The Effectiveness of Web-Quest in Developing EFL Critical Reading Skill among Higher Studies Students"Faculty of Graduate Studies for Education Students as a Model"

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Abstract

*T*he current study aimed to develop the critical reading skill using Web-Quest for special diploma students at Faculty of Graduate Studies for Education, Cairo University, Egypt .The sample consisted of thirty students of the special diploma of the faculty that were randomly selected. The study was conducted through the quasi- experimental method using Web-Quest strategy. The researcher used a list of critical reading sub- skills, a test for the critical reading skills to determine what students learned and a scoring rubric for correcting the test. The study indicated that there is a statistically significant difference between the mean score of the experimental group students in the pre-posttest on behalf of the post test at significance level (0.01) which is < (0.05). The results proved the effectiveness of using Web-Quest in developing the critical reading skills for special diploma students at Faculty of Graduate Studies for Education.*
Key words: critical reading skills – Web-Quest

1.1 Introduction

Reading, as one of the four main language skills, is basic in learning English as a foreign language. Reading comprehension is the level of understanding a message. In other words, how well does the reader understands what he/she reads? This understanding comes from the interaction between the words that are written and how they trigger knowledge outside the written message. Comprehension is a "creative, multi-faceted process" dependent upon four language domains: phonology, syntax, semantics, and pragmatics. Proficient reading generally depends on the ability to recognize words quickly and effortlessly. It is also determined by an individual's cognitive development, which is "the construction of thought processes". Reading comprehension involves both the ability to decode (figure out) words (i.e. know what the words are) and also the ability to make meaning of the words strung together; comprehension (Nissila, 2016). So, learning to read critically is an important part of developing good study habits, and ultimately strong reading skills will enhance almost every area of students life; especially we live in the age of digital transformation and knowledge economy.

EFL Students, in our age, are in need of critical reading not only in Egypt but also all over the world. For example, students across the United States continue to struggle with reading comprehension. The National Assessment of Educational Progress released the 2017 Nation's Report Card, which shows little to no growth in reading comprehension among 4th and 8th graders in the USA over the last 20 years. A 1997 study by Wigfield and Guthrie found that students who read for their own interests spend

300% more time reading, which leads to higher academic achievement. So, it is the world necessity of reading generally and critical reading especially.

According to Dodge, Web-Quests are a suitable frame to develop certain skills so as to engage students in a discovery process which upgrades their level from an initial stage of looking for information to a final stage of synthesis and conclusions by means of a process of gradual reuse and refinement. Thus, it can be concluded that completing a Web-Quest scaffolds not only a process of searching information but also a process of analysis and synthesis (Yoder, 2005).

1.2 Context of the Problem:

The researcher noticed the absence of clear effective reading strategies that can be used in developing critical reading skills of EFL for the higher studies for education students especially and students generally, poor critical reading performance and their weak attitude towards it. It is noticeable that critical reading is in an area that is underexplored in most academic contexts. This was deduced from the researcher long experience of teaching English and the recommendations of some related studies such as Mohammad & Qoura (2022), Suleiman (2023) and Abu Ghlasi (2022). Most students have passive attitude towards critical reading skills. This absence may be due to the real means of teaching reading which mostly ignore critical reading skills that can be enhanced through utilizing Web-Quests. The researcher conducted a pilot study to identify the special diploma students' present level of critical reading skills. So, a critical reading skill pilot study test was designed for administering it to twenty six

participants of the special diploma at Faculty of Graduate Studies for Education. The results reported showed that the mean score of the sample is 6.56 (38.51%) which indicated that most students had low performance in critical reading. So, there is a need for developing special diploma students' critical reading skills.

1.3   Statement of the Problem:

The problem of the present study is the remarkable weakness of the higher studies for education students' EFL critical reading skills which are necessary for them as a requirement for academic levels. It is apparent from the experience of the researcher and the recommendations of the related studies literature. To overcome the problem, the present study suggests a strategy based on Web-Quest to develop EFL critical reading skills for higher studies for education students.

1.4 Research Questions:

The main question of the study is:

What is the effectiveness of using Web-Quest to develop EFL critical reading skills among higher studies for education students?

-The main question necessitates four other sub-questions:

- What are the critical reading skills necessary for higher studies for education students?
- What are the critical reading skills that higher studies for education students already have?
- What are the characteristics of Web-Quests to develop higher studies for education students' critical reading skills?

- What are the effects of using Web-Quest on developing higher studies for education students' critical reading skills?

1.5 Aims of the Study:

The study aimed at achieving the following objectives:

- To determine the EFL critical reading skills necessary for higher studies for education students.
- To determine the EFL critical reading skills that higher studies for education students already have.
- To develop the EFL critical reading skills among higher studies for education students through Web-Quests.

