# JClic as a Pedagogical Tool to Increase Students' Mastery of 'Present Perfect Simple' in English

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## I. Abstract

As several studies suggest (Celce-Murcia & Larsen-Freeman 1999; Larsen-Freeman, Kuehn & Haccius 2002; Riddell 2014) the present perfect simple continues to be a challenge for many English language learners. In particular, high school students often find it difficult to discriminate between the simple past and the present perfect simple in English. Then, in order to help students improve their mastery of the present perfect simple we have designed and developed fifteen computer-based activities with the JClic software as an innovative approach to address the research problem. Furthermore, we consider that the present investigation may be helpful for teachers to update their teaching techniques and materials to better support students' academic success and to gain more insight into the types and causes of students' errors in using these two troublesome tenses. Accordingly, this small-scale quasi-experimental study sought to answer two research questions. Concerning the first research question, the results have shown that students' initial knowledge level in the use of present perfect simple was very low. About the second research question, the data analysis showed evidence that the educational software JClic has proved to be an effective tool for teaching and training the correct use of the present perfect simple. In addition, the paired two samples Student's t-test was used when comparing pre-test (2nd end-of-term exam) and post-test (3rd end-of-term exam) scores to test the first hypothesis and the results indicated statistical significant difference in the population scores. Then, we can assert that the use of JClic in the English classroom was a good strategy to enhance the language learning process.

**Key words:** present perfect simple, simple past, JClic, computer-based activities, errors.

## II. Introduction

By the end of high school English language learners (ELLs) are expected to achieve mastery of the verb tense-aspect system in order to control grammatical accuracy and communicate fluently in English. Nevertheless, sometimes that goal may be hard to reach because many students «struggle to learn verb-tense aspect in English» (Larsen-Freeman, Kuehn & Haccius 2002:3). Similarly, other researchers have noted that the English verb tense-aspect system is a problematic grammatical area for language learners (Curell & Gotor 1990; Celce-Murcia & Larsen-Freeman 1999; Riddell 2014). One of the most controversial issues of the tense-aspect theory and of language teaching and learning is the use of present perfect simple. In particular, the concept of «indefinite time» to describe an action that happened at an unspecified time in the past can often be puzzling to English language learners. On top of that, the fact that there is a certain similarity between

present perfect simple and simple past, as both tenses can be used to talk about past events, can make the choice of these two tenses even more difficult for the learners of English. Incorrect use of verb tenses can generate confusion, misunderstanding, disagreement and many times can hinder the interpretation of meaning. In addition, wrong tense errors reveal students' poor grammar knowledge of the target language. Therefore, in order to help students overcome this difficulty and make them understand that verb tenses interact and relate with one another, we followed Celce-Murcia & Larsen-Freeman's (1999:109) suggestion to present and explain the present perfect simple in contrast to past simple. Some important benefits of mastering the use of these two tenses are that students can improve their grades in written assignments and end-of-term tests and also be better prepared for University entrance exams. Another important aspect we have looked at in the first phase of our research project is the effect of the use of computer-assisted instruction (CAI) on students' achievement. Regarding this issue, Nutta (1998:50) as well as Beatty (2003:7) agree that the use of computers for instruction and learning can provide intellectual and academic benefits. Moreover, Ross, Morrison & Lowther (2010:19, 20) consider educational technology a «tutor» and a «teaching aid». Additionally, Girón-García (2013:157) acknowledges that «many teachers have discovered that media materials can be valuable in a variety of instructional tasks, helping to make complex subject matter accessible and engaging». Besides, Rabab'ah & AbuSeileek (2009) show in their research that computer-assisted instruction brings better results regarding the learning of English tenses in comparison to direct instruction. Furthermore, Guerrero, Muñoz & Sotelino (2007); Bangs (2012); Livingstone (2012) point out that the use of the JClic authoring software can effectively be used to support language teaching. What is more, Livingstone (2012:48) affirms that the immediate feedback provided by the JClic platform through the multimedia activities it makes available, promotes second language acquisition. Then, in order to provide an innovative solution to the complex problem of the use of present perfect simple we have created 15 computer-based activities with the JClic application. Even though the effects of computer-assisted instruction on students' achievement have been thoroughly investigated, no similar study was found in the literature to examine the effects of JClic on students' achievement in the use of present perfect simple through this new method. Therefore, in this paper we show that JClic as a pedagogical tool can have a positive impact on students' academic performance.

