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**Using a Web Quest Model to Develop Critical Reading
Performance among General Secondary Stage Students**

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Abstract: This study aimed at investigating the effect of using a WebQuest Model (WM) on developing General Secondary Stage students' critical reading performance. The participants were first year General Secondary Stage students at Asmaa' Bint Abi Bakr General Secondary School for Girls in Suez Governorate in Egypt. Twenty-four first year General Secondary Stage students participated in each of the experimental and control groups. Both groups were pre-tested by using the Critical Reading Performance Test (CRT) for equivalence in their critical reading performance. The researcher trained the experimental group on using the WM to develop their critical reading performance. The experimental group and the control group were post-tested by using the CRT. Differences between the mean scores of the pre- and post-CRT was calculated by using the t-test. The results indicated that statistically significant differences were found between the mean scores of the experimental group and the control group on the post-CRT in favor of the experimental group. The results also showed that there were statistically significant differences in the mean scores of the experimental group between the pre- and post-CRT in favor of the post-CRT. The results revealed the effectiveness of using the WM in developing critical reading performance among General Secondary Stage students.

Key words: WebQuest, critical reading skills, critical reading performance.



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Introduction

The emergence of the Internet as a language learning resource has led to the development of numerous technology applications in classrooms. Using the Internet in classrooms could lead to a more self-paced autonomous learning which is learner-controlled rather than teacher-controlled. WebQuests are activities which are based on using resources from the Internet. They are used to "focus on using information rather than looking for it, and to support students' thinking at the levels of analysis, synthesis, and evaluation" (Dodge, 2001, p.6). Besides, WebQuests could be used to provide a potential resource for developing critical reading among learners. This is because of the authenticity of the resources provided in WebQuests (Prapinwong & Puthikanon , 2008).

The WebQuest has become one of the most popular learning models which makes use of Internet resources by engaging students in authentic and collaborative tasks. It has several advantages which include encouraging critical thinking, leading to more communication through group activities, and eliciting greater learner motivation through interdisciplinary studies as well as "real-life" tasks(Dudenev,2003).Therefore, WebQuests have been developed for the purpose of engaging the learner in a task that elicits higher order thinking than simple information searching and recall (Sanders, 2005). They continue to grow in popularity, with teachers from around the world and experts in the field of educational technology espousing their potential to promote higher level thinking. One of the merits of WebQuests is developing critical reading skills such as scanning, skimming, paraphrasing and summarizing (Dodge, 2001). On the other hand, WebQuests can also allow teachers to access information at their own convenience and at their own pace and to utilize student-centered learning, co-operative learning, critical thinking activities, and authentic assessment (Johnson & Zufall, 2004).

Critical reading is very important to Foreign Language (FL) students. It is considered a highly reflective skill that requires students to stand back and gain some evidence from the text they are reading (Knott,2008). Critical reading refers to a careful, active, reflective and analytic reading (Kurland, 2002). It helps students analyze the written texts in terms of the author's main argument, sufficiency of the evidence provided to support this argument, tone and style employed by the author in the text and the overall plausibility of the subject matter (Gulcat, 2004). The possession of critical reading skills could open real possibilities in students' future working and personal lives (Haneline & Aiex, 1997). Therefore, it is essential for English as a Foreign Language (EFL) teachers to help their students become critical readers.

Considering the important role of critical reading in General Secondary Stage students' academic and personal lives and taking into account the growing use of WebQuests as collaborative web tools implemented in classrooms, a greater emphasis should be given to using the WebQuest to develop General Secondary Stage students' critical reading performance. It is also important that General Secondary Stage students should be more concerned about developing their critical reading performance in English language. Therefore, this study aims at investigating the effect of using a WebQuest Model (WM) on developing critical reading performance among General Secondary Stage students.

Context of the study

The researcher worked as a lecturer of Curriculum and TEFL Instruction at Suez Faculty of Education in Egypt. She also supervised some groups of fourth year prospective EFL teachers during their practicum at General Secondary Schools in Suez Governorate. She noticed that most first year General Secondary Stage students suffer from weaknesses in their critical reading performance.

