A Review of CALL and TE Research on Grammar Learning: Suggestions for Further Research and Pedagogical Implications

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Received: August 23, 2016   Accepted: October 28, 2016   Published: December 14, 2016
doi:10.5296/v5i1.9893   URL: http://dx.doi.org/10.5296/v5i1.9893

Abstract

Applying various approaches for efficient grammar teaching has been the focus of abundant research among which elaborating on the effect of focus on form perspective such as computer-assisted language learning (CALL) and input enhancement on the learners’ grammar improvement can be beneficial in grammar research studies. Regarding CALL domain, different technological tools have been applied and their efficiency has been taken into account by various research papers, demonstrating the due positive impact of their utilization in the classroom, paving the way for the learners to experience peer interaction and support, while having teacher’s scaffolding, to gain mastery over grammar. To name a few CALL tools, web-based learning, power point presentation, video projector, and educational software can practically be employed at the service of teaching grammar. One of the sub-division strategies of input enhancement is textual enhancement (TE) through which
target forms are bolded, underlined, italicized, colored, or highlighted. Researchers in the field of grammar learning are seeking new methodologies by examining the positive effect of TE combined with CALL approach on the second or foreign language learners’ grammar learning. Hence, the purpose of this study is to present a review of the current literature in order to investigate, to what extent, technology-based instruction can improve learners’ grammar performance. Studies concerning different types of technological tools, TE formats, and the combination of CALL and TE are accounted for in this research. Finally, suggestions for further research and pedagogical implications are provided.

**Keywords:** CALL, TE, input enhancement, grammar learning, noticing

1. **Introduction**

In the world of language teaching, researchers have always been concerned with new and practical methodologies to enhance the quality of teaching language skills and sub-skills. In this regard, teaching grammar has always encountered debates among grammar experts in terms of finding a helpful approach to assist both language teachers to transfer their knowledge effectively and simultaneously learners can be more active participants in the language classrooms. For learners to have interaction with their teachers and peers demands to adopt a kind of approach through which interaction can take place as Long (1991) argues that interaction is pre-requisite for learning. Therefore, teaching grammar accounts for efficient approaches to foster meaningful communication in the classroom.

There exists various approaches in teaching grammar through meaningful interaction, including processing instruction, interactional feedback, discourse processes, and input enhancement as well as technology-enhanced instruction all of which are under the umbrella term of ‘focus on form approach’. According to (Nassaji & Fotos, 2011), focus on form aims to implicitly attract the learners’ attention to the target forms in the context of meaningful interaction. The present study accounts for two recent approaches in grammar instruction i.e. input enhancement and CALL. Input enhancement, as the name suggests, attempts to provide an atmosphere in which the learners’ focus is directed to the target form through enhancement techniques, resulting in the occurrence of noticing (Schmidt, 1995). Textual enhancement (TE) as a type of input enhancement manipulates the text by bolding, underling, highlighting, and italicizing the target form, which results in the learners’ involvement to interactively notice the grammatical part. Similarly, CALL, by using task-based instruction (Corbeil, 2007) can pave the way for the teachers to apply various technological tools in order to assist the language learners to do the tasks with the help of the teacher as well as their peers to be self-regulated language learners.

To conclude, this study attempted to maneuver on the contemporary literatures regarding the application of TE combined with CALL can fulfill both teachers and learners’ requirements in teaching and learning grammar in the context of meaningful interaction. By providing a comprehensive literature review, the present research aims to provide new insights for further research as well as pedagogical implications in terms of technology-enhanced instruction in teaching language skills and sub-skills.
2. Literature Review

Grammar learning has gained lots of attention from researchers who are concerned with seeking the most effective ways to facilitate the grammar learning. Although there seems to be a body of research conducted to highlight the researchers concerned in grammar instruction, there is still a need for more quantitative and qualitative studies to uncover the hidden aspects of teaching grammar. To find the possible gaps in the literature, it might be beneficial to have an interpretive review of the current studies in three practical and mostly-used approaches in teaching grammar, i.e. TE studies, CALL research, and the combination of TE and CALL research on grammar learning.

