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Invertible Octopus as a Tool to Promote Fast Thinking in Impromptu Speaking

Kamarul Ariffin Ahmad*, Nur Khadirah Ab. Rahman, Emily Abd Rahman, Nor Hafidzah Zulkifli

Language Centre, Universiti Pertahanan Nasional Malaysia, Kem Sungai Besi, 57000 Kuala Lumpur, Malaysia

*Corresponding author: kamarul.a@upnm.edu.my

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Abstract

Having students extemporize as a classroom activity to prepare them for impromptu speech may be daunting. Their reluctance to volunteer or to step forward may cost time, thus giving everyone the opportunity to practice impromptu speech may be hampered. An action research was conducted to view and understand students' perspectives of a game called Invertible Octopus Game as an intervention to help them hone their fast-thinking skills based on Dual Process Theory Type 1. The game was designed with a closer look into Cognitive Load Theory, and 30 medical students were selected for the research. Data were gathered via a short questionnaire, interviews and classroom observations to gain insights into the effectiveness of the game in activating students' fast thinking skills as a preparation for impromptu task. The students reported that this activity helped them prepare for the impromptu task and 96% of them agreed that the game invoked their fast-thinking skills. 92% of the students hoped to have such a game in the future for the speaking class. The study concluded that the game managed to work as a facilitating tool for the impromptu task and had the potential to develop students' fast-thinking skills. Nevertheless, future and in-depth research is needed to further develop the framework and to gain empirical data for the effectiveness of the Invertible Octopus Game.

Keywords: fast-thinking, game, impromptu speech, speaking skills.

Abstrak

Melibatkan pelajar dalam aktiviti spontan di dalam bilik darjah bagi mempersiapkan mereka untuk pengucapan spontan adalah mencabar. Keengganan pelajar untuk tampil secara sukarela atau melibatkan diri boleh memakan masa dan menjejaskan peluang semua pelajar untuk berlatih. Satu kajian tindakan telah dijalankan untuk memahami perspektif pelajar terhadap satu permainan yang dinamakan *Invertible Octopus Game* sebagai satu intervensi bagi membantu mereka mengasah kemahiran berfikir pantas berdasarkan *Dual Process Theory* (*Type 1*). Permainan ini dibangunkan dengan mengambil kira *Cognitive Load Theory*, dan seramai 30 pelajar perubatan telah terlibat dalam kajian ini. Data dikumpulkan melalui soal selidik ringkas, temu bual dan pemerhatian bilik darjah bagi mendapatkan gambaran tentang keberkesanan permainan ini dalam mengaktifkan kemahiran berfikir pantas pelajar sebagai persediaan untuk tugasan pengucapan spontan. Pelajar melaporkan bahawa aktiviti ini membantu mereka membuat persediaan untuk tugasan tersebut dan 96% daripada mereka bersetuju bahawa permainan ini mencetuskan kemahiran berfikir pantas. Sebanyak 92% pelajar berharap aktiviti seperti ini diteruskan dalam kelas pertuturan pada masa hadapan. Kajian ini merumuskan bahawa permainan ini berfungsi sebagai alat yang berkesan dalam persediaan tugasan pengucapan spontan dan berpotensi membangunkan kemahiran berfikir pantas pelajar. Walau bagaimanapun, kajian lanjutan yang lebih mendalam diperlukan untuk membangunkan kerangka yang lebih kukuh serta mendapatkan data empirikal tentang keberkesanan *Invertible Octopus Game.*

Kata kunci: Perasaan kekitaan, humor afiliatif, humor *self-enhancing*, humor agresif dan humor *self-defeating*

1.0 INTRODUCTION

Effective communication is vital across many settings. Getting messages delivered clearly is important to avoid miscommunications and as a means to ensure a proper and accurate outcome is achieved. In language classes such as the English language, various methods and activities are designed and included in the curriculum to ensure the students could function well in various communication settings. The designed tasks and assessment must consider various aspects that include psychological and physiological demands. In the impromptu task especially, the cognitive demands are high among non-native speakers as they are struggling to produce not only clear but also accurate linguistic features (Jalleh et al., 2021).

