Preserving Indigenous Semai Folktales as A Process of Educating 21st Century Learners Through Gamification

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ABSTRACT

Gamifying Semai folktales is a project which aims to preserve the Semai cultural heritage and values in the 21st century and the gamification idea is also in line with policy makers, the Ministry of Higher Education Malaysia, via its Minister, mentioned the importance of integrating gamification in Teaching &Learning of all levels of education. The project explores the idea of gamification in encouraging ESL students to read short stories from various genres and culture and it is also set to disclose the ramifications of language gamifications in ESL teaching and learning particularly in the choice of Orang Asli Semai folktales in the selection. To ensure the language learners' understanding of the Semai folktales, the animated movie comes with online quizzes to help the language learners to comprehend the content of the story and are able analyse the short story elements. Applying gamification in teaching and learning will give a new dimension not only to the students but also to prepare more dynamic language educators in embracing the rapid change in teaching and technology. Since gamification has exciting elements which can be motivating to the students, the videos and online quiz questions created have great commercialization potential. The videos uploaded on YouTube will be able to garner followers and the online questions uploaded on Quizzes can be accessed by any ESL learners. The findings revealed that most students preferred language activities with gamification which are more relevant to the 21st century learners.

Contribution/Originality: This study contributes to the understanding of how gamified environment systems affect users based on their characteristics. Specifically, it contributed to the comprehension of how gamification affects the engagement and
1. Introduction

Advances in computer game technologies and the popularity and availability of these games have made them strong candidates for educational purposes (Prensky, 2001). A growing body of research shows that Game-Based Learning (GBL) can be used effectively in various scenarios especially in education field. The use of the web 2.0 gamification in the ESL classroom has become familiarized with the phrase “successful teaching and learning”. Thus, it provides ESL instructors more alternatives and tools to enhance the teaching and learning experience of the learners. Now the teacher, as a facilitator motivates the student by publishing his work in the web and giving the learner and authentic global audience for classroom participation.

Gamification idea with SEMAI FOLKTALES has been introduced to ESL students who have undergone an English course in a public university. The study has been inspired by a quotation by a former minister,

“Schools and universities must become the happiest places where the learning process is fun, so that students will love knowledge. They must also be places where differences are not just respected but appreciated and celebrated,” (Maszlee Malik, as cited in Chin & Pajaendram, 2019).

Prior to the research, the researchers have analysed several researched papers that have implemented the idea of gamification in ESL classrooms (Barta, Gama, Jorge, Gonçalves, 2013; Betts et al., 2013) and believed that the current study should be able to explore the idea of gamification in encouraging ESL students to read short stories from various genres and culture. With their intention to introduce Orang Asli Semai folktales in the selection of short stories for Diploma students and to ensure the language learners’ understanding of the Semai folktales, the researchers have applied gamification as a tool to enhance and engage the ESL readers

The researchers highlighted two objectives for the study:

i. To find out the students’ perception on language learning using Semai Tribe ghost stories

ii. To identify the students’ perception on the use of gamification as language activities

While the two research questions are:

i. What are the students’ perception on language learning using Semai Tribe ghost stories?

ii. What are the students’ perception on the use of gamification as language activities?

2. Literature Review

In English language teaching and learning, the notion of gamification is still new and has not been ventured by many educators. Nonetheless, those who advocate it believe that the idea of gamification can be a good platform of making classroom lessons to be more interesting. This is due to its engagement element and its features that are similar in
nature with the games played by students at home. Scholars who agree that gamification of education is a strategy for increasing engagement by incorporating game elements into an educational environment (Dichev & Dicheva 2017) also believe the main goals of gamification are to enhance certain abilities, introduce objectives that give learning a purpose, engage students, optimize learning, support behaviour change, and socialize (Knutas et al., 2014; Krause et al., 2015; Dichev & Dicheva, 2017; Borges et al., 2013). Being stimulated by the games elements and its favourable impact, many researchers have investigated the effect of gamification in an educational context, getting favourable results, such as the increase of engagement, user retention, knowledge, and cooperation (Hakulinen & Auvinen 2014; Tvarozek & Brza, 2014).