2.1 TE Studies

Differential effects of textual enhancement formats on intake were examined by Simard (2009). The purpose of this study was to measure if types of TE formats used in a text have a differential input on intake or not. Participants were 188 French speaking secondary students in Quebec aged 11-12. The target linguistic features were the English plural markers. To meet the purpose of the study, different TE formats (capitalizing, underlining, and coloring) were examined in 8 experimental groups. The purpose that Simard followed was to compel the learners to read a text with 290 words using the above-mentioned enhancement techniques. After students put a series of ideas from the text they were required to read them properly in a chronological order. In order to investigate the effect of TE, two versions of a multiple choice recognition tests were developed as the pre-and post-test. In order to analyze the collected data, ANOVA was used to determine if groups were comparable at the pre-test. Findings of the study revealed that the learners in the TE group, which the target forms were capitalized, outperformed the other experimental groups. It was also found that TE formats had a significant effect on the intake of the target features. Simard suggested that further studies should be carried out to look into the various types of TE formats in combinations with other approaches.

As to the teaching grammar through TE, there was an attempt to raise the awareness of the learners in order to directing their attentions to the target forms in the context of meaningful interaction. For instance, in their study, Jahan and Kormos (2013) made an attempt to explore the impact of textual enhancement on EFL learners’ grammatical awareness of future plans and intentions. The purpose of the study was to examine whether TE affected participants’ noticing of future plans and intentions. Ninety-seven students participated in this four-session study in five weeks and they were randomly assigned into two experimental groups (unenhanced and enhanced) and one control group. To account for the research questions of the study, the researchers benefited from the pre-test, immediate post-test, and delayed post-test which were administered during the research. The experimental groups were exposed to the different versions of the input enhancement, but the control group was not provided with any noticeable input. Data obtained from the pre-test was analyzed with SPSS. Moreover, ANOVA was also conducted to take the three scores into account. For more elaboration on the test scores, a Pearson’s chi-squares test was utilized in order to examine the effect of TE on noticing. The result showed that visual enhancement in the experimental...
groups can call the learners’ attention to the target structure. Significant effects of the
treatment on the overall gained scores of the immediate- and delayed post-test were observed.
It was also concluded that TE without explicit information on form-function mapping might
not be effective in expanding grammatical points. Findings necessitated additional research
using an extended longitudinal design to draw more valid conclusions.

In their study Nahavandi and Mukundan (2013) looked into the impact of textual input
enhancement and explicit rule presentation on Iranian elementary EFL learners’ acquisition of
simple past tense. The subjects were distributed to three mixed classes and included 93
elementary learners aged 19-40. They were randomly assigned to three treatment groups: 1) textual enhancement group; 2) textual enhancement and rule presentation; and 3) the control
group. The pre-test, post- and delayed post-tests were administered in order to measure the
learners’ performance within one month of treatment in which participants read the
comprehension passages consisting 270 highlighted simple past verbs. In order to track the
difference, participants in the control group were provided with unenhanced simple past text.
The researchers found that TE and rule presentation group outperformed the control group.
Testing gender differences in all three groups by ANOVA showed that there wasn’t
significant difference between male and female participants. The study contributed to the
efficiency of TE in drawing learners’ attention to the target form particularly when combined
with explicit rule presentation.

Research on TE has shown that different generations can have different performance while
using enhancement techniques. For example, Mayen’s (2013) research was concerned with
the combination of visual prompts and typography to facilitate the intake of Spanish verbal
morphology in 19 young language learners. It was hypothesized that pictures may enhance
the long-term retention of words and increase comprehension. To test the hypothesis, they
were randomly assigned to one of two experimental groups (input enhancement group (IE),
input enhancement plus visual prompts group (IE+VPs)), and one control group. Five tasks of
reading, fill in the blank, writing, interview, and translation were administrated to each group.
Based on the reported post-test scores, IE+VPs group showed more focal awareness or
noticing in the target forms. In comparison with Nahavandi and Mukundan’s (2013) study,
although both highlighted the noticing of target forms, it seems that young language learners
can more tangibly distinguish the linguistic forms since Mayen’s study argued that children
are highly visual learners.