To determine how serious the problem of critical reading performance among first year General Secondary Stage students is, the researcher analyzed first year General Secondary Stage students' past exam results on reading. The analysis revealed that first year General Secondary Stage students suffer from weaknesses in their critical reading performance. Besides, she conducted a pilot study on a random sample of 30 first year General Secondary Stage students at a General Secondary School in Suez. She discussed with them the problems they had in critical reading performance. They asserted that they suffer from weakness in critical reading. They indicated that this weakness could be traced back to the methods employed in teaching them critical reading.

The researcher also conducted a pilot study with 15 EFL teachers and 5 supervisors at General Secondary Stage in Suez to investigate their opinions regarding how serious the problem of critical reading performance among first year General Secondary Stage students is. They asserted that first year General Secondary Stage students suffer from weaknesses in their critical reading performance. They indicated that the reason behind these weaknesses could be attributed to the inappropriate methods of teaching critical reading provided to these students. They asserted that these methods are void of Internet-based technology that could be used in teaching critical reading and that could help in developing critical reading performance among students.

The researcher reviewed previous studies which were conducted to investigate critical reading performance of General Secondary Stage students in Egypt. She found out that studies designed by Abou Hadid (2000) and Torkey (2002) were conducted because General Secondary Stage students in Egypt suffered from weaknesses in critical reading performance. Those studies revealed that in spite of the importance of critical reading to EFL students, the majority of General Secondary Stage students are not given chances to engage in instructional activities which could help them develop their critical reading performance.

The researcher also conducted a survey on previous studies designed to investigate the use of the Internet in teaching critical reading. Research revealed a positive correlation between Internet-based language learning and academic achievement as Internet integration into classroom teaching and learning of a language could help students develop critical reading and promote the students' interest in the task (Murry, 2006). Moreover, although Internet-based technology is believed to be sound when used in teaching critical reading, most research on WebQuests focused on their use for interdisciplinary teaching (Pohan & Mathison, 1998) and co-operative learning (Brucklacher & Gimbert, 1999). Few studies evaluated the effects of using WebQuests by students on their learning and motivation and little research showed the results towards the use of the WebQuest as a supplement to regular

classroom instruction (Murry, 2006). Besides, the researcher found out that the WM use in teaching critical reading suffers from a lack of scholarly research in Egypt.

Statement of the problem

As indicated by the results of the pilot studies on first year General Secondary Stage students' critical reading performance, it was found out that they suffer from weaknesses in their critical reading performance in English language. These weaknesses are represented in their inability to identify the main ideas of passages in which the main ideas are not directly stated, detect the author's purpose and tone, detect mood, draw conclusions, make comparisons, form personal justified opinions, make inferences, recognize bias, identify cause and effect relationships, recognize contradictions in a text and evaluate arguments. These weaknesses might be attributed to the inappropriate approaches of teaching critical reading provided to them. Using a WM is, therefore, suggested to develop critical reading performance among first year General Secondary Stage students.

Questions of the study

- 1-What are the most important critical reading skills to be developed by first year General Secondary Stage students?
- 2-How far will the WM help first year General Secondary Stage students in developing their critical reading performance?

Hypotheses of the study

- 1-There would be statistically significant differences between the mean scores of the experimental group and the control group on the post-Critical Reading Test (CRT) in favor of the experimental group.
- 2-There would be statistically significant differences in the mean scores of the experimental group between the pre- and post-CRT in favor of the post-CRT.

Purpose of the study

The purpose of this study was to investigate the usefulness of using a WM in teaching critical reading to first year General Secondary Stage students to reveal if it could provide them with an effective support to develop their critical reading performance in English.

Significance of the study

The results may be significant to first year General Secondary Stage students as it represents an attempt to overcome the shortcomings in teaching critical reading by offering a teaching strategy based on using a WM to help develop critical reading performance among them. It may also be significant to EFL teachers and curriculum developers as it introduces them an effective way to incorporate Internet-based technology represented in the WebQuest use encouraging critical reading among learners.