The National Philosophy of Education aims to produce holistic graduates who excel academically and have better intercultural understanding, which resulted in the re-introduction of literature into the curriculum. In 2000, literature became a part of the English syllabus in secondary and tertiary level education. Based on researchers’ observation and research findings, it is discovered that presently, ESL learners at tertiary level are facing some challenges to appreciate short stories because of the unfamiliar cultural content. Although literary texts provide contexts in which ESL students can learn more about the L2 culture (McCafferty, 2002), unsuitable texts can create distance between the text and the readers, especially culturally (Saraceni, 2003). The unfamiliar short story elements which exist in most foreign short stories introduced to them in the syllabus will result in their difficulty to write the reading analysis assigned.

ESL students also find reading short stories boring and they would end up copy pasting the answers from the internet for their reading log practices. One of the main challenges in learning literature are caused by the text itself, such as the language of the text, especially when there is a mismatch between the texts selected and students’ language ability. Struggling readers share the same problems which are weak comprehension, lack of interest and confidence (Arvidson & Blanco, 2004).

Another challenge is teachers are not creative in text selection to captivate the student’s interest although they generally agree that the texts should promote intellectual development, independent thinking, are interesting to adolescents and meet certain cultural and aesthetic standards (Agee, 1998). Teachers also cannot assume that ESL readers share the same background knowledge, similar values, and norms to fully comprehend the texts (Horowitz, 2002).

Besides linguistic skills, students also need background knowledge to fully comprehend literary texts (Horowitz, 2002). It has been discovered that when students encounter unfamiliar cultural aspects, they tend to interpret the meaning based on their own culture, which might result in inappropriate cultural representation. Sometimes students are faced with a cultural reference that is totally alien to them.

With reference to the obstacles discussed, the researchers hypothesize that ESL learners will enjoy reading Orang Asli Semai short stories which are original stories from the largest aboriginal tribe which exist in the Peninsular Malaysia. Even though these stories are the folklore of an aboriginal tribe, the genre is captivating and most importantly, most of the stories carry important messages to the learners in the present today. Most themes and values in the stories are still relevant to today’s youngsters. Once the students get themselves familiar with the elements in the Semai ghost stories, they could relate them to their own local stories. Moreover, the frequently emphasized values for global
citizenship such as respect for diversity, human rights and sustainable development, which the stories touch on are deemed to be significant for ESL learners for lifelong learning experiences.

Furthermore, the idea of introducing gamification in literature studies is to engage the learners. Gamification would fascinate the learners especially when there is element of competition included in such games. The Semai short stories used in the project are packaged with the animated movies and online quizzes (quizziz and Kahoot) to help the language learners to grasp the content of the story better. The practice using gamification will enable them to analyse the short story elements clearer. Thus, this will enable them to write superb reading logs. Jang, Park, and Yi (2015) found that users with low agreeableness who used a non-gamified version of a system had lower learning rates than those who used the gamified one. Thus, the learners with gamification experiences have a better chance at learning.

According to Prensky (2011), game features can provide the –tainment part of the educational design needed to engage learners. Borrowing game elements, he argued, and incorporating them into the classroom environment can facilitate engagement. Little research has been done on the effect of gamification on motivation and engagement of the learners. The research literature connected to gamification is limited on multiple levels and there is a need to explore the long-term effect of gamification in promoting and sustaining learners’ motivation and engagement. In addition, Codish and Ravid (2014) researched, through preference surveys, how extroverts and introverts received the gamification and discovered an adverse effect of the ranking on extroverted students and favorable but not substantial on introverted students; extroverts chose the badges. On the other hand, Jia et al. (2016) found different results, in which, also through preference surveys, identified that extroverted people are driven by points, levels, and ranking. McGonigal (2011) is in agreement with Prensky (2001) in recommending the gamified path in teaching and learning that allows the students to engage in from the beginning to end. Thus, through gamification it is hoped that the learners would gain their motivation and confidence level in ESL classroom.