In the similar vein, Sarkhosh and Farahani (2012) carried out a study to see whether different
TE formats have differential effects on the intake of English subjective mood. This study
attempted to shed more light on the influence of TE on the learners’ acquisition of linguistic
features by introducing two new TE formats. One is backgrounding in which the whole
reading text is bolded and target forms are backgrounded or dimmed in the text. In the second
format incorrect form, which is marked with asterisk, is followed by correct form in reading
text. These two formats do not have theoretical background in the literature. One hundred and
fourteen female Iranian upper intermediate level students participated in this study aged
14-41. Determining their knowledge of English subjective mood a pre-test was employed.
For five experimental groups a reading text included various TE formats was administrated
and in control group there was no intervention. A piloting session was managed in order to examine the reliability of the text by applying KR-21 format. Two parallel versions of 18 multiple choice tests were constructed for pre- and post-test. A one way ANOVA was conducted to analyze the mean scores between six groups on pre- and post-tests. The result demonstrated that the underlined group outperformed other groups at post-test in addition underlying the target forms provided more noticing in the part of learners. There was no significant effect on using two new TE formats since reading a bold text is more difficult than reading a text in small case letters (background format). The implication of this study is for teachers to pay attention to the learning strategies. It is suggested that further studies should unravel the nature of the relationship between learning strategies and different TE formats.

Combs (2008) conducted a study entitled as topic familiarity and input enhancement. The purpose of this study was the effect of typographical enhancement and topic familiarity on the participants’ acquisition of form with the aim of reading texts. Thirty-six lower intermediate students took part in the study. Then, they were divided into three experimental groups and one control group. In the experimental group, group A received textually enhanced materials and topic familiarity. Group B, was exposed to textually enhanced material with no topic familiarity. Group C, received topic familiarity training with no textual enhancement materials. In the control group students had neither enhanced texts nor topic familiarity training. Two pre-tests were given, a 25 multiple choice item and fill in the blank cloze test. Also, learners were asked to rank their degree of familiarity with topics on a five Likerts scale. A written recall was taken in order to see what learners could recall from the reading. According to the result of this study, neither the textual enhanced materials nor the topic familiarity training had a significant effect on the acquisition of the form. It was suggested that more studies must be done to consider different types of treatment such as one short treatment and visual input enhancement, etc. Moreover, it needs a large experimental timeframe for the true effect to be examined.

In a quasi experimental study, Birjandi, Alavi, Najafi (2015) tried to test the effects of unenhanced, enhanced, and elaborated input on learning English phrasal verbs. One hundred fifteen university students during 15-week semester participated in this research. OPT, pre- and post-test were conducted. During the treatment sessions, students were exposed to the target forms in three different forms; enhanced input (EI), unenhanced input (UI) and elaborated input (ELI). The students had to read the texts and write summary of them. In EI group, the subjects were exposed to the enhanced input in which the texts were highlighted to catch their attentions. For UI group there was no enhanced input. In the last group which was ELI, the students were given the elaborated version of the input with redundancies and definitions of the target forms. For analyzing the data, Friedman’s 2-way ANOVA was used. The result of this study revealed that students performed better on the enhanced input than unenhanced input. Also lexical elaboration can lead to more noticing in understanding of phrasal verbs. It is suggested that more research is needed to explore the effects of output tasks on the instructor of phrasal verbs.

Sarboland (2012) tried to test the effect of different textual enhancement formats and the intake of English past simple tense. The participants of this study were 156 male
pre-intermediate learners. Collecting demographical information such as age, educational level, etc, a background questionnaire was distributed. Multiple-choice recognition tests were applied for pre- and post-tests.