1.6 Hypotheses of the Study:

The study tried to test the following hypotheses:

- There is a statistically significant difference between the mean scores of the pre-test and the post test of the experimental group in favour of the post test results in critical reading skills after implementing the Web-Quest strategy .
- There is a statistically significant difference between the mean scores of the pre-test and the post- test of the experimental group in favour of the post- test results in critical reading skills after implementing the Web-Quest strategy as a whole.

1.7 Definitions of Terms:

-A Web-Quest (Operational Definition):

In this study, the term Web Quest is operationally used to mean the internet-based technological applications in which students follow steps to complete a task on a specific subject or multi-disciplinary subject (Dodge, 2004; 2006).

Critical Reading (Operational Definition):

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

Review of Literature & Related Studies

A- Review of Literature

2.1.1 Web-Quest and its Types:

The model was first developed using the name Web-Quest by Bernie Dodge and Tom March at San Diego State University in 1995. Dodge (1995) classified Web-Quests into two types: long-term and short-term Web-Quests. Long-term Web-Quests are specific idea with in-depth analysis and summative evaluation. The learner can thoroughly analyze information and draw conclusions of the topic he is dealing with. Short-term Web-Quests are concerned with exploring new idea, exploring a new topic, surveying analysis or adapting a technological skill.

2.1.2 How to Build a Web-Quest
- Introduction: It is an attempt to attract the attention of the student to engage the reading process.
- Task: In the first section, they outline the task. The learner should be sure of how the final result should be like.
- Process: It is the steps that the students should take to accomplish their Web-Quest. Learners should survey online the resources the instructor directed them to.
- Evaluation: Students' performance will be marked according to a rubric they are aware of and they refer to from time to time to meet the learning goal.

- Conclusion: The conclusion, gives the teacher and the learners the opportunity to reflect, to check knowledge of the process and summarize their understanding. It is important to encourage them to make connections to other ideas. See Figure (1)

Figure (1) A Diagram of Building a Web-Quest

1. Introduction
5. Conclusion
2. Task
4. Evaluation
3. Process
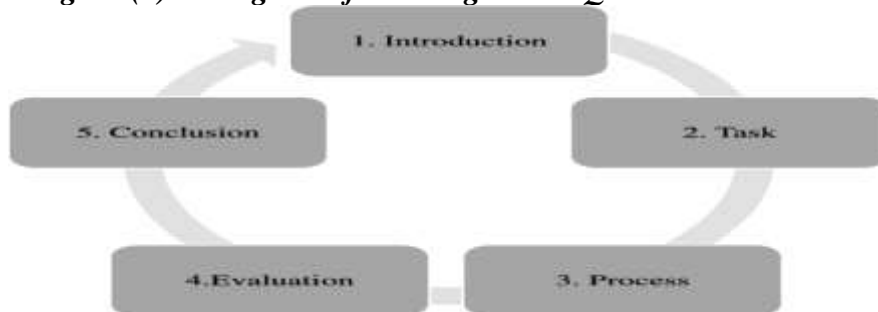
Ebadi and Rahimi (2017) indicated that students have the opportunity to actively cope with their assignments as a prerequisite for their collaborative activities using the web-based activities. That is, teachers have the chance to check students' collaboration, interaction and contribution to learning processes. Familiarity with the social media can enhance interaction among the participants and motivate them to use social media as learning tools. This can work together with the Web-Quest based strategy which, in turn, can have a positive impact on the learners' critical reading skills. Web-Quest can be a didactic approach that encourages students' active participation, stimulates teachers' support and peers to deal with the topic, and permits more free time (Samiei & Ebadi 2021).

2.13 Turning students into classroom explorers

Nowadays, endless new digital opportunities are available to students; so, it is valuable to change them into explorer learners. Understanding the fundamentals of science and technology has become more important than

before for responsibly shaping our world; today and in the future. Success is dependent on finding the right approach. At learning process, it is far too common that facts are simply memorized rather than fully understood and applied. That's why instructors should work with their partners to develop methodic approaches for critical thinking which consequently and actively engage students into critical reading. The concept of Web-Quest strategy is our guiding principle towards the efforts of critical reading.

