

TABLE OF CONTENT

| | |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|
| Anita Christina Anthony Pre-Service ESL Teachers' Mindsets and their Approaches towards Assessments https://doi.org/10.24191/mvahvg19 | 1–21 |
| Maryam Muidh Alsulami, Sharifah Shahnaz Syed Husain, Aini Faridah Azizul Hassan Saudi EFL Learners' Attitudes Towards Arabic-English Code-Switching https://doi.org/10.24191/yjvd8a60 | 22–37 |
| Julazzmie Kambutong, Nur Farha Shaafi Content Validity of a Survey on Knowledge, Skills, and Readiness for Generative AI https://doi.org/10.24191/xnvcmw23 | 38–57 |
| Aini Syahira Jamaluddin, Nabila Huda Nasir, Nur Azyyati Mohamad Sa'edin, Ummu Habibah Mohd Sakri @ Shukri Can Artificial Intelligence Replace Teachers? Perspectives from Pre-Service Teachers in Elementary Education https://doi.org/10.24191/vjk6sz19 | 58–73 |
| Xia Yutong, Talaibek Musaev Grammar of Obligation: Syntactic Patterns in Malaysian Reddit AIED Discourse https://doi.org/10.24191/rs3g1v95 | 74–97 |
| Mohd Hafiz Mat Adam, Geethanjali Narayanan, Juriani Jamaludin, Rafidah Abd Karim Fostering Independent Expository Essay Writing Development Using Song-Assisted Learning (SAL) to Avert AI Over-Reliance https://doi.org/10.24191/nhh8d038 | 98–112 |
| Farhana Atiqah Ahmad Radzuan, Marina Mohd Arif Teacher Perspectives on ChatGPT Integrated Vocabulary Instruction in a Flipped ESL Classroom https://doi.org/10.24191/9deysg59 | 113–135 |
| Damia Syafiqah Mohd Salleh, Norlina Mohd Sabri, Fazlin Marini Hussain SpeakEasy Nihongo: Mobile Application for Japanese Beginner Learners https://doi.org/10.24191/1k11n645 | 136–152 |



Fostering Independent Expository Essay Writing Development Using Song-Assisted Learning (SAL) to Avert AI Over-Reliance

Mohd Hafiz Mat Adam*
mohd_hafiz@uitm.edu.my
Academy of Language Studies
UiTM Cawangan Perak, Kampus Tapah, Malaysia

Geethanjali Narayanan
geetha@uitm.edu.my
Department of Teaching English as a Second Language, Faculty of Education
UiTM Cawangan Selangor, Kampus Puncak Alam, Malaysia

Juriani Jamaludin
juria914@uitm.edu.my
Faculty of Music
UiTM Shah Alam, Malaysia

Rafidah Abd Karim
feida16@uitm.edu.my
Academy of Language Studies
UiTM Cawangan Perak, Kampus Tapah, Malaysia

Corresponding author*

Received: 8 January 2026

Accepted: 8 March 2026

Published: 25 May 2026

CITE THIS ARTICLE:

Adam, M. H. M., Narayanan, G., Jamaludin, J., & Abd Karim, R. (2026). Fostering independent expository essay writing development using song-assisted learning (SAL) to avert AI over-reliance. *Journal of Creative Practices in Language Learning and Teaching*, 14(1), 98–112. <https://doi.org/10.24191/nhh8d038>

ABSTRACT

AI over-reliance on expository essay writing aspects lead to decreased cognitive abilities and critical thinking skills, diminished confidence, and waning core skills that are crucial to self-develop an expository essay. Its over-reliance leads to like-minded idea production in the



students' work, as reflected in their main ideas, supporting details, and examples. Thus, this study aims to analyse the effects of using a Song-Assisted Learning (SAL) approach to reduce over-reliance on AI for expository essay writing among students in a public university in Peninsular Malaysia. The research design was quantitative in nature, focusing on a quasi-experimental design involving 30 students from a public university located in Perak, Malaysia. Two distinct approaches were used in this study: (i) AI-permissible condition, and (ii) SAL approach. The essays were marked by two independent raters using a reliable rubric adapted from an established university. The data were analysed using SPSS v.29 involving independent samples T-test. For the AI condition test, the findings revealed poorer scores ($M = 6.967$) resulted from a high plagiarism rate, and points that drifted away from the question's main requirements. On the other hand, under the SAL condition, the submitted essays contained more human touch – more authentic, personal, creative, and emotion-driven, resulting in better scores ($M = 14.233$). The difference was significant ($p = 0.006$), highlighting the negative standing of AI's over-reliance on students' expository essay writing capabilities, and the need to use a different approach to foster students' cognitive and problem-solving skills.