2.2 CALL Studies

Corbeil (2007) attempted to find out if power point presentation can effectively replace textbooks and blackboards for teaching grammar. Do students find it as an effective learning tool? The goal of the study was to shed light on the effectiveness of PPTs used in the classroom to notice the target grammar rules and find whether learners see this instruction effective in learning grammar than by traditional methods. A total of 84 university students participated in this two-year study. They were aged 18-19. This study involved one experimental group in which the teacher used computerized explanation in the form of PPTs and one control group in which the teacher used the textbooks and blackboard to explain the target forms. Communicative games were used in this study to use the grammatical points. Pre- and post- and delayed post-tests were administrated. After the post-test, a questionnaire on the effectiveness of PPTs was conducted. The result revealed that there was no significant difference between the experimental and control groups. It was shown that using PPTs was as effective as textbooks and blackboard for the explanation of grammatical rules. All of students found the PPTs to be effective for their understanding of target forms. The control group had a slightly progress. It may be due to the learners’ note taking during teacher’s explanation. A factor which disturbed the use of PPTs may arise from the weak quality design of the PPTs themselves. According to the findings, using combination of PPTs and blackboard could be promising.

Pirasteh (2014) carried out a quantitative study surveying the effectiveness of computer-assisted language learning grammar by Iranian EFL learners. The purpose of the study was to examine the effect of using computer and in particular email in helping Iranian students to learn grammar more easily. The participants were 52 students who studied English as a general course. They were aged from 18 to 23. The students were assigned to two experimental and control groups. Both groups took a pre-test. During five weeks of treatment, 15 grammar points and related examples were presented to both groups (experimental group via email and control group through printed paper). Both groups received feedback. The control group received it orally and experimental group received feedback by email. After the treatment they took a post-test. The findings determined that computer as a tool and e-mail as an application can help students to increase the grammar learning since e-mail can easily be sent and be stored for retrievals. CALL can increase interest and motivation of students by using technology such as e-mail.

The effect of computer-based grammar instruction versus teacher directed grammar instruction for teaching L2 structure was investigated by Nutta (2013). Two experiments were conducted based on learners’ proficiency level. Participants in this study were 53 students enrolled in an intensive academic university in Florida. The treatment consisted of one hour of instruction per day for 7 days. Students in teacher-directed group were taught without computer equipments whereas students in computer-based group used ELLIS software (it has
the multimedia delivery like audio, video, recording capability, etc). The result indicated that computer based instruction was more effective than teacher-directed grammar instruction. Administrating the interview and questionnaire showed that students were satisfied with the computer based interaction and experienced a desire to spend more time per day using it. It was suggested that further research should be conducted with different populations of participants (elementary and secondary students).

In 2014, Alodail conducted a qualitative study regarding the impact of technology (power point presentation) on students’ learning. The study was carried out by the 20 students in Athens. The purpose of the study was to explore the possibility of using presentation software to improve students’ learning. The data was collected by interviewing the students before and after the study and observing a class where a teacher taught lessons via power point. Power point started with a classical music to attract learners’ attention. The finding revealed that power point provides a graphic or visual made of learning rather than the standard pen and paper. The results indicated that there was a strong relationship between students’ learning and technology because of making them more motivated and willing to learn.

Torlakovic and Deugo (2004) made an attempt to application of a CALL in the acquisition of adverbs in English. The purpose of this study was whether or not the adverbial analyzer, the CALL system developed for the study, could be used as an instructional tool for grammar teaching. Participants were 21 ESL learners aged 20-35. They were randomly assigned to two experimental groups (computer group by using adverbial analyzer and in class group which was teacher fronted instruction) and one control group which was involved in testing. A pre-and post-test and delayed post-test were administrated. A questionnaire was completed by learners to examine the advantages and benefits of using CALL. This study was regarded the form focused instruction and communicative tasks. ANOVA was used to examine the significance of difference between the pre-test scores of the three groups and proved that the groups were comparable and investigated the three tests within the groups. The only group that showed improvement of performance in tasks was the computer group. It was revealed that grammatical awareness without presence of grammatical instruction causes a loss of confidence. The study suggested more researches on CALL field and development for a longer period of time and a bigger number of participants.

