



Effects of Using the Google Search Engine, the Trello Learning Management System (TLMS), and Classroom Form-Focused Instruction on Developing EFL Learners' Grammatical Knowledge

Roya Khoii¹, Atefeh Gharibshah²

Islamic Azad University, Tehran North Branch, Islamic Republic of Iran¹
Islamic Azad University, Tehran North Branch, Islamic Republic of Iran²

Abstract

The present study aimed to investigate the effects of employing the Google Search Engine, the Trello Learning Management System, and classroom form-focused instruction on developing EFL learners' knowledge of simple past and present perfect tenses. The participants consisted of 45 pre-intermediate level female language learners within the age range of 19-35, randomly assigned to three experimental groups. Before the treatment, a PET and a teacher-made grammar pre-test were administered to the three groups to homogenize them in terms of language proficiency and knowledge of the target tenses. In the course of treatment, the first group (EXI) received form-focused instruction; the second group (EXII) searched for the target tenses in the related texts in Google and performed the required activities to learn the tenses, and the third group (EXIII) worked with the uploaded grammar lessons and tips in the Trello forum. At the end of the experiment, a post-test similar to the pre-test was administered to all the three groups to check the effectiveness of the treatment. The findings indicated that, although all the three groups had improved their knowledge of simple past and present perfect tenses, the form-focused group (EXI) had significantly outperformed the other two groups on the posttest, thus raising some doubt regarding the efficiency of using technology in teaching L2 grammar.

Keywords: FLL, Form-focused Instruction, Google, Grammar, LMS, Trello.

1. Background

There is no doubt that technology has noticeably influenced our lives and created numerous changes in the past few decades. Language teaching/learning is one of the areas that have been feeling the impact of the changes made by technology. Advanced technologies, such as laptops and internet access, have become nearly ubiquitous in foreign language learning in many developed and developing countries; therefore, it is not surprising to find that the majority of these technologies have been co-opted by the field of education, in general, and TESOL, in particular. In the field of teaching English, technology has provided an "adaptive learning" environment, which is defined as a strategy in bringing materials online [1].

Moreover, technology can help with making teaching materials more personalized, which can assist both learners and instructors in learning and teaching more effectively. According to Duncan-Howell [2], language teachers should "personalize instruction and make sure that the educational environments we offer to all students keep pace with the 21st century". Personalization, especially in teaching grammar, can provide the learners with an opportunity to learn in an authentic environment.

Teaching grammar has been greatly facilitated by using computers because computer-based instruction is capable of providing an optimal context for performing the related tasks and activities [3]. Nevertheless, providing a desirable context for grammar acquisition is "an idea that researchers and teachers ignore at their peril" [4]. Moreover, newly advanced technologies enable language teachers to design their teaching methods based on the learners' needs and develop a variety of pedagogical methods for teaching grammar.

Undoubtedly, grammar forms a basis for building a language, enables language users to convey a message, and is the central part of any language around which other parts such as pronunciation and vocabulary revolve [5]. However, it does not seem to be an enjoyable part of language education for either students or teachers [6]. Therefore, many language scholars and practitioners have tried to



introduce some innovative learning strategies and pedagogical techniques to make the process of learning L2 grammar more interesting for the learners.

It is generally observed that students, particularly at the higher education level, use the Google search engine to collect the information required for their projects. Thus it seems to be a familiar tool to the majority of students. It is also believed that Google enables language learners to “discover patterns in their authentic contexts” [7]. Using a search engine results in a kind of incidental authentic learning, which helps learners acquire knowledge in authentic ways.

A useful technology which has not been given due attention in the realm of L2 grammar teaching is the Trello Learning Management System (TLMS). A language management system (LMS) is a software application or web-based technology which aims at improving learners’ interactions by providing a collaborative environment for both learners and the teacher [8]. An LMS is not only advantageous in managing the curriculum and training materials but also provides certain evaluation tools to gauge learners’ progress [9].