In addition, impromptu speech requires students to perform fast thinking as little to no preparation time is given. The challenge for students when it comes to preparing and presenting their impromptu speech varies from language to delivering appropriate and relevant ideas for the topic given. Nevertheless, the inclusion of impromptu speech as an assessment is undeniably crucial as this task could help students in developing their confidence (Wirdayana & Kultsum, 2023). Furthermore, such a task also requires self-efficacy which include confidence - developing one's self-confidence is vital to ensuring that they can perform and function effectively. Ghafar (2023) stated that students with higher levels of self-confidence outperformed and did well in speaking tasks as compared to those who possessed lower self-confidence. Thus, intervention to facilitate students in building self-confidence is called for.

Not only that the intervention helps in building self-confidence, but it should also equip and train students to develop cognitive agility since impromptu speech requires students to think fast. Cognitive agility refers to the flexibility of one's cognitive functions to generate accurate string of ideas in flash, and this dynamicity is seen as valuable to be instilled in students as a means of preparing them for impromptu speech (ElAdl, 2025). Given the loads at performing the task, an intervention is needed to help students develop the skills and attributes needed to perform well thus moving towards reliable scores – scores that rely on their performance in terms of speaking with minimum noise coming from the psychological and physiological factors.

Many interventions were being developed by teachers across the globe to prepare the students for speaking tasks and with the advancement of technology, these interventions were digitalised to promote self-learning. However, performing or speaking in front of a crowd requires practice in a real setting in which digital games are lacking – digital games are often played alone or in a group at their own respective place without physical human interaction or presence (Rajendran et al., 2024). As mentioned, various factors must be considered to develop an intervention for impromptu tasks that mimic the real-life setting. Therefore, the invertible octopus game was designed as an innovation that caters to these needs; practice, development of confidence and cognitive agility, and mimic the real-life setting.

The innovation was designed based on the Dual Process Theory (DPT) as proposed by Kahneman where he classified cognitive abilities into two categories, namely Type 1 and Type 2. Type 1 refers to fast and heuristic thinking whereby Type 2 refers to slower yet more accurate thinking which is almost always useful at decision-making (Grayot, 2020). Grayot further claimed that even though Type 1 was almost always associated with autonomous thinking, it could still be trained and learned to be internalized. This game hones the students' Type 1 thinking as the game requires them to think fast as the game continues.

Thus, this study was conducted with the aim of exploring the effectiveness of this methodology as a teaching tool specifically for and as preparation for impromptu speech tasks from the students' perspectives. This study delved into understanding the students' perception of the game at helping them prepare for the impromptu speech task by activating their Type 1 thinking skills. Their emotions throughout the game would also be investigated to identify if the game was suitable for the purpose of preparation for the speaking task.

■2.0 LITERATURE REVIEW

Impromptu speeches which may take place in various communicative settings including public speaking or even discussion and spontaneous conversation between several parties may increase anxiety amongst the speakers especially when they are speaking in a second or a foreign language (Jalleh et al., 2021). Many language courses, like the one offered in the institution, impromptu speech skills are honed and being tested to develop students' self-confidence and comfort while speaking in front of a crowd. Given the obstacles such as anxiety, it created unwanted and extra tasks for the language teachers to facilitate students in mastering the skills and at the same time to develop students' self-confidence. Teferra et al. (2022) has reported that students with higher level of anxiety produced less words thus did not speak as much as those who had lower anxiety. This is concerning as this could be viewed as noise in assessment which may hamper the results in yielding accurate estimates of students' speaking ability.

When self-confidence in speaking is discussed, it is almost always related to self-efficacy. Self-efficacy, that correlates positively with language learners' performance (Li et al., 2023), is the learners' beliefs of their own ability to perform a task successfully. At times, learners need to be given trainings in order for them to discover and develop their confidence and efficacy in performing language tasks, which classroom practices or instructions can be the means to achieve this (Yuan et al., 2024). With enough exposure and reinforcement, students are expected to improve their self-confidence as they are going to get familiarized with the situation (Badrasawi, et al., 2021). With this game, when students play it for rounds, they are expected to gain experience as they are training their mind to think fast, develop their self-confidence and establish an emotional state that is ready for spontaneous tasks (Badrasawi et al., 2021; Wang & Sun, 2024; Saez-Zevallos et al., 2025).