It is expected that gamification will more easily capture and sustain the interest of millennials (Baptista & Oliveira, 2017). The rationale behind the statement is because they are ‘raised on games’ (Gamrat, Zimmerman, Dudek, & Peck, 2014). There seems to be a large potential impact in using gamification for improving acceptance and use of new technologies in education. What more important is ESL educators can seize this opportunity for the betterment of ESL teaching and learning. Presently, gamification has a low solution maturity (Liu, Santhanam, & Webster, 2017); the researchers recognize the opportunity to contribute new knowledge to this field and to propose new connections.

In this study, we aimed to study whether the language learning using Semai indigenous folktales gamification affects students’ preferences and interests. More specifically, we aimed to investigate the suitability of introducing Orang Asli folklores as short stories selection for the Diploma students who study literary texts because of the familiarity in culture and the fascinating genre which indirectly helps to preserve these folktales. We also aimed to investigate the students’ opinion on the use of gamification as language activities. The findings would inform whether the distinct components of gamification affect students’ engagement and learning.
3. Methodology

3.1. Participants

Participants of the study were 147 public university students from semester two Diploma classes who are doing Integrated Language Skills 11 which is a compulsory English proficiency course. The course syllabus contains a literature component whereby the students must read short stories from western and Asian genre.

3.2. Research Instrument

A survey questionnaire using Likert scale was distributed to the students after the intervention with Semai folktales and online games. The survey used one open-ended question aimed at gathering in-depth information concerning students’ reactions towards text selection (the indigenous short stories) and teaching strategies using Gamification.

3.3. Data Collection and Data Analysis Procedure

In order to gauge the student perception on gamification using ghost stories from the Semai tribe, this study has employed a few steps. Firstly, three animated videos encapsulating stories from the Semai tribe namely The Ghost of Terloche, Geget Ghost and Cherik Noit were recorded and uploaded to Youtube. The videos’ duration is about 5-6 minutes long and all videos contain animation and narration to help viewers understand the stories. Based on these stories, 15 questions were devised for every story. These questions were then uploaded to Kahoot.com and Quizziz.com which are two easily accessible gamification platforms so that the students could answer them after they had viewed the videos. Students were given the choices to answer the questions as homework or in class, depending on the quality of their internet connection. After the students had answered the questions on Kahoot.com and Quizziz.com, they were required to record their marks by saving the screenshots of their marks as proof of their gamification activities.

Concurrently, a survey was conducted to attain the student feedback on the gamification activities done. This survey was carried out using a questionnaire consisting of one demographic question and sixteen questions on how they perceived their English language learning experiences via the ghost stories from the Semai tribe and gamification. For the demographic section the questionnaire only required the student to indicate the English language code that they are pursuing this semester. For the perception section, the questionnaire contained one open ended question, two yes/no questions, one multiple choice question and twelve Likert-scale questions ranging from strongly disagree (1) to strongly agree (5). This questionnaire was administered to the students using a Google form. The internal reliability of the questionnaire calculated by Cronbach’s alpha was at α =.77. The questionnaire was sent out to the respondents and collected a week later. The results from the analysis of the questionnaire are presented descriptively and are discussed in the subsequent section of this paper. The open-ended question was analyzed using thematic analysis using NVIVO 1.4. Braun and Clarke (2006) argued that thematic analysis should be a foundational method for qualitative analysis, as it provides core skills for conducting many other forms of qualitative analysis.
4. Result

The main objectives of this research are to identify students’ perceptions of language learning using Semai tribe ghost short stories and students’ perception on the use of gamification as language activities. The questions will be analysed into two categories which are first, language learning using Semai Tribe Ghost Stories and second, The use of gamification as language activities. 147 respondents were involved in this research study which exploring the idea of gamification to read short stories from various genres across the world and culture. Most of the students came from Part 2 students (81.6%) whereas Part 1 is only represented by (18.4%) as shown in Table 1. The questionnaires consist of 16 questions; 1 open-ended questions, 2 closed-ended and 9 Likert Scale questions. Strongly Disagree (1), Disagree (2), Neutral (3), Agree (4), Strongly Agree (5). 2 questions will be analysed for Research Question 1 while 10 questions will be based on Research Question 2.

