ENGLISH GRAMMAR SELF-EVALUATION THROUGH GAMIFIED ASSESSMENT – A PRELIMINARY STUDY

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ABSTRACT

Gamification method in teaching and learning has been applied widely by the educators. Gamification is not only used in lessons, but it can be an alternative of evaluation to enhance students' understanding in certain topics. In learning English language, one of the challenges faced by students is the English grammar. English grammar is subjective and the most basic grammar topic is Subject-Verb Agreement (SVA) which has been learned since Standard 1. Yet, students still have difficulty on mastering this topic. Therefore, a preliminary study was executed to observe the potential of a grammar assessment using gamification as an alternative for students to do self-evaluation to master a grammar topic called Subject-Verb Agreement which is mainly used in writing and speaking. A gamified assessment was conducted to 1044 Form One students of MRSM with different English proficiency levels. They were assessed on the grammar topic which consisted of 30 multiple-form questions and they were given 45 minutes to complete the assessment with different levels of difficulty. Based on the results, the students are in good and average level on understanding the grammar topic. In conclusion, this preliminary study can be used to design an alternative English grammar assessment by incorporating gamification for students to enhance their knowledge and master the English grammar.

Keywords: English grammar, gamification, subject-verb agreement, gamified assessment

INTRODUCTION

The main six skills when learning a language in CEFR (Common European Framework of Reference) are Reading, Writing, Listening, Speaking, Literature in Action and Language Awareness. When Ministry of Education introduced CEFR to teach English Language in the Malaysian Education Plan 2015-2025, one of the important skills that students need to master is Language Awareness. The skill focuses on grammar acquisition. Introducing CEFR in language teaching aims to standardise the English Language programmes at schools in order to meet the international standards, deliver a good quality of English education for students and implement the strategic and action plans to achieve the international language level (Kementerian Pendidikan Malaysia, 2013).

Since one of the important skills in CEFR is Language Awareness which is grammar skills, educators nowadays have been using gamification as a method or approach to make students master grammar topics. Gamification in education has been applied widely to enhance students' participation in class especially in grammar lessons. Other than encouraging students to be active in class, gamification approach is aimed to motivate students to follow the teaching and learning process of grammar skills acquisition. Effective learning outcome can also be acquired through clear learning objectives and activities (Bakhary, 2018). Integrating gamification approach in learning environment is a good tool to obtain data, improve students' problem-solving and communication skills and also teamwork among them (Rabah et al., 2018). Gamification has been used widely to motivate students in learning. Moreover, integrating gamification in grammar lessons can simplify complex structures of grammar patterns to help students understand and master the skills. Thus, students feel more encouraged to learn English Language skills.

Gamification in Teaching English Grammar

English teachers nowadays have been applying gamification in teaching English grammar as gamification can motivate students and increase their participation during English lesson. The main concept of gamification is to utilise game mechanics techniques to support students' participation and motivation in their learning process (Sin & Said, 2020). Using gamification in English lesson creates positive learning outcomes as different game elements incorporated support different learning styles. Learning grammar in different settings like active games is more fun rather than doing drilling exercises in the workbooks. Learners are more engaged to learn particular grammar topics through authentic language games which are related to real-life contexts (Yaccob & Yunus, 2019). According to Oliver (2017), there are two types of gamifications integrated in teaching and learning process of English grammar. First is structured gamification, where learning structures are integrated with gamification elements which are related to the learning contents and students' progress is rewarded continuously while secondly, content gamification is aimed to turn learning content into a game hence showing that structured gamification is used to motivate students while content gamification is more to introduce new knowledge or information to students (Oliver, 2017).

Another gamification approach applied in language teaching is Technology-Enhanced Language Learning (TELL) where the goal is to give autonomy for students to control their language learning process (Chang & Hung, 2019). Applying this approach has been shown by a study when students were given control to pose grammar questions and let their friends to answer the questions in a gamification way. Before the questions were published in a grammar game called "TipOn", teachers needed to check the reliability and validity of the questions to ensure correct grammar structures and suitable according to the level in the game. By using this approach, positive effects of learning performance were found when the teachers compared the pre-test and post-test results. Therefore, by using gamification in English grammar lesson, students can personalise their own learning and they are able to grasp the understanding of complex grammar structures. They can also produce positive learning outcomes to assist their learning process as mastering grammar is one of the complicated skills in English language.