Variables of the study

The independent variable is using the WM in teaching critical reading. The dependent variable is first year General Secondary Stage students' critical reading performance.

Limitations of the study

1-First year General Secondary Stage students at Asmaa' Bint Abi Bakr General Secondary School for Girls in Suez Governorate in Egypt as the researcher worked as a lecturer of Curriculum and TEFL Instruction at Suez Faculty of Education in Suez Governorate.

2-A limited duration for the experiment(eight weeks) as the training program included the following four sessions: Identifying the WebQuest, pre-reading phase, reading phase and post-reading phase.

Definition of terms

1-A WebQuest

Peterson, Caverly and Macdonald (2003, p. 38) defined a WebQuest as "an instructor-created website that sets up a problem for students to accomplish, and guides their work with specific web-based resources, individually or in small groups."

March (2004,p.3) defined a WebQuest as "a scaffold learning structure that uses links to essential resources on the World Wide Web and an authentic task to motivate students' investigation of a central, open-ended question, development of individual expertise and participation in a final group process that attempts to transform newly acquired information into a more sophisticated understanding."

A WebQuest is operationally defined in the present study as an activity that is based on using resources from the Internet and presents authentic tasks with scaffolding that encourage students' participation in an autonomous and collaborative way.

2- Critical reading

To Carr (1990, p. 69) critical reading is defined as "the ability to read beyond the lines. It includes the ability to discuss, analyze, evaluate what is read, draw inferences, and arrive at conclusions based on evidence."

Kurland (2002,p.1) defined critical reading as "a technique for discovering information and ideas within a text."

Critical reading is operationally defined in the present study as a technique for evaluating what is read. It involves the ability to identify the main idea, identify relationships, draw conclusions, make inferences and comparisons.

Theoretical framework

A. History of WebQuests

The first WebQuest was created by Dodge at San Diego State University in 1995. Since then, WebQuests have gained popularity and have become a frequent topic of discussion at technology and education conferences (Lipscomb, 2003). Educators value the WebQuest's impact and encourage its use in various educational settings (Milson & Downey, 2001). Thousands of schools and universities all over the world and many teachers have used WebQuests in classroom language instruction (March, 2004).

The WebQuest approach is based on teaching subject area content through computer generated web-based instructional activities (Dodge, 2001). It has been utilized as a form of guided inquiry using web resources and an instructional tool for promoting critical thinking skills, scaffolding and co-operative learning (Zheng, Stucky, McAlack, Menchanna, & Stoddart, 2005). Moreover, a WebQuest offers an ideal social constructivist Computer Assisted Language Learning (CALL) environment (Simina & Hamel, 2005). It blends the benefits of the constructivist approach, inquiry-based learning approach, project-based approach and co-operative learning (Blasszauer, 2003).

B. Components of a WebQuest

- Introduction: It discusses the importance of the topic of the WebQuest and reasons why the topic is worth investigating. A good topic included in the introduction of a WebQuest should be clearly tied to the curriculum standards, build on the learner's prior knowledge by explicitly mentioning important concepts or principles and be challenging, motivating and suit the learners' interests or goals (Blasszauer, 2003).

-Task: It involves a description of what the learners are going to accomplish. It should be doable and interesting to them (Johnson & Zufall, 2004). It identifies roles for co-operative group members and describes clearly what the end result of the learners' activities will be. It can be a problem to be solved, a position to be defended, a product to be designed or anything that requires the learners to process and transform the information they have gathered (Blasszauer, 2003).

-Process: It includes scaffolding, which is a temporary structure that is well written and involves clear steps and tools for organizing information (Dodge, 2001). It provides a clear description for the learners on how to find and organize the information via suitable tools, and what they should do to complete the task. It describes whether the task will involve more than one class and the time it will take (Blasszauer, 2003). It includes variety in the activities with a description of responsibilities and how to distribute responsibilities among the learners (Johnson & Zufall, 2004).

-Resources: They provide links to high-quality Internet-based resources which the learners should use to accomplish the task. All web links should be pertinent to the task, make excellent use of the web and are working. Resources should be pre-selected by the teacher to help the learners focus on the topic. They include specific software, specific hardware, e-mail accounts for all students and video or audio materials (Blasszauer, 2003).

