Using ClassDojo to motivate kids participation in the English as Foreign Language online classes during the Covid-19 pandemic: a case study

Usando ClassDojo para motivar a participação de crianças nas aulas online de inglês durante a pandemia do Covid-19: um estudo de caso

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Abstract

Introduction: COVID-19 pandemic has changed the way the classes were conducted worldwide. Ecuadorian teachers were required to implement synchronously and asynchronously classes. Consequently, all the content was adapted to this new type of class. On the other hand, students have presented tiredness during classes, demotivation to learn, and unhappiness with this new modality. Studies have demonstrated the advantages of Computer Assisted Language Learning (CALL) to motivate learners. Method: This case study aimed to investigate the efficiency of ClassDojo to motivate Ecuadorian students' participation during the English online classes. A sample of 29 sixth-graders from a private school, ranging from 9 to 11 years old, participated in this research. The data were collected during four months of classes (August to November 2020) through tests (pre and post), interview, and teacher's journal. Results: After the implementation of the app, the participants presented a significant difference between the pre-test (M= 2.03, SD= 1.26) and post-test (M= 7.28, SD= 1.69) with a p = 0.00 and Cohen's d=3.52. The results gathered from the pre and post-test revealed that ClassDojo motivated students' participation in class. Results from the interview showed students' positive opinions on the use of ClassDojo. Conclusions: This app allowed participants to learn, interact, and have fun at the same time. This research is addressed to teachers who have online classes and want to increase learners' participation.

Keywords: ClassDojo; Class participation; Motivation; Online classes; COVID-19.

Resumo

Introdução: A pandemia da COVID-19 mudou a forma como as aulas eram ministradas em todo o mundo. Os professores equatorianos foram obrigados a implementar aulas de forma sincrona e assincrona. Consequentemente, todo o conteúdo foi adaptado para este novo tipo de aula. Por outro lado, os alunos, apresentam cansaço durante as aulas, desmotivação para aprender e infelicidade com a nova modalidade. Estudos têm demonstrado as vantagens do Computer Assisted Language Learning (CALL) para motivar os alunos. Método: Este estudo de caso teve como objetivo investigar a eficiência do ClassDojo para motivar a participação de alunos equatorianos durante as aulas online de inglês. Uma amostra de 29 alunos do sexto ano de uma escola particular, com idades entre 9 e 11 anos, participou desta pesquisa. Os dados foram coletados durante quatro meses de aulas (agosto a novembro de 2020) por meio de provas (pré e pós), entrevista e diário do professor. Resultados: Após a implementação do aplicativo, os participantes apresentaram diferença significativa entre o pré-teste (M= 2.03, DP = 1.26) e o pós-teste (M = 7.28, DP = 1.69) com p = 0.00 e d de Cohen = 3.52. Os resultados recolhidos do pré e pós-teste revelaram que o ClassDojo motivou a participação dos alunos nas aulas. Os resultados da entrevista mostraram as opiniões positivas dos alunos sobre o uso do ClassDojo. Conclusões: Este aplicativo permitiu aos participantes aprender, interagir e se divertir ao mesmo tempo. Esta pesquisa é dirigida a professores que têm aulas online e desejam aumentar a participação dos alunos.

Palavras-chave: ClassDojo; Participação nas aulas; Motivação; Aulas online; COVID-19.

INTRODUCTION

COVID-19 pandemic has changed the way the classes were conducted worldwide. Everyone needed to (re)adapt to the new modality of classes (Muthuprasad, Aiswarya, Aditya, & Jha, 2020) since it is the first time some countries would have this online method. Ecuador has never had online classes in the elementary and high school contexts before. This new type has been a challenge for all teachers and students (Cáceres-Piñaloza, 2020), but it was a necessary step for education (Bao, 2020; Halim, Hashim, and Yunus, 2020).

Ecuadorian teachers were required to implement synchronously and asynchronously classes. Consequently, all the content was adapted to this new type of class. On the other hand, students have presented tiredness during class, demotivation to learn, and unhappiness with this new modality. As a consequence, in some situations, they were not participating actively. Researches said that learners learn better when they have active class participation (Auster and MacRone, 1994; McKinney and Graham-Buxton, 1993; Weisz, 1990). Studies have proved that motivation during online classes is a critical determining factor of spontaneous participation and fulfillment of each student (Bolliger, Supanakorn, and Boggs, 2010; Hsu, Wang, and Levesque-Bristol, 2019). For
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this reason, educators have encountered themselves in a dilemma: how to motivate and assess participation in online contexts (Precourt & Gainor, 2018).