Grammar Topic: Subject-Verb Agreement (SVA)

This preliminary study focuses on one section of English grammar which is Subject-Verb Agreement (SVA). SVA is the most basic grammar rule in English grammar. Grammar teaching is always perceived as the most difficult and boring skill to learn at every level of learning instituition (Yusob, 2018). Among all English grammar topics, SVA is the most common or prevailing topic. This is due to students' inability to include suitable SVA in forming sentences correctly (Singh, 2020). Most students experience such problems in agreement as they are not able to make the subjects agree to the verbs as they match singular subject with plural verb and vice versa. This is agreed by another study which emphasised that majority of students make the worst error in learning English which is the lack of agreement between words in a sentence (Mehat & Ismail, 2021). Most errors made by them are related to singular and plural forms. Experts claimed that the rule of singular and plural forms is the most basic rule which should be mastered by students (Yang & Yu, 2019). It is confusing because the formation of English words in plural forms is complicated because it involves many spelling rules. Although students have been learning to add the suffix -s to indicate plurality, they should know other forms of plurality too (Mehat & Ismail, 2021).

Previous studies related to SVA includes the study by Ellis (2006) which identified verb complement, known as subject-verb agreement is one of the difficult grammar topics. Furthermore, Maros and Salehuddin (2007) stated that the most mistakes made by students in their essays are articles and subject-verb agreement. Another study conducted to Malaysian EFL (English as a Foreign Language) learners by Darus and Subramanian (2009) revealed that singular or plural forms is the most difficult grammatical aspect for the learners (Alhaysony & Alhaisoni, 2017). Recent research done to Universiti Teknologi MARA (UiTM) students of Kampus Kuala Terengganu stated that SVA is the most problematic and confusing topic for the students based on the analysis of the grammar test given to them (Nguyen & Ngo, 2021). This shows that even young adult learners have difficulty to master the topic. Although they know the rules of SVA but they were not able to apply them correctly in sentences. Based on the previous studies done, it shows that SVA is the most difficult topic to master not only by school students but also university students. Therefore, this grammar topic is the most suitable topic chosen for this study.

Gamification in Assessment

The main highlight of this study is digital gamified assessment which focuses on an English grammar topic, subject-verb agreement. Gamification approach has been implemented in assessment to reduce students' anxiety taking examination or test and stimulate motivation. By inserting game elements in the group task assessment, students are encouraged to work together and contribute to completing the assessment assigned to them. Previous study on Calculus subject showed that game points in the gamified assessment encouraged students to answer the questions more quickly. However, the study done is not in digital form (Atmaja & Mandyartha, 2020). A proposed methodology of gamification in assessment called GAMED (Gamification-Based Assessment Methodology) is aimed to introduce systematic steps to increase students' engagement through gamification. GAMED was used to evaluate final year project of vocational students and through this methodology, teachers and students interact with each other to build up a thorough report on students' achievement (Souza et al., 2019).

Gamification in assessment allows flexible timing and can be done anywhere. It also attracts students to participate actively in the learning process. When they get engaged with the assessment, they have better understanding of the content and this gives self-beneficial value to them (Hawari et al., 2020). Examination or test creates anxiety among students. Students had difficulty to recall what they have learnt and could not get better understanding of the subject content. Therefore, by creating assessment using gamification approach, it affects students psychologically such as developing the experience, improving intrinsic motivation and increasing player engagement (Pitoyo, 2019). As a result, students are more confident and reduce their anxiety to answer the examination or test when it is in a gamification form.

Gamification has potential as an assessment if it is designed properly to meet the criteria of an evaluation. Assessment in a gamification form has the possibility to enhance the way the formative assessment is conducted. It is crucial to make sure that such assessments are valid, reliable and practically invisible so that students do not realise they are being tested or assessed (Menezes & De Bortolli, 2016). Therefore, game elements can be integrated in the assessments for the purpose of evaluation. This may reduce the anxiety, boost motivation and allow active participation from students. Continuous learning process can be achieved too when students get constant feedback from the assessment. Thus, gamification has the potential as an assessment and can be an alternative for formative evaluation.

