

The Effectiveness of Gamified Flipped Home-Based Learning in Improving Subject-Verb Agreement (SVA) Among Malaysian Year 3 ESL Learners

Teo Woon Chun, Shamala Rajasagaran, Jordan Wee Jee Wui & Melor Md Yunus

Faculty of Education, Universiti Kebangsaan Malaysia, Bangi, Selangor, MALAYSIA

p111804@siswa.ukm.edu.my

ABSTRACT

Grammar has been given due attention for conveying messages accurately. Home-Based Learning (PdPR) becomes challenging for both Malaysian primary ESL teachers and learners. Low participation and engagement among learners in PdPR has resulted in the difficulty in mastering Subject-Verb Agreement (SVA) knowledge via PdPR during COVID-19 pandemic. This study was aimed to examine the effectiveness of Gamified Flipped Home-Based Learning in improving Malaysian Year 3 ESL Learners' SVA competence. This study adopted a pretest-posttest nonequivalent groups design in which 60 Malaysian Year 3 ESL learners from Selangor and Johor were selected via purposive sampling as the participants of both experimental and control groups of the study. A pre-test and post-test were administered prior and after 2-week intervention respectively. A set of questionnaires was given to the experimental group participants in order to examine their perceptions towards learning SVA via Gamified Flipped Home-Based Learning. The findings from pre-test and post-test depicted that both experimental and control groups portrayed improvement in scores, but the experimental group's margin of improvement outperformed the control group with the score difference of 282. The results from the questionnaire revealed that learners hold positive perceptions towards Gamified Flipped Home-Based Learning. This shows that it is effective and positively accepted among Malaysian primary ESL learners. This study implied that teachers may modify their teaching approaches to suit their pupils by incorporating games into the flipped PdPR. Future research can focus more on integrating different gamifications in the FCA to suit the different levels of ESL learners.

Key Words: English as a second language (ESL), gamified learning, flipped classroom approach, home-based learning, grammar

1. INTRODUCTION

The COVID-19 pandemic forced the educational institutions around the world to cease face-to-face interactions for their learners. The best alternative that was available for all the countries were to shift from the traditional method of teaching to a full-fledged online teaching and learning to ensure their learners would not miss out on education (Haug et al., 2021). Learners in Malaysia as well had to go through with home-based learning also known as PdPR for more than half a year due to the school closures that were in line with the World Health Organisation's (WHO) guidelines. However, the pandemic which resulted in school closures accelerated the learning difficulties and barriers faced by learners around the world (Sabates et al., 2021). One such difficulty faced by Malaysian ESL learners was mastering grammatical items via PdPR as claimed by Krishnan et al. (2020).

According to Hidayat (2021), many studies have highlighted that grammatical mastery is pivotal for ESL learners to augment their second language acquisition. Febriyanti (2019) revealed a major struggle faced by non-native language learners in grammatical mastery was mastering the subject-verb agreement (SVA) knowledge that hinders them in acquiring the English language. This particular struggle was heightened tremendously among the ESL learners when the sudden shift to remote learning was put into

action during the outbreak of COVID-19 virus. In addition to that, the low level of engagement and participation among ESL learners in online lessons also contributed towards their barriers in mastering SVA knowledge (Destianingsih & Satria, 2020). Therefore, this paper is aimed at bringing about changes into ESL learners' PdPR experience by incorporating flipped classroom approach with gamification in order to enhance and improve their grammatical mastery of SVA. In conjunction with this, this paper will address the following research questions:

1. Are there any significant differences between the experimental and control groups in mastering SVA knowledge via Gamified Flipped Home-Based Learning?
2. What are the perceptions of Malaysian Year 3 ESL learners towards learning SVA via Gamified Flipped Home-Based Learning?