Keywords: Artificial Intelligence (AI), Song-Assisted Learning (SAL), English as Second Language (ESL), humanized

INTRODUCTION

AI integration in tertiary education has been showing positive effects on writing skills, as many aspects of writing become improved, such as sentencing and grammar that are proofed, producing essays that are error-free in term of language, but affecting the students' critical thinking skills that discourage active learning and independent thinking, when equitable access to AI is not controlled (Pervaiz, 2025). This means, despite the advantages that AI carries in assisting the students' writing process, its over-reliance is harmful especially when the students fail to use their own cognitive abilities when AI usage is completely forbidden (e.g.: final examinations). According to Zhai et al. (2024), AI over-reliance weakens users' cognitive abilities since it creates a dependent and reliant environment that leads to uncritical acceptance of the generated contents – weakening critical evaluation of received information, and poor efforts in cross-referencing data that affect final analysis and interpretation of matters. Since AI overuse is not cognitively enriching, this concern was also raised and supported by Larson et al. (2024) who stated that the students in AI generation (GenAI) are exposed to unlimited information that also contain poor-quality, inaccurate, and confabulated data, that require the students to have critical thinking skills to distinguish them. It then leads to a depressing condition, when the requirement for self-thinking skills pressurize the students' mental ability, since they are used to getting answers instantly using AI. This leads to over-reliance on AI even to complete the simplest essay writing task, since using self-mental abilities are tiring to the students. This phenomenon is widespread in this era, known as brain fatigue – a psychobiological state of tiredness caused by prolonged periods of performing demanding, cognitive-load-inducing activities, and it reduces efficiency in cognitive performance (Craik, 2014; Tanaka et al., 2014). In general, it is a mental state marked by persistent tiredness, difficulty concentrating, and reduced cognitive performance, caused by the overstimulation of the mind, often resulting from prolonged exposure to digital information and artificial intelligence tools. This situation weakens



the students' mental abilities, as proven by research conducted by Kosmyna et al. (2025) who discovered weaker neural connectivity and under engagement of students who received too much external support from AI. In other words, mental fatigue is further complicated by stress, and later leads to decreased cognitive performance, as discussed by Kunasegaran et al. (2023). From this context, it leads to the following problem statement: AI over-reliance is showing that the students prefer to let AI complete the tasks given to them, by simply prompting it with any given question, resulting in poor expository essay scores when plagiarism and monologue answers were detected – affecting voice and content scores, with possible penalization of marks. An approach that can reduce AI over-reliance should be considered, to ensure that the students feel interested and challenged to use their own cognitive efforts to develop an expository essay. This study aims to investigate whether the use of the SAL approach can improve the students' expository essay writing scores, as opposed to using AI to assist their essay development.

From the discussion above, this study presents several gaps. In other research, AI was proven to improve the students' essay writing scores significantly, especially when integrating AI-based feedback into their learning process (Triwayatno et al., 2025), but this study presents conflicting results on the same topic, whereby AI usage leads to poorer essay score performances when marked using a rubric that considered the student's voice – as they committed plagiarism and directly lifted ideas provided by the generative AI before developing their essays. In addition, despite AI's usefulness in assisting student writing and performance, in the long run, it leads to cognitive debt (Kosmyna et al. 2025), making the students unable to rely on their own minds to think and solve a given writing task, causing issues in assessments and final examinations when digital devices (involving AI) are forbidden. This matter also presents a knowledge gap, since there is a lack of understanding about this subject, whereby did the students obtain better assessment/final examination scores, or they only obtained better test scores that were obtained for research purposes? In other words, the students' performances were claimed to be improved by AI assistance, but do the students really manage to perform well in physical final examinations that ban digital devices?

In this regard, the SAL approach is seen to be an effective approach to be used in class, to reduce such over-reliance on AI. Song-Assisted Learning (SAL) refers to an instructional approach that incorporates songs and music into the teaching and learning process to support students' cognitive, emotional, and motivational development. According to Governor et al. (2013), the use of content-rich songs in classroom instruction can enhance student engagement and learning experiences while offering new possibilities for developing innovative instructional strategies. In language learning contexts, SAL involves the integration of song lyrics and melodies to facilitate various language skills, including listening comprehension, vocabulary development, grammar practice, and writing activities. Songs also function as meaningful sources of content and thematic material, enabling students to generate ideas, stimulate creativity, and connect personal experiences with learning tasks. Johansson (2021) similarly reported that songs enhance vocabulary acquisition and retention, promote positive attitudes toward learning among both teachers and students, and reduce learner anxiety and stress. Furthermore, the enjoyable and emotionally engaging nature of music can increase learners' motivation and willingness to participate in classroom activities, as supported by Sene and Erkan (2018), who found that students were more eager and motivated to engage in learning tasks when songs were incorporated into lessons. Nevertheless, Azzazi (2023) noted that the successful implementation



of music in education depends largely on teachers' confidence and preparedness. Teachers must be equipped with appropriate training to select songs that align with learners' cultural backgrounds, proficiency levels, age, interests, and prior knowledge. Therefore, although SAL offers numerous pedagogical benefits, its effectiveness depends on the proper implementation by instructors as well as students' engagement with the approach. Additionally, songs can serve as a medium for exploring cultural differences. Arevalo (2010) demonstrated that songs allow learners to compare cultural elements, language characteristics, and social contexts between their own culture and those of English-speaking communities. Such comparisons enhance learners' intercultural understanding and contribute positively to their overall language development, including writing skills.

Overall, this research is therefore guided by the following research question: "Is there a significant difference between the use of AI-permissible condition and the SAL approach in term of scoring?", with the objective of determining whether there is a significant difference in students' expository essay writing scores between those under the AI-permissible condition and the Song-Assisted Learning (SAL) approach.