OBJECTIVES

The objectives of this preliminary study are:

a) to analyse the potential of integrating gamification in a grammar assessment as an alternative for students to do self-evaluation
b) to conduct a gamified assessment to evaluate students' understanding on the topic Subject-Verb Agreement (SVA)

Students were assessed on SVA topic only as it is the most basic grammar rule or pattern when we learn English grammar. According to the literature review and studies made, most of the students have difficulty to comprehend the syntax of SVA as they wrongly apply the rules in speaking and writing. Based on the test analysis, it is hoped that the alternative to the assessment which integrate gamification can be designed to help students evaluate themselves in order to master the grammar topic.

LITERATURE REVIEW

Pedagogical Approaches of Teaching and Learning English Grammar

There are many conventional and moden pedagogical approaches of teaching and learning English grammar. One of the recent methods is blended learning. Blended learning is the systematic combination of traditional lesson (face-to-face) and online mode lesson (Sujana et al., 2021). For teaching and learning English grammar, materials and notes are given in the physical classes and test or assessment is done online by using Google

Form or Microsoft Forms. Another way is grammar notes and materials are provided online to students such as videos explaining the rules of the grammar topic and assessment is executed offline. Combining traditional method and modern approach of grammar teaching and learning process fulfills the students' needs for easy access, active learning session and positive attitude towards grammar lesson.

Next modern pedagogical approach to teach and learn English grammar is instructional game. Instructional game is used for educational purposes. It can be in conventional or online form. The main features of instructional game are enjoyable and educational with the main objective to promote learning in an enjoyable learning environment (Ahmad & Hussin, 2017). In grammar lessons, instructional game is designed to help students learn the grammar rules. The grammar rules are presented from easy to difficult to ensure learning happens progressively. Applying instructional game in grammar lessons allows the teaching and learning process to meet specific lesson objectives. However, the main challenge to design an instructional game for grammar lesson is to ensure the game elements included can support the learning objectives. Thus, the learning objectives, learning activities and game objectives need to be outlined so that the game can support the learning.

Another way of pedagogical approaches to teach and learn English grammar is by using gamification. Gamification in pedagogical context is defined as a modified teaching strategy to adapt game elements in the learning objectives that lead students to experience gamified activities (Krisbiantoro, 2020). It is effective in contextualising grammar rules in order to enhance students' understanding to apply accurate rules in sentences or phrases (Castillo-Cuesta, 2020). Moreover, applying gamification in teaching and learning English provides safe learning experience. This is because the experience gained encourages students to complete the challenges and the gamified activities cultivate social skills such as decision making and problem solving. Furthermore, the immediate feedback from the activities done by students informs their progress and indirectly promotes continuous learning (Pektas & Kepceoglu, 2019). Gamification in teaching and learning English grammar has positive impacts on examination scores. This is due to students' interest in learning the English grammar and increased motivation towards grammar lessons (Wang et al., 2019). Gamification supports immediate responses on students' learning progress and rewards them for completing the assignments. Students are expected to work autonomously and this skill can be developed by using gamification. Gamification provides optimised feedback and visualization tools that aid students to understand their progress in learning English grammar (Costa et al., 2021). Thus, integrating gamification in teaching and learning process of English grammar does assist students to experience deep learning when they get continuous responses on their performance. This allows students to fix their mistakes and do better in the test or examination. Overall, it can be summarised that modern pedagogical approaches of teaching and learning English grammar nowadays have positive impacts towards students' motivation and attitude.

English Grammar Digital Assessments

When the pandemic of Covid-19 hit globally, teaching and learning session has gone through a drastic change from physical lessons to online lessons. This also applies to test and examination. Digital assessments are the alternative to evaluate students' knowledge and understanding after they have attended online classes. There are some platforms used by teachers to assess students on their English grammar skills such as Google Forms and Microsoft Forms. These online platforms are effective and flexible for teachers to design grammar test in many ways. The platforms allow teachers to create grammar test in a form of multiple-choice questions or essay. Besides, the use of digital assessments for English grammar facilitates teachers in calculating the marks automatically and analysing the results (Jazil et al., 2020). The results are recorded as soon as students finish the test and this allows immediate feedback for students' mistakes. Teachers can do error analysis once the test is completed.

The integration of digital platforms into grammar assessment helps direct students' learning and provides opportunities for them to practise the language by themselves. Moreover, it makes students to be independent in learning grammar and enhance their willingness to master the skills. Due to this, students feel more interested, more motivated, engaged, concentrated and useful in learning English grammar. Therefore, using digital assessments has given positive effect on students' performance in mastering the English grammar (Nieminen et al., 2022).