2. LITERATURE REVIEW

The emergence and development of instructional technologies in recent years has made learner-centred pedagogy more workable and more popular at all levels of academia. Even though there is not a single model, FCA is characterised by a conception similar to that of inverted classrooms, reversed instructions and blended learning (DeLozier & Rhodes, 2016; Hao, 2016). Instructional content is previewed by learners before they come to class. In-class time is utilised for interactive activities such as discussion (Wei et al., 2020), problem-solving activities (Cheng et al., 2019), brainstorming and gaming (Jo et al., 2018). Most research on FCA cited constructivist learning theories based on the works of Piaget (1968) and Vygotsky (1978). Piaget introduced the concept of cognitive conflict that occurs following the interactions with peers, and Vygotsky's concept of zone of proximal development (ZPD) explained learning that occurs because of the interactions with more advanced individuals. Both scholars highlight the fact that the learning process depends on interactions with others, and FCA manages to increase peer interaction since more in-class time can be utilised to implement cooperative activities. Simultaneously, FCA also incorporates mastery learning, a theory based on the belief that learners must attain a level of mastery in a level of learning before moving on to the next level of learning (Bloom, 1971). In the proposed Gamified Flipped Home-Based Learning framework as shown in Figure 1, learners engage in a few cycles of studying (videos and PowerPoint slides) and testing (synchronous and asynchronous games). This allows reinforcement to take place, and eventually learners are able to achieve a level of mastery in the target language item.

As mentioned previously, gaming is one of the elements that can be incorporated in FCA (Jo et al., 2018). According to Landers, Armstrong and Collmus (2017), gamification is the process of using game mechanisms to encourage problem solving and to engage players in non-game contexts. The theory of gamified learning (Landers, 2014) proposes that effective instructional content directly influences learners' behaviors as well as learning outcomes. Gamification does not replace instructions; it improves instructions by eliciting positive behaviours among learners which are conducive to learning. With the gamification of in-class activities in FCA, active learning can be fostered. Through past studies that investigated gamified learning in FCA, positive outcomes on learners' motivation and learning achievement could be observed compared to the other learning approaches (Lo & Hew, 2018; Yildirim, 2017; Zainuddin, 2018). Nonetheless, there is still limited research that evaluated the effectiveness of gamified FCA in a primary classroom setting. Though past studies have demonstrated the effectiveness of FCA and gamified learning, more evidence is still needed on its effectiveness in teaching and learning of grammar, which has always been a challenge for ESL teachers and learners. Gamified Flipped Home-Based Learning has been designed with the integration of FCA and gamified learning. Hence, this paper aimed to report the effectiveness of the Gamified Flipped Home-Based Learning on improving the mastery of SVA items among lower primary ESL learners.

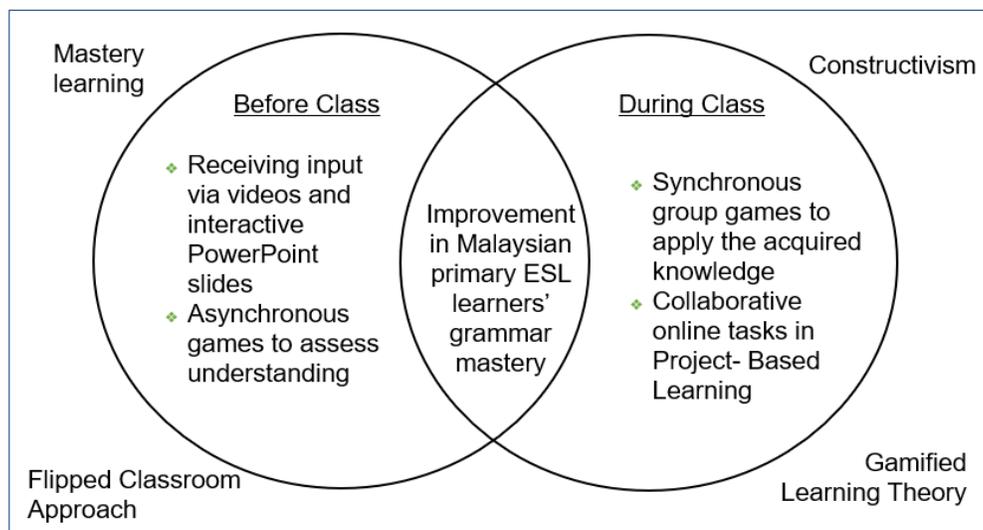


Figure 1: The Framework of Gamified Flipped Home-Based Learning

3. METHODOLOGY

A quasi-experimental research which adopted a pretest-posttest nonequivalent groups design was conducted. This study involved 60 Malaysian Year 3 ESL learners from three national-type primary schools located in Selangor and Johor. They were selected via purposive sampling and randomly assigned into both experimental and control groups.