The effect of using Internet resources in teaching English grammar on the achievement of secondary school students in Iran was examined by Alami, Rajabi, and Molavi (2014). The participants were 60 students aged 14-15. Nelson proficiency test was administered to check the homogeneity of study. Treatment was five sessions program teaching passive voice. Experimental group was trained by using the grammar resources available on the internet. In the control group, traditional grammar teaching was held. It is concluded that the students in experimental group were able to learn grammar better than participants in control group. It is suggested that further research is needed to examine the more subtle between books and websites for perceiving their advantages and disadvantages more precisely.

Apperson, laws, and Scepansky (2006) made an attempt to an assessment of student performances for power point presentation structure in undergraduate courses. In this study,
275 psychology students aged 17-53 participated. Students were asked to complete a 36 item 7-point Likert scale survey consisting of questions regarding the nature of PPTs and students’ preferences toward them. The last two open-ended questionnaires asked students to comment more about background sounds. Data collected with questions analyzed via T-test and ANOVA statistical analyses. The result revealed that participants preferred pictures, graphs, and sounds when accompanied by text explanation. It is important for PPT slides to be well constructed. It was suggested that further study could investigate the use of handouts of the power point slides in conjunction with the use of PPT on academic performance.

Mohammadi and Mirdehghan (2014) attempted to explore a computer-mediated communication (CMC) approach to teaching phrasal verbs to Iranian EFL senior high school students. The main purpose of this study was exploring the effect of blended learning (face to face classroom interaction with online learning) in learning phrasal verbs. Conducting the OPT test, 40 learners were randomly divided into two groups (experimental group n=16 and control group n=24). OPT instrument was regarded as the pre-test in this study. The treatment lasted eight weeks. During treatment sessions participants in experimental group were given usernames and passwords to log into the study website (www.nicenet.ir) for taking part in phrasal verb class online. Throughout the course, eight phrasal verbs lessens were introduced in the online class. Researcher checked the class every night to reply messages, answer questions or add some sample tasks when needed. Post-test included 50 items measuring the participants’ knowledge of phrasal verbs practiced throughout the course in both groups. Comparing the participants’ level of language proficiency during pre- and post-test, t-test was conducted. The findings indicated that participants in the experimental group significantly outperformed those in the control group. Also it was indicated that professional net users seem to benefit more from the web based language program. It was suggested that other language skills can also be practiced through online environment.

Tafazoli, Nosratzadeh, and Hosseini, (2013) investigated a quantitative study regarding computer-mediated corrective feedback in ESP course, reducing grammatical errors via Email. The study aims at exploring differences between the impacts of e-feedback versus conventional print feedback on the quality of the writing of EFL learners. He considered 80 learners who were sophomore students majoring in tourism at the university of Mashhad. He randomly divided participants into two classes. Class A was organized on line writing by using Microsoft word software and sending writing tasks via email. Class B was supposed to deliver its writing tasks in traditional way. Both groups were given corrective feedback on the grammatical accuracy. The pre-test was administrated at the beginning of the term. After 10 sessions of treatment the post-test was hold. To ensure the reliability of error counting in the post-test, an expert colleague was invited to reexamine the procedure. The result shed light on producing fewer mistakes in computer-mediated class as compared to those in the conventional class. It was highly recommended that if follow-up interview with the participants had been conducted, it would have helped the researcher more in explaining the differences observed in the impact of presenting different types of feedback.

Rahimi and Hosseini (2010) carried out a qualitative study on the impact of computer based activities on Iranian high school students’ attitude towards CALL. Participants of this study
were 42 female junior high school students. The experiment started with completing CALL questionnaire. Then, the CALL-based language activities were designed for lesson 7 of students’ English textbook. The activities were included finding new words, definition, pronunciation and synonym through using computers. New grammatical points were introduced via power point software in the classroom. In writing part, students were supposed to send their writing tasks via email and the teacher gave feedback to their writing tasks. The mentioned activities were done in four 90-minute sessions within a month. Another CALL questionnaire was administered at the end of the experiment. The results of both questionnaires were compared by T-test. There was a significant attitude towards CALL before and after the experiment and it showed computer based exercises improved students’ attitude toward CALL. However students did not believe that computer can take the place of traditional teaching and they preferred blended learning. The finding indicated that teachers’ role is important in improving students’ autonomy in computer based instructions.

