International Journal of Research in English Education (IJREE)

Original Article **Published online: 20 September 2023.**

Examining the Impact of Implementing Nicenet on Teaching Grammar Structures to Develop Writing skill among Iranian EFL Intermediate Learners

Elham Tizjang[1], Houman Bijani[2*], & Salim Said Bani Orabah[3]

* Correspondence:
houman.bijani@gmail.com
1. Molana Institute of Higher Education, Abyek, Iran
2. Department of English Language, Islamic Azad University, Zanjan Branch, Zanjan, Iran
3. University of Technology and Applied Sciences, Ibra, Oman

Received: 26 June 2023
Revision: 17 August 2023
Accepted: 2 September 2023
Published online: 20 September 2023

Abstract

It is possible that technology possesses a unique place in language teaching and learning. Research on CALL in the Iranian L2 context is rather scarce. This research intends to explore the impact of administering Nicenet as one of the virtual learning environments (VLE)'s on linguistic use and grammar instruction in writing. The design of the research was quasi-experimental method having a pre-test and a post-test. The subjects were chosen through the convenience sampling strategy and were assigned randomly into experimental and control groups (female = 21, male = 21) and control (female = 21, male = 21). The independent variable in this research was the teaching linguistic use (grammar) through Nicenet. The dependent variable was the participants' linguistic use (grammar) as reflected by the writing test. The participants were chosen concerning their performance on the Oxford Placement Test (OPT) and were homogenized accordingly. The outcome of inferential statistical tests, ran through Mann-Whitney, depicted that there was a statistically significant variation between the accomplishments mean scores of the learners of the experimental group who learned the grammar through computer and the control group who studied the same syntactic item utilizing the traditional strategy. The results also showed that the accomplishment in the post-test for both the experimental and control groups is related to the treatment. The results depicted that computer as an instrument and Nicenet as an application could assist learners to escalate their grammar acquisition.

Keywords: computer assisted language learning, e-learning, grammar, Nicenet, technology, virtual learning environment

[Downloaded from mail.ijreeonline.com on 2026-11-18]

[DOR: 20.1001.1.25384015.2023.8.3.7.7]

1. Introduction

Technology has undoubtedly got a unique position in language teaching-related fields. In this regard, a lot of English as a Foreign Language (EFL) instructors are recurrently using Internet English lessons in their teaching process just due to the fact that they have seen many privileges of this learning medium. The Internet provides a great source and teaching material for EFL instructors who are keen on involving them into their existing programs as recommended by numerous supporters. What was mentioned above reminds us of the concept of Computer-Assisted Language Learning (CALL).

In the fields of L2 acquisition and language teaching, CALL is often seen as an approach where the computer is utilized as a helper to the presentation, reinforcement, and evaluation of materials to be acquired, typically comprising a substantial interactive component. As stated by Levy and Stockwell (2006), CALL is "the search for and study of applications of the computer in language teaching and learning" (p. 309). Reviewing the literature reveals the fact that CALL has long been used. For example, Chapelle (2001) confirmed that the first ideas of CALL were triggered during the 1950s. CALL was then considered an effective instructional help during the 1960s and 1970s, and the employment of CALL in second language contexts was more seriously considered. Gradually, the use of technology in facilitating language acquisition became more complex. Among all the applications mentioned previously, virtual learning environments have gained considerable attention on the part of both L2 researchers and teachers.

Nicenet, which is a famous virtual learning environment (VLE), is a competent network simulation program that permits class members to receive their education virtually (Malmir & Aghazamani, 2019). "Nicenet provides simulation, visualization, authoring, assessment, and collaboration capabilities and facilitates the teaching and learning of all fields including L2 teaching and learning. This software, moreover, includes various pieces of equipment in its virtual classroom, thus allowing students to create a network with an almost unlimited number of devices, encouraging practice, discovery, and troubleshooting. The simulation-based learning environment of Nicenet helps students develop many essential skills such as critical thinking and problem-solving in the second language (L2) context. Additionally, Nicenet allows teachers to easily teach and demonstrate complex concepts and even evaluate their students at the end of the virtual semester" (Ahmed, 2018, p. 23).

A lot of research noticed that CALL is a fruitful environment for student-computer interaction. It permits cooperative activities (Meskill & Mossop, 2003), promotes negotiating meaning between subjects (Toyoda & Harrison, 2002), simplifies language learning (Vilmi, 2003), and promotes the learner to play active roles in communication, and be active and have control over their learning (Bikowski & Kessler, 2002). Gruba (2006) furthermore reiterated that CALL supplies interactive computer activities for language learning that assists learners to interact communicatively.

In terms of the mechanism of this software, it must be indicated that this software is downloadable for free and can be easily installed on the computer. After registering and obtaining a username and password, students and instructors may have pedagogical meetings too. Based on the syllabus defined by the instructor of the teaching program, the teaching materials and approaches may be specified and the total course will get started. Considering the goals of this research which is examining the impact of Nicenet on grammar development, this software will be used mainly to teach grammatical structures in a virtual environment.

