By engaging in these authentic tasks, learners improve their language proficiency and develop essential critical thinking and problem-solving skills, which are crucial in high-pressure military environments (Kawa, 2023).

The integration of technology into language education has further revolutionized the teaching and learning of speaking skills. Digital tools and mobile applications now offer learners flexible and interactive opportunities to practice speaking beyond the confines of traditional classroom settings, fostering greater fluency and confidence (Celik, 2023). For example, platforms that support video conferencing and interactive simulations enable military personnel to participate in realistic communication scenarios, directly enhancing their operational communication skills (Celik, 2023). Additionally, speech recognition software provides immediate, targeted feedback on pronunciation and fluency, allowing learners to identify and correct their errors in real time - a critical feature for achieving effective communication in high-stakes military contexts (Yahya & Kurniawan, 2019).

The Teaching-Speaking Cycle

As Goh and Burns (2012) proposed, the Teaching-Speaking Cycle serves as a comprehensive framework for planning effective speaking activities in language education. This model is particularly relevant in military training contexts, where effective communication is crucial for operational success. The cycle consists of seven distinct steps, each designed to build upon learners' existing knowledge and skills while addressing their specific communication needs.

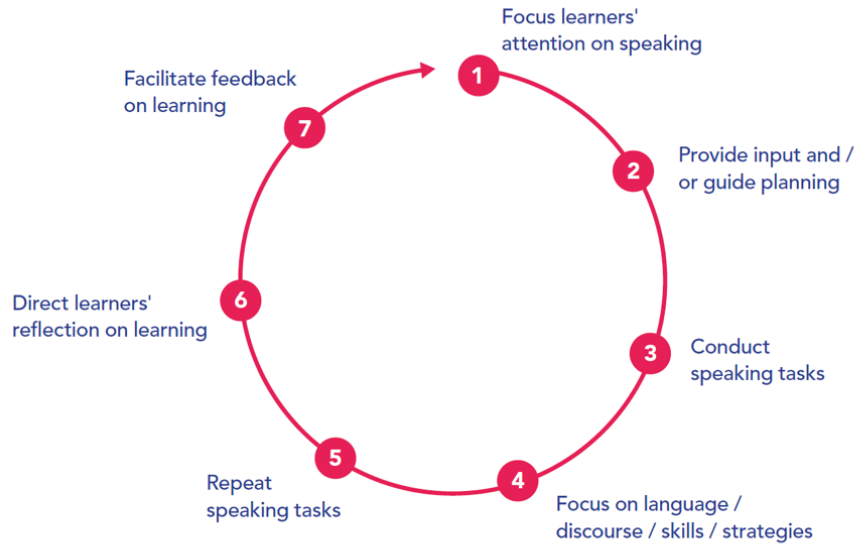


Figure 1: Teaching-Speaking Cycle (Goh & Burns, 2012)

1. Focus Learners' Attention

This initial step involves engaging learners by highlighting the importance of the speaking task at hand. In a military context, this might include discussing the relevance of effective communication in command and control scenarios or during negotiations with international partners.

2. Providing Input/Guidance

In this phase, instructors provide necessary language input, such as vocabulary, phrases, and structures relevant to the speaking task. This could involve teaching specific terminology used in military operations or intercultural communication strategies for military personnel.

3. Conducting Speaking Tasks

Learners engage in speaking activities to practice the language and skills introduced in the previous steps. This could include role-playing exercises simulating real-life military situations, such as coordinating a mission or conducting a briefing.

4. Focusing on Language/Discourse/Skills/Strategies

After the speaking tasks, instructors guide learners to reflect on their language use, focusing on fluency, accuracy, and the effectiveness of their communication strategies. This step is crucial for military personnel to develop the ability to convey information clearly and effectively under pressure.

5. Repeating Speaking Tasks

Learners are encouraged to repeat the speaking tasks, applying the feedback received in the previous step. This repetition helps solidify their skills and boosts confidence, which is particularly important in high-stakes military environments.

6. Directing Learners' Reflection

In this phase, instructors facilitate discussions that encourage learners to reflect on their performance, identify areas for improvement, and set goals for future speaking tasks. This reflective practice is essential for the continuous development of communication skills.

