Utilizing Web Quest and Collaborative Learning Activities to Enhance EFL University Students’ Performance in Advanced Grammar

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Abstract
In this study, the effectiveness of using Web Quest and collaborative learning activities to enhance the performance of EFL students in advanced grammar was examined. Participants were third-year students from the Foreign Languages and Translation faculty at Misr University for Science and Technology. The study created two groups, with 30 students in each: the control group received traditional instruction while the experimental group was presented with Web Quest and collaborative learning activities. Data was collected through pre- and post-tests on advanced English grammar, and the paired samples T-Test was used to compare the two groups' performances. The independent samples T-Test was used to determine any significant differences between the two achieving groups. The results indicated that the experimental group showed a significant improvement in performance over the control group. The study recommends the use of Web Quest and collaborative learning to boost EFL students' grammar learning results.

Keywords: EFL students, Web Quest, collaborative learning, advanced grammar
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الاستفادة من أنشطة الويب كويست و التعليم التشاركى لدعم أداء طلاب اللغة الإنجليزية كلغة أجنبية بالجامعه في القواعد المتقدمة

الملخص

أختبرت الدراسة الحالية الاستفادة من أنشطة الويب كويست و التعليم التشاركى في تحسين أداء طلاب اللغة الإنجليزية كلغة أجنبية في القواعد المتقدمة حسث ضمت الدراسة 60 مشاركًا من الفرقة الثالثة بكلية اللغات الأجنبية و الترجمة في جامعة مصر للعلوم والتكنولوجيا، و أقسم المشاركين إلى مجموعتين أحا ما تجريبيا و الأخرى ضابطة حيث ضمت كل منهما 30 طالبا مناصفة، و تم تدريس القواعد المتقدمة للمجموعة الضابطة باستخدام الطريقة التقليدية و لمجموعة التجريبية باستخدام أنشطة الويب كويست و التعليم التشاركى، و أعتمد جمع البيانات البحثية على الاختبار القبلي و البدئي لقواعد اللغة الإنجليزية المتقدمة ، و تم التحقق من الفرق بين أداء المجموعتين في الاختباران القبلي و البدئي باستخدام اختبار “ت” للعينات المقترنة، و التحقق من الدلالة المعنوية للفرق بين أداء المجموعتين في الاختبارين القبلي و البدئي باستخدام اختبار “ت” للعينات السميتة، و تم أيضا حساب المتوسطات الحسابية المكتسبة للمجموعة التجريبية و الضابطة في الاختبار البدئي و حساب دلالاتهم المعنوية، و أشارت النتائج إلى ارتفاع أداء المجموعة التجريبية في اختبار قواعد اللغة الإنجليزية المتقدمة عن أداء المجموعة الضابطة و أوصت الدراسة بإمكانية استفادة تدريس قواعد اللغة الإنجليزية المتقدمة من أنشطة الويب كويست و التعليم التشاركى في تحسين أداء طلاب اللغة الإنجليزية كلغة أجنبية.

الكلمات المفتاحية: طلاب اللغة الإنجليزية كلغة أجنبية، الويب كويست، التعليم التشاركى، الأداء، قواعد اللغة الإنجليزية المتقدمة
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Background of the study

As clarified by Al-Sayed, Abdel-Haq, El-Deeb, and Abdel-Sadeq (2016) and Al-Shamisi (2016), the Web Quest approach blends elements of both constructivism and instructivism into its concept. Learning in Web Quest involves an inquiry-based approach where language learners depend on acquiring knowledge from different online sources. Through Web Quest, EFL learners actively engage in the TEFL process, which empowers them to independently search for relevant study materials on the web. As language instructors assume the role of guides under this approach, their main responsibility is to direct learners towards suitable materials that align with the teaching modality and subject matter. In other words, the instructors facilitate a consistent, productive gathering of learning materials as per specific contents.