Other than the psychological factors mentioned above, impromptu speech also requires the speaker to possess adequate knowledge of the subject matter (Sekkal, 2020). This would add another dimension to the variables where students need to possess the knowledge to be able to deliver the speech within the limited time given for the preparation. This would add a challenge to the teachers, to prepare the students to be knowledgeable enough to be given any topic for the speech. In addition to that, students must be equipped with the knowledge on how to use non-verbal communication cues appropriately while delivering the message while choosing the correct and accurate diction to ensure accuracy (Sekkal, 2020; & Guvey, 2021). These not only add the obstacles towards providing adequate skills to supplement the presentation, but time is also an enemy to the teaching and learning process where most of the time, teachers have limited face-to-face interaction time with the students to exercise.

Despite the struggle due to the multifaceted variables, impromptu speech is an important skill to master as it could be the sought after skill in leadership (Yong et al., 2024). Effective impromptu speech not only facilitates delivering the message smoothly, but it also ensures that the message is crystal clear and can be easily comprehended by the audience. In addition to the setting of the institution where the student's composition comprises of military cadets as the majority, impromptu speech is seen as a means to practice and to hone their cognitive agility where the skill requires them to think fast while remain flexible and adaptive (LaCroix, 2021). Cognitive agility is closely related to psychological fluency where those who are fluent are more likely to view mental task as easy thus having the ability to process information faster (Hbash, 2023).

Agility in communication is vital as the parties involved in a conversation are to be versatile and adaptable to whatever information is presented to them where they possess the ability to rapidly process the information and produce a string of idea in the form of utterances (Ruler, 2021). As mentioned earlier, during an impromptu speech exercise or even assessment, students are given little to no preparation time prior to their speech and this aligns the perspectives of cognitive agility and impromptu speech. Nevertheless, cognitive agility is not a borne skill that is stagnant and cannot be developed. Paonessa (2025) suggested that creative play could enhance cognitive ability by training the mind to become innovative and function well outside of the usual context or unpredictable setting, which in the case of impromptu speech the topic given is viewed as the unpredictability presented to the students prior to the presentation. Paonessa's stand resonates with the idea of having the Invertible Octopus Game where this innovation is seen as the creative play to promote leisure and arts while exercising the intended skills.

Another dimension to be considered when it comes to impromptu speech, other than the self-confidence, background knowledge and cognitive agility as aforementioned, is the dual process theory which could also be traced in Freudian theory (Jonathan, 2017). Dual process theory (DPT) is a theory of how someone processes information either slowly and reflective or automatically and heuristically (Grayot, 2020). DPT categorises cognitive processes into two, namely Type 1 and Type 2 in which Type 2 refers to slower and a more careful approach towards decision making, whereby Type 1 refers to a faster and more intuitive (Khalil & Amin, 2022). Impromptu speech is closely related to Type 1 as it reflects the mental capacity of students in processing the information that they receive faster and Grayot added that Type 1 is also related to motor skills – which is applied in the octopus game.

It is also worth noting that impromptu speech requires the speaker to actively process information with the working memory and the long-term memory that they acquired which is closely related to the cognitive load theory. During the short preparation time, students need to actively work on the stimulus given, which is the topic of the speech, and the knowledge they possess to construct string of ideas for the presentation – which involves a complex cognitive activity (Chen et al., 2023) that may increase the demand of the task. Szulewski et al. (2020) iterated that this process, referred to as the cognitive load theory, requires a person to map their cognitive architecture to generate the appropriate ideas or actions, and the interaction between these two types of memory not only will help the students survive the preparation period but also as a backup while the presentation is ongoing.

The literature has proven that despite the importance of including impromptu speech as an exercise and a form of assessment in a language classroom, particularly speaking lessons, there are challenges that the teachers must count into consideration while preparing the students for the task. The demands to be equipped with the confidence, required skills and knowledge are not only on the students, but to the teachers too – especially when designing in-class activities that would facilitate the students to acquire and develop their abilities. Thus, a memorable and easy to implement model to facilitate this, that captures the needs, was developed in the form of an in-class game named the Invertible Octopus Game.

This game is seen as a tool that helps students develop their cognitive agility when their brains are trained to make faster decisions that is a mechanic that supports DPT Type 1 and the gameplay imitates the real-life impromptu speaking situations where the students are given a brief time for preparation – which this game is expected to facilitate the development of the skills over time (Wang & Sun, 2024; Puri et al., 2025). This approach, not only being fun, but also a low-stress approach that improve students' engagements which in return will result in gaining proficiency, motivation as well as reducing cognitive task – that would also help in improving cognitive agility (Puri et al., 2025). Therefore, this game addresses both emotional and psychological aspects such as self-confidence, anxiety and self-efficacy, while simultaneously strengthening mental skills like fast thinking, cognitive load management and cognitive agility through the active gameplay.