SAL and Affective Filters

The effectiveness of Song-Assisted Learning (SAL) in language classrooms can be explained through the Affective Filter Hypothesis proposed by Krashen (1985). According to this hypothesis, emotional variables such as anxiety, motivation, and self-confidence play a significant role in determining the extent to which learners can successfully acquire a second language. In general, the presence of music and meaningful lyrical content can reduce tension in the classroom, increase learners' emotional engagement, and encourage active participation in language-related tasks, including writing activities, as supported by Mobbs and Cuyul (2018) who highlights its benefits in reinforcing prosodic features, promoting cultural understanding, and encouraging self-expression, which generally demonstrate how music can motivate learners.

Krashen's Hypothesis of Affective Filter

According to Krashen (1985), a high affective filter is anything that impedes a learner's access to an input, such as a mental block, which highlights a learner's condition of feeling unsafe, unrelaxed, unmotivated, stressed, and fearful. However, if the affective filter is low, the input can flow much easier, as the learner feels the opposite, which opens up a smooth path to Language Acquisition Device (SLAD). The following figure shows the Krashen's Hypothesis of Affective Filter, and the usage of SAL approach to reduce the filter to assist LAD and provide a desired output:

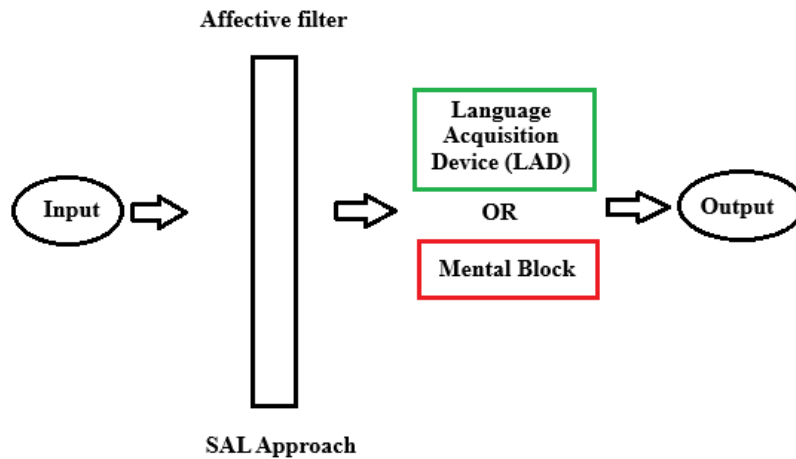


Figure 1. Krashen's (1985) Hypothesis of Affective Filter

Based on the figure above, when the affective filter is reduced or increased, it closes or opens a student's mood – acting like a gate that controls the amount of input that enters (Abukhattala, 2012). By using the right pedagogy to reduce the affective filter, the hindrance to LAD can be condensed to produce the best output. In this study, the SAL approach that uses songs to assist the students' ideation was used to provide a sense of safety, relaxation, motivation, and confidence to the learners, in effort to reduce the affective filter to assist the students' essay development using the songs' lyrical contents. The relevant ideas from the lyrics' messages could help the students produce better ideas that contain emotional depth that represent the students' voice. Since Krashen's theory also challenged the accepted second language pedagogy – abandon the traditional classroom teaching (Bailey & Fahad, 2021), the SAL approach is seen as a more interactive teaching and learning method that can avert AI overuse. Thus, despite having past studies and literature supporting AI's positive effects on students' essay writing performances, its over-reliance is harmful to the students' cognitive and critical thinking abilities. So, the SAL approach can facilitate the students' writing, while also being a non-conventional way of teaching expository essay writing to avert AI over-reliance in English as Second Language (ESL) classroom settings.

To specify, the Affective Filter Hypothesis proposes that emotional factors such as anxiety, fear, and lack of confidence can block language acquisition. When the affective filter is high, learners become anxious and less receptive to learning. In fact, songs create a comfortable and enjoyable learning environment, which lowers the affective filter. When the affective filter is low, students become more willing to participate and write, reducing writing anxiety. In addition, Krashen (1985) also argued that motivation and positive emotions facilitate language learning. SAL lowers emotional barriers and increases motivation, allowing students to engage more actively in writing tasks. When the students feel less anxious, they are cognitively freer to think and express ideas. With a lower affective filter, learners can process input more effectively, enabling better idea generation and written expression. Moreover, the theory also provides a pedagogical justification for using songs. According to the Affective Filter Hypothesis, such conditions facilitate language acquisition and learning performance. So, the findings can be interpreted through Krashen's (1985) Affective Filter Hypothesis, which suggests that learners acquire



language more effectively when emotional barriers such as anxiety and fear are minimized. The use of songs in the SAL environment appeared to create a more relaxed and enjoyable classroom atmosphere, thereby lowering students' affective filters and enabling greater engagement in idea generation and writing activities.

METHODOLOGY

This study employed the quasi-experimental design under the quantitative method, involving 30 students from a public university located in Perak, Malaysia. The data were retrieved from the students' expository essay writing scores from test instruments under two conditions: (i) AI-permissible, and (ii) SAL approach. The data was analysed using independent samples T-test, and descriptive statistics.