Ebadi and Rahimi (2018) and Awada and Ghaith (2014) suggest that Web Quest facilitates active participation from EFL learners. By encouraging learners to gather knowledge through different sources in order to complete assigned tasks, this approach empowers EFL students to take charge of their learning. Additionally, as outlined by Chuang (2016) and Berezova, Mudra, and Yakushko (2018), Web Quest can significantly improve social and cognitive skills, enabling learners to collaborate with others more effectively in fulfilling their learning objectives. This approach is based on a Cognitive Load Theory which aims to streamline access to relevant materials while limiting extraneous ones. Its systematic approach to research ultimately encourages learners to synthesize, analyze, and evaluate proper information that aligns with the subject's requisite learning objectives. Leveraging traits embodied by Web Quest allows advanced EFL learners to significantly improve their skills in creative cognition. Furthermore, its adherence to task requirements also promotes creative thinking skills while maintaining a specified learning outcome. Finally, as Salehi, Asgari, and Amini (2015) and Richards and Rodgers (2014) reiterate, we must evaluate how Web Quest application assists in the advanced EFL learning of critical
thinking, not just grammar, as the tackling of contextualizing complex grammar rules lends to enhancement in pragmatic rules of use everyday language for improved communication. In 2009, Murray and McPherson noted that Web Quests can enhance group work by facilitating verbal interaction among students, thereby improving their speaking skills. Through discussing assignments in groups, language exchange is also promoted. Similarly, Torres (2007) found that using Web Quests encourages collaborative and cooperative learning among students in addition to promoting independent and responsible learning through interacting in the target language. Students performed their respective roles with increased enthusiasm and felt a sense of maturity and responsibility as a group. Working in groups enables correcting each other's errors and enhances social skills in addition to building knowledge (Strickland, 2005). Web quest puts the students at the center of the learning process and is based on inquiry. It is designed around a scenario that interests the students and they work in small groups following the instructions provided. Students use web links provided by the instructor to search for information, analyze and combine information, and present their solution to the problem. Through this process, students collectively gain a deeper and wider understanding of issues. Furthermore, there is ongoing formative assessment to assess student learning that aims to help students grow and learn from their mistakes.

Statement of the Problem.

The mastery of advanced English grammar rules among third-year English majoring students is still far from the satisfactory levels. Therefore, the current study examines the effect of utilizing Web Quest and collaborative learning activities to enhance the experimental participants’ performance in advanced English grammar rules in comparison to the traditional method used to teach advanced English grammar rules to the control group.

Questions

The current study attempted to answer the following questions:

1. What is the performance of the two examined groups in the advanced English grammar rules pretest?
2. How does the performance of the control and experimental groups vary in the advanced English grammar rules posttest?
3. To what extent does the performance of both examined groups differ significantly in terms of statistics in the advance English grammar rules posttest?
What is the effect of utilizing the Web Quest and collaborative learning activities on enhancing the experimental group’s performance in the advanced English grammar rules posttest?

Hypotheses
The present study verified the following null hypotheses:
1. There is no difference in the performance of the two examined groups in the advanced English grammar rules pretest.
2. There is no variance in the performance of the control and experimental groups in the advanced English grammar rules posttest.
3. Statistically, the performance of both groups does not significantly differ in the advanced English grammar rules posttest.
4. Web Quest and collaborative learning activities do not highly enhance the experimental group’s performance in the advanced English grammar rules.

Aims
The current study aimed to:
1. Distinguish the contrast in the results of the pretest on advanced English grammar rules between the two observed groups.
2. Allocate the variance in the performance of the control and experimental groups in the advanced English grammar rules posttest.
3. Determine the statistically significant difference in the performance of both groups does in the advanced English grammar rules posttest.
4. Investigate how the implementation of Web Quest and collaborative learning exercises helps in improving the performance of the experimental group regarding advanced English grammar rules.

Significance of the study
The current study aims to contribute significantly to:
1. Sustain the policy of Misr University for Science and Technology to enhance the English proficiency levels among its students.
2. Elevate the performance in advanced English grammar among the third-year students at the faculty of Foreign Languages and Translation.
3. Examine the practicality of utilizing the Web Quest and collaborative learning activities in teaching advanced English grammar rules.
4. Generally, contribute to the literature of FL teaching
5. Hopefully, the findings of the research can be beneficial to other faculties of Foreign Languages and translation in other private universities in Egypt.