Although digital assessments of English grammar have many benefits to the teachers and students, there are some challenges to be considered. Firstly, the designing of a grammar assessment with high validity and reliability is challenging. Students tend to cheat on the examination since it is done online or digitally. Thus, the difficulty of the assessment should be taken seriously. It should be fair and equal for all students (Kwon & Özpolat, 2021). Students' understanding level and the objectives of the assessment should take into consideration too. Learning aid such as grammar rules tutorial should be provided for students to revise before taking the examination. Due to this reason, students are able to monitor their own progress in mastering English grammar. To conclude, designing digital assessment for English grammar creates positive responses from students and teachers mainly because of the self-assessment main feature which is immediate feedback from the digital platforms. Students manage to observe their achievement progress in acquiring English grammar skills and this motivates them to explore more on the English grammar rules.

Gamification in Grammar Assessments

In presence, gamification has been integrated in English assessments to boost students' interest to answer the test. Gamification facilitates assessment based on students' needs and could be used as formative assessment or summative assessment. Gamified assessment may be best to assess students' learning and give marks to determine students' success. It can also determine students' learning level and any remaining flaws (Pektas & Kepceoglu, 2019). By inserting game elements in a grammar assessment, it can reduce anxiety among students. Elements such as story can enhance students' understanding of overall assessment, game points can encourage students to answer the questions more quickly, feedback and reward can actually increase students' engagement to the assessment. Embedding game elements such as reward systems, unlocking badges, achievement and story telling in a grammar assessment enhances the motivation of students to participate in an assessment process and maintain the engagement throughout the assessment (Hawari et al., 2020). Gaming elements boost students' performance in grammar test too. They can lessen the pressure of taking the test and increase the attention when sitting for the test (Reed et al., 2020).

Other than these, evaluative feedback and the opportunity to redo should be included as one of the game elements in a grammar test for students to have the possibility to learn and improve their skills during the assessment. The gamification feature which provides students with instantaneous test report of their responses including the correction of wrong answers give students the autonomy to observe their level of understanding (Pitoyo, 2019). Students could identify their own weakness in certain parts of grammar topic and they could do self reflection of their own learning. Due to this, students and teachers can collaborate to come out with an alternative to overcome the weakness.

However, there are some limitations of gamification in grammar assessment. For example, when using Kahoot, students may lose self-confidence when they have got consecutive wrong answers since they are evaluated quickly by the game. Therefore, they may feel demotivated to proceed with the assessment. Moreover, the time limit given for each grammar question leads students to give wrong answers without thinking properly for the choice of answers. Besides, teachers must deal with technological issues when dealing with gamification in assessment since it is done online. This kind of problem may affect students' learning (Pektas & Kepceoglu, 2019). Gamification in grammar assessment promotes competition but it is found to be less effective because the aspect can reduce students' self-efficacy. They may lose motivation when they are ranked low in the leaderboard of the game (Reed et al., 2020). Thus, game elements and mechanics need to be chosen carefully for a gamified grammar assessment to sustain students' interest in learning the skills.

In conclusion, gamification in grammar assessment can be an alternative to a traditional assessment for students to self regulate their own learning pace to master English grammar skills. Besides, the choice of suitable game elements and mechanics is important to engage students throughout the assessment and be able to do self-evaluation so that mistakes can be corrected. This promotes independent and continuous learning.

METHODOLOGY

A gamified assessment entitled Lost and Found on Subject-Verb Agreement (SVA) has been designed for an English webinar meant for Form 1 students. It is designed using Google Form as Google Form is proven to be

effective, flexible and easy to use digital assessment platform (Jazil et al., 2020). The webinar was executed online with more than 1000 participants on 14 August 2021. The title of the webinar is Fun with GRAMULA. GRAMULA stands for Grammar Formula. The formula is a simplified version of SVA rules in a form of video presentation. GRAMULA project started in 2012 and it has been used in English classes to facilitate students to understand, memorise and apply SVA rules in their writing. Then, in 2016, GRAMULA was chosen as semi finalist in MARA Technology Expo Competition (MARATex). GRAMULA also entered a competition called EduInnovation in 2020 organised by UKM and it won Silver Medal. In the webinar, GRAMULA was included as the tutorial for the gamified assessment to promote self-evaluation for students to assess their understanding of SVA. Figure 1 shows the poster of the webinar entitled Fun with GRAMUL