The other variable examined in this study was the writing skill. Writing has become central in many current schools and universities as a qualifying criterion for academic success. Students work hard to learn how to produce well-organized writing and obtain more skills in the enhancement of English writing. Writing teachers also make considerable efforts to enable students to write more proficiently. Despite this, university and college students see writing as the most challenging part of their English language skills. This idea is established by several studies (e.g., Bowles & Montroy, 2013; Graham & Harris, 2000). There appears to be an agreement among language instructors that careful attention must be paid to students' writing not only as an especially challenging discipline but also as the most complicated aspect of English language learning.

On the other side, grammar in writing is very essential. From a wider point of view, grammar even incorporates a significant section of the whole language and "is a device for constructing and expressing meaning, without which effective communication would be impossible" (Crivos & Luchini, 2012, p. 12). "The effectiveness of teaching grammar and the necessity of learning grammar for L2 learners is now a well-established fact in second language acquisition" (Boroujeni, 2012, p. 54) which has resulted in the reconsideration of the role of grammar in L2

[Downloaded from mail.ijreeonline.com on 2026-11-18]

[DOR: 20.1001.1.25384015.2023.8.3.7.7]

classrooms. Grammar could furthermore be considered as a required "master" skill which incapables competence to improve listening, speaking, reading, and writing.

"Students who have acquired English imperfectly through interactions with native speakers also recognize the significance of grammar, as they may have faced misunderstandings because of their grammatical deficiencies" (Trosborg, 2011, p. 11). Although there is experimental evidence for learning and teaching grammar, the query of how to improve grammar instruction has been unanswered. There appears to be a requirement of creating more novel methods to teach grammar more influentially. Putting all the above together, this proposed study plans to investigate the impact of using Nicenet as one of the VLEs on enhancing grammar in writing among Iranian intermediate learners.

Furthermore, grammar plays a vital role in the EFL classroom (Boroujeni, 2012). Indeed, "grammar is often seen as critically important in the path of learning a foreign language. Along the same line, effective second language grammar learning is particularly important for EFL learners, as they have less exposure to English language in their daily life. Still, numerous Iranian EFL learners as often as possible endure poor grammar, despite a long time of English study" (Alavinia & Sehat, 2012, p. 27). One of the much-listened complaints among Iranian English learners is that they feel desperate and frantic in creating trustable grammar skills. With regard to this, it may be recommended that one of the most important worries among all Iranian instructors and researchers is how to proficiently move forward with learners' linguistic use and grammar (Farrokhi & Sattarpour, 2012).

2. Review of the Literature

Technology has brought an impressive alter to education. Innovative and technological developments are extending the range of probable solutions that can progress educating and learning inputs, processes, and results or outcomes (Ghahari et al., 2014). Information and communication innovations offer a probability to apply modern learning and teaching practices. More particularly, language teaching has been optimized by the application of VLEs and other technological progress (Beatty, 2003; Shang, 2007). It should also be added that, in the area of language instruction, the application of technology has widely challenged the classical methods and put forward novel instruments, approaches, and techniques in language learning. It has thus resulted in the appearance of a sub-discipline in English language learning known as VLE. Generally speaking, VLE's demonstrates some qualities to enrich EFL. Conducting further research on these qualities can be an extremely valuable source for all those who are involved in L2 learning and teaching.

According to Nazari and Negah (2012), "there are at least three bunches of language analysts as far as their views on educating grammar are concerned" (p. 12). As Rodrigllez and Avent (2002) keep up, the ones who advocate Krashen's input hypothesis, known as anti-grammarians, doubt the role grammar teaching has in language instruction; this bunch underpins comprehensible input by stating that this sort of input would massively assist the learner progress their fluency and accuracy (Kamil, 2021; Mohan, 2019; Shen, 2012). The second bunch, pro-grammarians, state that "formal instruction plays an imperative role and should not be abandoned since direct grammar instruction makes a difference altogether with exactness and speeds L2 learning" (Ebsworth, 1997, p. 56). The third group believes that variables such as age, cognition, and maturation of students had better be regarded in addition to grammar instruction (Celce-Murcia, 1991; Celce-Murcia & McIntosh, 1991).

Mukhtar (2020) asserts that the global spread of COVID-19 has resulted in the closure of educational facilities. The ability of universities to handle a crisis that calls for the use of cutting-edge hardware and software to enable effective online learning was put to the test in this situation (Mollahossein, 2022). To prevent disruptions to learning, this closure hastened the development of online learning environments (Nejati, 2022). How to effectively deliver course material online, engage students, and administer assessments is now a focus for many institutions. COVID-19 has caused institutions to invest in online learning even though it poses a risk to humanity (Ghafarpour, 2022).

Moreover, in Iran's EFL setting, the procedure through which students are capable of acquiring and utilizing English language structures has been among the essential considerations of Iranian English instructors. It is regularly heard that numerous Iranian learners complain about the off-base and inaccurate application of linguistic and grammatical structures they have acquired formerly, which can be seemingly credited to inadequacy and ineffectiveness of instruction. That is why formulating a few new methods to assist English learners in gaining deeper skills in grammar is profoundly fundamental. Concerning the aforementioned gaps, this research intends to explore the impact of practicing Nicenet as one of the VLE's on linguistic use and grammar instruction in writing. In other words, this study will empirically determine whether the grammatical structures which are taught via Nicenet will be better used later

[Downloaded from mail.ijreeonline.com on 2026-11-18]

[DOR: 20.1001.1.25384015.2023.8.3.7.7]

by them in writing or not. In addition, one of the serious problems in most of the current educational systems is time. To everyone's admittance, the fast-paced lifestyle of today's world allows little time for seemingly luxurious activities like learning a second language (Plog, 2001). Such being the case, devising some novel ways to both teach language and save time can be highly desired. Therefore, this study will be an attempt to introduce Nicenet as an effective tool to serve this purpose. Concerning the aforementioned goal of the research, these research questions can be stated:

1. Does the implementation of Nicenet have any significant effect on Iranian intermediate EFL learners' grammar development in writing?
2. Is there any significant difference between male and female learners in terms of grammar development in writing when Nicenet is implemented?