When practicing critical reading skills using Web-Quests, learning is based on constructivism, as it is supposed to be a systematic cognitive development from the side of students during their project. In the same time, students are able to develop their technological literacy to help in content language learning and making use of social constructivist learning approach, professional development activity and critical reading development task which could be achieved through Web- Quests activities (Luzon, 2002& Laborda, 2016) (See Figure 3).
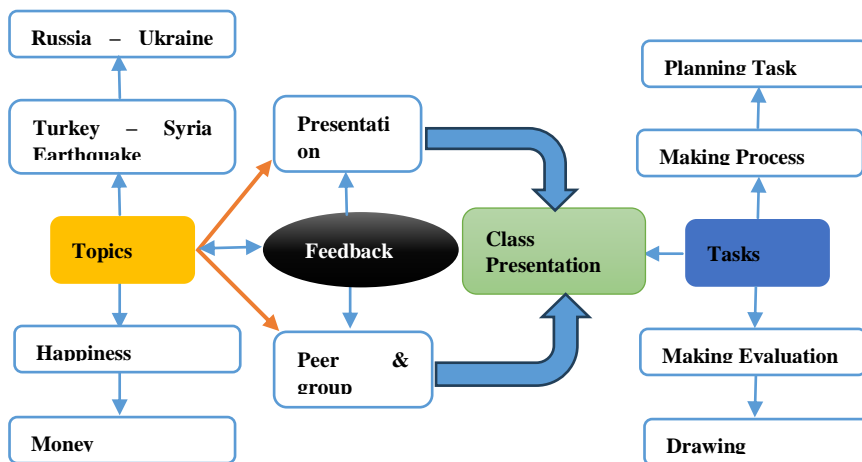

Figure (3): Students' Interaction Using Web-Quest

2.2 Related Studies:

2.2.1 Web-Quest and Critical Reading Studies:

Chhouk & Chusanachoti (2021) discussed the effectiveness of an instructional model incorporating the Web-Quest Learning Approach (WQLA) and Reflective Practice (RP) in improving the critical reading ability of university students. The participants were 11 second-year undergraduate students selected from one private university located in Cambodia. The study was a one-group pretest and posttest design. The study sheds light on the current knowledge, theory, and practice with respect to the effectiveness of the instructional model integrating WQLA and RP in enhancing students' critical reading ability, in terms of making inferences, evaluating information, and drawing conclusions. The results of the study showed that the critical reading ability of the students was enhanced after submitting to the instructional model integrated with the Web- Quests Learning Approach (WQLA) and Reflective Practice (RP).

Samiei & Ebadi (2021) investigated the effects of the Web-Quest-based flipped classroom on the EFL learners' inferential reading comprehension skills using a mixed-methods approach. The sample was of EFL IELTS course participants; a group of intermediate learners attending an IELTS course. T-test and ANOVA were used to analyze the quantitative data. The participants' attitudes towards the Web-Quest-based flipped classroom effects were also explored. The results proved that the Web-Quest-based flipped classroom effectively developed the learners' inferential reading comprehension skills. The findings

revealed the EFL learners' mainly positive attitudes towards the effectiveness of this innovative approach in developing their inferential reading comprehension skills. The study recommended using Web-Quest-based flipped instruction as an efficient and effective alternative approach to traditional classroom practice.

Sedik (2020) main purpose of his study is to measure the effect of using Web-Quest strategy on developing reading comprehension performance for EFL students. The study participants were English majors at the Faculty of Education, October 6 University. The study participants involved only third year English language majors. The administration of the study happened in the academic year 2019- 2020. The participants responded to a reading comprehension test (RCT) through using Web-Quest strategy. Results showed that 45.5% of the study participants were unable to pass the reading comprehension test (RCT) while, 54.5% were able to pass it.

Romero (2018) intended to check visual literacy and the Web-Quest supporting the reading comprehension in 8th grade students of a private school in Kennedy, Bogotá, Colombia. The researcher used the qualitative approach. The instruments used were a questionnaire, a forum and a focus group. The activities were implemented using the Web-Quest integrated with the visual literacy strategy. A questionnaire was designed to determine the type of activities to be used at the time of Web-Quest implementation. Since most of the implementation was virtual, the teacher was not with them to guide them in the activities, but they had to read the instructions carefully and develop the activities autonomously. With the visual aids that were in the Web-Quest, students were more viable

to understand and develop their reading comprehension skills. The results showed that the students reinforced their reading comprehension, not in their totality but they could understand what the readings were about and learn new vocabulary and new tools to work autonomously through using the Web- Quests.

The researcher benefited from related literature and the previous studies in building the program, introducing the models to be followed; the rubrics, attitude scale and tests. For example, the researcher adapted Laborda Web- Quest oral diagram Model (2016) to guide him in critical reading. Khodary (2014) model of Web- Quest shed light on the assignments students should carry out. Suleiman (2023) and Anuar (2017) helped the researcher to adapt a scale attitude that goes with critical reading skills.   Different studies supported in building the tools and models of Web-Quest.

3. Method
3.1 Research design:

The study adopted the quasi-experimental design, using experimental one-group pre-posttest. The experimental one- group students received Web-Quest critical reading activities. A critical reading pre-posttest was given to the group before and after the experiment. The selection of the special diploma students is due to the following reasons:

- Special diploma students are in need of getting TEFL or ILETS certificate for registering in the Master degree. This is a registering prerequisite at Faculty of Graduate studies for Education at Cairo University. So, students were expected to be greatly engaged in this type of study.