Figure 1. Fun with GRAMULA webinar poster

The phase started with planning the story element for the gamified assessment. The concept of the assessment is adventure hidden-object game. The story element of the gamified assessment is in a comic form. When a good visual technique is used, it can improve students' visual/spatial intelligence and enhance their understanding. Besides, students are able to learn new vocabulary from the comic story. This can attract students to learn complex grammar structure by exploring the rules by themselves (Cabrera et al., 2018). The story starts when the character got an invitation to board a cruise. Unfortunately, the ship was stranded on an isolated island and the character needed to survive while figuring out the way to escape from the island. This concept is suitable for lower form students because it is not complicated. Moreover, it trains students to be more focused and enhance students visual-spatial skills (Oei & Patterson, 2013). It also improves students' skills to justify, interpret and analyse. Figure 2 shows the interface of the first section of the gamified assessment.
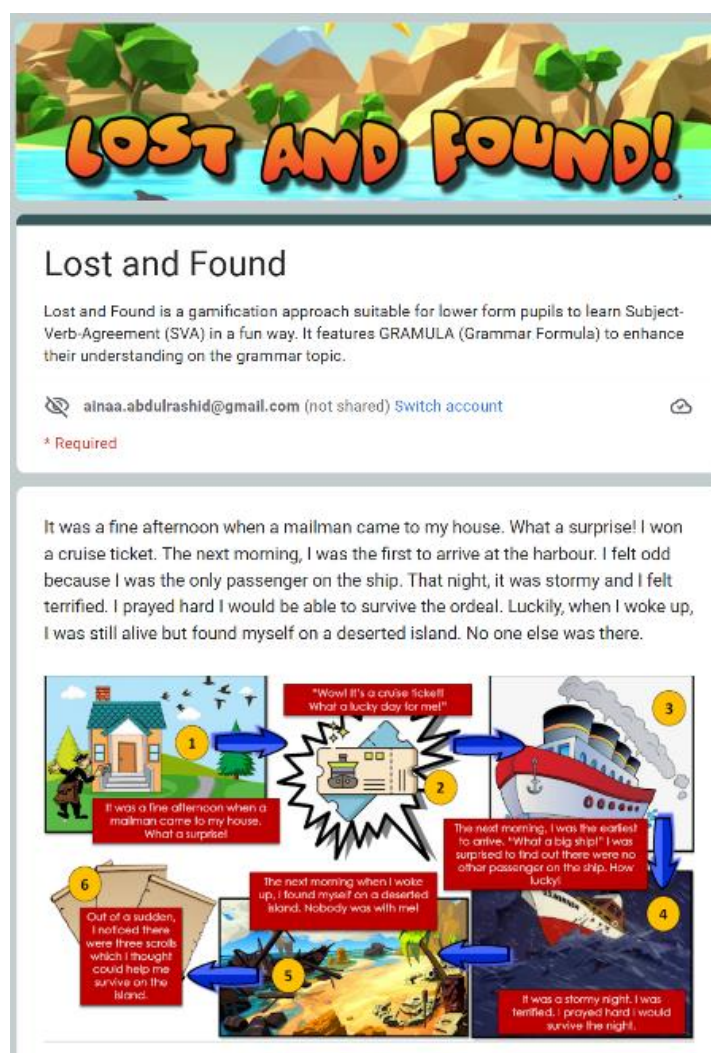
Figure 2. First section of Lost and Found gamified assessment

The next phase is constructing the questions based on the level of difficulty. The questions are chosen from various grammar books in the market. There are 30 questions and divided into three difficulty levels: easy, moderate and hard. The questions are related to the game story and the types of the questions vary such as multiple-choice questions, fill in the blank questions and true/false questions. The vocabulary used to construct the instruments were based on the DSKP (Dokumen Standard Kurikulum dan Pentaksiran) of Form 1. There is a list of vocabulary in the DSKP of every form. So, the vocabulary used is according to their level of proficiency.

