



CALL RESEARCH BRIEF

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Title: Summary of gamifying the foreign language classroom for brain-friendly learning

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Rationale /Overview of the study

The primary objective of this study was to examine the potentials of gamified instruction to enhance the learning outcomes of English as a foreign language (EFL) learners. The study explored the impact of gamified features on the motivation, engagement, and learning outcomes of the EFL learners.

The study was conducted in a college English class in Ecuador with two student groups. After attrition, there were 35 students in one group who participated in gamified instruction while the other group, consisting of 31 students, followed a traditional educational model. The authors used the principles from *Mind, Brain, and Education Science* by Tokuhamma-Espinosa (2011) in designing gamified instruction so that they could come up with a powerful brain-friendly classroom for the EFL learners in the gamified condition, such as using the gamified course management system, rezzly.com.

The study shows that the implementation of gamified elements can help EFL learners have better learning outcomes. The group that received gamified instruction showed higher autonomy, motivation, enjoyment, and engagement, and more chances to get direct feedback from their teachers as it provided a more interactive and immersive learning experience, leading to more substantial enhancement in their language learning compared to the group who did not receive the gamified instruction. Overall, this study shows how gamified instruction can promote brain-friendly learning for EFL learners.

Research methods

Participants

Twenty-one students were initially selected from two English II classes in Fall 2018. However, 66 students completed the post-questionnaire. It is not clearly explained why there were more students who completed the questionnaire than the originally selected number of students for the study. The participants, enrolled in a college English class, ranged from 18 – 22 years old. As the journal from the teacher was collected at the end of the semester, the teacher can be considered a participant.

Context

The study took place in Ecuador for two sections of college English class. The study was conducted over the course of a semester.

Data collection tools

There were three main instruments used to collect the data.

1. **Pre- and post-questionnaires** (22-item, 6-point Likert-scale): Students from both groups were given a questionnaire before they participated in the class and were given the same set of questions after they took the class. The language used in the questions was Spanish so that the students could better understand them and answer authentically. The presurvey mainly assessed their experience in their prior English I course, while the post-survey evaluated their performance in the English II course.
2. **Written reflections by the participants**: Written reflections were only collected from the experimental group (*students who received gamified class*) during the class.
3. **Teacher journal**: The teacher consistently wrote down ones' thoughts on the implementation of the gamified pedagogy throughout the course and had to submit the reflection after the semester ended so that it could be used to analyze any emerging themes.

Data analysis approach

The study used both statistics and patterns in the students' words to analyze the information.

- Researchers compared the questionnaire answers from before and after the class to see if there were differences in the outcomes between the two groups.
- Researchers asked the students to write down their thoughts and feelings towards the class. Then, common themes and patterns were studied based on the students' reflections.

Hence, from this data, researchers were able to develop a deeper understanding and overall picture of the EFL students' learning experiences under the implementation of gamified pedagogy.

Results

The study shows/ suggests

- The participants that were in the class that implemented gamified instruction demonstrated an **increase in their language learning outcomes** when compared to the participants that received traditional instruction.
- Using a brain-friendly approach, especially in language learning contexts, can **improve the efficacy** of gamification in EFL learning settings.
- The participants who were taught using the gamification techniques showed **higher motivation, engagement, and enjoyment** in learning the foreign language due to the elements below:
 - Gamified instruction **increases autonomy** and gives learners a sense of control, as students can self-correct and choose to work at their own pace.
 - The participants were able to **receive immediate feedback** from teachers, and the increased interaction with the teacher led to better task completion.

Suggestion for future research

- More research is needed to confirm the findings, as the study was conducted with a small number of participants and only in one school, which could be difficult to generalize to other contexts.

Practical implications

Practical implications for **teaching**

- Foreign language teachers can use gamification to support brain-friendly learning.
- Gamified elements can enhance students' learning during instruction.
- The study provides guidelines for incorporating gamified instruction (*activities, assessments, and lessons*).

Practical implications for learning

- EFL learners may benefit from gamified activities with higher motivation, engagement, and enjoyment in learning.
- Gamified instruction provides direct and explicit feedback to better meet the learners' needs.

Pedagogical suggestions

- Educators should consider implementing gamification in EFL classrooms to improve students' autonomy, motivation, enjoyment, and engagement.
- Educators should incorporate formative feedback in gamified instruction to enhance learning outcomes.
- Educators should provide ample opportunities for students to collaborate and share their knowledge with peers.
- Educators should consistently reflect on their practices and make improvements on their teaching.

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