Luckily, there are various educational technology tools available to teachers to deal with the given-classes challenges imposed by the COVID-19 pandemic (Rodrigues, Almeida, Figueiredo, & Lopes, 2019). Furthermore, some tools can be used to assess remotely or motivate learners during this new process. Studies have demonstrated the advantages of Computer Assisted Language Learning (CALL) to motivate learners. Daniels (2004) conducted a study with fifth-grade students and used the "Power Writing" program to motivate them to write. The results obtained showed a breakthrough in their motivation. Another way teachers can foster students' participation and, at the same time, motivate them to learn is using gamification. Games proved their "remarkable motivational power" (Dicheva, Dichev, Agre, & Angelova, 2015, p. 75).

ClassDojo is an excellent app that meets the parameters of gamification. It fosters students' positive behavior and gives positive reinforcement to them. Thus, the present study investigates the efficiency of ClassDojo to motivate sixth-graders Ecuadorian students' participation during the online classes. The results will be significant for teachers to know efficient strategies to be used in class to promote active learning through active class participation. Two research questions were addressed to be answered by the end of this study: 1) to what extent has ClassDojo motivated kids' participation in the EFL online classes? And 2) what are students' opinions on using ClassDojo in online classes?

CLASSROOM PARTICIPATION

For decades, classroom participation has received researchers’ attention (Crawford and MacLeod, 1990; Heller, Puff, and Mills, 1985). The reason why this phenomenon happens is that students have better learning results when they actively participate in the classroom (Auster MacRone, 1994), and "oral skills can (not) be recognized without class participation being assessed" (Armstrong & Boud, 1983, p. 35). However, there is a difference in opinions between some educators. Some believe that assessing participation motivates learners (Lyons, 1989) and can show students' priorities (Bean & Peterson, 1998). On the other hand, some believe that class participation should be voluntary (Lowman and Lowman, 1995; Tiberius, 1990), and for that reason should not be graded.

Classroom participation is defined as "the number of unsolicited responses volunteered" (Burchfield & Sappington, 1999, p. 290). Some factors influence students participation, such as those cited by Weaver and Qi (2005): a) class size and opportunity, many students per class hinder opportunities to participate; b) Faculty as the authority of knowledge, hierarchical power of the class, commonly called by Freire (1970) as the "banking model," in other words, teachers have the prominent active voice and students are passive learners, just absorbing information; and finally, c) fear of professor criticism, the role of negative emotions in class.

Then, considering all the discussion above, the method used in this research to assess participation is based on a study conducted by Precourt Gainor (2018). The rubric used focused on the combination of two components: participation frequency and participation consistency.

ONLINE CLASSES DURING COVID-19 PANDEMIC

During the covid-19 pandemic, the online classes in Ecuador were divided into two parts by many schools: synchronous with online interaction mediated by a technological tool such as Zoom or Google meets, and asynchronous, independent learning using an online platform according to each context.

This modality of learning requires more preparation for the professor/instructor because some situations can affect learning. Ku, Tseng, and Akarasriworn (2013) said that interaction is one element that influences students' outcomes and motivation. The lack of face-to-face classes might decrease the number of interactions between student-teachers and students-students (Saghafi, Franz, & Crowther, 2014). For that reason, educators have an important role. They are responsible for fostering discussion among learners (Jones, 2006). One crucial way is through the correct choice of technological tools (Michael, Maithya, Cheloti, et al., 2016). A satisfied student is a synonym for successful learning (Marks, Sibley, & Arbaugh, 2005).

MOTIVATION

Working with students’ motivation is essential because it "energizes" human behavior and "gives it direction" (Dornyei & Ottó, 1998, p. 117). In the L2 classes, motivation plays an important role (Gardner, 1985; Gardner, Masgoret, Tennant, and Mihic, 2004; Lightbown and Spada, 1993) because it can influence students’ learning. Motivation impulser people to reach their goals (Harmon-Jones, Harmon-Jones, & Price, 2013) and makes students learn and participate (Cole, Feild, & Harris, 2004).