Next, the phase continues with selection of game elements. Suitable game elements are crucial to ensure the objectives of the assessment using gamification are achieved. Game-based assessment refers to methods that include multiple game elements to measure an individual's ability (Bhatia, 2018). Integrating relevant game elements in the assessment can improve students' engagement and measure their cognitive ability, personality and performance (Grobben, 2020). By applying suitable methods and materials in technology, knowledge and values can be delivered to create a good impact for future life and career of students (Din, 2021). As for this gamified assessment, the game elements chosen are challenges (shown by game storyline), multiple paths to support students learning pace, levels with three difficulties (easy, moderate and hard), hints in a form of tutorial (GRAMULA) and feedback for students' self-evaluation (EduTrends, 2019). Google Form is suitable to be used to design a multiple-path assessment as it has a feature called section or branching. This feature allows students to move from one section to another when they have successfully answered the questions.

Next, the levels of difficulty range from easy to hard; based on the topics of SVA. Figure 3 shows the tutorial of level 1 and Figure 4 shows some of the questions that students need to complete.
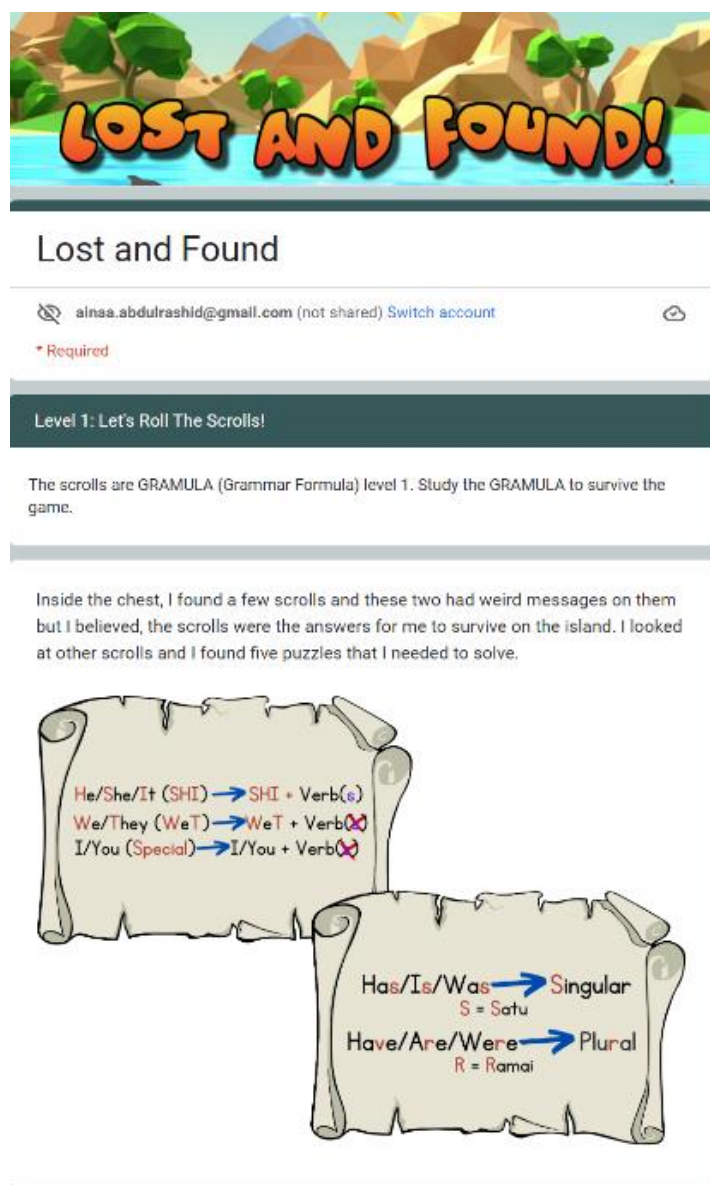

Figure 3. Tutorial Level 1

Puzzle 1: I ___ I am stranded in an isolated island. *   1 point

Choose ▾

Puzzle 2: The night ___ cold so I gather several dry leaves and tree trunk to * 1 point
warm myself.

○ is

○ are

○ was

○ were

Puzzle 3: Choose the correct sentences. *   1 point

☐ While walking around the island, I see a music box. It plays beautiful music that I have never heard before.

☐ The music are pleasant to my ears and I loves the calmness I feel.

☐ I decide to keep the music box and plan to use it whenever I feel lonely and bored.

☐ I have no idea what to do. Therefore, the first thing I prays for is food.

☐ I know I need to search for food before it is dark so, I searches for any useful things from the wrecked ship.

Puzzle 4: After I ___ gathered the things I need to survive, I start searching * 1 point
for more food. I enter a small forest next to the beach.