Literature review

Chen (2019) used the Web Quest method to create English language learning lessons using online resources. The goal was to provide EFL learners with an interactive learning experience in which they participate actively in the classroom. This was based on a constructivist approach, and aimed to assess the effectiveness of online Web Quest learning activities by analyzing the students' learning strategies. The Web Quest model involves real-life learning tasks, a framework for task implementation, performance evaluation, and self-reflection. Chen discovered that this model helped the learners maximize their critical thinking and problem-solving skills, enhance their autonomous learning ability, and develop their use of English in practical, real-life situations. Chen suggests that the design must be meaningful and encourage critical thinking and EFL teachers should consider selecting a topic that interests students. For example, teachers could choose a real-life scenario such as planning a trip overseas and help students find learning materials that explain steps required for such a trip. By working in groups and using interactive teaching methods, students had the opportunity to negotiate meaning and develop writing and oral communication skills.

Amini (2020) conducted a study to analyze the benefits and drawbacks of using Web Quest to improve the English language mastery of Iranian high school EFL learners. The research also focused on how Web Quest impacted the efficiency of Iranian EFL teachers in motivating students and creating a favorable learning environment. The sample group comprised of 16 randomly selected Iranian EFL teachers, and the study used an online questionnaire to obtain data on the benefits and drawbacks of Web Quest. Amini pointed out that Web Quest-based instruction has various advantages, including creating an environment that promotes collaboration between students and teachers. The Web Quest offers a realistic learning setting, and helps to make the learning process meaningful and motivating. Learners get to work collaboratively and practice different language skills.

Web Quest may have its drawbacks, which include teachers' reluctance to implement a new tool, trouble with choosing appropriate learning materials and the need for teachers to improve their digital competencies. Another disadvantage might include difficulty in ensuring full student participation. However, Amini argues that Web Quest not
only improves the English proficiency of EFL learners, but also enhances teachers’ ability to better instruct through the usage of technology and the internet. The use of Web Quest can benefit teachers in classroom organization, inter-personal communication, imaginative problem solving, and adaptability skills. Moreover, employing such innovative teaching strategies can encourage language teachers to collaborate on ideas and share online resources.

A study by Liang and Fung (2020) investigated how a Web Quest program could contribute to the development of critical thinking abilities in 125 primary school students in Hong Kong. The Web Quest model employed a "design research" approach formed from six different stages - including introduction, tasks, sources, process, evaluation and conclusion. The study lasted six weeks, with eight classes a week of 60 minutes each. Initially, the researchers introduced the participants to the necessary information that was needed to achieve industry-relevant skill sets in the first two cycles, proceeded by a list of diverse Web Quest resources at cycle three. The fourth cycle involved the teaching of crucial stipulated steps, with the evaluation of task performance taking place over the fifth cycle and the sixth cycle focusing on reflecting on acquired knowledge. Various tools were employed for collecting data- including critical thinking pre- and post-tests, audio-recordings of classroom discussions, written assignments by the participant, classroom observation, and semi-structured interviews of teachers. The main communication tool in the Web Quest program was "exploratory talk," which the participants used consistently to show their critical thinking skills and justify their opinions. Sociocultural discourse analysis was then carried out to analyze classroom dialogue during the program implementation. Overall, the study provides evidence on how implementing the Web Quest program is highly beneficial for developing critical thinking abilities in students, helping learners offer reasons and support when expressing their views. Consequently, implementing the Web Quest program can indeed help students gain effective critical thinking skills.

In 2020, Synekop conducted a study on the attitude of English language instructors in the National Technical University of Ukraine towards implementing Web Quest for teaching English for Specific Purposes (ESP) courses. The study had 31 participants comprising of 28 females and 3 males. Data was gathered by classroom observation and a 10-item questionnaire that focused on participants' preference for Web Quest over traditional teaching methods, comprehension behind these preferences and taking into account student learning differences while using Web Quest. The study revealed that most participants favored using Web
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Quest over traditional teaching methods. They also affirmed that using Web Quest would enhance learners' communicative, collaborative, critical thinking skills, as well as foster knowledge acquisition in the English language. Furthermore, the participants proposed incorporating different learning tasks to accommodate the varying learning requirements of students, instead of adopting an approach that may not work for everyone. Nevertheless, when it comes to student autonomy, the viewpoints of the participants were mixed. Some were in favor of complete autonomy, but others preferred limited autonomy, considering that students might not have the ability to evaluate learning materials and tasks independently.