During the online class environment, students can decrease their motivation to learn (Inoue, 2007). The lack of face-to-face interaction, body contact, and facial expression are elements that might cause this demotivation.
GAMIFICATION

Gamification is a term that appeared in 2008 (Deterding, Dixon, Khaled, & Nacke, 2011) but gained attention after the second half of 2010 (Dicheva et al., 2015). Its primary purpose is to motivate students to learn (Domínguez et al., 2013), but also it focuses on engagement, participation, and enjoyment (Nah, Zeng, Telaprolu, Ayyappa, & Eschenbrenner, 2014). The word gamification means "the use of game elements, game design and game dynamics in non-game contexts" (Lin, 2014). In other words, it is to get elements/characteristics belonging to video games and apply them in different contexts such as education or marketing.

Brewer et al. (2013) researched gamification’s efficiency in motivating children through a prize system. They noticed the participants became more motivated in task completions by increasing 73% to 97%. On the other hand, Barata, Gama, Jorge, and Gonçalves (2013) used game elements like experience points, levels, leaderboards, challenges, and badges to motivate an Information Systems and Computer Engineering course participation during the classes. The results showed an improvement in students’ engagement, but their grades were not significantly different.

CLASSDOJO

ClassDojo is a classroom management web-based system that works with gamification. This app awards students with virtual points when they perform positive behavior during the class. First, teachers set up a class. Second, they enroll all of their students in this class. Third, the app automatically gives the students an avatar. However, each learner can customize their avatar and choose the one that best describes them. Finally, the app is ready to be used. Figure 1 shows one class example provided by the app.

The use of ClassDojo in education has grown lately (Cetin and Cetin, 2018; Krach, McCreery, and Rimel, 2017). More than 35 million teachers, parents, and students have used this app for educational purposes (Friedemann, Baumbach, & Jantke, 2015). Maclean-Blevins and Muilenburg (2013) researched the efficiency of ClassDojo on teacher praise for student behavior. By the end of the study, they concluded that students increased positive behavior and decreased negative behaviors. Lin (2014) used Classdojo and another app to assess classroom participation and performance. She found out that students were comfortable being assessed using both gamification apps and were motivated to participate more. Almost all of the studies focused on using ClassDojo to enhance positive behavior in class, a few works with ClassDojo and spark classroom participation, and almost none of them worked with ClassDojo and online classes.

METHODOLOGY

This research is a case study with a mixed-method approach (qualitative and quantitative) whose focus is sixth-graders English learners. This type of research "facilitates exploration of a phenomenon within its context, using a variety of data sources" (Baxter, Jack, et al., 2008, p. 544).

Setting and Participants
This study was carried out in a private school in Los Ríos Province, Ecuador, during the English classes. The participants are 29 sixth-graders with ages from 9 to 11 years old. Among the participants, 16 were female, and 13 were male. They all pursue the A2 level of English according to the CEFR.

It is the first time this school offers this new modality of class; therefore, first-time students have online classes. Since June 2020, due to the covid-19 pandemic, the participants were offered two class types, synchronous, online interactions twice a week using the Zoom platform and asynchronous activities three times a week using their school learning platform. Table 1 shows the topics worked during each week and the classes where Class Dojo was used.