This study did not involve experimental and control groups. It only involved one group selected from one intact class chosen based on factors like (i) proficiency levels, (ii) same course or instructor, and (iii) accessibility or logistical feasibility. Hence, the sample was chosen based on the following considerations: (a) their current semester – all semester 3 students, (b) non-repeater of the English subject, and (c) number of students in the class – no lesser than 30 students. This study employed a single-group design as it aimed only to explore the students' differences in essay content production when two different approaches were applied. Rather than comparing treatment effects between groups, the study only sought to find idea production difference between the essays. The use of only a single group was also influenced by practical considerations such as limited participant availability and the nature of the investigation.

The data collection procedure began by teaching expository essay writing to the students using the SAL approach that involved songs for six weeks. All song selections were made carefully under stipulated conditions set by Zarin Tasnim (2022) involving six criteria: (i) learning objectives and goals, (ii) rhythm and tempo (genres), (iii) educational value, (iv) length and complexity, (v) interactive potential, and (vi) student interest – to ensure relevance and suitability to be used in class.

During the lesson period, the students were taught about expository essay writing contexts normally using PowerPoint slides, with SAL being used at every session for expository essay writing practices, functioning as stimuli to help their composition processes. It involves the usage of songs prior to every practice to assist them with essay development covering ideas, examples, supporting details, and contents. This approach was also used to motivate them and reduce their writing apprehension, since songs are generally fond by today's generation. Bao (2023) emphasizes that songs can contribute positively to both cognitive and emotional development, including enhancing abstract thinking abilities, intercultural awareness, visual and literary literacy, and emotional intelligence.

Priming period is also needed to ensure that both approaches were done equally in term of time allocation for stimuli. According to Shalev and Bargh (2011), a priming intervention includes the regulation of the states of emotions, which activate mindsets that can enable adaptive function. A more specific type of priming is called "goal priming", by which cues in the environment has the



ability to foster goal-directed cognition and behaviour, with zero requirement for conscious intentions (Papies, 2016).

In week 7, the essay composition task began. SAL approach was not used to these students. Generally, they were asked to write an expository essay from a given topic, and they could freely use AI (such as looking for online articles through AI suggestions, or prompt for relevant ideas) for the first 30 minutes, under the instructor's supervision (no songs were involved at this stage). After the 30 minutes time allocation for AI usage elapsed, the students began writing their essays, and all their digital devices were confiscated. The time given to complete the essay was 1 hour and 30 minutes, submitted in handwriting.

In the following week (8), the students were asked to write the same essay, but they were restricted from using any digital devices, with only the SAL approach being primed to them for 30 minutes. To clarify, the SAL approach priming period in week 8 involved the usage of the carefully selected songs as mentioned earlier. Within the first 30 minutes, songs were used to assist the students' ideation processes before asking them to compose the essays individually. At this stage, the students discussed about the contents of the songs and their meanings with their peers, alongside getting inputs from the instructor regarding the messages that the lyrics bear. Overall, the students had freedom to make meanings from the songs on their own, and could use any ideas, points, and examples, that they deemed usable for their essays, as found from the lyrics or inspired by the musical arrangement (genre) of the songs.

All submitted essays were marked by two independent raters using a specific rubric by SUNY Oneonta (2024) that contained the following criteria: (i) content (40%), (ii) voice (30%), (iii) mechanics and vocabulary (20%), and (iv) organization (10%). The Cohen Kappa's value between both raters yielded the amount of 0.82, indicating high agreement between scores by both raters. The score data were later analysed using independent samples t-test and descriptive statistics, using SPSS v.29.

RESULTS AND DISCUSSION

Generally, the table below shows the result of the students' expository essay writing scores. In the first test (AI), the students performed poorly due to factors like A - plagiarism and direct lifting, B - containing similar main ideas as the other students' who committed A, and C - directly copied and pasted the AI generated answers. These resulted in extremely poor results that ranged in between 0 – 8% out of 20%. However, when the SAL approach was used, and the students were restricted from using AI (and other digital devices), they attempted to complete the given task on their own, through self-reflection and making connections with the songs' lyrics. This resulted in better results, with voices and contents being more authentic and containing emotional depth. The minimum score in the SAL test was 11%, and the highest was 18%.



Table 1. Student Essay Scores

| Student | AI | Remark | SAL | Remark |
|---------|----|--------|-----|--------|
| 1 | 17 | - | 14 | - |
| 2 | 10 | - | 16 | - |
| 3 | 4 | A | 14 | - |
| 4 | 13 | - | 16 | - |
| 5 | 14 | - | 14 | - |
| 6 | 6 | A | 11 | - |
| 7 | 6 | A | 16 | - |
| 8 | 4 | A | 14 | - |
| 9 | 8 | B | 10 | - |
| 10 | 0 | C | 18 | - |
| 11 | 6 | A | 18 | - |
| 12 | 4 | A | 14 | - |
| 13 | 4 | A | 11 | - |
| 14 | 6 | A | 12 | - |
| 15 | 16 | - | 14 | - |
| 16 | 4 | A | 11 | - |
| 17 | 8 | B | 11 | - |
| 18 | 4 | A | 17 | - |
| 19 | 5 | A | 14 | - |
| 20 | 4 | A | 18 | - |
| 21 | 3 | A | 14 | - |
| 22 | 4 | A | 11 | - |
| 23 | 13 | - | 15 | - |
| 24 | 8 | B | 15 | - |
| 25 | 6 | A | 14 | - |
| 26 | 4 | A | 17 | - |
| 27 | 14 | - | 15 | - |
| 28 | 8 | B | 17 | - |
| 29 | 0 | C | 16 | - |
| 30 | 6 | A | 10 | - |

Legends

| | |
|---|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| A | Plagiarised and direct lifting. AI-given points were not cross-referenced or double-checked for relevance. Points drifted away from the question's requirement. (AI misunderstood the question). |
| B | Contains main idea(s) that drifted from the essay's requirement, being similar to AI generated answers that drifted from the essay's requirement, suggesting direct lifting without properly understanding or double-checking what the question requires. (AI misunderstood the question). |



C Copied and pasted AI generated answers that were completely irrelevant. (AI misunderstood the question).