Table 1: Respondents

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Students</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>ELC121</td>
<td>27</td>
<td>18.4%</td>
</tr>
<tr>
<td>ELC151</td>
<td>120</td>
<td>81.6%</td>
</tr>
<tr>
<td>Total</td>
<td>147</td>
<td>100%</td>
</tr>
</tbody>
</table>

4.1. What are the students’ perception on language learning using Semai Tribe ghost stories?

Based on these two questions which are subsequently related to each other, the respondents showed that they have a positive response towards the use of Semai tribe ghost short story in language learning classroom. There were 145 students (98.6%) who agreed with the statement that they find the short stories as interesting compared to only 2 students (1.4%) who disagreed as indicated in Table 2.

Table 2: Question 1

<table>
<thead>
<tr>
<th>Answer</th>
<th>Do you find the story interesting?</th>
<th>Percentage</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td></td>
<td>98.6%</td>
<td>145</td>
</tr>
<tr>
<td>No</td>
<td></td>
<td>1.4%</td>
<td>2</td>
</tr>
</tbody>
</table>

The following question in Table 4 requires the students to respond their feedbacks on “Why do you think the story is interesting/not interesting?”. Thus, the responses were analysed using NVIVO 1.4 in order to categorise the themes accordingly. The students who answered “No” in Table 3 listed their reasons as Its don’t really relate to us in these modern days and because it’s not really my cup of tea. Based on the analysis, there are 6 themes mined from the responses as shown in Table 4. The themes are listed as; interesting storyline, new knowledge, indigenous culture, tradition and mythical stories, moral values, different genres and improves the students’ language learning. These themes show positive feedback towards the language learning by using Semai tribe ghost short stories.
### Table 3: Reasons for No

<table>
<thead>
<tr>
<th>No responses from students</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student 1</td>
</tr>
<tr>
<td>Student 2</td>
</tr>
</tbody>
</table>

### Table 4: Reasons for Yes

<table>
<thead>
<tr>
<th>Yes responses from students</th>
</tr>
</thead>
<tbody>
<tr>
<td>Themes</td>
</tr>
<tr>
<td>-----------------------------</td>
</tr>
<tr>
<td>Interesting storyline</td>
</tr>
<tr>
<td>New Knowledge</td>
</tr>
<tr>
<td>Indigenous culture, tradition and mythical stories</td>
</tr>
<tr>
<td>Moral Values</td>
</tr>
<tr>
<td>Different genres</td>
</tr>
<tr>
<td>Improves the students language learning</td>
</tr>
</tbody>
</table>

#### 4.2. What are the students’ perception on the use of gamification as language activities?

There are 11 questions were analysed to answer research question 2. For Question 3 as shown in Table 5, the respondents were given 5 options to choose from the answers. They were required to choose one answer based on this question; Which language activities do you prefer with indigenous story? The highest percentage chosen by the students is Language Activities with games (Gamification) with 34% followed by A group discussion/presentation on short story elements (32.7%), Reading the text and answer quiz (9.5%), Listening Activities (9.5%) and Writing Activities (1.4%). The answer shows that the use gamification is favoured by these students while they learn language compared to other activities.