-Evaluation: It includes an evaluative tool that might be in a form of a rubric. Explicit directions should be involved in the WebQuest rubric so as to describe to the learners what they should exactly do to be successful with the WebQuest components and to tell how they will demonstrate their growth in knowledge (Dodge, 2001). It should indicate selected aspects of the learners' performance to be evaluated and indicators reflecting a variety of performance levels (Blasszauer, 2003).

-Conclusion: It brings closure to the activity and reminds the learners of what they have

learned as a result of completing the activity. It encourages the learners to apply what they have learned in different contexts. It provides a summary statement about the worthiness of the experience and the importance of what it will teach. It encourages the learners to reflect on the process to help them extend what they have learned into other domains outside the classroom. It also gives them suggestions for further learning experiences (Perez Torres, 2005).

C. Critical reading skills

Thistlethwaite (1992) presented the following as critical reading skills: the writer qualification as an authority, the writer's bias and objectivity, the writer's purpose and tone, the up-to-dateness validity of the material, the writer's use of reasoning and support and the reader's own objectivity and biases.

Abdel Moaty (2002) asserted that the most important critical reading skills are as follows: identifying the main idea, making inferences, identifying cause and effect relationship, drawing conclusions, distinguishing between facts and opinions and making comparisons.

D. Review of related literature

Literature revealed that WebQuests were successfully used with students of all ages and levels. Examples are studies conducted by Burleson (2001) and Emmert (2003). The WebQuests were also applied for academic English as a Second Language (ESL) (e.g., Peterson et al., 2003), literacy studies and social sciences (e.g., Burleson, 2001).

WebQuests could also be used as instructional activities that would provide students with a valuable experience in English and Language arts (e.g., Chatel & Nodell, 2002) and English for Specific Purposes (ESP) (e.g., Haddad, 2004). The WebQuest methodology has also been transferred to language learning in the 3D virtual world Second Life to create a more interactive experience (Vickers, 2007).

Although the WebQuest has been widely used in various educational settings as mentioned before, the researcher did not find any previous study that was conducted on the use of WebQuests in teaching critical reading in English. Hence, the following section includes some previous studies conducted on using the WebQuest in teaching and learning reading in general.

In their study, Teclehaimanot and Lamb (2004) asserted that the use of technology in teaching and learning could bring reading alive for children and young adults. They indicated that WebQuests could engage students in problem-solving and collaboration. The results revealed that a WebQuest environment could facilitate the reading experience and could help students meet challenging standards while addressing critical questions that bring meaning to learning.

Rozema (2004) designed a study that described how two Web-based learning tools, the literary MOO and the WebQuest, were used to reinforce reader-oriented and text-oriented literature instruction. The results revealed that the literary MOO, used in conjunction with the novel *Brave New World*, helped the students evoke and elaborate on the story world of the text, make personal

connections between the text and their own lives, and discuss the text in a collaborative way. The results also showed that the WebQuest, used in conjunction with the novel *Heart of Darkness*, helped the students read the text in an analytical and text-centered way.

Research design

The present study was a pre-, post-test quasi-experimental study. It involved two groups: an experimental group and a control group.

A. Participants

The participants were first year General Secondary Stage students at Asmaa' Bint Abi Bakr General Secondary School for Girls in Suez Governorate. Their ages ranged from 15 to 16 years old. All the participants were proficient in using computer as all of them obtained the International Computer Driving License (ICDL) before conducting the experiment. Moreover, all of them have access to the Internet at their homes as the experimental group was required to use the Internet to complete the task. The students were already assigned into classes by their school. Two classes were randomly selected from one teacher's list of classes. These two classes were randomly assigned into two groups, one class as the experimental group (24 students) and the other as the control group (24 students). Both groups used to read and study the critical reading texts provided in their Student's Textbook *Hello! English for Secondary Schools, Year One* by using reading software given on Compact Disks (CDs). Both of them were also familiar with participating in collaborative work during critical reading lessons. However, both groups were not provided any opportunities to access into the Internet during critical reading lessons. Their teacher of English language stressed that they both had no previous experience with using WebQuests before conducting the experiment. The researcher taught the experimental group and the control group. The experimental group was taught lesson (13) on page (83) from the Student's Textbook *Hello! English for Secondary Schools, Year One* by using the WM while the control group was taught the same lesson by using reading software provided on a CD that they regularly used during critical reading lessons.