■3.0 METHODOLOGY

This study was conducted with action research approach where this approach is used to improve pedagogical practices and to prepare interventions to solve real-life problems (Clark et al., 2020; Stringer & Aragorn, 2020). Action research involves researching on the practice that consists of identifying the problem and reflecting on the effectiveness of the intervention. This study was designed to overcome the issue of providing enough practice prior to the presentation with the limited time available in a speaking classroom. In addition to the DPT that explains the mental processes involved while playing the game, the idea of the game was based on Cognitive Load Theory (CLT) that involves several mental activities to perform a task which is closely related to the impromptu speech (as described in the previous section) and given with the advancement of technology, multiple digital-based games have been developed in line with the theory (Puri et al., 2025). The Octopus game on the other hand, despite theoretically align to CLT, was designed with considerations of the absence of the Internet and without any prior capability of developing digital game-based content which makes it applicable to almost any classroom setting – that was also a way of ensuring cost effectiveness.

When developing a game based on CLT, the game designer should bear in mind that the game has to be at par with the students' ability in term of the complexity of the content, the way it is presented and how it facilitates in developing the knowledge (Sweller et al., 2019). The mismatch of the load and the tasks would end up in a poor design game or overly complex tasks thus resulting in exceeding the capacity which may hamper the overall objective of the game (Sweller et al., 2019; Faber et al., 2024; Langerock et al., 2025). To ensure that the impact of the game is sustained, Van Nooijen at al. (2024) suggested that the aim of developing a learning tool should be based on how the task helps in developing the knowledge and the skills, and this could be done by optimising the load presented and required to perform a task. Thus, DPT and CLT were seen as two theories underlying this approach where DPT was set as the aim to achieve by performing tasks that were designed based on CLT. Therefore, the Invertible Octopus Game was developed as an intervention to overcome the problems faced in preparing students for the impromptu task without burdening students' cognitive load.

Adopting Lewin's action research model that includes four stages in a cycle which are planning, action, observation and reflection (Messikh, 2020), the planning stage took place when the problem was identified that involved 30 medical students who attended a speaking class were found to experience difficulties to present their impromptu speech despite having good written command in English. They were found to stammer and hesitated while presenting and upon short discussion, they reported that they were nervous and could not think of an idea when they were a given a topic to deliver. Then, a learning method was developed (i.e. the game) to help them overcome the issues. The action stage took place when the game was conducted in class that involved all of the students. Then the observation stage took place where data were collected to examine whether the intervention managed to overcome the issues – through short survey, interviews and classroom observation while playing the game.

The short interviews were conducted to understand the students' point of view pertaining to the game and their feelings while playing the game. The interviews were unstructured interviews where it consisted of initial questions used for explorations of their feelings while playing the game – before receiving the toy, upon receiving the toy, and other questions deemed appropriate based on their responses to the earlier questions. Though some researchers viewed unstructured interviews as being inferior to the counterpart method, unstructured interviews have been proven to increase the interviewer-interviewee interactions thus making the session more fruitful and in-depth without compromising its validity (Chauhan, 2019; Bihu, 2020; Lin et al., 2022). Thus, five students were selected on voluntary basis and were interviewed out of the 30 participants for the study.

A short survey was also disseminated virtually prior to the interview to all students to be answered, and the items were developed with yes-no format so that the deeper understanding would be gathered during the interview - the yes-no format was used to ask simplify the evaluation of the opinion from the students (Aini Faridah Azizul et al., 2021). The items were:

1. This activity forced me to think fast.
2. This activity made me feel nervous.
3. This activity made me feel more alert with my surroundings.
4. I honed my speaking skills during the activity.
5. The activity is suitable for impromptu speech task.
6. I wish to have more activities like this in class.
7. I planned a strategy to survive the game.