In summary, the table above presents the scores of 30 students under two essay-writing conditions: AI-assisted and Song-Assisted Learning (SAL). Overall, students performed significantly better in the SAL condition compared to the AI-assisted condition. Scores in the AI-assisted essays ranged from 0 to 17, whereas the SAL essays ranged from 10 to 18, showing a general upward trend in performance when songs were integrated as part of the learning process. A review of the remarks for the AI-assisted essays reveals several recurring issues. Many students' AI-generated essays were flagged for plagiarism, direct lifting, or inclusion of irrelevant points that did not align with the essay question. Specifically, remarks labelled "A" indicated direct copying from AI outputs without cross-checking for contextual relevance, while "B" and "C" denoted varying degrees of misunderstanding of the essay prompt and complete irrelevance of content. In contrast, no SAL essays were flagged for plagiarism or content issues, suggesting that students' writing under this approach was more authentic and aligned with task requirements. These findings suggest that while AI-assisted writing may lead to dependency and superficial engagement with content, the SAL approach appears to foster greater originality, comprehension, and relevance in students' expository essays.

Specifically, AI scores ranged from 0 to 17, while the SAL scores ranged from 10 to 18. This highlights SAL scores being consistently higher than the AI scores of almost all students. A larger improvement from AI to SAL scores were observed from students 10 (0 to 18) and 18 (4 to 17), with N = 18 and 13 incremental scores, but with students 1 and 15 (N = -3 and -2 respectively) showing a slight reduction. Based on the remarks as explained in the legends row, students 3, 6 - 8, 11 - 14, 16, 18- 22, 25, 26, 30 committed plagiarism and direct lifting under A, causing them to be penalized and given scores of 3 – 6, while students 9, 17, 24, and 28 committed B that showed them using main ideas that drifted from the question's requirement, indicating that they did not read the question properly and simply reused the answers provided by AI. Finally, students 10 and 29 committed C, indicating that they directly copied and pasted the generated AI answers as their own. On the other hand, none of the SAL essays were flagged with plagiarism, or received penalization of scores – indicating that the essays were completely written by the students using their own efforts and cognitive skills, as assisted by the SAL approach.

To clarify, the following table shows excerpts from the students' work from both methods (AI vs SAL), alongside selected rater's comments:

Table 2. Student Essays' Excerpts Based on the Different Approach Used

| AI-Assisted excerpt | Rater's Comment | SAL excerpt | Rater's Comment |
|-------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|
| This is a good thing that the company should do, in efforts to ensure staff giving their best for the | Connecting company's vision and mission with lucky draw presents sound | I will buy special gifts for them like gold. It will make them more happy and give more | Natural essay build up, containing human feelings about the need to show appreciation to |



| | | | |
|----------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------|
| company's achievement. The vision and mission of the company can be achieved. | unnatural. This line is possibly developed by generative AI. | energy to work with our company. We need to appreciate our staff. | the staff, and make them feel happy when receiving the gifts. |
| The total budget of the ceremony is RM10,000 inclusive of hall loan, dinner catering, appreciation presents, parking reserves, and cleaning costs. | The question's RM10,000 fund is clearly used to buy lucky draw presents only. It does not involve other costs written here, except for presents. This line is probably AI's misunderstanding of the fund's usage, but used by student anyway without sufficient checking. | The gift can include a trip to Langkawi for 3 nights and 2 days, and include dinner for them to allow them to bonding at Langkawi. They can healing and help the staff forget about work for a while to make them smile. | Even though the supporting details are simple, yet they show the student's own intention to make the staff smile and heal themselves during the trip. |

Based on the table above, the students' own writing often appears more natural than AI-generated texts or AI-assisted composition process because it reflects personal voice, authentic thinking processes, and individual experiences. When the students write, they draw upon their own knowledge, perspectives, and linguistic habits, which results in varied sentence structures, spontaneous expressions, and natural imperfections that make the writing sound human and genuine. These small variations, including occasional grammatical inconsistencies or informal phrasing, contribute to the authenticity of the text. In contrast, AI-generated writing is typically produced based on patterns learned from large datasets, which often leads to highly structured, grammatically polished, and somewhat uniform language. As a result, while AI writing may appear technically accurate and coherent, it may lack the individuality, contextual depth, and personal engagement that characterize students' original writing.