## III. Objectives

The purpose of the present empirical investigation is to improve students' mastery of the present perfect simple in English since this is a problematic form for many English language learners (ELLs).

To address this problem, the present study raises two basic questions for further study:

1. What is students' initial knowledge level of the English present perfect simple?

2. Does the use of JClic as a pedagogical tool increase students' performance in the correct use of present perfect simple in written production?

In addition, in order to identify whether or not the population means are different the research questions are translated into the following hypothesis:

- As a result of using JClic activities there will either be no significant difference in students' performance (3rd end-of-term exam scores) in the use of present perfect simple or there will be a significant change.

## IV. JClic as a pedagogical tool

Bangs (2012 web article) defines JClic as «a freeware application, formerly known simply as CLIC, developed by Francesc Busquets, for the development of multimedia activities for language learners.» Additionally, Bangs states that «with JClic you can create different types of activities: puzzles, associations, crosswords, identification activities, exploration activities, open-ended answers, multiple choice, etc.»

According to Guerrero, Muñoz and Sotelino (2007:172) JClic is a program created in Spain, which is free for «educational purposes» and which can run under the three most common operating systems: Microsoft Windows, Apple Mac OS X and Linux. Moreover, the JClic program has the following advantages:

- It can be used both online and offline.
- It incorporates all the multimedia elements (images, animation, audio, video).
- All media files can be turned into «zip» files.
- The number of attempts per question and the time limit can be previously set.
- The info boxes provide information about the time spent, number of tries, etc.
- It provides performance reports for teachers to better monitor student progress.
- It can promote participation and maintain student engagement and motivation through 16 types of instructional activities. These types of activities are: simple association, complex association, double puzzle, explore activity, memory game, identify cells, information screen, exchange puzzle, hole puzzle, complete text, fill-in-the-blanks (text), identify elements (text), order elements (text), written answer, crosswords and word search. (Guerrero *et al.* 2007:173-174)

What is more, JClic is free software released by the Ministry of Education of the Government of Catalonia under the terms of the GNU General Public License (Generalitat de Catalunya WebPage) and it is now implemented in many Spanish public schools. Then, the instructional activities can be created under the Creative Commons licence, which means that «the project can be modified or changed by another person providing that the authorship of the same one is respected» (Guerrero *et al.* 2007:176). Another point worth mentioning is that JClic includes three main sections: (1) JClic player which «allows the activities to be played from the local disk (or from the local network) without the necessity of being connected to the internet»; (2) JClic Author which «allows the creation, edition and publication of activities in a simpler, more visual and intuitive way», and (3) JClic Report «collects data and generates reports on the results of the activities done by the students.» (Guerrero *et al.* 2007:173-174)

Therefore, JClic as a pedagogical tool can be successfully used to support the teaching and training of complex grammatical concepts. Furthermore, due to the range of features available, JClic can help teachers identify individual strengths and learning needs, on the one hand, and provide students a positive learning experience, on the other.

## V. Method and materials

The present research project was developed in the year 2014, in a local high school classroom as part of the teacher training master's degree programme. In this study, classroom action research is undertaken as a methodology to find the answer to specific grammatical problems identified during the teacher-training program. According to Van Lier (2004:195) «action research is often problem oriented, and it introduces a change, the implementation of which is then monitored, studied and reported.» Nonetheless, a better way to define action research is through the words of O'Leary (2004:140) who describes it as a:

> Cyclical process that takes shape as knowledge emerges. Cycles converge towards better situation understanding and improved action implementation; and are based in evaluative practice that alters between action and critical reflection. Action research can therefore be seen as an experiential learning approach to change.


**Figure 1.** Action Research Cycle

Then, in order to improve students' mastery of the present perfect simple we have developed a plan of action with the following steps:

**1. Initial Reflection** (field notes taken during classroom observation):

- **Problem identification** - The students seemed to have great difficulty with the use of present perfect simple in contrast to simple past tense.
- **Brief Report on the existing situation** - (1) The students received their graded 2nd end-of-term English exam and they were very disappointed with their results. (The results helped us determine students' initial performance level on the use of present perfect and past simple). (2) English grammar was taught through the traditional method (textbook approach) and assessed through a paper and pencil method.
- **Finding Relevant Literature** - In this step we conducted a literature review to identify existing research and gather significant information on the chosen topic.