To be sure that the control group and the experimental group were equivalent in their critical reading performance before conducting the experiment, the researcher pre-tested the two groups by using the CRT. Then, the t-test was used to test the significance of the differences between them on the pre-CRT. The results indicated that the mean score of the experimental group was 9.38 with a standard deviation of 2.48, while the mean score of the control group was 9.04 with a standard deviation of 2.20. The results showed that the difference in the mean scores between the experimental group and the control group on the pre-CRT was not statistically significant ($t=0.493$, $p=0.625$). This indicates that the control group and the experimental group were equivalent in critical reading performance before conducting the experiment. These findings are presented in Table (1).

Table (1) The t-Value of the Difference in the Mean Scores between the Experimental Group and the Control Group on the Pre-CRT

Group	N	Mean	SD	DF	T	Sig.
Experimental	24	9.38	2.48	46	0.493	0.625
Control	24	9.04	2.20			

B. Organization of the experimental group

The researcher divided the 24 students of the experimental group into six groups with four students in each group. She assigned a role for each student in each group. Roles are distributed among the members of each group as follows: a leader who is responsible for helping in navigating through the various sections of the WM, a recorder who should record the answers given by the group, an elaborator who should explain important and unclear points and a timer who is responsible for organizing the time of the group. The students in each group were encouraged to exchange roles in their group throughout the program sessions.

Instruments

A. The Critical Reading Skills Checklist (CRSC)

The researcher designed a Critical Reading Skills Checklist (CRSC). It included critical reading skills that could be the most important to be developed by first year General Secondary Stage students. It is a rating scale checklist including eleven critical reading skills with three levels of importance that ranged from very important to less important. The reason behind constructing the CRSC was to make the CRT.

To validate the CRSC, the researcher submitted it to a jury of judges, professors of Curriculum and TEFL Instruction at some Faculties of Education in Egypt and to supervisors of English language at General Secondary Stage in Egypt. The jury members provided some modifications to the CRSC as they recommended that the critical reading skills should be limited to five or six to be more manageable. Their modifications were taken into consideration as the researcher selected five critical reading skills that received the highest frequency under critical reading skills according to the jury members. Finally, the jury members agreed upon the selected five critical reading skills.

B. The Critical Reading Test (CRT)

The researcher designed a CRT. She adapted the texts of the CRT from Wikipedia, the free encyclopedia. Then, she modified it to be more applicable for the present study and designed the questions attached to it. The CRT included Multiple Choice Questions. To design the CRT, the researcher analyzed the reading texts in the Student's Textbook Hello! English for Secondary Schools, Year One and the learning standards provided by the National Authority for Quality Assurance and Accreditation (NAQAA) of Education in Egypt regarding the most appropriate critical reading skills in English language necessary to be developed by first year General Secondary Stage students.

The CRT was administrated to a pilot sample of 30 first year General Secondary Stage students at a General Secondary School in Suez Governorate and not included in the participants of this study. The first reason behind piloting the CRT was to find out whether the CRT and its directions and questions were understandable to first year General Secondary Stage students. The second reason of piloting the CRT was to estimate the time that first year General Secondary Stage students would take in answering it. The pilot sample stressed that the CRT was understandable to them. The researcher found out that the appropriate time for answering the CRT was 50 minutes.

To assess the validity of the CRT, the researcher submitted it to the same jury members. They agreed upon its validity for assessing first year General Secondary Stage students' critical reading performance. She also used criterion related validity to assess the validity of the CRT. The statistical correlation of (Pearson, Kendall and Spearman) was found as follows: (0.967, 0.903, 0.917) and it was at the level 0.01. This result indicates the validity of the CRT.