### Table 5: Question 3

<table>
<thead>
<tr>
<th>Which language activities do you prefer with indigenous story?</th>
<th>Percentage</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Responses</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
A group discussion/presentation on short story elements

Writing Activities 32.7% 48
Reading the text and answer quiz 22.4% 33
Listening Activities 9.5% 14
Language Activities with games (Gamification) 34% 50

In the following question referring to Table 6, the questions emphasized on the use of Quizizz and Kahoot in language learning where the question asked, “Do you prefer gamification such as quiziz and Kahoot to be used in language activities?” Most of the students responded Yes with 97.3% compared to No (2.7%). This question is relevant as researchers used both website-based gamification in order to engage the students with the Semai tribe ghost short stories.

<table>
<thead>
<tr>
<th>Answer</th>
<th>Percentage</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>97.3%</td>
<td>143</td>
</tr>
<tr>
<td>No</td>
<td>2.7%</td>
<td>4</td>
</tr>
</tbody>
</table>

Table 6: Question 4

In the next section related to Table 7, the respondents were required to choose Likert Scale in order to scale their opinions regarding the use of gamification in language learning. There are 9 questions which are listed as follow.

1. Gamification method increases my interest in the lesson.
2. Students want to be more successful through gamification method
3. Students compete with motivation using gamification method
4. Students prefer gamification method in other lessons
5. Students communicate more through gamification method
6. Gamification methods are fun.
7. Group work in gamification foster collaboration.
9. I like being placed in competition with other students in the classroom via a game-based method increases my motivation.

Table 7: Likert Scale Questions

<table>
<thead>
<tr>
<th>Question 5: Gamification method increases my interest in the lesson.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Likert Scale</td>
</tr>
<tr>
<td>Percentage</td>
</tr>
<tr>
<td>Total</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Question 6: Students want to be more successful through gamification method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Likert Scale</td>
</tr>
<tr>
<td>Percentage</td>
</tr>
<tr>
<td>Total</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Question 7: Students compete with motivation using gamification method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Likert Scale</td>
</tr>
<tr>
<td>Percentage</td>
</tr>
<tr>
<td>Total</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Question 8: Students prefer gamification method in other lessons</th>
</tr>
</thead>
<tbody>
<tr>
<td>Likert Scale</td>
</tr>
<tr>
<td>Percentage</td>
</tr>
</tbody>
</table>

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Based on the result in Table 7, most of the question received Strongly Agree and Agree responses. For Question 5 “Gamification method increases my interest in the lesson”, 71 students chose Strongly Agree (48.3%), Agree (47.7%) with 70 responses and 6 students chose Neutral with 4.1%. Next question, the students are required to scale “Students want to be more successful through gamification method” which showed 70 students chose Agree (47.6%), Strongly Agree (40.1%) with 59 students and Neutral 12.2% (18). In question 7 “Students compete with motivation using gamification method”, the highest percentage is Agree (56.5%) followed by Strongly Agree (37.4%) and the lowest recorded is Neutral with 6.1%. For question 8 “Students prefer gamification method in other lessons”, Strongly Agree showed the highest percentage with (44.9%), second place is Agree (44.2%), Neutral (10.2%) and the least is Disagree (0.7%). The following question asked, “Students communicate more through gamification method”, the respondents chose Agree (46.9%), Strongly Agree (32.7%), Neutral (19) and the least chose by the students is Disagree with 1.4%. In question 10, the students responded Strongly Agree with 58.5% when they were asked “Gamification methods are fun” followed by Agree (34.7%) and Neutral (6.8%). Next question is “Group work in gamification foster collaboration” where 44.9% chose Strongly Agree, 42.9% chose Agree and the least is 12.2% Neutral. In question 12 “Gamification improves students’ self-confidence”, 70 respondents responded Agree (47.6%), second in place is Strongly Agree with 42.9% followed by Neutral (8.8%) and the least is Disagree with 0.7%. Last but not least is question 13 which requires the students to scale “I like being placed in competition with other students in the classroom via a game-based method increases my motivation”, the response showed 40.1% Agree, Strongly Agree 33.3%, Neutral 25.2% and Disagree with 1.4%. Overall, there is positive feedback from students’ perception on the use of gamification in language learning.