3. Methodology

3.1 Design of the Study

The design of the research was quasi-experimental method with a pretest and a post-test. The subjects were chosen through a convenience sampling strategy and were assigned randomly into experimental and control groups. The reason for choosing convenience sampling was due to the fact that the learning grammar through using new technology is extremely demanding and can bore many individuals. Thus volunteers who were willing to participate in this research were asked to cooperate throughout the instruction period (Dornyei, 2007). It is noteworthy to indicate that the nature of the sampling will limit the generalizability of the finding to other contexts, thus this will limit the external validity of the findings and care must be given in reporting the outcomes. The independent variable in this research was the teaching of linguistic use (grammar) through Nicenet. The dependent variable was the participants' linguistic use (grammar) as reflected on the writing test.

3.2 Participants

For data collection, a total of 64 Iranian students at an intermediate level of language proficiency, maturing 14 to 19 years, studying at an English language institute, were opted through a convenience sampling method. The participants were female and male. All of them were included in learning English as a foreign language on and off in the past few years at distinctive language institutes. These participants were taking part in courses to cover the book American File 3. The participants were assigned into two groups of experimental (female = 21, male = 21) and control (female = 21, male = 21) through randomization. The participants were chosen concerning their performance on Oxford Placement Test (OPT) and were homogenized accordingly. It must be reiterated that the participants had no previous familiarity with such technology in language acquisition and they all had acquired English using the traditional break-and-mortar educational system of Iran.

Once the pretest was done, the eight-week treatment started according to the previous study on displaying new structures on Nicenet (Dizon-Ross, 2016; Rashtchi & Aghili, 2014). The course started with the learners accepting a brief explanation and demonstration of Nicenet features for two sessions to extend their familiarity. Fifteen examples were presented to the learners on Nicenet for each session except for the final lesson in which the posttest was held. The content was created by the researchers and the instructor together to meet the level of the learners. The examples were chosen based on their course book (American File 3) so that the important ones as prompted by the educator were included. This might help the balance between the topic and the number of examples drawn from each unit. The learners were given 15 minutes at the start of each lesson to cover the tests and content on Nicenet from the past sessions. Students were told that they could use their computers or their smartphones, or a combination of both to get to the list on Nicenet and practice at home. They were not pushed to use it regularly (i.e., the learners were encouraged to consider the structures outside of the lesson but were not required to do so). In this way, other learning activities were conducted during the rest of the session.

The instruction used for the control group was adapted from previous studies on CALL (Khodabandelou et al., 2017; Zarei, Esfandiari, & Akbari, 2016). The contrasting group received treatment based on PowerPoint presentation and the stages containing pictures, bold types, italics, and colorful presentation of target structures depending on the activity together with their examples from extra sources in case the example from the book was not considered suitable for presentation. Fifteen participants were nominated for the experimental group and they were given examples which were all the same taking about 20 minutes of class time. These presentation activities were part of the practice done in the class to develop students' target structures. Each presentation contained three stages according to presentation–

[Downloaded from mail.ijreeonline.com on 2026-11-18]

[DOR: 20.1001.1.25384015.2023.8.3.7.7]

practice-production (PPP) instruction in class. It started with the introduction of the new structure together with meaning and/or examples. Then, they were practiced via further examples from the textbook or other sources. Finally, some exercises were presented to the students to help them since they contained the target form structure.

3.3 Instruments

3.3.1 Oxford Placement Test (OPT)

Oxford Placement Test (2020), as a test of proficiency homogeneity, was performed at the beginning of the semester. This test contains 60 multiple-choice items on grammar, vocabulary, and reading comprehension. They were permitted to take it in 40 minutes. This test was utilized to homogenize the learners of the two groups in this research. Before using the OPT test, its reliability was measured using alpha Cronbach $r = .84$ which according to Cohen's table of reliability measures is highly reliable.

3.3.2 Pretest and Posttest

Two parallel researcher-made tests of writing were used both before and after the course. The tests contained essay-type questions. There were 25 items on each test which were based on the grammar points covered in American File 3, their current course book. To ensure that the target structures were new to the learners, the researchers adopted two criteria; first, they made sure that the structures were presented in American File 3 for the first time. To do so, they consulted the previous volumes of the textbook as well as their teacher's book. Second, they consulted with the teachers who presented the previous levels to make sure that their judgment was true and they had not gone around presenting the target structures in their classes before. Besides three experts in English language teaching reviewed the tests to ensure the content to ascertain its content validity. The test was developed based on the Assessment Package of the book and a table of specifications. They were piloted on a similar group of male learners in the same institute before administration. The validity of the test was approved by a group of professionals in terms of face validity and content validity. The reliability for both the pretest and the posttest were measured using alpha Cronbach $r = .81$ and $r = .87$ respectively which according to Cohen's table of reliability measures is highly reliable.