Salem conducted a study in 2022 to analyze the impact of using Web Quest to improve English academic writing skills among three groups of students from the college of Management Science at Sadat Academy for Management Sciences in Alexandria and Tanta branches, Egypt. All the participants were enrolled in the English Language Testing System (ELTS) preparation course. The research was carried out with an experimental group composed of 15 students who received English academic writing training through online sheltered instruction using Web Quest. Additionally, there were two control groups. The first control group consisted of 19 students, while the second had 20 participants. The first control group had online unsheltered instruction, whereas the second control group was given offline traditional instruction. Pre- and post-tests for English academic writing, soft skills, and writing anxiety were the data collection tools. Salem concluded that applying online sheltered instruction with Web Quest can considerably improve English academic writing skills. It reduces writing-related academic anxiety, encourages collaborative learning, and fosters cognitive skills essential for relieving anxiety when writing English. Web Quest provides an opportunity for experimental participants to participate actively and manage their learning time effectively. The collaboration managed via Web Quest learning activities also improves satisfaction levels among participants collaborating.

Method
Research design

The current study utilized a mixed research method combining quantitative and qualitative analyses, drawing from the works of Pomboza (2014), Perez (2016), Bakker (2018), and Salem (2020). The paired samples T-Test was used to compare pre- and posttest performance within each group, while the independent samples T-Test was employed to examine significant differences between the two groups' pre- and
posttest performance. Additionally, the gained mean scores of both groups in the posttest were assessed for statistical significance. The qualitative analysis focused on describing the advanced English grammar pre- and posttest performances of both groups.

Participants

The study's participants were third-year undergraduates enrolled in the Faculty of Foreign Languages and Translation at Misr University for Science and Technology (MUST). Data collection took place during the second semester of the academic year 2022-2023.

Procedures

In the early second term of the academic year 2023-2024, the advanced English grammar test was piloted by using 25 participants, even though it is an international test derived from Oxford University. The aim of pilot study was not only assessing the test reliability but also its validity in terms of its practicality and applicability to the Egyptian EFL learners. The test was found valid as the participants of the pilot study did not complain of its difficulty or expressed inability to follow up the test questions. The Cronbach’s Alpha coefficient was .96 in an indication of high reliability. All participants sat for the advanced English grammar pretest. Then, two groups of control and experimental participants were created containing 30 students each. The control group was taught advanced English grammar by using a traditional method. Meanwhile, Web Quest and collaborative learning activities were utilized over 12-week period in teaching advanced English grammar to the experimental group.

The syllabus of Web Quest and collaborative learning is introduced in (Appendix A). It covered various advance English grammar rules such as tenses, independent and dependent clauses, adjective and adverbial clauses, etc. The Web Quest and collaborative learning activities are introduced in (Appendix B). They were derived from various Web Quest websites, in addition to a website created by the researcher (Appendix C). The designed web quest has six fundamental elements to present the assignment to students and help them become acquainted with the tasks involved and varieties of resources that help to accomplish them.

The researcher adopted six of the essential components of a web quest as Dodge (2004) and Turville (2008) have specified, which are as follows:

1. Introduction: This component aims to arouse students' interest by providing them with background information on the topic and Motivational scenarios.
2. Task: It involves a clear and achievable description of the expected outcome typically designed to intrigue students.
3. Process: This component provides learners with a detailed guide to complete the task, including embedded links for each step.

4. Resources: Consisting of a bookmarked websites list or print resources that students can use to complete the task.

5. Evaluation: It focuses on the criteria or rubric that will be utilized to evaluate students' work. This component should be specific, clear, fair, and consistent.

6. Conclusion: This element is designed to encourage reflection among students about their learnings and summation by the teacher in reminding them of what they have learned.