Both experimental and control group participants was given two weeks to acquire SVA under Gamified Flipped Home-Based Learning and traditional classroom approach respectively. For experimental group participants, they entered the virtual platforms prepared by teacher and accessed the input (lecture videos, slides, etc.) in the platforms. They participated in the asynchronous games at their own pace to test their understanding, and they were given chance to access the inputs multiple times to make sure that they had adequate understanding on the content knowledge. During PdPR, they recalled what they have learnt from the input given and participated in the synchronous games and collaborative tasks to apply the knowledge. Teacher provided guidance to all participants throughout the intervention.

In otherwise, control group participants learned SVA during PdPR under Presentation-Practice-Production structure. It is a deductive and traditional classroom approach which the teacher presented SVA in the target language. Then, they were given opportunities to practise it through very controlled activities, and then practise the target language in free practice activities which bring in other language elements at the final stage of the lesson (British Council, 2006).

To answer the first research question, pre-test and post-test were administered prior and after the intervention respectively. Their scores will be analysed via mean, standard deviation and margin improvement. Also, a set of questionnaires were administered to experimental group participants after the intervention in order to explore their perceptions towards learning SVA via Gamified Flipped Home-Based Learning.

4. RESULTS AND DISCUSSION

4.1 RQ 1: Are there any significant differences between the experimental and control groups in mastering SVA via Gamified Flipped Home-Based Learning?

The pre-test and post-test scores of the participants from both experimental and control groups were calculated and tabulated in Table 1.

Table 1. Mean and Standard Deviation of Participants' Scores and the Margin of Improvement

	Mean		Standard Deviation		Margin of Improvement
	Pre-test	Post-test	Pre-test	Post-test	
Experimental	67.80	79.87	19.48	16.60	+362
Control	32.27	36.26	23.28	23.15	+80

Based on the findings, both experimental and control groups had portrayed improvement in their test scores, with a mean difference of 12.07 and 3.99 respectively. However, the results of the experimental group outperformed the control group which implies that adopting Gamified Flipped Home-Based Learning appears to play a role in enhancing the participants' SVA mastery level, as the experimental group's margin of improvement was higher than the control group with the score of 282. This outcome corresponds to the studies conducted by researchers who claimed that incorporation of FCA and gamification lead to better understanding and mastery of knowledge (Lo & Hew, 2018; Yildirim, 2017; Zainuddin, 2018).

4.2 RQ 2: What are the perceptions of Malaysian Year 3 ESL learners towards learning SVA via Gamified Flipped Home-Based Learning?

Table 2 shows the descriptive statistics of the data collected from the questionnaire.

Table 2. Participants' Perceptions towards Learning SVA via Gamified Flipped Home-Based Learning

Item	Agree	Disagree
1. I had fun while learning via Gamified Flipped Home-Based Learning.	93.33% 28	6.67% 2
2. I understand the SVA rules better after Gamified Flipped Home-Based Learning.	93.33% 28	6.67% 2
3. I can apply SVA rules in my work after Gamified Flipped Home-Based Learning.	76.67% 23	23.33% 7
4. I wish to participate in Gamified Flipped Home-Based Learning again.	100% 30	0% 0

The findings of the questionnaire illustrate that most participants hold positive perceptions towards learning SVA via Gamified Flipped Home-Based Learning as 93% of the participants found the lessons fun and enjoyable and all participants wish to attend the lessons in future. This corresponds to the findings of Jo et al. (2018) which claimed that the incorporation of FCA and gamification would lead to an active learning environment among learners. Moreover, it is noticeable that the participants perceive that they hold a better understanding of SVA as 76% of them found themselves able to apply the knowledge after attending the lessons which is pertinent to their improvement of test scores.

5. CONCLUSION & RECOMMENDATION

In conclusion, there are significant differences between learning SVA via Gamified Flipped Home-Based Learning and traditional classroom approach. Most of the participants hold positive perceptions towards Gamified Flipped Home-Based Learning. This study may serve as a good insight for other English language teaching practitioners as well as policy makers in developing a new home-based learning model for Malaysian ESL learners. Future studies are recommended to be carried out by researchers to discover how Gamified Flipped Home-Based Learning can be employed effectively in other aspects in the Malaysian primary ESL classroom context.

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