7. Facilitating Feedback on Learning

Finally, instructors provide constructive feedback on learners' speaking performances, highlighting strengths and areas for growth. This feedback loop is vital for military personnel, as it helps them refine their communication skills in a supportive environment.

Integrating the Teaching-Speaking Cycle in Military Training Using Digital Tools

Integrating the Teaching-Speaking Cycle within military training can be significantly enhanced through the use of digital tools like mobile applications. For instance, virtual reality (VR) and augmented reality (AR) technologies can create immersive environments where military personnel can practice their speaking skills in realistic scenarios without the risks associated with live training exercises (Herdayatamma, 2022). Additionally, mobile applications can facilitate asynchronous learning, allowing personnel to engage with speaking tasks and receive feedback at their convenience. This flexibility is particularly beneficial in military settings, where personnel may have unpredictable schedules and varying levels of access to traditional classroom environments (Fadzlah, 2023). Furthermore, online platforms can support collaborative learning, enabling military personnel to practice speaking with peers across different locations and enhancing their intercultural communication skills. By leveraging these digital tools, educators can create a more engaging and effective learning experience that prepares military personnel for the unique communication challenges they face in their roles. In conclusion, the Teaching-Speaking Cycle provides a structured approach to developing speaking skills among military personnel. By integrating this framework with digital tools, educators can enhance the effectiveness of language training, ensuring that military personnel are equipped with the necessary communication skills to perform their duties effectively.

Challenges in Teaching Speaking Skills

Despite advancements in teaching methodologies and the integration of technology, significant challenges persist in effectively teaching speaking skills to military personnel. One major hurdle is the difficulty instructors face in providing ample opportunities for real-time interaction, which is crucial for developing speaking competence. As highlighted by Galloway and Rose (2021), the lack of interactive environments can hinder the ability of learners to practice and refine their speaking skills, particularly in high-pressure military contexts where clear communication is essential. Furthermore, the diverse linguistic backgrounds of military personnel complicate the teaching process, necessitating tailored approaches that address individual needs and proficiency levels. Bisai and Singh (2022) emphasize that educators must adapt their teaching strategies to accommodate the varying levels of language proficiency among learners, which can be

particularly challenging in a military setting where personnel may come from different linguistic and cultural backgrounds.

In addition to these challenges, integrating digital tools into language instruction presents its obstacles. While technology can potentially enhance learning experiences, many educators report being unprepared to utilize these tools in their teaching effectively. According to Sim (2023), the absence of clear guidelines and institutional support can discourage teachers from exploring and adopting digital tools in their English language teaching. This lack of support is echoed by (Choi & Chung, 2021), who found that many educators struggle to incorporate technology into their language instruction due to insufficient training and experience. As a result, professional development for educators is essential to align their instructional practices with contemporary pedagogical approaches and to effectively utilize digital tools in the classroom (Rahmawati, 2023). By addressing these multifaceted challenges, military training programs can create a more effective and inclusive environment for developing speaking skills, ultimately leading to improved communication capabilities among personnel.

The Impact of Mobile Learning on Speaking Skills

Mobile learning has emerged as a powerful tool for enhancing speaking skills among military personnel. The flexibility and accessibility of mobile applications allow learners to engage with language content at their own pace, fostering greater autonomy and motivation (Umar et al., 2019). This autonomy is particularly beneficial in military contexts, where personnel often have unpredictable schedules and varying levels of access to traditional classroom environments. Mobile learning platforms enable military personnel to practice speaking skills through interactive exercises and real-life simulations, which can be accessed anytime and anywhere. This convenience encourages consistent practice and helps reinforce language retention, as learners can revisit materials as needed (Zainal & Yunus, 2021).

Furthermore, mobile applications designed for language learning often incorporate gamification elements, which can enhance engagement and retention of language skills. Gamification strategies, such as points, badges, and leaderboards, create a competitive yet enjoyable learning environment that motivates military personnel to improve their speaking abilities. This approach aligns with findings that active learning strategies, including gamification, significantly boost students' confidence and participation in speaking activities. Additionally, the use of mobile technology facilitates peer interaction and collaboration, enabling military personnel to practice speaking in a supportive environment. Collaborative features in mobile applications allow users to engage in conversation practice with peers, receive feedback, and share resources, thereby fostering a community of learners who can support each other's language development (Celik, 2023).