The experimental group participants were divided in small groups to negotiate meaning and ways of performing these activities. They were also exposed to evaluation and discussion of their performance of the Web Quest activities. Finally, their achievement in fulfilling the advanced English grammar Web Quest activities was discussed, so that the experimental group was aware of their errors in advanced grammar rules and ways of correction. Web Quest force students to utilize electronic communication tools, allowing them to obtain valuable experience in this field. Through participation in forums linked to the Web Quest topic, students utilized discussion threads as information sources. The various sub-tasks and responsibilities outlined in a Web Quest forced communication among students or contacting subject matter experts using email to ensure task completion. At the end of the second term of the academic year 2023-2024, the two groups sat for the advanced English grammar posttest.

Data collection instruments

Data were collected by using Oxford Practice Grammar Advanced Diagnostic Test (OPGADT) (Appendix D). The test was employed as pre- and posttests to analyze the participants’ performance in English advanced grammar (Tuan, 2011; Stahl, Law and Hesse, 2013; Yunus, Salehi, Amini, Shojaee, and Fei, 2016; and Salem, 2022). The test consists of two sections with the total of one hundred questions. Section 1 includes 50 multiple choice questions, whereas section 2 comprises 50 supply the missing word questions covering the grammar rules shown in Table 1. Five questions were allocated to test each grammar rule. The test final score was one hundred marks, as one mark was assigned for the correct answer of each question.
Table 1: Grammar rules covered in the (OPGADT)

<table>
<thead>
<tr>
<th>Grammar rules</th>
<th>Types of questions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Section 1</td>
<td></td>
</tr>
<tr>
<td>1. Sentences</td>
<td>Multiple choice</td>
</tr>
<tr>
<td>2. The passive</td>
<td>Multiple choice</td>
</tr>
<tr>
<td>3. Modals</td>
<td>Multiple choice</td>
</tr>
<tr>
<td>4. Adjectives &amp; Adverbs (clause/ phrase)</td>
<td>Multiple choice</td>
</tr>
<tr>
<td>5. Determiners and quantifiers</td>
<td>Multiple choice</td>
</tr>
<tr>
<td>6. Prepositions</td>
<td>Multiple choice</td>
</tr>
<tr>
<td>7. Noun clauses</td>
<td>Multiple choice</td>
</tr>
<tr>
<td>8. Infinitives and gerunds</td>
<td>Multiple choice</td>
</tr>
<tr>
<td>9. Adverbial clauses</td>
<td>Multiple choice</td>
</tr>
<tr>
<td>10. Conditionals</td>
<td>Multiple choice</td>
</tr>
<tr>
<td>Section 2</td>
<td></td>
</tr>
<tr>
<td>1. Tenses</td>
<td>Supply the missing word</td>
</tr>
<tr>
<td>2. Negatives and questions</td>
<td>Supply the missing word</td>
</tr>
<tr>
<td>3. Articles and nouns</td>
<td>Supply the missing word</td>
</tr>
<tr>
<td>4. Adjectives and Adverbs</td>
<td>Supply the missing word</td>
</tr>
<tr>
<td>5. Pronouns, substitutions and ellipsis</td>
<td>Supply the missing word</td>
</tr>
<tr>
<td>6. Reporting</td>
<td>Supply the missing word</td>
</tr>
<tr>
<td>7. Prepositions</td>
<td>Supply the missing words</td>
</tr>
<tr>
<td>8. Relative clauses</td>
<td>Supply the missing word</td>
</tr>
<tr>
<td>9. Adverbial clauses</td>
<td>Supply the missing word</td>
</tr>
<tr>
<td>10. Conjunctions</td>
<td>Supply the missing word</td>
</tr>
</tbody>
</table>

Results and Data analysis

Descriptive statistics of the advanced English grammar pretest is shown in Table 2. It indicates similar performance in the advanced English grammar pretest for the two examined groups. Evidence of similarity is shown in the two groups’ minimum and maximum scores (51-54) and (51-53) for the control and experimental groups successively. The mean scores of (4.64) for the control group and (4.63) for the...
experimental group indicate their similarity in performing in the advanced English grammar pretest as well. The two groups’ similar standard deviation values, (5.14) for the control group and (5.13) for the experimental group, show that there is no variance in the two groups’ performance in the advanced English grammar pretest. The finding supports the first null hypothesis that there is no difference in the performance of the two examined groups in the advanced English grammar rules pretest. The two groups’ pretest performance in advanced English grammar was marked with numerous errors covering a wide range of the advanced English grammar syllabus. These errors were found in tenses, the passive voice, the modal verbs, prepositions, relative clauses, adverbial clauses, connectors, articles, nouns, etc.