3.4 Procedure

Having assigned the participants into experimental and control groups, they took an OPT and were homogenized. The participants were then requested to do a writing test as the pre-test. As their treatment, the experimental group received grammar input enhancement by choosing examples adopted from their course book on an online platform (i.e., Nicenet) while the control group was offered with the same items on an offline platform, PowerPoint, which were presented to them via input enhancement in the class and a duplicate of which they could have at home. Moreover, the experimental group underwent a process of computer-assisted instruction via Nicenet– an interactive application that is available online to learners via their computers and smartphones. This software was developed to help the learners master grammar points and was user-friendly in terms of practicing target forms and using them in practice time. The software develops automatic tests of the items in different formats and holds timed quizzes. Following the treatment sessions which took 8 weeks, both groups took a post-test. It is noteworthy to mention that the pretest and post-test were parallel.

3.5 Data Analysis

Data comprised OPT, pre-test, and post-test scores. The data were first organized and the mean and standard deviation were calculated using SPSS (Mann-Whitney). Mann Whitney was used due to the fact the collected data were non-parametric. At that point, the inferential measurements matched the Mann-Whitney test, and independent samples t-tests were employed to test the hypothesis.

4. Results

Before testing the hypotheses mentioned earlier, the researchers had to confirm that the learners who have taken part in this research were homogeneous concerning their proficiency. Accordingly, the scores collected via OPT were used for further analysis, the outcomes are demonstrated in Table 1.

[Downloaded from mail.ijreeonline.com on 2026-11-18]

[DOR: 20.1001.1.25384015.2023.8.3.7.7]

Table 1. Descriptive statistics for the OPT scores of the experimental and control groups

	Group	N	Mean	Std. Deviation	Std. Error Mean
OPT	Experimental	32	17.3750	2.39287	.42300
	Control	32	17.2188	2.40610	.42534

As shown in Table 1, the observed mean scores for the experimental group, 17.37, and the control group, 17.21, were very close. The same is true for their standard deviation indices, 2.39 and 2.40, respectively. Further analysis was done to see if the distribution of the OPT scores was normal. The outcomes are presented in Table 2.

Table 2. Normality test of distribution of OPT scores for the experimental and control groups

		Kolmogorov-Smirnova			Shapiro-Wilk		
	Group	Statistic	Df	Sig.	Statistic	df	Sig.
OPT	Experimental	.187	32	.006	.922	32	.024
	Control	.194	32	.004	.924	32	.027

a. Lilliefors Significance Correction

Based on the outcome presented in Table 2, the observed *p* scores from the Kolmogorov-Smirnov run for the OPT scores obtained from the experimental (.00) and the control group (.00) were below .05 which implied that the distributions of scores in these groups were not normal. To assure the homogeneity of the groups concerning English proficiency, a Mann-Whitney test was administered, since the distribution of the OPT scores was not normal in the experimental and control groups. The outcomes are presented in Table 3.

[Downloaded from mail.ijreeonline.com on 2026-11-18]

[DOR: 20.1001.1.25384015.2023.8.3.7.7]

Table 3. Mann Whitney test for the OPT scores collected from the experimental and control groups

	OPT
Mann-Whitney U	488.000
Wilcoxon W	1016.000
Z	-.325
Asymp. Sig. (2-tailed)	.745

a. Grouping Variable: Group

As shown in Table 3, the observed results from the Man-Whitney test (U= 488.00, p= .74 > .05) run for the OPT scores showed that the groups were identical regarding their English proficiency prior to starting the course.

H_{02} = There is no significant difference between male and female learners regarding grammar development in writing when Nicenet is implemented.

Since the second research question accounted for the variation between the male and female students' performances after the course, the same procedure was followed to confirm their homogeneity concerning English proficiency prior to participating in the course. The outcomes are depicted in Table 4.

Table 4. Descriptive statistics for the OPT scores of the male and female participants

	Sex	N	Mean	Std. Deviation	Std. Error Mean
OPT	Male	34	16.9706	2.18098	.37404
	Female	30	17.6667	2.57753	.47059

As depicted in Table 4, the observed mean scores for the male learners, 16.97, and the female learners, 17.66, were very close. The same is true for their standard deviation indices, 2.18 and 2.57, respectively. The normality of the distributions of the scores for the male and female students was also tested. The outcomes are presented in Table 5.

[Downloaded from mail.ijreeonline.com on 2026-11-18]

[DOR: 20.1001.1.25384015.2023.8.3.7.7]

Table 5. Normality of distribution of OPT scores for the male and female learners

		Kolmogorov-Smirnova			Shapiro-Wilk		
	Sex	Statistic	df	Sig.	Statistic	df	Sig.
OPT	Male	.171	34	.013	.945	34	.085
	Female	.174	30	.020	.921	30	.028

a. Lilliefors Significance Correction

According the results depicted in Table 5, the observed p scores from the Kolmogorov-Smirnovrun for the OPT scores obtained from the male (.00) and the female (.00) participants were below .05 which implied that the distributions of scores in these groups were not normal. To ascertain the homogeneity of the groups concerning English proficiency, a Mann-Whitney test was run, the outcomes are shown in Table 6.