**2. Planning:** This step consisted of developing the research questions and the hypothesis, and establishing the project objectives that describe the outcomes to be accomplished, on the one hand. On the other hand, it involved collecting, organizing and interpreting data in order to imagine a way to help students improve their use of the present perfect simple and past simple tenses in written production. In addition, we developed an action plan in which we described the method and the steps needed to design and implement the JClic program.

**3. Acting:** In this stage, we designed the JClic activities and then we implemented them in the English classroom.

**4. Observing (field notes):** During the intervention we observed how the program worked and monitored students' progress. This was done by means of classroom observation and field notes.

**5. Reflecting:** In this step, we reflected on the effects of the use of the JClic activities as a basis for further planning. We also examined if the initial diagnosis was correct and if the action was taken in an appropriate manner.

Participation in the study was completely voluntary and confidential. In other words, the research participants had the opportunity to agree or refuse to participate. In addition, students who agreed to participate were assigned individual identification numbers to maintain their confidentiality. The participants of this study were 17 students in the 1st Year of Bachillerato, with age range from 16 to 17 years old. The students were enrolled in the Science and Technology Studies and their English level, according to the Common European Framework of Reference for Languages, was between A2 and B1. The participants were chosen on the basis of their poor 2nd end-of-term exam results.

Then, in order to answer the research questions and verify the hypothesis, a classroom-based quasi-experimental pre-test/post-test design was used, in which only one group of participants was observed. In addition, for data collection and analysis a mixed-methods approach was used. That is to say, both qualitative and quantitative data were collected and further analysed in order to answer the research questions and test the hypothesis. The qualitative data were obtained from the classroom observation (field notes) and the quantitative data were obtained from the pre-test, the intervention and the post-test. Subsequently, both types of data were compared and analyzed to measure the accomplishment of the objectives after the implementation of the program. The research instruments used to gather the data were:

**Classroom observation (field notes)** – First, it was used to establish the research objectives, the research questions, the method and the design of this study. Second, it was used to record specific behaviour, events and interactions before, during and after the program implementation.

**2nd end-of-term exam** – This exam was analysed as pre-test. It was used to collect the preliminary data about students' ability in using past simple and present perfect simple. The scores were compared with the ones students obtained in the 3rd end-of-term exam (post-test). Then, it also served as a baseline to measure students' progress.

**JClic program** – This program was the experimental treatment and the results were compared with the 2nd and 3rd end-of-term exam results to find out its impact on students' achievement.

**3rd end-of-term exam** – This exam was analysed as post-test. The scores were compared with the ones students obtained in the 2nd end-of-term exam. This exam was performed after the intervention (JClic program implementation).

In addition, when elaborating the teaching-learning procedure for the present study, we have used the materials that seemed most appropriate to help us reach our goals:

- Visual images (printed material)
- Classroom blackboard
- Notebooks and pencils
- Computers with internet access
- Computer software JClic

These materials were used to facilitate the knowledge transfer, to provide useful feedback and to assess the outcomes of instruction. Besides, another reason for choosing these materials was to help students transfer the information provided during this training program from short-term memory to long-term memory. That is to say, these materials were used in order to encourage the transfer from mere thoughts to consciousness. Therefore, the materials used in our study

allowed students obtain a more comprehensible knowledge of the instructional content.

**Procedure**

The main objective of this investigation was to improve students' mastery in the use of present perfect simple. Then, to achieve our objective, during the Teacher Training Program, we embarked on a small-scale research project. With the help of the software JClic Author we developed 15 training activities and implemented them in an experimental classroom. The study consisted of three 55-minute sessions developed over a study period of one-week in a computer laboratory where each student was assigned a computer to work on the learning activities. The sessions were organised as follows:

***Session 1***

This session started with a warm-up to catch students' attention and to engage them in the steps that followed. First, students were handed out two printed images (visual aids to support the explicit explanation): «The Timeline Chart» and the «Present Perfect vs. Past Simple» and then example sentences using the two tenses were elicited from the students. In addition, for a better understanding of the differences in usage between present perfect simple and past simple, students were explained their formation and functions. Further, in order to determine whether the students understood what was taught, the information was drawn on a timeline on to the blackboard and some example sentences were elicited from the students. What is more, to reinforce and summarize the information being taught, some extra information and examples of the present perfect simple and past simple tenses were displayed on the computer screen. After that, students started to perform the computer activities designed in order to help them master the use of the two tenses. During this session students performed on the computer the following JClic activities:

- **Activity 1.** Choose the right answer (present perfect simple or past simple).
- **Activity 2.** Finish the sentences (match with the proper time adverb).
- **Activity 3.** Type the correct form of the verbs (present perfect simple or past simple).
- **Activity 4.** Choose the right tense for the following time references (present perfect simple or past simple).