Moreover, the implementation of mobile learning strategies can be tailored to address the specific communication needs of military personnel, such as command and control language, negotiation skills, and intercultural communication. By utilizing mobile applications that focus on these areas, educators can ensure that military personnel are not only improving their general speaking skills but are also acquiring the specialized language competencies required for their roles. This

targeted approach to language learning, combined with the inherent flexibility of mobile technology, positions mobile learning as vital in developing practical communication skills among military personnel. As technology continues to evolve, the potential for mobile learning to enhance speaking skills will likely expand, offering new opportunities for military personnel to engage with language in meaningful ways Asratie et al. (2023).

Conclusion

In conclusion, teaching speaking skills to military personnel is a multifaceted endeavour that requires a comprehensive understanding of the components of speaking competence, effective pedagogical approaches, and technology integration. The teaching-speaking cycle provides a valuable framework for structuring speaking activities that meet the unique needs of military learners. As the demand for English language proficiency continues to grow in military contexts, the effective use of digital tools and mobile applications will be crucial in preparing personnel for the challenges of modern communication. Ongoing research and professional development for educators will further enhance the effectiveness of speaking instruction, ensuring that military personnel have the necessary skills to succeed in their roles.

References

- Alim, H. (2023). Cognitive readiness of military personnel: issues and considerations for malaysian army. *International Journal of Academic Research in Economics and Management Sciences*, 12(4). <https://doi.org/10.6007/ijarems/v12-i4/19052>
- Asratie, M., Wale, B., & Aylet, Y. (2023). Effects of using educational technology tools to enhance efl students' speaking performance. *Education and Information Technologies*, 28(8), 10031-10051. <https://doi.org/10.1007/s10639-022-11562-y>
- Bisai, S. and Singh, S. (2020). Towards a holistic and inclusive pedagogy for students from diverse linguistic backgrounds. *Teflin Journal - A Publication on the Teaching and Learning of English*, 31(1), 139. <https://doi.org/10.15639/teflinjournal.v31i1/139-161>
- Celik, B. (2023). Technology-Enhanced Language Learning: A Review of its Benefits. *International Journal of Social Sciences and Educational Studies*, 10(1), 383-387.
- Choi, L. and Chung, S. (2021). Navigating online language teaching in uncertain times: challenges and strategies of efl educators in creating a sustainable technology-mediated language learning environment. *Sustainability*, 13(14), 7664. <https://doi.org/10.3390/su13147664>
- Fadzlah, A. F. A., Abdul Wahab, N., Thanakodi, S., Lazim Talib, M., Razali, M. N., Mohd Yunus, M. S. F., ... & Mohd Asri, M. â. (2023). Critical success factors (csfs) model for military training mobile gaming apps (mg apps). *International Journal on Advanced Science, Engineering and Information Technology*, 13(5), 1960-1970. <https://doi.org/10.18517/ijaseit.13.5.18286>