To assess the reliability of the CRT, the researcher used the test/retest method of calculating the reliability coefficient of the CRT. The statistical correlation of (Pearson, Kendall and Spearman) was found as follows: (0.767, 0.763, 0.670). It is a high correlation coefficient at the level 0.01. This reveals that the CRT had a high degree of reliability.

Materials

A. A WebQuest Model (WM)

The researcher adapted the WM from the Internet. Then, she modified it to be more applicable for the study. She depended on the WebQuest rubric designed by Prapinwong and Puthikanon (2008) to construct the WM. She used the first generation of the WebQuests to design the WM as it is more applicable for the present study. The topic was about Wonders of the Modern World. It was a reading lesson from the Student's Textbook Hello! English for Secondary Schools, Year One, Unit (13), Lesson (3), Page (83) studied by first year General Secondary Stage students.

To assess the validity of the WM for developing critical reading performance among first year General Secondary Stage students, the researcher submitted it to the same jury members. They asserted its validity for developing critical reading performance among first year General Secondary Stage students.

B. A program based on using the WM in a critical reading lesson

The researcher designed a program which based on using the WM in a critical reading lesson. It was constructed to train the experimental group on using the WM when they perform critical reading. The program was also validated by the same jury members.

Framework of the program

-Goal of the program

The goal of the program is to help the experimental group use the WM to develop their critical reading performance.

-Training activities

The researcher conducted the following sessions for training the experimental group:

- 1- Identifying the WebQuest.
- 2- Pre-reading phase
- 3- Reading phase 4- Post-reading phase

-Teaching aids

The following teaching aids were used throughout the different sessions of the program:

- A white board - Charts
- An LCD projector
- Computers with Internet access

-Materials

The experimental group was provided with printed materials prepared by the researcher for introducing the topics included in the different sessions of the program.

-Assessment

Every student in the experimental group was given an assessment sheet by the end of each session.

C. Treatment

To investigate the effect of using a WM on developing first year General Secondary Stage students' critical reading performance, the researcher trained the experimental group by using the program which was based on using the WM in a critical reading lesson.

In the first session, the researcher held a conference with the experimental group to discuss with them what a WebQuest is, its characteristics, components, types, stages, benefits of implementing in EFL classrooms and advantages of using it in a critical reading lesson. Then, the researcher showed them some examples of WebQuests available on the Internet to revise with them what a WebQuest is and what the components of a WebQuest are. She explained to them how to use each component of a WebQuest in a critical reading lesson, showed them the curriculum standards included in this WebQuest and explained to them what is meant by the learning standards of the curriculum required for first year General Secondary Stage students to develop their critical reading performance. Then, they were informed the importance of assigning themselves into groups of four students in each group with a significant role for each student in the group. Each student was provided with a CD which included the WM of the present study to go through all the components of this WM individually at home to be acquainted with it. By the end of this session, every student was provided with an assessment sheet on this session.

In the second session, the researcher revised with the experimental group the importance of the introduction as a component in the WebQuest. The researcher wrote the title and the first sentence of the WebQuest introduction on the whiteboard and asked them to predict what they think a WebQuest introduction with a title like this might be about and why they think so. Then, the students assigned themselves into groups of four students in each group with a significant role for each student in the group. The researcher discussed questions with them to help them generate ideas about the topic of this WebQuest. She also asked them to work in pairs in their groups to generate similar questions to ask and answer about the title and the introduction of this WebQuest. Each group was encouraged to indicate what they already know about the Seven Wonders of the Ancient World. The students in each group were also encouraged to write their answers in the first column of the (KWL) sheet. Each group gave questions about what they want to know about the Seven Wonders of the Ancient World and wrote their questions in the second column of the (KWL) sheet. Then, the researcher trained

the students on how to open and print out the printable versions provided in this WebQuest. They were told that to complete the task, they should write questions about the Wonders of the Modern World, answer the Ancient Wonders worksheet, write a simple timeline to illustrate when the wonders were constructed, produce a brochure about a Wonder of the Modern World and introduce a PowerPoint presentation of the name, location, history, a picture and reasons for choosing this wonder. By the end of this session, every student was provided with an assessment sheet on this session.