Table 2: Descriptive statistics of the two groups’ performance in the advanced English grammar pretest

<table>
<thead>
<tr>
<th>Participants</th>
<th>Mean Score</th>
<th>Standard Deviation</th>
<th>Min.-Max. Scores</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control</td>
<td>4.64</td>
<td>5.14</td>
<td>51-54</td>
</tr>
<tr>
<td>Experimental</td>
<td>4.63</td>
<td>5.13</td>
<td>51-53</td>
</tr>
</tbody>
</table>

Table 3, data on the advanced English grammar posttest scores for two groups is presented. The information reveals that both groups showed progress in their performance, but the experimental group made more significant progress than the control group. This can be deduced from the fact that the minimum and maximum scores for the experimental group were higher (56-87) than those of the control group (53-64), and the experimental group had a higher mean score of 16.71 compared to the control group’s mean score of 9.83.

Furthermore, the standard deviation for the control group was higher (14.69) than that of the experimental group (9.84), indicating that the control group made more mistakes when it came to advanced English grammar rules in comparison to the experimental group. The errors made by the control group were distributed across various aspects of advanced English grammar rules, whereas the experimental group primarily struggled with tenses, adverbial clauses, ellipsis, and some connectors. Based on these findings, the second null hypothesis, which suggests that both groups perform the same in advanced English grammar rules posttest, is rejected.

Table 3: Descriptive statistics of the two groups’ performance in the advanced English grammar posttest

<table>
<thead>
<tr>
<th>Participants</th>
<th>Mean Score</th>
<th>Standard Deviation</th>
<th>Min.-Max. Scores</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control</td>
<td>9.83</td>
<td>14.692</td>
<td>53-64</td>
</tr>
<tr>
<td>Experimental</td>
<td>16.71</td>
<td>9.840</td>
<td>56-87</td>
</tr>
</tbody>
</table>
Table 4 presents the findings of a paired T-Test conducted on the collected samples, revealing a significant difference between the posttest performances of the two groups in advanced English grammar rules, which is indicated by the p value < 0.05. This outcome contradicts the third null hypothesis, which suggests that there is no significant statistical difference between the performance of the groups in the advanced English grammar rules posttest. The results indicate that the control group made an improvement in their advanced English grammar posttest performance compared to their pretest performance, but this improvement was not statistically significant as the p value is > 0.05.

Table 4: The paired samples T-Test

<table>
<thead>
<tr>
<th>T</th>
<th>M</th>
<th>SD</th>
<th>N</th>
<th>DF</th>
<th>t-value</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pretest control group score</td>
<td>4.64</td>
<td>5.14</td>
<td>30</td>
<td>29</td>
<td>6.817</td>
<td>.006</td>
</tr>
<tr>
<td>Posttest control group score</td>
<td>9.83</td>
<td>14.69</td>
<td>30</td>
<td>29</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pretest experimental group score</td>
<td>4.63</td>
<td>5.13</td>
<td>30</td>
<td>29</td>
<td>13.384</td>
<td>000</td>
</tr>
<tr>
<td>Posttest experimental group score</td>
<td>16.71</td>
<td>9.84</td>
<td>30</td>
<td>29</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Furthermore, Table 5 displays the outcomes of an independent samples T-Test, showing that the experimental group achieved a far higher mean score (12.08) in their advanced English grammar posttest than the control group (5.19). The control group's standard deviation (9.55) was higher than that of the experimental group (4.71), suggesting that there was greater variation in the control group's posttest performance in advanced English grammar rules in contrast to the experimental group. These findings invalidate the fourth null hypothesis that the experimental group's posttest performance in advanced English grammar rules does not improve through the introduction of Web Quest and collaborative learning activities.