While the game was played, the teacher performed observations to record students' reactions especially their non-verbal responses that included facial expressions, tones and willingness to participate. A checklist was developed based on Wardani (2018) and Maher (2020) where the number of occurrences was recorded in the checklist by putting a check mark every time the behaviour was observed. The checklist for the observation included the following items:

Facial Expressions	Tones	Willingness to Participate
Smiling/Laughing	Shaking (voice)	Staying alert
Raising eyebrows	Speaking too softly	Catching the toy without hesitation
Looking anxious	Project voice loudly	Communicate with friend(s)
Avoiding eye contact	Various tones	

These data were then recorded and studied to determine the effectiveness of the method by employing mixed-method approach. The survey items were analysed by calculating the percentage of the responses. This is due to the nature of action research where the research is localised and is intended to the specific group. Therefore, advance statistical method was not employed as the whole group is considered as the population. The number of occurrences was counted from the checklist to identify which behaviour(s) had the most occurrence – the findings from the checklist were used as prompts during the interview. The interview data were analysed with interview data analysis suggested by Miles and Huberman which involved five stages namely 1) transcribing the interview, 2) read and rereading the transcript for familiarisation, 3) coding the interview – to identify themes, 4) writing the summary of the coded data, and 5) writing the interpretation of the data (Griffee, 2005). These processes were done by three research members independently and a discussion was done to resolve the disagreements before concluding the identified themes.

3.1 The Gameplay

The Invertible Octopus Game was played with a large group of students and in this study, it involved all 30 students in the class. The plush octopus which could be inverted to show anger and happiness expressions was used as a tool to be tossed to another player in the game. The game required a plush toy, in this research the invertible octopus plushie, and a classroom setting where students were scattered and seated at their chosen corner of the class – the classroom for this research consisted of wheeled-chairs that were equipped with foldable table on each – made the movement easier. In this game, the teacher acted as the starter of the rounds and would not participate with the rest of the gameplay. The gameplay would involve only two tasks which were to choose an emotion (based on the invertible octopus) either angry or happy, and they were supposed to continue the story (i.e. sentence) from the previous player. The teacher then explained the rules where each student was given only 3 seconds to respond to the task and if they failed to perform the task, a simple punishment would be given for example answering a grammar question. Other than that, they must ensure that their sentences must have logical sequence – as the game use narrative/story as the stimulus.

The game started with the teacher holding the plush octopus and read a sentence aloud to the whole class to mark the beginning of the round and as a stimulus for the game. The stimuli used in this research were (based on a few rounds) 1) It was a dark and a stormy night…, 2) The day I experienced a near death event was the day I realised…, and 3) I wake up in the middle of the night and no one was there. The teacher then tossed the plush octopus to a random student where he had to invert the octopus according to the emotion of his choice and continue the story based on the chosen emotions. The element of emotion was added as a challenge so that the students could, theoretically, activate as well as map their cognitive architecture while playing. This gameplay would not only require them to listen and understand the sentences given by their friends, but also to anticipate the storyline to ensure the continuity of the theme – as mentioned earlier, failure to abide by the theme, would result in punishment. The game was repeated for three times to maximise the participation from all the students – the recorded time for each round was approximately 12 minutes. Finally, the reflection stage took place by producing a report (i.e. this article) as reference for future improvement and development of the action research – and the cycle would continue as suggested by Lewin.

4.0 RESULTS

From the observation, the highest number of occurrences were identified for Smiling/Laughing followed by Project voice loudly and Staying alert. Students were seen laughing while tossing the toy and some of them aimed at their friend who tossed the toy to them from the previous round. Some of the students were also seen laughing due to the jokes made by their friends when they responded to the storyline. Other than that, some students were seen whispering to each other while the toy was being held by their friends and upon clarification during the interview, it was found that the whispering was to plan on the next possible line of the story. Despite the fact that some students were seen

shaking and avoiding eye contact while playing, based on the observation, none of them were recorded or seen talking too softly. One or two occurrences were recorded where students hesitated to catch the toy when being tossed to them.

Survey and interview data were collected after the game, and the responses were recorded in Table 1 and Table 2.