To obtain the conclusion of the results, an independent samples t-test was conducted to obtain the statistical data and its p-value, as shown in the table below:

Table 3. Independent Samples T-Test

| | Type | N | M | SD | p-value |
|-------------|------|----|--------|-------|---------|
| Test | AI | 30 | 6.967 | 4.429 | <.001 |
| | SAL | 30 | 14.233 | 2.445 | |

The table summarizes the comparative results between the AI-assisted and Song-Assisted Learning (SAL) conditions in essay writing performance. It presents the number of participants (N), mean scores (M), standard deviations (SD), and the p-value indicating the significance of

the difference between the two groups. The results show that for the AI-assisted condition (N = 30), students obtained a mean score (M) of 6.97 with a relatively high standard deviation (SD) of 4.43, indicating both lower overall performance and greater variability among students' scores. In contrast, under the SAL condition (N = 30), students achieved a much higher mean score (M = 14.23) with a smaller SD (2.45), suggesting more consistent and stronger performance across participants. The p-value (< .001) indicates a highly significant difference between the two conditions, confirming that students performed significantly better in essay writing when using the Song-Assisted Learning approach compared to AI assistance. These results demonstrate that the SAL approach led to markedly improved and more uniform writing outcomes, while the AI-assisted approach resulted in lower, inconsistent scores, possibly due to overreliance on AI-generated content and misunderstanding of essay prompts.

The results above reflect the negative impacts of AI dependency and overuse, clearly showing penalization of scores being given to the students who took the test under the AI-permissible condition. It showed 23 out of 30 students (77%) decided to misuse AI and committed three different misconducts (A, B, and C) that led to the penalization of their scores, possibly resulted from the students' laziness and reduced critical and independent thinking, leading to reduced creativity (voice) – they refused to think of the answers on their own, and were lazy to complete the task because their level of creativity was reduced since AI was allowed to be used to complete the test. This is supported by a study by Zhang et al. (2024) who discovered the following consequences of AI dependency, namely (i) laziness, (ii) spread of misinformation, (iii) decreased creativity, and (iv) reduced critical and independent thinking. In fact, the increasing use of ChatGPT has led to individuals' growing dependence on AI, resulting in various misuse and abuse of the technology (Kasneji et al., 2023). In addition, the 23 students from the AI test scored 0 for the voice scores (weightage: 30%), indicating zero contribution to criteria related to “personal connection”, “powerful tone”, “weaving quotes, paraphrases and summaries into own writing”, and “thoughtful transitions” – showing the lack of voice, to almost none, found in their essays. The poor scores in these areas are alarming, because they reflect a significant decrease in creativity, critical thinking skills, and independent thinking, since AI was at their disposal. Therefore, even though AI was allowed to be used during the test under supervision, misuse and abuse still happened, because it was impossible for one instructor to control all 30 students entirely. This emphasises the need to guide the students towards appropriate and responsible use of AI, by integrating it for academic excellence ethically, as suggested by Ihekweazu et al. (2024). Apart from voice, they also lost marks in contents (weightage: 40%), whereby AI misunderstood the question and provided them with wrong answers, as shown below:

Table 4. Students' Main Ideas (Answers)

| Question | Your company will hold a “Staff Appreciation Ceremony” soon. You need a RM10,000 fund from the finance department to buy gifts for 30 lucky staff members. Write an expository essay about the gifts that you will buy using the money. | |
|-----------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|
| Bil | Irrelevant Contents (Provided by AI/ChatGPT) | Relevant Contents |
| 1 | Boost employee morale and motivation | Bicycles |
| 2 | Enhancement of company culture | Hampers |



| | | |
|---|--------------------------------------------------|--------------------------------|
| 3 | Retention and engagement | Shoes |
| 4 | To appreciate excellent staff | Buy gold bars as presents |
| 5 | To avoid problems of low budgeting | Trip to Langkawi |
| 6 | For company reputation | Cash bonuses |
| 7 | To achieve the vision and mission of the company | Free overseas vacation tickets |
| 8 | Foster competition | Wallets |

Based on the table above, when detecting the students' irrelevant contents, it was apparent that the students failed to properly comprehend what the question required, despite its simplicity. The question was straightforward, with only two starting sentences used to complicate the actual requirement of the answers – (i) the company will hold a ceremony, and (ii) what can RM10,000 be used for, to gift 30 lucky staff. Yet, the students chose to completely take AI generated main ideas as their answers, which resulted in various penalization of marks. If the students answered the question on their own, various relevant contents that required simple explanations can already be used as their answers. This scenario is alarming, showing that the students failed to ethically use AI even under the instructor's supervision. When using ChatGPT in educational settings, it is important to follow responsible and ethical procedures to ensure that the technology is used in a way that is safe, equitable, and considerate of students, teachers, and all other stakeholders (Ihekweazu et al., 2024).