***Session 2***

This practice session started with a warm-up to elicit students' answers and get them involved in the lesson. First, students were handed out a printed image («For and Since» - visual aid) with explanations of the use of present perfect with «for» and «since». Then, some example

sentences were elicited from the students. During this session students performed on the computer the following JClic activities:

- **Activity 5.** Add «For» or «Since» (present perfect simple).
- **Activity 6.** Choose a suitable time expression (present perfect simple and past simple).
- **Activity 7.** Find the mistakes and rewrite the sentences correctly (present perfect simple and past simple).
- **Activity 8.** Read the story and identify the past simple and present perfect simple.
- **Activity 9.** Word search puzzle (Find 8 verbs in past simple).
- **Activity 10.** Put the conversation in the correct order (past simple).

***Session 3***

In this session students performed and finished the following JClic activities:

- **Activity 11.** Match the questions to the pictures (questions in present perfect simple).
  **Activity 12.** Put the words in the correct order to make a sentence (present perfect simple).
- **Activity 13.** Turn the sentences into negative and use the contracted form of the verbs (present perfect simple and past simple).
- **Activity 14.** Match the subjects to the verbs (present perfect simple «have/has»).
- **Activity 15.** Write the past simple form of the verb you listen (verbs listening).

In order to cater for the diversity of learning styles and enhance the learning experience for all the students we made a diversified use of the learning materials, such as: visuals (pictorial illustration), blackboard drawings, graphic representations, texts and audio. On the other hand, as research has shown, computer-based fun and enjoyable activities can stimulate students' interest, decrease their anxiety and improve their self-confidence.

In addition, extra information, time and assistance were provided to slow learners. What is more, by creating fun and engaging activities with game elements such as: word search puzzle, match questions with pictures, make a sentence from scrambled words and scrambled sentences (put the conversation in the correct order) we expected equal participation from both slow and fast learners. In other words, these types of activities were student-focused and required an active engagement of all students.

## VI. Results and discussion

The findings of the present study were divided into four main sections: (1) data from the 2nd end-of-term exam; (2) data from the 3rd end-of-term exam; (3) data from the JClic program implementation and (4) data from the field notes.

### 1) DATA FROM THE 2nd END-OF-TERM EXAM

**Research question 1**: *What is students' initial knowledge level of the English present perfect simple?*

In order to answer the first research question and find out students' initial knowledge level of the English present perfect simple and establish future requirements, we examined their 2nd end-of term exam (as pre-test). The 2nd end-of-term exam was a final examination which included reading, vocabulary, grammar review, listening and writing. The grammar review section consisted of mixed tenses exercises. However, we gave qualifications only to those exercises that were relevant to our study. That is to say, we assigned grades only to the exercises in which students had to use the present perfect simple.

The exercises provided in 2nd end-of-term exam tested students' knowledge of the present perfect simple (affirmative and negative forms) and their comprehension of the present perfect time markers: *since, for,* and *never*. The results show that students experienced difficulties with the correct use of present perfect simple. What is more, students appeared to be confused with tense and aspect. In fact, most of the errors corresponded to wrong choice of tense. In other words, students used past simple instead of present perfect. This type of error could be described as faulty analogy because students seemed to extrapolate the use of past simple. On top of that, sometimes students used the two tenses the other way around: present perfect instead of past simple, which means that they overused the present perfect. However, there were situations where students used present simple or present continuous instead of present perfect tense. Moreover, another common error was the incorrect use of past participle form of irregular verbs, which means that students were applying the rules inaccurately.

Therefore, the errors that students committed were mainly of four types: misformation (wrong forms of verbs are selected as an alternative to the correct ones), addition (not required elements are added), omission (important elements are omitted) and ordering (correct elements are placed in the wrong order).