- Frățilă, C. (2022). On the power of language in military leadership. *Land Forces Academy Review*, 27(2), 113-117. <https://doi.org/10.2478/raft-2022-0015>
- Galloway, N. and Rose, H. (2021). English medium instruction and the english language practitioner. *Elt Journal*, 75(1), 33-41. <https://doi.org/10.1093/elt/ccaa063>
- Goh, C.C.M. & Burns, A. (2012). *Teaching speaking: A holistic approach*. New York: Cambridge University Press.
- Herdayatamma, N. K. L. (2022). Virtual reality in military training to maintain indonesian military readiness in the era of covid-19 pandemic. *IJHCM (International Journal of Human Capital Management)*, 5(2), 97-103. <https://doi.org/10.21009/ijhcm.05.02.9>
- Kawa, S. (2023). Task-based language teaching: a pedagogical approach for improving english proficiency: analysis of private schools in erbil. *Ots Canadian Journal*, 2(10). <https://doi.org/10.58840/ots.v2i10.38>
- Kopchak, L., Zhumbei, M., Terletska, L., Konchovych, K., & Kanonik, N. (2022). The use of english as lingua franca to overcome language barriers and raise the level of education in modern conditions. *Eduweb*, 16(3), 121-133. <https://doi.org/10.46502/issn.1856-7576/2022.16.03.9>
- Lee, J., Hall, A., Carr, M., MacDonald, A., Edson, T., & Tadlock, M. (2021). Integrated military and civilian partnerships are necessary for effective trauma-related training and skills sustainment during the inter-war period. *Journal of Trauma and Acute Care Surgery*, 92(4), e57-e76. <https://doi.org/10.1097/ta.0000000000003477>
- Paneerselvam, A. and Mohamad, M. (2019). Learners' challenges and english educators' approaches in teaching speaking skills in an esl classroom: a literature review. *Creative Education*, 10(13), 3299-3305. <https://doi.org/10.4236/ce.2019.1013253>
- Prykhodko, I., Lyman, A., Matshehora, Y., Yurieva, N., Balabanova, L., Hunbin, K., ... & Morkvin, D. (2021). The psychological readiness model of military personnel to take risks during a combat deployment. *Brain Broad Research in Artificial Intelligence and Neuroscience*, 12(3), 64-78. <https://doi.org/10.18662/brain/12.3/220>
- Rahmawati, Y. (2023). Enhancing english language proficiency in hrm: a strategic imperative for logistics efficiency. *Asian Journal of Logistics Management*, 2(2), 112-122. <https://doi.org/10.14710/ajlm.2023.20519>
- Santos, R. (2024). Investigating the interplay between authentic leadership skills and second language proficiency in a higher education institution. *Cognizance Journal of Multidisciplinary Studies*, 4(2), 113-118. <https://doi.org/10.47760/cognizance.2024.v04i02.011>
- Sim, J. (2023). Using digital tools in teaching and learning english: delving into english language teachers' perspectives. *Creative Education*, 14(10), 2021-2036. <https://doi.org/10.4236/ce.2023.1410129>

- Skilleås, H. (2024). Language lessons learned? nato requirements and norwegian officer cadets. *Scandinavian Journal of Military Studies*, 7(1). <https://doi.org/10.31374/sjms.221>
- Umar, L., Kamran, U., & Maqbool, S. (2019). Analyzing writing needs of mba students:a case study of iiui. *Global Regional Review*, IV(III), 382-389. [https://doi.org/10.31703/grr.2019\(iv-iii\).42](https://doi.org/10.31703/grr.2019(iv-iii).42)
- Yahya, Y. and Kurniawan, R. (2019). Technology in teaching speaking skill: a review of current literature. *Journal of Language Education and Development (Jled)*, 2(1), 242-251. <https://doi.org/10.52060/jled.v2i1.204>
- Zainal, N., & Yunus, M,M. (2021). A review of the use of online module to improve English-speaking skills among university students. *International Journal of Academic Research in Progressive Education and Development*, 10(4), 147-155.



Designing Web-Based Learning Resources for Adult Learners: Insights from Military Officers' Needs

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Abstract: This paper explores the relevance and impact of web-based learning technologies for adult learners, with a specific focus on military officers. Adult learners face unique challenges, such as time constraints, practical learning needs, and the necessity for flexible educational solutions. Current web-based platforms offer benefits like accessibility, engagement, and skill development but often fall short in addressing the specific requirements of Military officers, including adaptability to military contexts and mission-oriented content. By analysing the characteristics of adult learners, the existing technological landscape, and the feedback from Military officers, this study identifies key gaps and opportunities for improvement. This paper concludes with suggestions for future research to refine web-based learning resources, ensuring they align with the unique needs of this critical demographic.

Keywords: *military officers, adult learners, web-based learning*

Introduction

Technology has become an integral part of modern education, fundamentally transforming how individuals learn and acquire new skills. The rapid evolution of digital tools and web-based platforms has made it possible to reach diverse groups of learners, breaking down barriers related to geography and time (Haleem et al., 2021). For adult learners, like military officers, the integration of web-based learning resources presents unique opportunities to address challenges

that traditional education methods cannot fully resolve (Patterson, 2016). These challenges include time constraints due to professional commitments, the need for learning materials that are both flexible and engaging, and the requirement for content tailored to their specific contexts and roles. Adult learners are distinct in their approach to education, often driven by intrinsic motivation and a desire to apply knowledge immediately in their work or personal lives (Knowles, 1984; Aljohani & Alajlan, 2020). They value learning experiences that prioritize flexibility, allowing them to learn at their own pace, and relevance, ensuring that what they learn is practical and applicable (Knowles, 1984; Mahlangu, 2017).