However, it seems that the most familiar and common approach to grammar teaching adopted by many teachers in most L2 educational contexts is form-focused instruction. The concept of form is expanded “to include not only grammatical or syntactic forms but also vocabulary, pronunciation, and pragmatics” [10]. In form-focused instruction, L2 learners learn the language features systematically according to a structural syllabus which determines which features should be taught, and in which sequence they should be presented [11].

2. Method

2.1. Research Question

This study targeted the following question:

How do the Trello LMS, the Google search engine, and classroom form-focused instruction compare in improving Iranian EFL learners’ knowledge of present perfect and simple past tenses?

2.2. Instruments

The following instruments were used to achieve the purposes of this study:

- PET exam
- A 30-item teacher-made grammar test used both as a pretest and posttest

2.3. Participants

45 Iranian pre-intermediate female EFL learners between 19 and 35 years of age in three intact classes at a language institute in Semnan participated in this study. They were randomly assigned to three form-focused (EXI), Google (EXII), and Trello (EXIII) experimental groups, using the same teacher as their instructor.

2.4. Procedure

At the outset of the six-week treatment period, a Cambridge PET test and a grammar pretest were administered to check the homogeneity of the students in terms of language proficiency and knowledge of simple past and present tenses. The results of two ANOVAs confirmed that there were no significant differences among the three groups’ mean scores on the tests.

In the course of the treatment, all the three groups studied *Touchstone 3* (2014) as their course book with a focus on units 3 and 4, which dealt with present perfect and simple past tenses. However, they were involved in different activities. In the form-focused group, the teacher used a set of flashcards and diagrams downloaded from the Internet to clarify the concepts of the tenses. Moreover, all the students were supposed to study a storybook (*Three Adventures of Sherlock Holmes*) and highlight the sentences including the target tenses of the study. They were also required to write them down



and reflect in small groups on some of the verb aspects such as the question, negative, and passive forms in order to expand their understanding of the tenses.

The students in EXII group used the Google search engine and the Internet to search for some sentences or texts including the target structures of the study. After highlighting the examples, they emailed the screenshots of the related sentences and texts to their teacher. The teacher collected all the highlighted examples and shared them in the class with all the students through the overhead projector. This was followed by some questions and answers on the part of students.

In EXIII, the teacher used the Trello Management System to establish a forum for grammar instruction. She also used a set of PowerPoint and PDF files including grammar lessons on simple past and present perfect tenses. Initially, she introduced the LMS, explained how to work with it, and asked the participants to join the forum. The students received the pdf and PowerPoint files in the LMS. The files included grammar lessons and tips as well as exercises for students to complete. The administrator answered the students' questions and provided them with constructive corrective feedback in the 'making comments' section of Trello.

3. Results

At the end of the treatment, a post-test similar to the pre-test was administered to all the three groups to examine the effects of the treatment. The descriptive statistics of the post-test scores of the three experimental groups are presented in Table 3.1.

Table 3.1 Descriptive Statistics of the Post-test of the Three Groups

Groups	N	Mean	Std. Error.Mean	SD	Skewness	
					Statistic	Std.Error
form-focused	15	22.20	0.7185	2.783	-0.375	0.580
Google	15	18.867	0.477	1.846	-0.954	0.580
Trello	15	19.20	0.603	2.336	0.770	0.580

The Threshold Loss Agreement reliability of the post-test was equal to 0.83, which was desirable. Finally, a one-way analysis of variance was run to compare the means of the three groups on the post-test (Table 3.2).

Table 3.2 ANOVA for the Post-test

	Sum of Squares	Df	Mean Square	F	Sig
Between Groups	101.111	2	50.556	9.131	0.001
Within Groups	232.533	42	5.537		

With $F(2, 42) = 9.131$, $P = 0.001 < 0.05$ (two-tailed), it was decided that the mean scores of the participants in the three experimental groups were significantly different from each other after the treatment. To identify the exact location of the differences, a post-hoc Tukey test was conducted. The results of the test are summarized in Table 3.3.