Table 5: The independent samples T-Test

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>M Gain Score</th>
<th>SD</th>
<th>DF</th>
<th>t-value</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control</td>
<td>30</td>
<td>5.19</td>
<td>9.55</td>
<td>29</td>
<td>6.567</td>
<td>0.000</td>
</tr>
<tr>
<td>Experimental</td>
<td>30</td>
<td>12.08</td>
<td>4.71</td>
<td>29</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Conclusion, discussion and implications

The pretest revealed that all participants had similar shortcomings in advanced English grammar, with errors common across several rules including tense, passive voice, modal verbs, prepositions, relative clauses, adverbial clauses, connectors, articles, nouns, pronouns, substitutions, ellipsis, determiners, and quantifiers. As a result, the first hypothesis that there would be no significant difference in the performance of the two examined groups in the pretest was supported by the findings.

The control group had only slight improvement in their performance in using advanced English grammar rules during the posttest, and the statistical analysis showed this improvement was not significant compared to their pretest performance. By contrast, the experimental group's posttest result was better than that of the control group. These outcomes contradict the second null hypothesis since there was a difference between the posttest performances of the two groups. Moreover, the differences between the groups' performances during the posttest were empirically significant according to statistical analysis.

In summary, this study disproves the third null hypothesis that there are no significant variations in the posttest outcomes of using advanced English grammatical rules. The control group had many mistakes in their posttest results across most of the advanced English grammar rules. On the contrary, the experimental group showed a decrease in the number of errors made in the advanced English grammar posttest. These mistakes were limited to specific advanced grammar rules, including tenses, adverbial clauses, ellipsis, and some connectors. The findings are consistent with those reported by Berezova, et al. (2018), Ebadi and Rahimi (2018), Chen (2019), Amini (2020), Liang and Fung (2020), Synekop (2020) and Salem (2022).

The study results demonstrate that the utilization of Web Quest and collaborative learning activities were superior in educating the experimental group on advanced English grammar rules than the conventional teaching approach adopted in the control group. This conclusion was drawn based on the experimental group's superior mean score noted in the advanced English grammar posttest compared to the control group. Consequently, the study nullifies the fourth hypothesis that posited that Web Quest and collaborative learning activities cannot effectively teach advanced English grammar rules to experimental participants.

The instructors of English at the faculty of Foreign Languages and Translation should take advantage of using Web Quest to improve the English language abilities of their students. It is especially important to
apply the Web Quest learning method when teaching advanced English grammar to students in this faculty due to its advantageous traits. For example, the participants involved in the study worked together to gather essential knowledge of advanced grammar rules. They were divided into groups and found relevant online examples that reinforced their comprehension of these rules. They also had opportunities to put these rules into practice, combine them and evaluate them in everyday life situations. The students who received this training were more active in their pursuit of learning advanced English grammar in comparison to their peers who were not in the experimental group. They regarded the learning process in a positive light, which resulted in better understanding and a higher level of skill demonstrated in the post-test. Therefore, it is recommended that the Web Quest learning approach can be adapted to teach a variety of English language skills in the Faculty of Foreign Languages and Translation. This methodology can greatly enhance English proficiency for students who are majoring in English for foreign language purposes.

**Limitations**
The limitations of the study were given below.
1. The subjects of the study were limited to sixty students of third-year students from the Foreign Languages and Translation faculty at Misr University for Science and Technology.
2. Web Quest and collaborative learning activities were utilized over 12-week period in teaching advanced English grammar to the experimental group. 3. The duration of the study was limited to eight weeks.
3. The study was limited to advanced grammar

The findings of the present study are restricted to the faculty of Foreign Languages and translation in the Misr University for Science and Technology. Hopefully, those findings can be of great benefit to other faculties of Foreign Languages and translation in other private universities in Egypt.

**Recommendations for Further Studies**
The present study recommends the following tentative topics for further studies:
1. Utilization of Web Quest in learning other English language skills such as vocabulary, speaking, and listening.
2. The impact of utilizing Web Quest in learning English on the EFL learners’ learning strategies.
3. The effect of utilizing Web Quest in language learning on developing positive attitudes towards FL learning among EFL learners.
4. The perception of utilizing Web Quest can be measured among EFL instructors at the faculty of Foreign Languages and Translation.
Utilizing Web Quest and Collaborative Learning Activities to Enhance EFL University Students’ Performance in Advanced Grammar

References