Table 1 Responses for the Short Survey

Items	Frequency (N=30)	Percentage (%) of Agreement
This activity forced me to think fast.	29	97
This activity made me feel nervous.	24	83
This activity made me feel more alert with my surroundings.	30	100
I honed my speaking skills during the activity.	29	97
The activity is suitable for impromptu speech task.	29	97
I wish to have more activities like this in class.	27	90
I planned a strategy to survive the game.	30	100

Table 2 Responses from the Interview and Identified Themes

Transcriptions	Themes
"I had to listen attentively" "I stayed alert through the game" "I was nervous because I am afraid I will be blank" "I did not want my friend to throw the octopus to me" "I don't know... I cannot think much... I am anxious"	Nervousness
"I was excited that I continue everyone's story" "I laughed listening to my friend's weird stories" "I know who to aim and I was waiting for my turn" "I hope to have more emotions, two is not enough" "I can laugh out loud and I like it"	Excitement
"I collaborate with my friend to ensure we survive the game" "I chose one emotion and quickly think of a sentence just in case my turn is next" "I decide, whatever happens, choose happy!" "When I whisper to my friend, I told her my sentence... next round she do that to me... we have less stress" "I avoid eye contact so that they will not choose me... but I keep listening just in case..."	Planning/ Strategising

From Table 1, it could be seen that two items received a total agreement from the students which were Item 3 and Item 7. 83% of the students reported that they felt nervous during the game despite 97% of them agreed that the game forced them to think fast. With the same percentage, 97% of the students also agreed that the game helped them develop their speaking skills and they also agreed that this game is suitable as a preparation for the impromptu speech task. This could also be observed when 90% of them wished to have more of such activities in their future speaking classes. They reported that they were excited to continue the story which some of them attempted to be creative by creating jovial sentences. The interview responses from Table 2 showed that there were three central themes identified which were 1) nervousness, 2) excitement, and 3) planning or strategising. These themes were finalised and concluded by three research members after a discussion by identifying keywords from the transcriptions of the interview.

■5.0 DISCUSSION AND RECOMMENDATION

The data showed that 83% of the students reported of feeling nervous and 97% admitted that the game forced them to think fast, with the addition responses from the interview, where they reported high-alertness and fear of being blank while playing indicated the activation of DPT. Despite the game was developed with the aim to facilitate and train DPT Type 1, the results showed that the students actively used Type 1 and Type 2 to get through the game. Activating both types of DPT is required when a student needs to think fast (Type 1) and at the same time they need to produce a logical sequence which closely related to Type 2 (Grayot et al., 2024) – both were the mental loads that a student needed to go through while playing the Octopus Game that may result in feeling of nervous and at the same time analytical to ensure logical sequence of the story as well as avoiding mind-blanking (Fell, 2022; Kellar & Heron, 2025). This is also supported when the students reported that they choose one emotion and one even reported that she decided to only choose happy to produce the sequence of event for the story, which suggested that Type 2 was used to lessen the load to think fast (Type 1). This supports the notion that this intervention managed

to facilitate them at honing their thinking process within the framework of DPT where they had to adapt to rapid, adaptive and analytical thinking (Kryjenskaia et al., 2025).

All students agreed that this innovative approach had strategised their gameplay and made them alert with their surroundings suggested that they were exercising their cognitive agility. During the game, students made rapid decisions by switching into different situations and cognitive demands – receiving the plush toy, choosing an emotion and producing logical sequence of the story – which showed that this game provided an interactive experience not only cognitively but also psychomotor coordination (Matlak et al., 2024; Zonca et al., 2025). Paired with the findings from the interviews and observations, students were seen to whisper, and they strategised with their friends to survive the game by collaborating and sharing their thoughts – planning the sequence of the story. Shih et al. (2025) conducted a study on how human being made decisions under uncertainty and their findings align with this research where they found that people who possessed and used their cognitive flexibility made better decisions when faced with uncertainty. The actions of students planning their outcomes were seen as their ability to use their multifaceted cognitive flexibility where they gathered information before making decisions (Cecchini et al., 2024).

Students' excitement was a factor that a teacher must take into consideration when planning such an innovation thus gamification has been proven to be effective regardless of the mode it is played – digital or non-digital mode (Sailer & Homner, 2019; Qiao et al., 2022). The findings from this study showed that 90% of the students wanted to have more of such activity in the speaking class as 97% of them believed that this activity helped them improve their speaking skills. Students reporting that they enjoyed the game and the observation revealed that they were seen laughing indicated that their engagement with the game was at optimum level. With this finding too, it echoes with other research that found positive outcome from the active engagement (Huang et al., 2018; Qiao et al., 2022; Xiao & Khe, 2024; Alqarni, 2025). Qiao et al. (2022) and Alqarni (2025) studies also found that gamification could also enhance students' cognitive ability – tailored to the needs of the tasks.