Table 6. Mann-Whitney test for the OPT scores collected from the male and female groups

	OPT
Mann-Whitney U	440.000
Wilcoxon W	1035.000
Z	-.951
Asymp. Sig. (2-tailed)	.342

a. Grouping Variable: Sex

As shown in Table 6, the observed results from the Mann-Whitney test (U= 440.00, p= .34 > .05) showed that the male and female participants were similar regarding their English proficiency before starting the course. The initiative analyses of OPT scores showed that the learners' proficiency was similar in the experimental and control groups. In addition, the results of the Mann-Whitney test conducted above displayed that the male and female learners were comparable concerning their proficiency levels. Consequently, the English proficiency of the participants was controlled before the course and the variations in their grammar achievement test scores may be attributed to the intervention designed by the researchers. The researchers calculated the descriptive statistics and tested the normality of the distributions of pretest and post-test scores in the experimental and control groups. The outcomes are presented in Table 7.

[Downloaded from mail.ijreeonline.com on 2026-11-18]

[DOR: 20.1001.1.25384015.2023.8.3.7.7]

Table 7. Descriptive statistics of pretest and posttest scores of the experimental and control groups

	Group	N	Mean	Std. Deviation	Std. Error Mean
Pretest	Experimental	32	9.5312	1.56544	.27673
	Control	32	8.5625	1.38977	.24568
Posttest	Experimental	32	16.6875	1.65466	.29251
	Control	32	14.9375	1.96645	.34762

The outcomes shown in Table 7 determine that both the experimental and control groups made huge improvements after attending English classes for one term. This is because both groups received grammar lessons containing the same topics. However, a closer look at the Table 7 indicates that the learners in the experimental group scored higher than the ones in the control group. To further test the hypothesis, the normality of the distribution of the scores was tested. The outcomes are given in Table 8.

Table 8. Normality of distribution for the pretest and posttest scores of the experimental and the control groups

		Kolmogorov-Smirnova			Shapiro-Wilk		
	Group	Statistic	df	Sig.	Statistic	df	Sig.
Pretest	Experimental	.227	32	.000	.923	32	.026
	Control	.188	32	.005	.896	32	.005
Posttest	Experimental	.130	32	.184	.953	32	.181
	Control	.144	32	.092	.917	32	.017

a. Lilliefors Significance Correction

Concerning the results in Table 8, the distributions of the grammar pretest scores for the experimental group (p= .00) and the control group (p= .00) are not normal, because the observed p levels are below .05. By contrast, the distributions of the grammar post-test scores for the experimental group (p= .18) and the control group (p= .09) are normal because the observed p levels are above .05. Accordingly, the Mann-Whitney test was employed to compare the pretest scores and the independent sample t-test was utilized to compare the grammar post-test results scores. The outcomes are depicted in Table 9.

[Downloaded from mail.ijreeonline.com on 2026-11-18]

[DOR: 20.1001.1.25384015.2023.8.3.7.7]

Table 9. Mann-Whitney test for the pretest scores of the experimental and control groups

	Pretest
Mann-Whitney U	332.000
Wilcoxon W	860.000
Z	-2.470
Asymp. Sig. (2-tailed)	.064

a. Grouping Variable: Group

As shown in Table 9, the observed results from the Mann-Whitney test (U= 332.00, p=.06 > .05) demonstrated that the experimental and control groups were similar concerning their grammar knowledge prior to starting the course.

Table 10. Independent samples t-test for the post-test scores of the experimental and control groups

		F	Sig.	t	df	Sig. (2-tailed)
Posttest	Experimental Group vs. Control Group	.018	.892	-6.951	62	.045

As demonstrated in Table 10, the observed results from the Levene's test (F=.01, p= .89 > .05) showed that the experimental and control groups were similar regarding their variances of post-test scores. Besides, the outcomes of the t-test (t=6.95, p=.04 < .05) depicted that the groups were significantly different concerning their grammar knowledge after the course.

5. Discussion

The outcomes of inferential statistical examinations demonstrated that there was a statistically significant difference between the accomplishments mean scores of the learners of the experimental group who examined the grammar through the computer and the control group who studied identical syntactic item utilizing the traditional strategy. This distinction was advantageous to experimental group. A glance at the learners' grades on the pretest indicates that there were no measurably noteworthy contrasts between the mean scores of the experimental and control groups. This outcome demonstrates that the participants had identical backgrounds regarding their information on the themes included in the test prior to administrating the experiment. This furthermore shows that both groups scored identically accordingly. The statistics also postulate that any achievement in language structure knowledge might be related to the computer-assisted method using Nicenet.

The results also showed that the accomplishment in the post-test for the experimental group is related to the treatment. It may be simply observed that the additional achievement in the experimental group's mean scores is more than the additional achievement in the control group's mean scores. This increase is related to the computer-assisted (Nicenet) method used which indicates that the application of the software program has significantly improved the capabilities of the students of the experimental group concerning their grammar.