Referring to the research question, students’ perception on the use of gamification during language learning is important in deciding the tools for classroom engagement. The use of the gamification during classroom is seen as teaching aids as it helps students to build their interest. Majority of the respondents agreed as they choose Strongly Agree and
Agree as their responses. Though gamification, students are motivated in their learning process as there is a sense of competition build up in the mechanism. The element of competitiveness provides by the gamifications will boost students’ confidence. This can be seen as the students agreed when they answered *Gamification improves students’ self-confidence*. Other than that, motivation is also evident in the result. Respondents chose Agree and Strongly Agree to reflect their opinion. Meanwhile, the rest of the questions depict on the positive elements posed using gamification in language learning. Hence, the findings are in line with McGonigal (2011) and Prensky (2001) who agree with recommending the gamified path in teaching and learning that allows the students to engage in learning from the beginning to end. As a conclusion, the result shows a very positive response from students’ perception on the use of gamification in language learning.

5. Discussion

A way to motivate students to read literature is through better text selection. The most important criterion in text selection is probably students’ interest. Students’ response suggested that they would like to read about adventure, mysteries and life experience. As students come from different background, interest and abilities, the best option is to choose texts which vary in terms of genres, topics and language level. Data from this study suggested that students were generally satisfied with the short stories’ genre. Using a variety of attractive teaching strategies is another way to improve students’ attitudes and motivation. Based on the results of the study, it can be said that majority students enjoyed gamification as a tool to enhance their understanding of the short stories.

There are two major contributions to this study. Firstly, the study contributes to the understanding of how gamified environment systems affect users based on their characteristics. Specifically, it contributed to the comprehension of how gamification affects the engagement and learning behavior of university students based on their personality traits. As students participated in their learning activities, the interactivity and feedback have a positive impact on the perceived enjoyment (Hsu & Lu, 2004; Lin, Wang, & Chou, 2012; Wang & Wang, 2008). Pappas (2015) found in a survey that 89% of the student’s state that a point system would increase their engagement. Future research could study the effect of gamification in various disciplines over a more extended period. It could help to verify whether, over time, gamification loses its effectiveness, to identify possible saturation points and limitations in its application.

Secondly, the study has also contributed to the preservation of folktales which belong to the Semai community. The innovative resource package which includes Semai folktales and gamification, tailored to appeal to the current generation’s consumer interests and lifestyles. These projects help to promote the folktales of the indigenous Semai in a way that can attract the young Semai to learn the priceless cultures and values of their tribe in one hand and learn the English language on the other by doing the interactive gamification activities prepared in the application related to the Semai folktales. With the immense popularity of social networking and technology, it is high time to develop a high-tech edutainment product for the young Semai to quench their thirst for knowledge. This interesting and fascinating product design is aligned with the 21st century teaching and learning a language as it can be used in the classroom as technology-based language enrichment activities. In brief the effort of gamifying the Semai folktales has also opened the educators and student's eyes and taught them to appreciate the orang Asli cultural heritage, one that is often ignored.
6. Conclusion

In conclusion, in discussing the related area for future studies, it can be suggested that researchers can further develop the study into a project-based learning where ESL teachers use activities where students get to practice their creative and critical thinking skills such as writing their own scripts, staging a drama or even creative writing. Teachers can encourage students to be more autonomous by using their internet searching skills and guiding them in activities like researching information on the indigenous tribe in Malaysia or the cultural beliefs and principles of life as mentioned in the stories. For gamification, recommendations can be teachers can use multitasking tasks in groups for large classes which enable students to rotate tasks so that they can try a variety of activities, create their own content for online games by using the free applications on the internet while working at their own pace. More research needs to be conducted on students’ reading abilities as they seem to lack higher level reading skills. Other possible future research areas which can help improve the teaching of literature in ESL contexts are students’ reading interests and teacher training.

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Conflict of Interests

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