Table 3.3 Post Hoc Test for the Three Experimental Groups

(I) groups	(J) groups	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Upper	Lower
form-focused	Google	3.3333*	0.85919	0.001	1.2459	5.4207
	Trello	3.0000*	0.85919	0.003	0.9126	5.0874
Google	form-focused	-3.3333*	0.85919	0.001	-5.4207	-1.2459
	Trello	-0.3333	0.85919	0.921	-2.4207	1.7541
Trello	form-focused	-3.0000*	0.85919	0.003	-5.0847	-0.9126
	Google	0.3333	0.85919	0.921	-1.7541	2.4207

*. The mean difference is significant at the 0.05 level.

Post-hoc comparisons indicated that the mean of EXI (M = 22.20, SD = 2.783) was significantly higher than those of EXII (M = 18.867, SD = 1.846) and EXIII (M = 19.20, SD = 2.336) on the posttest.

7. Conclusions and Discussion

The findings of the study demonstrated that the participants of the form-focused group had significantly outperformed the Google and Trello groups regarding the knowledge of the target tenses of the study. There might be at least three main reasons for this finding. First, the negative attitude of the learners, teachers, and institutions towards using technology does not encourage students in their quest for language learning. Second, the findings can be attributed to the extraneous processing overload i.e., a situation in which the cognitive processing of extraneous material in the lesson is so challenging that there remains little or no cognitive capacity to perform key or generative processing. Third, the students' poor e-literacy might have functioned as an obstacle to better learning. In this study, the participants found the Trello LMS too unfamiliar and too difficult to handle. Nevertheless, the findings of this study do not mean that the application of technology in teaching grammar should be limited. Rather, they demonstrate that teachers need to guide the students by providing more instructional support in order to minimize the chances of technological challenges which the learners might have to deal with. In addition, teachers need to know that their students possess enough e-literacy and enthusiasm to embrace technology so as to choose more user-friendly and appropriate websites and educational technologies.

References

- [1] Kerr, P. "Adaptive learning", *ELT Journal*, 70(1), 2015, 88–93.
- [2] Duncan-Howell, J. "Teachers making connections: Online communities as a source of professional learning", *British Journal of Educational Technology*, 41(2), 2010, 152-340.
- [3] Hedge, T. "Teaching and learning in language classroom". Oxford: Oxford University Press, 2006.
- [4] Benson, P. "Making sense of autonomy in language learning" in R. Pemberton, Toogood, S. & Barfield, A. (Eds.), "Maintaining control: Autonomy and language learning". Hong Kong: Hong Kong University Press, HKU, 2009.
- [5] Cook, V. "Second language learning and language teaching". UK: Hodder Education Publishers, 2008.
- [6] Jean, G. & Simard, D. "Grammar teaching and learning in L2: Necessary, but boring?", *Foreign Language Annals*, 44(3), 2011, 467-494.
- [7] Zengin, B. "Benefit of Google Search Engine in learning and teaching collocations", *Eurasian Journal of Educational Research (EJER)*, 8(34), 2011, 151-166.
- [8] Miyazoe, T. & Anderson, T. "Learning outcomes and students' perceptions of online writing: Simultaneous implementation of a forum, blog, and wiki in an EFL blended learning setting", *System* 38(2), 2010, 185-199.
- [9] Srichanyachon, N. "EFL learners' perceptions of using LMS", *Turkish Online Journal of Educational Technology (TOJET)*, 13(4), 2014, 30-35.



- [10] Nassaji, H. "Corrective feedback, learner uptake, and feedback perception in a Chinese as a foreign language classroom", *Studies in Second Language Learning and Teaching*, 6(1), 2016, 159-181.
- [11] Spada, N. & Lightbown, M.P. "Form-focused instruction: Isolated or integrated?" *TESOL QUARTERLY*, 42(2), 2008, 181-207.