"One possible explanation for the effect of using Nicenet for teaching English grammar is that computers enable each individual to work according to his own pace. The user may move freely from one component to another as he/she wishes and according to his/her needs" (Abunabah, 2012, p. 43). This trait makes CALL programs cater to individual

[Downloaded from mail.ijreeonline.com on 2026-11-18]

[DOR: 20.1001.1.25384015.2023.8.3.7.7]

variation and therefore act better in the post-test. "Another possible explanation is the novelty of the experience which may have contributed to pupils' eagerness to learn and consequently to perform better" (Kamil, 2021, p. 70). Moreover, "the self-paced nature of the computerized activities and the superior visual representation of the material in the software motivated the pupils in the experimental group to perform significantly better in the post-test" (Alharbi, 2019, p.18).

In addition, computerized methods such as Nicenet, unlike the traditional method, enable learners to receive feedback simply, which enhances self-reliance skills. Employing the computer gives the student the opportunity to utilize numerous feelings during the learning procedure (Assiddiq, 2019; Kilickaya, 2004). The use of the computer screen which comes along with multimedia effects gets the attention of the students and empowers faculties of retention to them. The investigators reckon that learners may acquire more efficiently by themselves with extra resources that technology makes accessible. Furthermore, using software programs applies the "Learning by doing approach, because learners employ the keyboard and the mouse to click or print their answers. Computer instructional programs are interactive. Learners can easily go forward or backward according to their needs and requirements (Damavandi et al., 2018, p. 22).

Through comparing the outcomes of this research with relevant literature in the past, we learn that this research is in line with numerous practical studies done formerly. It is in line with Nutta (2001) and Alian, Khodadabandeh, and Soleimani (2018) who confirmed empirically that computer-based teaching may be an influential approach of teaching the grammar of a second language. The outcomes are consistent with Abu-Seileek (2004) and Nagata (2007) who maintain that "the processing group performed significantly better than the classical group." (p. 15). The research is furthermore in line with Al Bataineh, Banikalef, and Albashtawi (2019), Zaini and Mazdyasna (2015), and Ebadi and Rahimi (2019) who reiterate that the computerized approach is more advantageous for learners than the traditional method. Similarly, the outcomes of the current research are consistent with McEnry, Baker, and Wilson (1995) and Amiryousefi (2016) who noticed that computer-based grammar teaching may be as influential as or more influential than traditional teaching.

6. Conclusion

As the outcomes of this research depict, the computer as an instrument and Nicenet as an application could assist students to boost their grammar acquisition. As the Nicenet can be used simply in certain times, it could be used for later recovery. The outcomes further demonstrated that learning grammar points using Nicenet could be influential in enhancing learners' grammar scores for both male and female learners, equally. Because the application of computers and the internet is increasing quickly in Iran, EFL instructors are typically encouraged computer-assisted methods such as Nicenetas as an accessible maintaining acquisition device to simplify language instruction. This can occur due to the increasing enthusiasm of learners for the utilization of technology like Nicenet. In case Nicenet is applied suitably, instructors may allocate the limited class time to other fruitful skills.

The research indicated that learners in the computer-based group made higher achievements than the ones in the traditional group. This outcome provides proof advocating the influence of computer-based methods such as Nicenet in teaching grammar, specifically verb tenses. This result is in line with Nutta's study (2001) demonstrating significant differences in favor of computer-based grammar instruction. Moreover, as it has been documented in CALL research, the use of the computer in language teaching has more advantages over traditional teaching. For instance, the computer supplies learners with opportunities that are inaccessible in classical L2 classrooms; besides, learners may get immediate feedback for their responses and correct their mistakes. Needless to state that, CALL also permits every student to work at his/her own pace, and learners are encouraged to employ the computer for various kinds of activities (Gruba, 2006; Kedrowicz, Watanabe, Hall, & Furse, 2006).

This result is due to the fact that students in the experimental groups were instructed by an interactive program, Nicenet. Students studied and practiced the lessons, and when they faced a trouble, they only clicked a button to get appropriate feedback about the answer and grammatical regulations. Such feedback is not typically accessible in the traditional context. Based on the findings discussed above, the researchers suggest the following areas to continue work:

1. Future researchers can employ new technologies in teaching English language skills and other elements of language and encourage students to work by themselves and create language activities.

[Downloaded from mail.ijreeonline.com on 2026-11-18]

[DOR: 20.1001.1.25384015.2023.8.3.7.7]

2. Forthcoming researchers had better incorporate new technologies in the syllabi and teaching practices and cite websites related to language skills.

References

Abunabah, A. (2012). The impact of computer-assisted grammar teaching on EFL pupils' performance in Jordan. *International Journal of Education and Development Using ICT, 8*(1), 71-90. Open Campus, The University of the West Indies, West Indies. Retrieved September 15, 2023 from https://www.learntechlib.org/p/42299/

Abu-Seileek, A. F. M. (2004). *Designing a computer—assisted.* University of Jordan: Jordan.

Ahmed, E. A. E. (2018). *Integrating blended learning in EFL teaching and learning process: A case study of faculty of education EL Hassahiesa*. Gezira, Sudan: University of Gezir.