Current web-based technologies, such as interactive learning platforms, mobile applications, and virtual simulations, have made significant progress in meeting these preferences. These tools enable self-directed learning, and provide access to resources anytime and anywhere (Anuyahong & Pucharoen, 2023). However, there remains a gap in meeting the unique needs of military officers. Their roles demand specialized knowledge and skills that often require context-specific and mission-relevant content (Likaj, 2015). Moreover, the dynamic nature of military operations necessitates learning resources that are adaptable, intuitive, and aligned with the challenges of their environment (Tufail et. al., 2019). As such, the existing web-based tools, while effective in many ways, often require additional customization and development to be fully beneficial for this group.

This paper seeks to evaluate the relevance and impact of current web-based learning technologies for military officers, focusing on their strengths, limitations, and potential for improvement. By understanding how these technologies align with the needs of adult learners in military contexts, this study aims to contribute to the design of more effective, efficient, and learner-centered educational resources.

Current Technology Landscape

Modern web-based learning tools offer a variety of features specifically designed to enhance the educational experiences of adult learners (Daderska et.al, 2023). Learning management systems (LMS) like Moodle and Blackboard enable educators to create structured, self-paced modules, incorporate multimedia content, and track learners' progress efficiently (Olugbade, 2023). Olugbade (2023) also mentioned that these platforms provide a centralised hub for learners to access course materials, submit assignments, and receive feedback, making them indispensable in contemporary education. Interactive platforms like Kahoot and Quizlet, on the other hand, foster active engagement through gamified quizzes, flashcards, and collaborative learning exercises (Wang & Tahir, 2020). These tools not only make learning enjoyable but also help reinforce key concepts through repetition and interaction.

Additionally, video conferencing tools such as Zoom and Microsoft Teams facilitate real-time collaboration, enabling learners and instructors to connect seamlessly despite physical distances (Gladović, 2020). While LMS and interactive platforms excel in delivering general educational content, they often fall short in providing the flexibility necessary to accommodate the unpredictable and demanding schedules of military personnel. Military officers frequently face

irregular working hours, which require learning tools that allow for asynchronous participation without compromising on engagement or quality (Tufail, et. al., 2019).

Usability challenges further compound the issue. Complex interfaces, steep learning curves, and insufficient support for mobile devices can discourage effective use among military officers who may rely heavily on smartphones or tablets in the field. Limited offline accessibility also poses a barrier, as these officers often operate in environments with inconsistent or limited internet connectivity. Addressing these gaps is crucial to ensure that web-based learning tools can fully support the professional development of military officers and cater to the unique requirements of their roles.

Impact on Learning

The rapid advancement of web-based learning technologies has transformed how individuals access and engage with education (Bower, 2015). For military officers, who operate in high-stakes environments that demand adaptability and continuous learning, these technologies hold significant promise. This section explores the relevance and impact of current web-based learning technologies for military officers by analyzing their strengths, limitations, and potential for improvement.

Web-based learning technologies offer several advantages that align well with the demands of military training (Spain et. al., 2012). According to the scholars, one of their primary strengths is accessibility. The officers need something that is accessible to them. This is because military officers are frequently deployed to diverse locations. Another key strength lies in the adaptability of these platforms (Likaj, 2015; Tufail et. al., 2019). Many web-based systems employ advanced algorithms to personalize learning paths based on individual progress, skills, and learning styles (Spain et. al., 2012). This ensures that officers receive training content suited to their specific needs, maximizing efficiency and effectiveness.

Despite these advantages, web-based learning technologies face several limitations when applied to military contexts. One major challenge is the issue of connectivity (Starr-Glass, D., 2011). Military operations often occur in areas with limited or unreliable internet access, which can hinder the use of online platforms. Without robust offline capabilities, these technologies risk becoming inaccessible in critical scenarios. Starr-Glass (2011) also added another limitation is the lack of contextual relevance in some platforms. Generic learning content that is not tailored to military-specific needs can limit the applicability and impact of training (Simons, 2009; Starr-Glass, 2011). For example, civilian-oriented modules may not adequately prepare officers for the unique challenges of military operations, such as command responsibilities, situational awareness, or crisis management.