Yusof and Saadon (2012) conducted a quantitative study to explore the effects of web-based language learning on university students’ grammar proficiency. The study was carried out with the participations of 93 freshmen students from a public university. They included 61 female and 32 male learners and were divided into three groups. Group A (Diploma in Office Management (DOMT)) was taken as the control group and the teacher taught the rules of changing active to passive voice. Group B (Diploma in Banking (DIB)) underwent the integrated learning environment in which the teacher explained the rules and the students were exposed to the web-based learning. Group C (Diploma in chemical Engineering (DCE)) encountered the cyber method that students used web based materials and the teacher did not help in explaining the rules. Students did their study and exercised on their own. A pre-test was also administered, and students had to change sentences from active to passive voice. After four weeks of treatment, students were given a post-test with the same sentences in pre-test. The finding indicated that the integrated method was the best method to be handled in grammar class. Applying this method, students seem to be pleased with the learning environment, and they can understand the grammar lesson easier.

2.3 TE and CALL Research on Grammar Learning

The studies above highlight the need for another approach in teaching grammar to be taken into account, focusing on the mixture of form-focused instructions and technological instruments. The fact that how technology can be at the service of grammar seems to be considered, and careful attention should be paid to the matter by conducting experimental research studies.

Gascoinage (2013) had a study about understanding of incidental input enhancement in computerized L2 environments. This study was examined the role of keyboarding and using computer on the SLA French diacritic recall which is unintentional enhancement in comparison with intentional enhancement such as, bolding, underlining, etc. Forty native speakers of English in Omaba University participated in this research. A short passage was handed to students in control and experimental groups. On the one hand, control group learners were asked to recopy the passage by hand. On the other hand, in experimental group,
students typed the passage with the computer. After this stage, for collecting learners’ accent grave in French (̀) and the accent aigu (́), students were asked to listen and rewrite the passage in a blank sheet of paper, although, spelling and grammar were not considered. According to a T-test, participants in the computerized group produced higher diacritic recall scores than control group. It was suggested that other target languages will need to be examined.

To conclude, it seems that the role of focus-on form instruction in the world of teaching grammar has been firmly recognized by the abundant research done in this area. In addition, computer-assisted language learning has also been the focus of much research aiming to distinguish the effect of applying technology in learning grammatical features. However, a mixture of these two instructional treatments in teaching grammar seems to be a rather new approach, which will be taken into account in the present study. More importantly, since institutes play a significant role in the learners’ language learning process, and they largely focus on effective teaching of grammar, it is beneficial to adopt a different approach in teaching grammar. As textual enhancement technique has been a successful form-focused instructional method in teaching grammar and power point presentation has also been practical in grammar learning, the present study will intend to figure out whether the mixture of these two above-mentioned treatments can lead to enhancing input to make grammatical forms more salient, and resulting in improvement in learning active and passive voice structures.

3. Suggestions for Further Studies

The present study was an attempt to provide a comprehensive review of current research on applying TE and CALL in paving the way for the learners to improve their grammar learning. Research highlighted the significance of using TE through CALL in that they could positively result in improving the learners’ grammar knowledge by exposing the learners to an interactive learning condition in which the learners experience peer support while the teacher acts the role of facilitator. Although both CALL and TE studies were found to be educationally efficient, there might exist some considerable limitations, which demands more elaboration by research scholars in this field. Therefore, suggestions for future research are provided to direct the researchers’ attention for the purpose of uncovering the possible hidden agendas in TE and CALL studies. They include:

1- Previous research was solely concerned with using one technological tool (power point presentation, e-mail, websites, or other educational software) to enhance the learners’ grammatical awareness, while a combination of CALL tools seems to intensify the positive learning outcome. In fact, when teacher has the capacity to apply various tools in the classroom, not only can he freely regulate the learners’ attention by providing the most suitable type of feedback, but the learners are also able to react to their teachers’ feedback and gradually self-regulate their learning conditions by peer support. Teachers’ scaffolding can be more effective when benefiting from various tools in that the teacher can provide necessary support for the learners and give them this chance to take control of their learning behaviors.

