



Gamification in a Homo Zappiens Class: Levels and Rewards to Improve Students' Behavior and Increase their Involvement

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Abstract

This paper looks into how an online-like game that is integrated during the English class can improve the students' behavior and their involvement in learning. The target group of this research consists of 18 students, third graders (9-10-year-old), from Olga Gudynn International School from Voluntari, Romania. The children possess a very good level of English, but they have some behavioral problems and a lack of involvement in the class. The research was conducted during the school year 2018-2019. In order to address the class issues – behavior and lack of involvement – a game was developed by drawing inspiration from the online games design. The game makes use of two categories of buckets and drops that “measure” good behavior and involvement. During the English class, the teacher draws a bucket on the board and, if the students properly behave for 10 minutes, a drop is drawn in the bucket. The students also have a paper bucket and five paper drops. At the end of an English class, five drops in the bucket on the board bring a paper drop in the paper bucket. When the students manage five paper drops in the paper bucket, they pass a level and receive an award. During the school year, the students' behavior and involvement was observed with grids. All the students managed to improve their behavior and 90% of the students were more involved during the English class. In order to explore the students' perception about the bucket-and-drops-game, a group interview was applied. Results show children were unanimously enthusiastic about it. There is also the case of two students who confessed that, because of this game, they find the English class funnier and they love English. Communication competence has been measured with a progress test and observation grids, that highlight an A2 level overall.

Keywords: *behaviour, involvement, games, rewards.*

1. Introduction

Educating the homo zappiens generation can sometimes be very challenging, as their need for technology became a basic need, and, as some previous studies shown [2], [3], [4], the new media have changed the way the students learn.

Whether we speak about the interactivity that came with the WEB 2.0 [1], the speed provided by the apps the digital natives use on a daily basis [4], or about the short-term rewards offered by games when passing a level [3], they all have impacted the cognitive patterns of the homo zappiens generation [4].

Defined as the integration of games' elements in a non-game environment [5], the gamification strategy was analysed only from the perspective of the instructional content, and, as previous studies shown [6] that it can improve the educational content either through a mediation or moderation process, but what does it happen when we use the gamification process to improve students' behaviour?

We know for sure that if we integrate the new media in learning, it become funnier, motivates students and increases their involvement, but can the new media also change the way in which students behave during classes? To answer this question, I have deigned an online-like game to measure their behaviour during classes. The idea of this project came when, facing a class with some behavioural problems, I needed to find a way to make them improve their behaviour and increase their involvement.

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2. General data about the project

2.1 Methodology

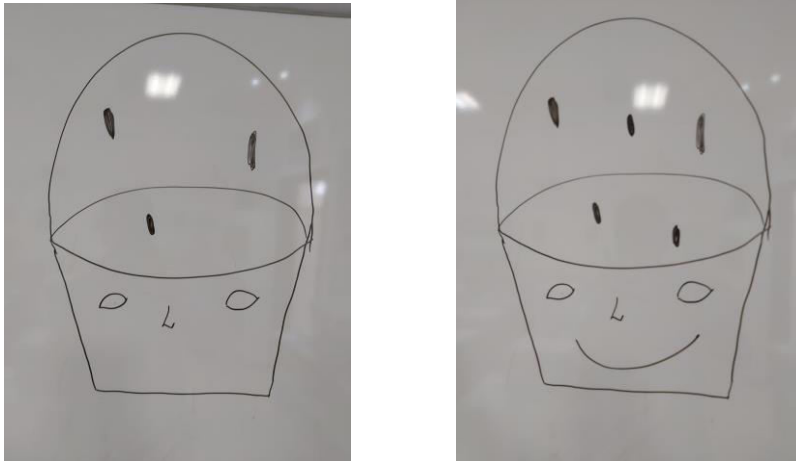
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To measure students’ perception about the bucket-and-drops game, I have applied a group interview.

2.2 Examples of activities



Picture 1: Drawn buckets at different stages



Picture 2: Paper bucket



3. Results

Improved behaviour. As the observation grids have shown, the students' behaviour improved. Challenged by the game, the students' behaviour improved. They have also developed their sense of belonging to the group, knowing that a mistake in their behaviour would affect the whole class progression in the game.

Involvement increased. Thanks to the game, the students became more involved in the English class. Their involvement increased by 70%, especially for the children with a very low involvement, because now, the class is quieter and they have more opportunities to answer.

The class became more challenging. As the students confessed, with the bucket-and-drops game the English class became more challenging, because now they have to face the challenge of being quieter. It is also the contribution of the surprise challenge which makes the class more challenging, as the students always tried to find what the reward for the running level would be.

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