In addition to that, Starr-Glass (2011) mentioned that technical issues also remain a persistent obstacle. Software bugs, compatibility problems with devices, and outdated interfaces can frustrate users and reduce the perceived value of the technology. Furthermore, the lack of continuous updates and support can render some platforms obsolete, failing to keep pace with evolving military requirements (Simons, 2009). Finally, the human aspect of learning is often

diminished in web-based environments (Pollack, 2024). The absence of direct interaction with instructors or peers can limit opportunities for collaboration, mentorship, and experiential learning, which are crucial components of military training. Web-based learning technologies hold immense potential for advancing the professional development of military officers. While they have proven strengths in accessibility, adaptability, and cost-efficiency, addressing their limitations is crucial to unlocking their full impact.

Relevance of Current Technologies

While current web-based learning tools have made significant strides in transforming education, they often fall short of meeting the full expectations and unique needs of adult learners (Fensie, 2023). These learners require tools that not only provide general educational content but also cater specifically to the realities of their demanding and dynamic roles of military officers. Feedback from this demographic highlights a pressing need for platforms that go beyond generic features and offer practical, tailored content that directly aligns with their operational and professional contexts (Spain et. al.,2012).

The integration of real-life military scenarios into web-based learning tools could significantly enhance the relevance and applicability of the training (Star-Glass, 2011). These scenarios would allow learners to engage in problem-solving exercises and decision-making simulations that mirror the complexities of military operations. Gamified simulations, which combine elements of gaming with educational content, could further improve engagement and retention (Pollack, 2024). Pollack (2024) also added by creating immersive experiences that replicate the high-pressure environments military officers face, such tools can bridge the gap between theoretical knowledge and practical application.

Moreover, the adaptability of these platforms is a critical area for improvement. Adult learners like military officers, come with diverse educational backgrounds, learning paces, and preferred styles (Dekker et. al., 2012; Willingham et. al., 2015). Some may excel in visual learning through infographics and videos, while others benefit more from hands-on, interactive exercises. Web-based tools must evolve to accommodate these varied preferences, offering customizable learning paths and content delivery methods (Kaur, 2024). Features like self-directed modules, personalized learning recommendations, and adaptive assessments could empower learners to progress at a speed and depth that suits their individual needs, ultimately enhancing learning outcomes. In addressing these gaps, web-based learning platforms can become more effective and impactful tools for Military officers, equipping them with the skills and knowledge necessary to excel in their roles while meeting the demands of their unique learning environments.

Conclusion

Web-based learning technologies present a transformative opportunity for adult learners, particularly military officers, by enhancing accessibility, engagement, and practical outcomes. However, their success hinges on thoughtful design and strategic implementation that address the unique challenges faced by this demographic. Incorporating mission-oriented content, scenario-based training, and user-friendly features tailored to real-world military contexts, these

platforms can bridge the gap between theory and application. Future advancements should prioritise collaboration with military officers to refine these tools, ensuring they align with operational needs and expectations. Research into emerging technologies, such as AI and augmented reality, alongside best practices for interface design, can drive innovation and usability. Through such efforts, web-based learning technologies can become indispensable resources for professional development, enabling military officers to excel in their roles and adapt to the demands of an ever-evolving operational landscape.