Classroom innovations are crucial especially for intervention purposes where learning problems are solved and as a means to diversify the teaching and learning approaches so that the optimal results can be achieved. Gamifying activities is the trend that many teachers are venturing into since the use of gadgets and digital devices are introduced to the world as well as in schools. Nevertheless, not everyone has the advantage and knowledge to develop digital games thus this intervention cum innovation was developed so that it is applicable to the majority of the speaking classrooms with minimal efforts for preparations, costing yet had the chances to maximise the results.

The findings from this study revealed that despite being young adults, they still exhibited unpreparedness and nervousness when it comes to presenting in front of a crowd, what is more impromptu tasks. The findings also suggested that the game, despite being simple and using a plush toy, still could be enjoyed by young adult learners, as 97% of them agreed that this innovation helped them prepare for the impromptu task and the observations showed that the students were laughing and smiling throughout the game due to the jovial stories or responses from their friends – in line with studies by Qiao et al., (2022) and Xiao and Khe (2024). Positive feedback recorded in the study also suggested that this game could be played in a big group with the limited time given as permitted in the schedule. As mentioned in the earlier part of this article, having all students practice impromptu speaking with big groups and time constraints is a big challenge, thus this study could provide ideas for teachers to overcome such challenges.

Having said that, and since this study used narrative speech in the game, conducting the game with a tougher challenge such as using factual-themed speech could be taken into consideration as future recommendations. As the nation now has adopted and implemented English language classroom syllabus based on the Common European Framework of Reference (CEFR) for Languages, the theme of choice could be tailored to the students' proficiency level or as a practice towards achieving the target level. The Invertible Octopus Game could also be modified to eliminate the emotional element where instead of choosing the emotion, students can also use different thinking hats. In addition, this study only focused on overcoming the challenge while looking into students' perceptions, future research could also be enhanced with pre-post assessments to study whether this game could also enhance the performance in impromptu speech task.

6.0 CONCLUSION

As a conclusion, this study would highlight two key reasons why the game is considered to be effective based on the data collected. Firstly, students' enjoyment of the learning session and their positive perceptions towards having this kind of activity is the main reason this innovation is considered a success. This is because many second or foreign language learners find learning a different language challenging thus affecting their attitude while they are in class. Therefore, this could be the starting point at making learning fun and less stressful. Secondly, the ability of the game to somewhat support the learning process especially when instant decision-making is needed, spontaneous action is required and the ability of such activity at honing the cognitive agility of the students to actively gather information from the prior knowledge to be used while presenting the speech.

The findings of this study showed that the gamified and collaborative activities may increase students' engagement and at the same time honing their cognitive and the intended skills (e.g. speaking skills). Therefore, this is a shift of paradigm where successful gamification activity does not only come from digitalised games but also from simple games even if they are played with young adult students. Making a class less stressful and more enjoyable should be the aim especially in language classes where students engagement might be low due to low-level of confidence, lack of opportunity and big number of students. This kind of approach not only helps students in terms of their cognitive, confidence, and the target skills, but it could also facilitate in developing social skills as collaboration is needed to play the game. Other than the educator, this is a call for the curriculum developer and the administrator of institutions to provide liberty and flexibility to the teachers in conducting classroom activities that deem appropriate for the students' needs, learning objectives and the overall development of characters.

Nevertheless, further investigation could be performed to gain more empirical evidence to support the findings. This innovation may be targeting a small and specific group of students, suggesting limitations of samples, and was developed for young adult learners who are currently undergoing their first-degree programme. Therefore, the data and conclusions derived from the findings of this study may be narrowed and could not be generalised to a wider context of students where the level of acceptance and the outcome of the game could be different for students at different stages of age or different levels of institution. Other variables which may include students' socio-economic

status, their upbringing, and their exposure to the language being learnt could also be considered for future research or innovation. Other than that, a comparison could be made in terms of their performance or marks between groups; control group and intervention group. This would open a vast opportunity for further research to be done into making such innovations informed and be applied in speaking classroom.

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Conflicts of Interest

The author(s) declare(s) that there is no conflict of interest regarding the publication of this paper

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