<table>
<thead>
<tr>
<th>Week</th>
<th>Topic</th>
<th>Asynchronous</th>
<th>Synchronous</th>
</tr>
</thead>
<tbody>
<tr>
<td>August 3th - August 9th *</td>
<td>Verb to Be</td>
<td>3 classes</td>
<td>2 classes</td>
</tr>
<tr>
<td>August 10th - August 16th</td>
<td>Simple Present</td>
<td>3 classes</td>
<td>2 classes</td>
</tr>
<tr>
<td>August 17th - August 22th</td>
<td>Adverb of Frequency</td>
<td>3 classes</td>
<td>2 classes</td>
</tr>
<tr>
<td>August 24th - August 30th</td>
<td>Daily routine</td>
<td>3 classes</td>
<td>2 classes</td>
</tr>
<tr>
<td>August 31st - September 6th</td>
<td>Going to</td>
<td>3 classes</td>
<td>2 classes</td>
</tr>
<tr>
<td>September 7th - September 13th</td>
<td>Will</td>
<td>3 classes</td>
<td>2 classes</td>
</tr>
<tr>
<td>September 14th - September 20th</td>
<td>Should</td>
<td>3 classes</td>
<td>2 classes</td>
</tr>
<tr>
<td>September 21st - September 27th</td>
<td>Must</td>
<td>3 classes</td>
<td>2 classes</td>
</tr>
<tr>
<td>September 28th - October 4th</td>
<td>First Conditional</td>
<td>3 classes</td>
<td>2 classes</td>
</tr>
<tr>
<td>October 5th - October 11th</td>
<td>Exam Week</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>October 12th - October 18th</td>
<td>Vacation week</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>October 19th - October 25th</td>
<td>Used to</td>
<td>3 classes</td>
<td>2 classes</td>
</tr>
<tr>
<td>October 26th - November 1st</td>
<td>Comparative</td>
<td>3 classes</td>
<td>2 classes</td>
</tr>
<tr>
<td>November 2nd - November 8th</td>
<td>Superlative</td>
<td>3 classes</td>
<td>2 classes</td>
</tr>
<tr>
<td>November 9th - November 15th</td>
<td>Comparative x Superlative</td>
<td>3 classes</td>
<td>2 classes</td>
</tr>
<tr>
<td>November 16th - November 22nd</td>
<td>Preposition of place</td>
<td>3 classes</td>
<td>2 classes</td>
</tr>
<tr>
<td>November 23rd - November 29th**</td>
<td>Countable x Uncountable nouns</td>
<td>3 classes</td>
<td>2 classes</td>
</tr>
<tr>
<td>17 weeks</td>
<td>15 topics</td>
<td>45 classes</td>
<td>30 classes</td>
</tr>
</tbody>
</table>

*Pre-test  **Post-test  ***ClassDojo was used only during the Synchronous classes

Table 1. Classes Schedule.

Data collection and analysis

The data was collected throughout four months of classes (from August to November 2020). Three instruments were designed to answer the research questions, make the data triangulation, and ensure validity and reliability.

First, one rubric was used in each class in order to measure each student’s participation. The grades from the first day and the last day were utilized as a pre and post-test. The analyses were made using the statistics software SPSS 25. It was calculated the p-value (Gehlbach & Robinson, 2018)) and Cohen’s d (Thalheimer & Cook, 2002).

Second, students’ interviews. With ten minutes-length, an interview was done with all the participants to know their opinions about using ClassDojo in class. An analysis based on Holliday (2005) was done to categorize the data. Finally, a teaching journal. Every class, the research kept a journal with notes and observations about the class. It is essential to highlight that this research followed ethical procedures. The consent letter was sent to the parents and the school. Only voluntary students participated in this study. Table 2 demonstrates that when each instrument was applied and what its goals are.

<table>
<thead>
<tr>
<th>Instruments</th>
<th>Goal</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rubric*</td>
<td>Assess student’s participation</td>
<td>From August 4th to November 28th</td>
</tr>
<tr>
<td>Interview</td>
<td>Become acquainted with the participants’ opinions on the use of Class Dojo in the class</td>
<td>December 1st, 2020</td>
</tr>
<tr>
<td>Teacher’s journal*</td>
<td>Write reflections, observations, and insights about the class, the participants, and the research process</td>
<td>From August 4th to November 28th</td>
</tr>
</tbody>
</table>

*used in all the classes

Table 2. Data Collection Instruments.
RESULTS AND DISCUSSION

Quantitative results

To answer the first research question, the authors ran a paired t-test in the SPSS 25 to compare the pre and post-test results. Table 3 shows that the participants had a significant difference between pre-test (M = 2.03, SD = 1.26) and post-test (M = 7.28, SD = 1.69) scores when examining all the samples together; t (28) = -25.87. The p-value (p = 0.00) is less than 0.05, which shows a high level of significance (Gehlbach & Robinson, 2018). The alpha value (d = 3.52), more significant than 0.08, supports the idea of using gamification through ClassDojo to motivate students to participate more in online classes. One hypothesis is because "there were more and better-rewarded challenges, and these gave students more opportunities to succeed" (Barata et al., 2013, p. 16).

<table>
<thead>
<tr>
<th>Test</th>
<th>M</th>
<th>SD</th>
<th>Sig. (P)</th>
<th>Es</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre</td>
<td>2.03</td>
<td>1.26</td>
<td>0.000</td>
<td>3.52</td>
</tr>
<tr>
<td>Post</td>
<td>7.28</td>
<td>1.69</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 3. Paired Sample t-test Results from Pre and Post-test.