In the third session, the researcher informed the experimental group that this WebQuest process involves the completion of five steps and that each step is a link located on the navigation bar at the top of this WebQuest page. Then, she trained them on how to click on each step of the WebQuest process to go to it and how to click on the back arrow to come back to the process page. They were informed to follow the steps in the order they are presented in the process section. They were also instructed that before they go to the first step, they should get the meanings of the new vocabulary provided on the online dictionary to help them understand the new vocabulary as they read. The researcher trained them on how to click on the online dictionary link on the process page to get the new vocabulary and their meanings and how to click on the back arrow to come back to the process page. The students were told that in step 1, each student must link to the pictures provided above in the WebQuest to know the Seven Wonders of the Ancient World, go to the websites provided on Section 1 of the WebQuest resources so as to read and find out information to note down remarks about the Seven Wonders of the Ancient World regarding: what their names are, where they were found, when they were constructed and why they were considered the Wonders of the Ancient World and to fill out The Ancient Wonders Worksheet. The students in each group were asked to write together The Ancient Wonders Worksheet, post it to the class wiki, look at other postings and add to them by using a different color to distinguish it from other postings.

Each group was encouraged to answer the questions they wrote during the second session in the third column of the (KWL) sheet. Then, they were told that in step 2 each participant should create a simple timeline to illustrate when the Seven Wonders of the Ancient World were constructed, use all the ideas produced by each participant to write together a timeline in The Timeline Sheet to show other groups when the Seven Wonders of the Ancient World were constructed, discuss together and write why these seven places might have been called "The Seven Wonders of the Ancient World" and what characteristics qualify them for that title. The students were told that in Step 3, each group should search the Internet together by using the Websites given on Section 2 on the resources section of the WebQuest to find information about the Wonders of the Modern World by reading articles about them. They were also told that they should consider the questions provided on The Questions Sheet while searching the given Websites to write answers for them. The students were instructed that in step 4, each group should use the facts and details gathered on the topic to create a brochure to be exchanged with other groups to inform them about a Wonder of the Modern World. Then, they were told that in Step 5, each group should prepare a PowerPoint presentation that should last no more than 10 minutes and no less than 5 minutes. It should give the name, location and history of the wonder, reasons for choosing it and a picture of the wonder. They

were informed that each group should present the PowerPoint presentation in 10 minutes to other groups. Each group was encouraged to pin the location of the wonder on a map in the classroom and discuss with other groups the distribution of these wonders. By the end of this session, every student was provided with an assessment sheet on this session.

The fourth session included telling the experimental groups that in the conclusion of this WebQuest they should know that what they had learned had made them more aware of the Wonders of the Modern World and why they are important and that the projects they created should help them inform other groups of the Wonders of the Modern World. Each group was encouraged to continue to think about the meanings behind these wonders and ask themselves and other groups how these wonders affect their and others' lives and what these effects are. By the end of this session, every student was provided with an assessment sheet on this session.

By the end of the training sessions, the researcher post-tested the experimental group and the control group by using the CRT. The statistical analysis that was carried out in the present study included calculating of the mean, standard deviation, standard error and t-value at level that was $P < 0.01$ for the pre- and post- CRT of the experimental and control groups. The results were statistically evaluated by using the t-test.

Results and discussion

A. Hypothesis one results: The first hypothesis stated that there would be statistically significant differences between the mean scores of the experimental group and the control group on the post- CRT in favor of the experimental group. The t-test was used to test the significance of the differences between the experimental group and the control group on the post-CRT.

The results indicated that the mean score of the experimental group was 25.96 with a standard deviation of 2.07 while the mean score of the control group was 8.96 with a standard deviation of 2.07. The results also showed that the difference in the mean scores between the experimental group and the control group on the post-CRT was statistically significant ($t=28.391$, $p=0.000$). So, this hypothesis was accepted. These findings are presented in Table (2).