2- Although rapid growth of technology seems to be evident in any communities, in
classroom context, however, there might be less or no familiarity with technological tools. Institutes or schools which are responsible for the students’ achievement can hold some educational programs to raise the learners’ awareness regarding the application of technology in the language classroom. This not only assists the learners to consciously and efficiently utilize the desirable tools, but teachers are also free to benefit from any technological tools since there are not concern with students’ unfamiliarity.

3- As the population of language learners are increasing and language classrooms face a lot of registrations in a semester, the issue of time management in crowded classrooms is of great importance and a bit challenging for the teachers. In order to involve all the learners with the classroom context teachers seem to have no choice unless they benefit from CALL to foster peer interaction and increase the efficiency of learning quality within a specific period of time while attracting the whole population of the learners.

4. Pedagogical Implications

Literature has demonstrated the positive and practical effect of CALL and TE on the learners’ grammar improvement. Research has also shown that language learning process and particularly grammar learning can, to a large extent, be facilitated by the application of CALL and TE. Therefore, they can produce the following contributions to grammar teaching and learning:

1- Learners can take advantage of teachers’ and peer scaffolding since CALL and TE provide both teacher-learner and peer interactions through which grammar learning can be achieved by teachers and learners’ support.

2- Dealing with students reticent is an issue that is of debate among language teachers. By applying CALL and TE, teachers are able to create a learning atmosphere in which both active and silent learners can cooperate with each other to learn the target grammar. Moreover, as mentioned above peer support is pedagogic tool that can reduce the students’ reticence is classroom.

3- The variety of tasks that can be employed in CALL classes is another effective contribution of teaching grammar through technology. Here the computer assists the teacher to design and implement the target grammar task and simultaneously attracting the learners’ attention toward the task. Various tasks can result in a dynamic learning environment which causes students less fatigue in the classroom, resulting in active participation and doing the tasks.

4- When learners are engaged in technology-enhanced instruction, since nowadays language learners are one of the numerous technology users, it seems that they can experience a friendly and warm atmosphere within CALL classes. In fact, both teachers and learners’ tendency to benefit from technology combine with TE can result in warm learning environment since they hold positive perceptions about technology.

5. Conclusion

The present study aims to provide some pedagogical implications of employing the CALL
field and its combination with focus on form approach such as textual enhancement. A large number of researches were dedicated to the positive impact of technological tools and TE format on learning each of the language skills. The main results of the review show the significant effect of CALL and TE for grammar learning. The study gives rise to a number of issues regarding technology and TE use in the language classroom. Based on the previous literature review in classes where benefited from TE and CALL tools, huge amount of interaction between learners and teachers was observed. The main objective of language teaching is to involve learners in learning process, however reticent and shy students are unwilling to communicate because of some personal barriers in the classroom. Surprisingly, the active role of even reticent student was seen in the environment in which technology-based instruction was used. As to the teachers, they always have the growing concern over performing the kind of task which is suitable for learners, although they are always under harsh pressure such as boring, unavailable, time-consuming tasks in traditional classroom. With the aid of TE and CALL tools, teachers will be able to utilize various tasks in a dynamic learning atmosphere according to their learners’ interest and needs. Friendly environment was one of the most noticeable issues using technology.

There is a small proportion of studies where the combination of different CALL tools are taken into account. One of the most crucial responsibilities of teachers who use technology-based instruction is to ensure that the learners are familiar with technological options. Therefore, learners should be computer literate. More practical experimental research can be conducted by a large population of students so that the quality and effectiveness of technological instruction in this situation can be examined.

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