Alavinia, P., & Sehat, R. (2012). A Probe into the main demotivating factors among Iranian EFL learners. *English Language Teaching, 5*(6), 9-35. doi:10.5539/elt.v5n6p9

Al Bataineh, K. B., Banikalef, A., & Albashtawi, A. (2019). The effect of blended learning on EFL students' grammar performance and attitudes: An investigation of Moodle. *Arab World English Journal (AWEJ), 10*(1), 45-63. Available at SSRN: https://ssrn.com/abstract=3367595 or http://dx.doi.org/10.2139/ssrn.3367595

Alharbi, M. A. (2019). Integration of video in teaching grammar to EFL Arab learners. *Computer-Assisted Language Learning-Electronic Journal, 20*(1), 135-153. http://callej.org/journal/20-1/Alharbi2019.pdf

Alian, J., Khodabandeh, F., & Soleimani, H. (2018). The effect of CALL-based tasks on EFL learners' grammar learning. *Teaching English with Technology, 18(*3), 54-68. https://files.eric.ed.gov/fulltext/EJ1186370.pdf

Amiryousefi, M. (2016). The differential effects of two types of task repetition on the complexity, accuracy, and fluency in computer-mediated L2 written production: A focus on computer anxiety. *Computer-Assisted Language Learning, 29*(5), 1052-1068. https://doi.org/10.1080/09588221.2016.1170040

Assiddiq, M. A. (2019). Authentic materials in reading comprehension classroom: Its effectiveness to Indonesian EFL students' achievement. *International Journal for Educational and Vocational Studies, 1*(7), 707-712. file:///C:/Users/SMA/Downloads/1676-6065-1-PB.pdf

Beatty, K. (2003). *Teaching & researching: Computer-assisted language learning.* London: Routledge.

Bikowski, D., & Kessler, G. (2002). Making the most of discussion boards in the ESL classroom. *TESOL Journal, 11*(3), 27-30. Retrieved September 15, 2023 from https://www.learntechlib.org/p/95777/

Boroujeni, F. A. (2012). Investigating controversies in teaching grammar: A case for the Iranian high school students. *Theory & Practice in Language Studies, 2*(8), 874-885. doi:10.4304/tpls.2.8.1570-1575

Bowles, R. P., & Montroy, J. J. (2013). Latent growth curve modeling using structural equation modeling. *Applied Quantitative Analysis in Education and the Social Sciences, 14*(2), 277-315.

Celce-Murcia, M. (1991). Grammar pedagogy in second and foreign language teaching. *TESOL Quarterly, 25*(3), 459-480. https://doi.org/10.2307/3586980 https://www.jstor.org/stable/3586980

Celce-Murcia, M., & McIntosh, L. (1991). *Teaching English as a second or foreign language*. Oxford University Press.

Chapelle, C. A. (2001). *Computer applications in second language acquisition*. Cambridge University Press.

Crivos, M. B., & Luchini, P. L. (2012). A pedagogical proposal for teaching grammar using consciousness-raising tasks. *MJAL, 4*(3), 141-153.

Damavandi, J. A., Zolfigol, M. A., & Karami, B. (2018). Oxidation of 1, 2-dihydro quinolines under mild and heterogeneous conditions. *Synthetic Communications, 31*(20), 3183-3187. https://doi.org/10.1081/SCC-100105895

[Downloaded from mail.ijreeonline.com on 2026-11-18]

[DOR: 20.1001.1.25384015.2023.8.3.7.7]

Dizon-Ross, R. (2016). *Parents' beliefs and children's education: Experimental evidence from Malawi.* Unpublished Manuscript, University of Chicago.

Dornyei, Z. (2007). *Research methods in applied linguistics.* Oxford: Oxford University Press.

Ebadi, S., & Rahimi, M. (2019). Mediating EFL learners' academic writing skills in online dynamic assessment using Google Docs. *Computer-Assisted Language Learning, 32*(5-6), 527-555. https://doi.org/10.1080/09588221.2018.1527362

Ebsworth, M. E. (1997). What researchers say and practitioners do perspectives on conscious grammar instruction. *Applied Language Learning, 8*(2), 237-260. https://www.researchgate.net/publication/234665214_What_Researchers_Say_and_Practitioners_Do_Perspectives_on_Conscious_Grammar_Instruction_in_the_ESL_Classroom

Farrokhi, F., & Sattarpour, S. (2012). The effects of direct written corrective feedback on improvement of grammatical accuracy of high-proficient L2 learners. *World Journal of Education, 2*(2), 49-57. doi:10.5430/wje.v2n2p49 http://dx.doi.org/10.5430/wje.v2n2p49

Ghafarpour, H. (2022). Interpersonal discourse markers in online vs. face-to-face EFL classes. *Teaching English Language, 16*(2), 63-84. doi:10.22132/tel.2022.155086

Ghahari, S., Khoshbin, L. S., & Forwell, S. J. (2014). The multiple sclerosis self-management scale: Clinicometric testing. *International Journal of MS Care, 16*(2), 61-67. doi: 10.7224/1537-2073.2013-019

Graham, S., & Harris, K. R. (2000). The role of self-regulation and transcription skills in writing and writing development. *Educational Psychologist, 35*(1), 3-12. https://doi.org/10.1207/S15326985EP3501_2

Gruba, P. (2006). Playing the videotext: A media literacy perspective on video-mediated L2 listening. *Language Learning & Technology, 10*(2), 77-92.