In addition, the following grading system was used for all the answers:

| | | | |
|---|---|---|---|
| **GRADING SYSTEM** | **0 = WRONG ANSWER** | **5 = HALF ANSWER IS CORRECT** | **10 = CORRECT ANSWER** |

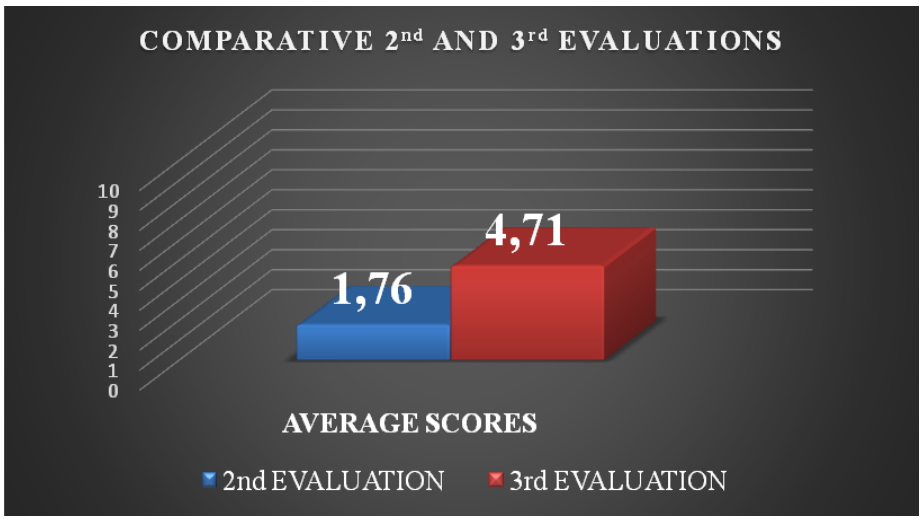
**Table 1.** Grading System

The average of the 2nd end-of-term exam scores was 1,76 which means low performance in the correct use of present perfect simple in written production. Therefore, students' exam results and classroom observation data motivated us to undertake action research.

## 2) DATA FROM THE 3rd END-OF-TERM EXAM

The 3rd end-of-term-exam was an exam given to students at the end of the 3rd academic term and included reading, vocabulary, grammar review, listening and writing. The grammar review section consisted of mixed tenses, relative pronouns and modal verbs. However, we assigned scores only to the exercises in which students had to use present perfect simple. In other words, we obtained the exam scores by dividing the exam into several parts. In addition, a score was given to each sentence according to a previously established grading system. The grading system used was the one shown in Table 1.

The average of the 3rd end-of-term exam scores was 4,71 which means high performance level in the correct use of present perfect simple. In addition, in order to illustrate the difference in average performance as part of a whole, we used the following bar chart:




**Graph 1.** Average Performance 2nd and 3rd End-of-Term Exams

As shown in Graph 1, the achievement of the objectives has been satisfactory as the average of the pre-test (2nd end-of term exam = 1,76) is lower than the average of the post-test (3rd end-of-term exam = 4,71): 1,76 < 4,71. However, in order to increase the reliability in the assessment of students' achievement and progress we correlated the 3rd end-of-term exam results with the results obtained during the program implementation (JClic results).

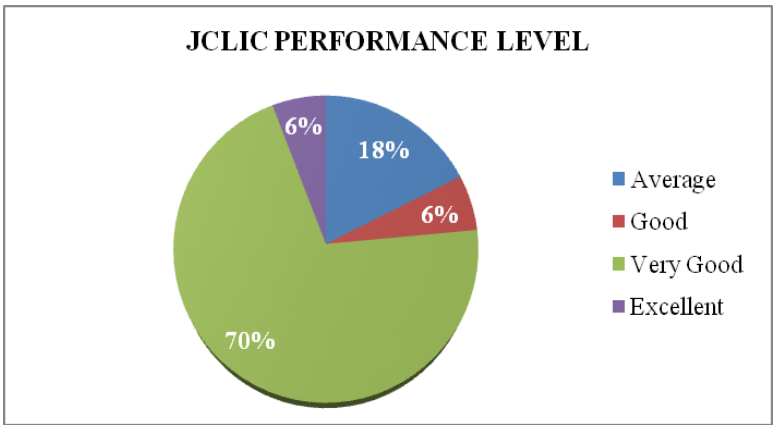
## 3) DATA FROM THE JCLIC PROGRAM IMPLEMENTATION

**Research question 2:** *Does the use of JClic as a pedagogical tool increase students' performance in the correct use of present perfect simple in written production?*

In addition, as the JClic project was the treatment, we only evaluated students' overall performance. Moreover, the results were correlated with the ones that students obtained in the 3rd end-of-term exam. Then, the JClic activities were graded based on student responses. Within each question students were allowed a certain number of attempts. So, once the student exceeded the maximum number of attempts the mark decreased.