On the other hand, the SAL approach that used songs containing relevant lyrics related to the essay topic managed to produce better essays with higher test scores, indicating that this approach reduced AI dependency by using the allocated time for song-listening, and prohibition of digital tools for 30 minutes, allowing the students to enjoy listening to the songs, and connect with their memories and past experiences to begin sharing what they feel like writing on their essays. This is supported by the findings from Pugh (2014) who said that music evokes a particular emotion, and it is powerful enough to bring certain feelings to a person, and changes a person's mood, and it greatly influences creative writing, due to a significant amount of brain activity that occurs from the depth of the students' responses of the lyrics. This cognitive spark makes the students use their mental abilities again, since some students completely rely on AI to answer various questions that they face in their everyday lives, including analysing people's reactions on them, possible sickness that they are suffering, and course of actions related to social interactions, as Klingbeil et al. (2024) stated, participants follow AI advice that conflicts with available contextual information and is against their own interests, and its overreliance on AI advice negatively affects human cooperation, leading to undesired results for advisees and third parties. This means, humans also use AI to get advice, making them behave as third parties – creating concerns on human's trusts since people are now trusting and relying on AI to advise them. The SAL approach that uses songs, contain human advice embedded in the lyrics, and the students need to explore them and decipher the hidden meanings to obtain them – making this approach challenging, fun, and engaging. Apart from fostering students' thinking skills, this method can also be used to reduce AI overuse or over-reliance, to produce students who possess mental capacities and critical thinking skills, especially in developing an expository essay. In fact, a study by Khoirunnisak et al. (2024) also discovered a significant improvement in term of student essay writing scores between cycle 1 and cycle 2, when song-related method was used in



the teaching and learning process, involving writing song lyrics analysis that improved the students' analytical essay writing skills. Overall, the SAL approach is beneficial in assisting the students' idea generation skills, fostering creativity, and eventually assist in enhancing the students' performances in expository essay writing, as opposed to using AI that can be beneficial to a certain extent, but with possibilities of misuse and abuse.

CONCLUSION AND RECOMMENDATION

Based on the results, there is a clear and significant difference between the two writing conditions. Students who wrote their essays using the Song-Assisted Learning (SAL) approach achieved substantially higher and more consistent scores compared to those who relied on AI-assisted writing. The statistical analysis ($p < .001$) confirms that the improvement under the SAL condition is not due to chance, but represents a meaningful enhancement in students' writing performance. This finding implies that the use of songs as a learning aid can be an effective pedagogical strategy for improving students' idea generation, comprehension, and engagement in writing tasks. The SAL approach appears to encourage critical thinking and originality, enabling students to express their own understanding and perspectives rather than depending heavily on AI-generated content. In contrast, the lower and more varied scores in the AI-assisted condition, combined with remarks of plagiarism and irrelevance, suggest that AI use without proper guidance can hinder authentic learning and discourage independent composition skills. In conclusion, the results reaffirm the pedagogical value of song-assisted learning as a creative and human-centered alternative to AI dependency in academic writing. By integrating music and lyrical content into the learning process, educators can promote deeper cognitive engagement, reduce overreliance on automated tools, and help students develop more genuine and contextually relevant written work. These findings highlight the importance of guiding learners toward meaningful, reflective, and self-generated writing practices rather than substituting human creativity with machine output.

REFERENCES

- Abukhattala, I. (2012). Krashen's five proposals on language learning: Are they valid in Libyan EFL classes. *English Language Teaching*, 6(1), 128–131.
<https://files.eric.ed.gov/fulltext/EJ1076806.pdf>
- Arevalo, E. A. R. (2010). The use of songs as a tool to work on listening and culture in EFL classes. *Cuadernos de lingüística hispánica*, 15, 121–138.
<https://www.redalyc.org/pdf/3222/322227521008.pdf>
- Azzazi, M. (2023). The benefits of incorporating songs in L2 classrooms. *The Cardinal*.
<https://the-ofla-cardinal.org/2023/02/14/the-benefits-of-incorporating-songs-in-l2-classrooms/>
- Bailey, F., & Fahad, A. K. (2021). Krashen revisited: Case study of the role of input, motivation and identity in second language learning. *Arab World English Journal*, 12(2), 540–550.
<https://dx.doi.org/10.24093/awej/vol12no2.36>