Choose ▾

Puzzle 5: Suddenly, I hears a noise! (Identify the mistake and type the * 1 point
correct answer).

Your answer

Figure 4. Level 1 questions

Students need to read the questions carefully because the questions are related to the storyline of the gamified assessment. In order to proceed to the next level, they have to answer a 'filler' question based on the questions they have answered previously. The purpose of such question is to sustain students' active participation to answer the gamified assessment. Figure 5 shows an example of 'filler' question.

Figure 5. 'Filler' question

The questions constructed for the gamified assessment are related to the game storyline and checked by expert English teachers. Variety of question types makes students enjoy the gamified assessment. They are not only in a multiple-choice form but there are questions which need students to fill in the blanks, choose multiple correct answers and select the most suitable answer from a dropdown list. The next phase involved before it was launched for the webinar is usability testing by English teachers. The teachers tested the flow and navigation of the gamified assessment. The teachers also assessed the difficulty of the questions for each level.

They also checked the suitability of the tutorials called GRAMULA. They were interviewed to get the feedback after the testing. The responses of the teachers are shown in Table 1.

Table 1. Responses by English teachers for the gamified assessment

	Responses of Teachers
Response 1	The formulas are easy to understand and suitable to be memorised. Examples of sentences help students to understand on how to apply the rules in sentences.
Response 2	It's suitable for Form 1 students because the storyline and illustration can attract the students to answer the assessment.
Response 3	The levels of difficulty are appropriate and quite challenging for students.
Response 4	The variety of type of questions does not bore students to answer. Different forms of question make students feel engaged.
Response 5	Using Google Form as the platform for the gamified assessment is effective as the marks are automatically calculated.
Response 6	Students get immediate feedback by using Google Form and it is good for self-evaluation.
Response 7	Besides being fun, the challenges integrated in the assessment promote students' problem-solving skills.
Response 8	Animation video and audio could be inserted in the assessment to cater different learning styles and multiple intelligences of students.
Response 9	This gamified assessment allows self-evaluation with the help of the tutorial called GRAMULA which is practical for grammar learning.
Response 10	The story of the gamified assessment is easy to understand. The flow and navigation of the game are smooth.

Then, the gamified assessment was introduced to Form 1 students in the webinar to meet the purposes of the preliminary study which are to analyse the potential of gamification as a grammar assessment and to evaluate students' understanding on the topic Subject-Verb Agreement (SVA). 1044 students took the assessment and they were given 30 to 45 minutes to complete it and after that, the answers and their responses were analysed.

To conclude, this preliminary study is important to figure out the potential and possibility of a gamified assessment to be an alternative for grammar evaluation to enhance students' understanding to master the grammar skills. The methodology consists of designing phase which includes stroyline planning and selection of game elements, developing phase which involves constructing questions and type of questions and final stage is the testing phase which requires expert English teachers to test the flow and navigation of the gamified assessment, tutorials and SVA grammar questions. The results and findings are discussed in the next section.

RESULTS AND FINDINGS

After students were done answering the gamified assessment, their results were calculated and analysed. Table 2 shows the students' results and Table 3 shows the summary of the results.

Table 2. Students' results of the gamified assessment

Marks	Number of students	%
30 – 25	115	11.02
24 – 20	305	29.21
19 – 15	296	28.35
14 – 10	222	21.26
9 – 0	95	9.100
Invalid	11	1.054
Total	**1044**	**100**

Table 3. Summary of the gamified assessment results

Level	%
Good	40.23
Average	28.35
Weak	30.36
Total	**100**

Other than that, students' feedback and responses were recorded too. Table 4 shows their feedback and responses on the game elements integrated in Lost and Found gamified assessment.

Table 4. Students' responses on the game elements integrated in Lost and Found

Game Elements	Feedback and Response
Storyline	• The story element is interesting and easy to understand. • The characters in the gamified assessment are entertaining and suit with the game theme. • Other than grammar, I learn perseverance and teamwork. • I also learn to always look for clues and pay attention to small details to solve a specific problem. • I hope there will be part 2 of the game. • Should add video and audio in the storyline.