Then, to obtain the score, the rule of three (inverse proportion) was used. That is to say, the number of correct answers was multiplied by 10 (maximum score) and divided by the total number of attempts per question:

E.g.: (19 * 10) / 19 = 10




**Graph 2.** JClic Overall Performance Level

As can be seen in Graph 2 the overall performance level in the JClic activities was very good with 70 % of the students obtaining a mark between 7,50 and 8,49. Furthermore, there were no students with poor level of performance in the JClic activities. Therefore, most of the students demonstrated very good performance level which means that the JClic project improved students' learning and mastery of present perfect simple and past simple and provided students a positive learning experience.

**Initial Hypothesis:**

*1. As a result of using JClic activities there will either be no significant difference in students' performance (3rd end-of-term exam scores) in the use of present perfect simple or there will be a significant change.*

To test the first hypothesis we compared the 2nd end-of-term exam results (pre-test scores) with the 3rd end-of-term exam results (post-test scores). In addition, to determine the significance of the difference in the

arithmetic means and know whether or not the JClic program was effective we used the paired two samples for means Student's t-test in Excel 2013. Namely, this tool helped us compare the before and after treatment scores from the same group at different times (2nd and 3rd academic terms) and test the first null hypothesis. Then, the null hypothesis (H0) is that there will be no difference in students' performance in the use of present perfect simple. The alternate hypothesis, claims that the average difference of exam scores will be greater than 0. Taking into account the results obtained with Student's t-test, we can state that our sample provides enough evidence to reject the null hypothesis and conclude with 95% confidence that there is statistical significant difference in the population means and that the results are not due to randomness.

**4) DATA FROM THE FIELD NOTES**

In the present study, throughout the participant observation period we took extensive field notes to record what was observed in the natural setting. Then, the data that was relevant for our objectives and research problem were categorized into patterns that later on supported us in performing a better analysis of the program implementation process. In other words, observational data was used to better contextualize, describe and increase the understanding of the phenomena under study.

According to our field notes students experienced difficulties with the correct use of the present perfect simple. Another pattern is associated to the use of technology. During the program implementation, we noticed the effect that the use of computer-based activities had in the learning process. Moreover, according to our observations students were anxious and motivated to complete every activity because it implied the use of the computer. Therefore, implementing technology in the teaching practice favoured and promoted students' learning, on the one hand, and increased their self-confidence and motivation, on the other.

## VII. Conclusions

The purpose of this research was **to increase students' mastery of the present perfect simple** with the help of the JClic computer-based activities. Then, the study's point of departure was based on **students' poor performance of the tense usage, in particular of present perfect simple and past simple**, demonstrated by the 2nd end-of-term exam results and by classroom observation.

In addition, the findings strongly support the proposal that JClic as a pedagogical tool has the potential to develop students' grammatical competence and consequently improve their knowledge of verb tenses such as the present perfect simple and past simple. Accordingly, JClic can be a valuable device for integrating technology into any lesson and develop student knowledge. Therefore, JClic can become a very useful

complement to traditional classroom-based teaching and learning. What is more, the findings clearly support our initial hypothesis. Then, we can draw some practical conclusions regarding the research questions and the hypothesis. Concerning the first research question, the results have shown that students' initial knowledge level in the use of present perfect simple was very low. In the light of this evidence, we decided to find an innovative solution to this practical problem. As regards the second research question, the data analysis showed evidence that the educational software JClic proved to be an effective tool for teaching and training the correct use of the present perfect simple.

The overall performance level in the JClic activities was very good which means that most of the students improved their knowledge of the present perfect simple. In addition, the paired two samples Student's t-test demonstrated statistical significant difference in the population scores, which means that the objectives of the study were accomplished and the results were not due to randomness. Then, the use of JClic in the classroom was a good strategy to enhance the language learning process and to reach the research objectives. However, regardless this proven effectiveness, the difficulty to use correctly the present perfect simple continues to be a challenge for many English learners. Then, more research needs to be done using a longitudinal case study and larger samples to better justify the causality between the variables and find out the long-term effect of the JClic program on the improvement of the knowledge of present perfect simple and past simple tenses. What is more, we may think that due to its novelty and ludic interface JClic could be a suitable computer-based tool to increase student motivation, engagement and confidence in the ability to learn and understand complex English grammatical concepts. Therefore, additional research could focus on examining the effect of JClic as a technological and pedagogical tool on student engagement, motivation and self-efficacy.

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