- Bao, D. (2023). Exploring the impact of songs on student cognitive and emotional development. *International Journal of Visual and Performing Arts*, 5(2), 134–143. https://researchmgt.monash.edu/ws/portalfiles/portal/567314098/567313149_oa.pdf
- Craik, F. I. M. (2014). Effects of distraction on memory and cognition: a commentary. *Frontiers in Psychology*, 5, 841. <https://doi.org/10.3389/fpsyg.2014.00841>
- Governor, D., Hall, J., & Jackson, D. (2013). Teaching and learning science through song: Exploring the experiences of students and teachers. *International Journal of Science Education*, 35(18), 3117–3140. <https://doi.org/10.1080/09500693.2012.690542>
- Ihekweazu, C., Zhou, B., & Adelowo, E. A. (2024). Ethics-driven education: Integrating AI responsibly for academic excellence. *Information Systems Education Journal*, 22(3), 36–46. <https://doi.org/10.62273/JWXX9525>
- Johansson, J. (2021). *Benefits of Songs in the ESL Classroom*. <https://www.diva-portal.org/smash/get/diva2:1538697/FULLTEXT02.pdf>
- Kasneji, E., Seßler, K., Küchemann, S., Bannert, M., Dementieva, D., Fischer, F., Gasser, U., Groh, G., Günemann, S., & Hüllermeier, E. (2023). ChatGPT for good? On opportunities and challenges of large language models for education. *Learning and Individual Differences*, 103, Article 102274. <https://doi.org/10.1016/j.lindif.2023.102274>.
- Khoirunnisak, Yanti Sri Rezeki, & Syarif Husin. (2024). Improving students' analytical writing skill by writing song lyrics analysis. *Ethical Lingua: Journal of Language Teaching and Literature*, 11(2), 584–594. <https://doi.org/10.30605/25409190.736>
- Klingbeil, A., Grützner, C., & Schreck, P. (2024). Trust and reliance on AI—An experimental study on the extent and costs of overreliance on AI. *Computers in Human Behavior*, 160, Article 108352. <https://doi.org/10.1016/j.chb.2024.108352>
- Kosmyna, N., Hauptmann, E., Yuan, Y. T., Situ, J., Liao, X. H., Beresnitzky, A. V., Braunstein, I., & Maes, P. (2025). *Your brain on ChatGPT: Accumulation of cognitive debt when using an AI assistant for essay writing task*. arXiv preprint arXiv:2506.08872, 4. https://collimateur.uqam.ca/wp-content/uploads/sites/11/2025/12/2506.08872v1_comp.pdf
- Krashen, S. (1985). *The Input Hypothesis*. Longman.
- Kunasegaran, K., Ismail, A. M. H., Ramasamy, S., Gnanou, J. V., Caszo, B. A., & Chen, P. L. (2023). Understanding mental fatigue and its detection: A comparative analysis of assessments and tools. *PeerJ*, 11, Article e15744. <https://doi.org/10.7717/peerj.15744>
- Larson, B. Z., Moser, C., Caza, A., Muehlfeld, K., & Colombo, L. A. (2024). Critical thinking in the age of generative AI. *Academy of Management Learning & Education*, 23(3), 373–378. <https://doi.org/10.5465/amle.2024.0338>
- Mobbs, A., & Cuyul, M. (2018). Listen to the music: Using songs in listening and speaking classes. *English Teaching Forum*, 56(1), 22–29. <https://eric.ed.gov/?id=EJ1181086>
- Papies, E. K. (2016). Health goal priming as a situated intervention tool: how to benefit from nonconscious motivational routes to health behaviour. *Health Psychology Review*, 10(4), 408–424. <https://doi.org/10.1080/17437199.2016.1183506>
- Pervaiz, I. (2025). The role of artificial intelligence practices in organizational productivity with the mediating role of artificial intelligence integration effectiveness in the FMCG sector of Pakistan. *Journal of Political Stability Archive*, 3(4), 1314–1328. <https://doi.org/10.63468/jpsa.3.4.77>

- Pugh, K. C. (2014). *The effect of music on creative writing*. Semantic Scholar. <https://www.semanticscholar.org/paper/The-Effect-of-Music-on-Creative-Writing-Pugh/4ffd41cc0047d3f3c410f2e1832ce52d0ec62c09?sort=relevance&pdf=true>
- Sene, S., & Erkan, D. (2018). The effect of songs on primary school students' motivation. *International Online Journal of Education and Teaching*, 5(4), 867–875. <https://eric.ed.gov/?id=EJ1250569>
- Shalev, I., & Bargh, J. A. (2011). Use of priming-based interventions to facilitate psychological health: Commentary on Kazdin and Blase (2011). *Perspectives on Psychological Science*, 6(5), 488–492. <https://doi.org/10.1177/1745691611416993>
- SUNY Oneonta, State University of New York, (2024). Marking Rubric. <http://employees.oneonta.edu/benjamkd/advanced/gradingrubric1.htm>
- Tanaka, M., Ishii, A., & Watanabe, Y. (2014). Neural effects of mental fatigue caused by continuous attention load: A magnetoencephalography study. *Brain Research*, 1561, 60–66. <https://doi.org/10.1016/j.brainres.2014.03.009>
- Triwayatno, N., Irawan, N., Ghofur, A., & Pramujiono, A. (2025). Enhancing students' English essay writing proficiency AI-based automatic feedback systems. *Jurnal Penelitian Humaniora*, 26(1), 36–48. <https://doi.org/10.23917/jph.v26i1.9041>
- Zarin Tasnim. (2022). Songs for EFL/ESL class: How to teach listening skill through music. *Mextesol Journal*, 46(3), 1–12. <https://files.eric.ed.gov/fulltext/EJ1364959.pdf>
- Zhang, S., Zhao, X., Zhou, T., & Kim, J. H. (2024). Do you have AI dependency? The roles of academic self-efficacy, academic stress, and performance expectations on problematic AI usage behavior. *International Journal of Educational Technology in Higher Education*, 21(1), 1–14. <https://doi.org/10.1186/s41239-024-00467-0>
- Zhai, C., Wibowo, S., & Li, L. D. (2024). The effects of over-reliance on AI dialogue systems on students' cognitive abilities: A systematic review. *Smart Learning Environments*, 11(1), 1–37. <https://doi.org/10.1186/s40561-024-00316-7>

Declaration of Generative AI and AI-assisted Technologies in the Writing Process

AI was not used for the development of this paper.

Conflict of Interest

The authors have no conflicts of interest to declare.

Acknowledgement

This paper forms a small component of the main author's thesis work.

Authors' Contributions

The authors confirm contribution to the paper as follows: study conception and design: R. Abd Karim, M.H.M. Adam, G. Narayanan; data collection: M.H.M. Adam; analysis and interpretation of results: M.H.M. Adam, G. Narayanan; draft manuscript preparation: J. Jamaludin, R. Abd Karim. All authors reviewed the results and approved the final version of the manuscript.