Table (2) The t-Value of the Difference in the Mean Scores between the Experimental Group and the Control Group on the Post-CRT

Group	N	Mean	SD	DF	T	Sig.
Experimental	24	25.96	2.07	46	28.391	0.000
Control	24	8.96	2.07			

This result shows that the experimental group achieved a significant improvement in their critical reading performance on the post- CRT compared with the control group. This significant result may be due to the following reasons:

Integrating the WM into a critical reading lesson motivated the experimental group to engage in inquiry learning as it provided them with all the resources and guidance to do so.

During training the experimental group on the use of the WM, the researcher guided them on how to use the website links given on sections one and two of the resources part to critically read articles about the seven wonders of the ancient world and the wonders of the modern world, find information about them and write answers for the questions provided in the questions sheet. This WM enabled the experimental group to work individually and in small co-operative groups of 4 students in each group to ask and answer questions which require them to think critically to identify the main idea, identify cause and effect relationships, draw conclusions and make comparisons. Due to these reasons, the experimental group developed critical reading performance on the post-CRT.

B. Hypothesis two results: The second hypothesis stated that there would be statistically significant differences in the mean scores of the experimental group between the pre- and post-CRT in favor of the post-CRT. The t-test was used to test the significance of the differences in the mean scores of the experimental group between the pre- and post-CRT.

The results indicated that the mean score of the experimental group on the pre-CRT was 9.38 with a standard deviation of 2.48. On the other hand, the mean score of the experimental group on the post-CRT was 25.96 with a standard deviation of 2.07. The results revealed that the difference in the mean scores of the experimental group between the pre- and post-CRT was statistically significant ($t=26.770$, $p=0.000$). Thus, this hypothesis was accepted. These findings are presented in Table (3).

Table (3) The t-Value of the Difference in the Mean Scores of the Experimental Group between the Pre- and Post-CRT

Group	N	Mean	SD	DF	T	Sig.
Pre-Experimental	24	9.38	2.48	23	26.770	0.000
Post-Experimental	24	25.96	2.07			

This result shows that the experimental group achieved a significant improvement in their critical reading performance on the post-CRT. This significant result may be due to the following reasons:

Training the experimental group on employing the WM in a reading lesson gave them systematic guidelines on how to accomplish the task. The task in this WM helped them find out information about the seven wonders of the ancient world, think about some buildings or inventions that can be nominated as the wonders of the modern world, search the provided websites to find out information about the wonders of the modern world and select one wonder of the modern world to share in the classroom. This encouraged them to complete research and activities which helped them develop their critical reading performance. Besides, the WM increased the experimental group's motivation because of the use of authentic material and the development of tasks. It supported co-operative groups to share the information about the modern wonders of the world and encouraged them to develop their critical thinking. Because of the reasons mentioned above, the experimental group developed critical reading performance on the post- CRT.

Conclusion

The results are limited to the research participants, the material used for the treatment and the instruments used to collect the data. It can be concluded that using the WM in a reading lesson proved to be effective in developing the experimental group's critical reading performance. The WM provided the experimental group with a collaborative environment that encouraged them to engage effectively in reading the texts given on the resources section and to learn from each other's work to develop their critical reading performance. Moreover, the WM allowed the experimental group to focus on information rather than looking for it. It facilitated the acquisition, integration and extension of a vast amount of information through tasks designed to engage them in demonstration of understanding. Therefore, they developed their critical reading performance.

Recommendations

In light of the findings and conclusions of the present study, the following recommendations are made:

- Extended use should be made of WebQuests to be integrated into the reading lessons taught to first year General Secondary Stage students to help them develop their critical reading performance.
- Training programs should be provided to EFL teachers to help them know how to use the WebQuest in teaching critical reading.
- Published materials about using the WebQuest in critical reading classrooms should be available to teachers and students.
- Curriculum designers, teacher-trainers and textbook writers have to focus on providing strategies based on using the WebQuest in teaching critical reading to EFL students at General Secondary Stage.
- A study is needed to investigate General Secondary Stage students' attitudes towards the WebQuest use to develop critical reading performance among them.

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