References

- Ahmad, T., Zhang, D., Huang, C., Zhang, H., Dai, N., Song, Y., ... & Chen, H. (2021). Artificial intelligence in sustainable energy industry: status quo, challenges and opportunities. *Journal of Cleaner Production*, 289, 125834. <https://doi.org/10.1016/j.jclepro.2021.125834>
- Aljohani, O. H. and Alajlan, S. M. (2020). Motivating adult learners to learn at adult-education schools in Saudi Arabia. *Adult Learning*, 31(4), 150-160. <https://doi.org/10.1177/1045159519899655>
- Anuyahong, B. and Pucharoen, N. (2023). Exploring the effectiveness of mobile learning technologies in enhancing student engagement and learning outcomes. *International Journal of Emerging Technologies in Learning (iJET)*, 18(18), 50-63. <https://doi.org/10.3991/ijet.v18i18.40445>
- Bower, M. (2015). Deriving a typology of web 2.0 learning technologies. *British Journal of Educational Technology*, 47(4), 763-777. <https://doi.org/10.1111/bjet.12344>
- Dekker, S., Lee, N., Howard-Jones, P., & Jolles, J. (2012). Neuromyths in education: prevalence and predictors of misconceptions among teachers. *Frontiers in Psychology*, 3. <https://doi.org/10.3389/fpsyg.2012.00429>
- Fensie, A. (2023). A conceptual model for meeting the needs of adult learners in distance education and e-learning. *International Journal of Advanced Corporate Learning (iJAC)*, 16(2), 37-56. <https://doi.org/10.3991/ijac.v16i2.35729>
- Gladović, P., Deretić, N., & Drašković, D. (2020). Video conferencing and its application in education. *JTTTP - Journal of Traffic and Transport Theory and Practice*, 5(1). <https://doi.org/10.7251/jtttp2001045g>
- Haleem, A., Javaid, M., Qadri, M. A., & Suman, R. (2021). Understanding the role of digital technologies in education: A review. *Sustainable Operations and Computers*, 3, 275-285. <https://doi.org/10.1016/j.susoc.2022.05.004>. *Journal of Education and Practice*, 6(24), 64-70.
- Kara, M., Erdogdu, F., Kokoç, M., & Cagiltay, K. (2019). Challenges faced by adult learners in online distance education: A literature review. *Open Praxis*, 11(1), 5-22.
- Kaur, H. (2024). *Online Education: Trends and Its Importance*.
- Knowles, M. (1984). *The Adult Learner: A Neglected Species* (3rd Ed.). Houston: Gulf Publishing.

- Likaj, M. (2015). Teaching Listening as a Communicative Skill in Military English.
- Mahlangu, V. P. (2017). Professional development of adult learners through open and distance learning. *Global Voices in Higher Education*. <https://doi.org/10.5772/intechopen.68818>
- Ochoa-Daderska, Renata & Ochoa-Daderska, Gabriela & Sánchez-García, Javier & Callarisa Fiol, Luis & Navikienė, Živilė & Navikaite, Justina & Demirci, Metin & Kopiec, Agnieszka & Ochoa Sigüencia, Luis. (2023). Exploring Digital Tools for Adult Education Trainers: Best Practices Across Europe. 10.5281/zenodo.8395367.
- Olugbade, D. (2023). Perception and effectiveness of moodle learning management system (lms) in creating engaging learning environments: a study of west african universities.. <https://doi.org/10.21203/rs.3.rs-3680909/v1>
- Patterson, M. B. (2016). Full-time instructional staffing and outcomes of advanced adult learners. *Adult Education Quarterly*, 66(4), 336-358. <https://doi.org/10.1177/0741713616662906>
- Pollack, R. (2024). United States Army Instructors' Perceptions of Low Self-Efficacy in Online Blended Learning Courses: A Phenomenological Study (Doctoral dissertation, National University).
- Simons, M. V. (2009). *Holistic Professional Military Development*. Massey University, New Zealand.
- Spain, R. D., Priest, H. A., & Murphy, J. S. (2012). Current trends in adaptive training with military applications: an introduction. *Military Psychology*, 24(2), 87-95. <https://doi.org/10.1080/08995605.2012.676984>
- Starr-Glass, D. (2011). Military learners: Experience in the design and management of online learning environments. *Journal of Online Learning and Teaching*, 7(1), 147-158.
- Tufail, M. S., Husain, H. A., Salehan, D. A., & Azid (2019), M. S. Devising an Evaluation Approach for a Malaysian Armed Forces English Language Program.
- Wang, A. I., & Tahir, R. (2020). The effect of using Kahoot! for learning—A literature review. *Computers & Education*, 149, 103818.
- Willingham, D. T., Hughes, E. M., & Dobolyi, D. G. (2015). The scientific status of learning styles theories. *Teaching of Psychology*, 42(3), 266-271. <https://doi.org/10.1177/0098628315589505>