Kamil, S. A. (2021). Exploring the role of updated technology in university English language classrooms. *Psychology and Education Journal, 58*(1), 5647-5655. doi: https://doi.org/10.17762/pae.v58i1.1969

Kedrowicz, A., Watanabe, S., Hall, D., & Furse, C. (2006). Infusing technical communication and teamwork within the ECE curriculum. *Turkish Journal of Electrical Engineering & Computer Sciences, 14*(1), 41-53. https://journals.tubitak.gov.tr/cgi/viewcontent.cgi?article=3610&context=elektrik

Khodabandelou, R., Ab Jalil, H., Ali, W. Z. W., & Daud, S. M. (2017). Presence and perceived learning in different higher education blended learning environments. *Blended Learning: Concepts, Methodologies, Tools, and Applications, 7*(4), 615-627. doi:10.4018/978-1-5225-0783-3.ch030

Kilickaya, F. (2004). Authentic materials and cultural content in EFL classrooms. *The Internet TESL Journal, X*(7). https://files.eric.ed.gov/fulltext/ED570173.pdf

Levy, M., & Stockwell, M. (2006). Effective use of CALL technologies: Finding the right balance. *Changing Language Education through CALL, 1*(18), 301-320.

Malmir, A., & Aghazamani, Z. (2019). Moodle implementation for L2 vocabulary development and retention: The effects on extroverted vs. introverted Iranian intermediate EFL learners. *Teaching English Language, 13*(1), 57-84. doi:10.22132/tel.2019.86986

McEnery, T., Paul Baker, J., & Wilson, A. (1995). A statistical analysis of corpus based computer vs traditional human teaching methods of part of speech analysis. *Computer Assisted Language Learning, 8*(2-3), 259-274. doi: 10.1080/0958822940080208

Meskill, G., & Mossop, J. (2003). Technologies use with learners of ESL in New York state: Preliminary report. *Journal of Language and Teaching Practice, 26*(1), 76-92. https://www.albany.edu/lap/Papers/technology%20use.htm

Mohan, B. (2019). Testing the effectiveness of pattern drills in the teaching of sentence structures in English. *Indian Journal of Applied Linguistics, 45*(1-2), 12-28.

[Downloaded from mail.ijreeonline.com on 2026-11-18]

[DOR: 20.1001.1.25384015.2023.8.3.7.7]

Mollahossein, H., Alavinia, P., & Modirkhameneh, S. (2022). Etiquette and value-based online English language instruction in the university context across gender: Variations in attitudes. *Teaching English Language, 17*(1), 25-52. doi:10.22132/tel.2022.160902

Nagata, N. (2007). Input enhancement by natural language processing: Assessing the impact of input enhancement in second language education. *Evaluation in Theory, Research, and Practice, 12*, 153-167.

Nazari, A., & Allahyar, N. (2012). Grammar teaching revisited: EFL teachers between grammar abstinence and formal grammar teaching. *Australian Journal of Teacher Education, 37*(2), 73-87. https://ro.ecu.edu.au/cgi/viewcontent.cgi?article=1691&context=ajte

Nejati, R. (2022). The relationship between students' self-regulated learning and reading comprehension in Iranian online classes in the COVID era. *Teaching English Language, 16*(2), 85-109. doi:10.22132/tel.2022.155099

Nutta, J. (2001). Course websites: Are they worth the effort? *NEA Higher Education Advocate, 18*(3), 5-18.

Plog, S. (2001). Why destination areas rise and fall in popularity: An update of a Cornell Quarterly classic. *Cornell Hotel and Restaurant Administration Quarterly, 42*(3), 13-24. https://doi.org/10.1016/S0010-8804(01)81020-X

Rashtchi, M., & Aghili, H. (2014). Computerized input enhancement versus computer-assisted glosses: Do they affect vocabulary recall and retention? *Theory & Practice in Language Studies, 4*(8) 780-791. doi:10.4304/tpls.4.8.1665-1674

Shang, H. F. (2007). An exploratory study of e-mail application on FL writing performance. *Computer Assisted Language Learning, 20*(1), 79-96. https://doi.org/10.1080/09588220601118479

Shen, Y. (2012). Reconsidering English grammar teaching for improving non-English majors' English writing ability. *English Language Teaching, 5*(11), 74-78. doi:10.5539/elt.v5n11p74

Toyoda, E., & Harrison, R. (2002). Categorization of text chat communication between learners and native speakers of Japanese. *Language Learning & Technology, 6*(1), 82-99. https://core.ac.uk/download/pdf/84320882.pdf

Trosborg, A. (2011). *Interlanguage pragmatics: Requests, complaints, and apologies*. New York: Walter de Gruyter.

Vilmi, R. (2003). The international writing exchange project. *Training, Language and Culture, 5*(2), 72-90.

Zaini, A., & Mazdayasna, G. (2015). The impact of computer-based instruction on the development of EFL learners' writing skills. *Journal of Computer Assisted Learning, 31*(6), 516-528. https://doi.org/10.1111/jcal.12100

Zarei, A. A., Esfandiari, R., & Akbari, A. (2016). Self-regulated learning strategies as predictors of reading comprehension. *Journal of Modern Research in English Language Studies, 3*(2), 34-21.

[Downloaded from mail.ijreeonline.com on 2026-11-18]

[DOR: 20.1001.1.25384015.2023.8.3.7.7]