Levels	• The levels are suitable for me to look at my progress to understand the grammar rules. • The questions for each level are relevant to develop my understanding on the grammar topic.
Challenges	• The questions should be more challenging. • Different types of question make me want to answer more because I think this is the best Google Form I have ever filled in. • The challenges are quite easy but practical for grammar learning. • I have the chance to learn more about SVA grammar topic while solving puzzles.
Hints	• GRAMULA is great for me to memorise and apply SVA rules in sentences. • I have improved my grammar after playing this game. • Using GRAMULA as the tutorials and hints for the game is effective for me to refresh my understanding on SVA grammar rules. • The formula used to simplify SVA rules is effective to fix my grammar mistakes.
Feedback	• This game really improves our learning. It gives us another chance to answer and we can learn from our mistakes. • I learn other grammar rules too when playing the game. • This game allows me to try again when I make mistakes. • The game helps me identify my weakness on grammar and I am able to learn from my errors.

DISCUSSION

Based on the results and findings, Table 3 shows that more than 40% of students achieved good score which is 30 to 20. These students claimed that the tutorials, GRAMULA help them a lot to answer the questions. They also claimed the storyline is straightforward and it eases them to understand the questions well. However, the students mentioned that the questions are less challenging for them. This is because the students are from IGCSE MRSM (Cambridge syllabus) and MYP (Middle Year Programme) MRSM. The students have good English proficiency level. Next, average students who scored 19 to15 are more than 28%.

The students highlighted about reading the instruction carefully. They said they did not read the instruction carefully because some of the questions require them to give more than two answers. Some questions also need them to fill in the blanks with grammatically correct words. However, they enjoyed answering the assessment as it is in a gamification form and it motivated them to try again. The tutorials provided with the gamified assessment supported them when they were stuck answering the questions. Then, the weak students scored 9 to 0 and they mentioned about timing. They were weak students and they needed more time to complete the assessment. Some of them did not even finish the assessment. Hence, their results were invalid.

In conclusion, based on the results and findings, a gamified assessment can be an alternative to the existing grammar assessment to motivate students to enhance their understanding on the grammar topics. This gamified assessment also supports students' self-evaluation because they can learn the tutorials before answering the quiz. Other than that, students need to be exposed to more engaging yet practical assessment in a gamification form to assess their own level of proficiency to master English grammar. Although good students can explore on their own, they still need assistance in applying the rules correctly in sentences.

Therefore, in self learning, students need tutorials or any guidance for them to explore on their own before answering the assessment. In addition, when it comes to entertaining weak students, more time and chances should be given to them and simpler explanation or formula needs to be emphasised in order to help them answer the assessment and gradually, they can master English grammar.

THE WAY FORWARD

For future work, an alternative of English grammar gamified assessment can be proposed to assist teachers to evaluate students' understanding on the grammar topics and students to assess their own progress as gamified assessment promotes self-evaluation. Since we are approaching towards 21st century learning environment, a gamified grammar assessment is the best initiative to motivate students to master English grammar as it is proven that a boring lesson can be engaging and fun when it involves Information and Communication Technology (ICT). Eventhough there are variety of digital assessment platforms that can be used such as *Kahoot!* and *Quizziz*, using *Google Form* which has been integrated with game elements eases teachers to do analysis on the results and gives students the freedom to explore the grammar rules on their own with minimal supervision by teachers.

Other than that, a multiple-path gamified grammar assessment can be proposed to cater the needs of weak students. This type of students needs more guidance digitally because they need more time and opportunities to master certain grammar topics. By having such gamified assessment, students have freedom to strengthen their basic knowledge on the grammar topics before they can move forward to the next level. This allows them to personalise and be independent to explore their own learning and at the same time, valueing their current level to grow on to the next. This can also increase motivation, engagement and joy to master the English grammar (Kamińska et al., 2019).

Based on the preliminary study done, it is suggested to design a multiple-path gamified grammar assessment which supports self-evaluation to master the English grammar. It is advisable if the assessment developed is not in a form of test or examination but indirectly, it is able to measure students' progress of understanding and mastering the grammar topics. Strong values can also be nurtured during this preliminary process as part of realizing self ability and aware of the goals of the game assessment. Other than that, another strong element which can be incorporated in the assessment is the grammar rules tutorials in a form of formula so that students are not confused reading long and wordy grammar explanation online or offline. For starter, the gamified assessment will focus on Subject-Verb Agreement (SVA) since SVA is the most basic grammar rule. When the students have mastered this basic rule, for future work, the game can be extended to other grammar topics too.

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