During the pre-test, the minimum grade was one, and the maximum was four, which shows that students lacked class participation. However, in the post-test, the minimum grade was four, and the maximum was ten, suggesting that students increased their class participation during the four months of classes. Figure 2 display these grades.

Figure 2. Minimum and Maximum grade from pre/post-test.

The graphic above showed that some students are still not participating actively after the implementation. The minimum grade is 4, which is still not high. The authors expected a higher minimum grade. Nevertheless, this number of students is less than those who had more than five in their grades. Students’ perspectives on using ClassDojo

To answer the second research question, by the end of the four months using ClassDojo, an interview was carried out to gather qualitative participants’ feedback on the use of the app. The twenty-nine students reported that they all liked to use ClassDojo. The participants mentioned many reasons that made this app successful in classes. Some learners said that when realizing they had many points, they comprehended they were improving actively in the class: "I like it because it gives you points, and I like that because you feel that you are improving."
The points in the ClassDojo helped students see their advances in learning. If they had fewer points than their classmates, they made the self-assessment and understood that they were not participating. The healthy competition provided by the app, together with positive reinforcement, made students increase their participation (Barata et al., 2013).

Another opinion that came out was regarding the benefits of ClassDojo to promote interaction among students. Students at the beginning of the class did not interact with their classmates because everything was done online. They just saw their classmates in small boxes due to the Zoom platform. So, this hindered students’ interactions (Saghafi et al., 2014). In one of the utterances from the teachers’ journal, it is possible to understand this situation:

Students seem demotivated to learn. They are not the same as I used to know them. It looks like they are just in the class because they have to. They used to be active learners. Maybe sitting in a chair all day and do not have face-to-face interactions with their classmates during class, especially during the break time, has made them feel sad. (Researcher’s journal, July 16th, 2020).

Some students confirmed this idea when they stated that one of the reasons they liked to use the app was because they could interact with their classmates; “I like using ClassDojo because we all interact, and I missed that” (Participant 3, interview, December 1st, 2020), and "ClassDojo has helped me interact more with my classmates. This made me feel pleased" (Participant 4, interview, December 1st, 2020. The interaction was an essential factor in motivating students to participate. When students started to interact more, they became more motivated to learn (Mercer & Howe, 2012).

Finally, ClassDojo provided enjoyment during the class. The app was able to conciliate learning with entertainment. Bisson and Luckner (1996) claimed that "fun can motivate learners to engage themselves in activities with which they have little or no previous experience" (p.110). The concept of having fun is directly related to intrinsic motivation (Dattilo, Kleiber, et al., 1993; Middleton, Littlefield, and Lehrer, 1992). Thus, having fun was a factor that motivated students’ participation. The following utterances confirm this idea: "I like ClassDojo because students have fun while learning" (Participant 5, interview, December 1st, 2020) and "Having fun in class through ClassDojo made me want to participate" (Participant 6, interview, December 1st, 2020) Through the quotes, the participants reported that the app motivates them to participate and to have fun. Cetin and Cetin (2018) obtained the same results in their study when they researched middle school students’ perspectives on the use of ClassDojo.

CONCLUSION

2020 has demonstrated to be an atypical year for all the areas in society. Some have suffered more with the consequences of the pandemic than others. The educational field has shown that, even in dire circumstances, educators were able to remedy the situation and provide the best for their students. Some teachers have encountered some problems like lack of motivation and tiredness to foster participation, but these factors did not make them give up on providing the best education for their students. Teachers showed that they have the ability to (re)adapt in all situations.

Students had their class performance affected somehow during the covid-19 pandemic, maybe because they were not used to this new online modality of class or the pressure of being locked up at home. Learners decreased their motivation to learn, and, as a result, they did not participate actively in class as they were used to do. For this reason, this study showed the importance of teacher searching for active methodologies to be used with their students.

Working with gamification has displayed in some researches good results for education. ClassDojo proved, according to the data, that it can motivate kids’ participation in the online classes, foster healthy competitiveness among classmates, and enhance learning and enjoyment. The findings showed that students were able to learn, interact, and have fun at the same time.
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