- The need of English as an international language of research as most researches are available in this language. Academic reading necessitates the critical reader. This principle is well- understood for researchers.

3.2 Participants:

Participants of the study were post graduate male and female students (n 30) in the academic year 2022-2023. The pre- experimental one-group consisted of 30 special diploma students at Faculty of Graduate Studies for Education at Cairo University. Students' age in the one group ranged from 24 to 45 years old. The pilot study results showed students' poor level of EFL critical reading.

3.3 Instruments:

The following instruments were used in the present study:

- The critical reading sub-skills checklist.
- A critical reading pre-posttest.
- A scoring rubric for post graduate students' critical reading skills.
- A platform to implement the study online.
- Self & peer- assessment checklist.
- A syllabus based on Eclectic approach to support Web-Quest strategy to be taught.

3.3.1 The list of critical reading skills

The list of critical reading sub-skills was developed after reviewing the related studies and the literature of critical reading skills such as Mohammad & Qoura (2021), Watkins (2018), Suleiman (2023), Hendawi (2019), Bedeer

(2017), Abdu (2019), Rafidi, (2020) and Abu Ghlasi (2022). Based on this list, the researcher developed the other instruments used in this study, including the critical reading rubric and pre/post critical reading test. This list was also helpful in preparing the study activities which aimed at developing the critical reading skills included in the list.

3.3.1.1 Aim

This list was developed in order to determine the critical reading skills that were both appropriate and necessary for post graduate students. The list was submitted to a group of specialists in the field of EFL who were requested to:

- Determine whether the critical reading sub-skills were appropriate for the target students.
- Modify the list if needed.

3.3.1.2 Structure of the list

In its initial form, the list was composed of 9 critical reading skills. These skills were rated by the jury members according to a three – point scale: relevant, to some extent relevant and irrelevant.

3.3.1.3 Validity

To establish content validity of the list, it was submitted to a jury committee. The jury committee provided the researcher with several insightful comments and modifications. In general, the jury members adapted the critical reading skills 9 items according to the post-graduate needs. Concerning content, the jury members made modifications on some items. Two of the jury commented on "writing critically" item as there was no

need to write as it is the skill of critical reading. Hence, it was replaced by the item "identifying the fact and opinion". While others commented on the order of the skills according to their importance. The final form of the list, approved by the jury is included in Table (1).

3.3.2 The pre/post reading test:

3.3.2.1 Purpose of the Test:

This test was used to measure post graduate students' critical reading skills. It was used as a pre-posttest to determine the effectiveness of using Web-Quest strategy in developing the critical reading skills of postgraduates.

3.3.2.2 Construction:

The test was constructed in the light of the following:

- 1. The critical reading skills of post graduate students' pre-reading, during reading and post-reading activities.
- 2. The types of some critical reading questions that can be used to test EFL post graduate students' critical reading TEFL or ILETS.
- 3. The previous studies

3.3.2.3 Description:

The final version of the test consisted of two critical reading passages. The first passage included eleven multiple choice questions. The second passage included seven multiple choice questions. Each skill was represented in two questions so, the total number of questions were 18 (see table 2). The two passages were intended to include less ambiguous vocabulary and idioms as possible to attract and motivate students to read and let them concentrate on the critical reading material. In the adapted pre-posttest,

new multiple choice questions were added about the item "Identifying fact and opinion" which replaced the item "Writing critically". The questions were intended to be away from any writing from the side of students as the main objective was to deal with the critical reading skill (according to the recommendations of more than one member of the jury). High relative weight was given to the questions of two items; namely "Identifying the author's opinion" and "Identifying fact and opinion" respectively, for their importance for the critical reader. The reading passages included in the test were intended to be unseen by the students to determine students' actual critical reading skills. The test included nine skills, represented in (18) questions, received 60 marks. The skill "Identifying the author's point of view" represented in questions 11&16 received four marks for each, whereas each of the skills "Making inferences", "Forming opinions", "Identifying cause & effect relationship", "Making prediction", "Drawing conclusions" "Making comparisons" and "Suggesting alternative ideas" represented in questions 1&7, 8&15, 3&14, 4&6 , 2&125 &13 and 10&17 received three marks for each respectively. The eighth skill "Identifying the fact and opinion" represented in questions 9&18 received five marks for each question.

3.3.2.4 Test Validity and Reliability:

3.3.2.4.1 Validity

3.3.2.4.1.1 Content Validity

To measure the test content validity, the test was given to a jury of EFL professors, associate professors and lecturers to validate the test (i.e. the clarity of test questions and its suitability for the students' level and what these

questions aim to measure). They were also asked to add, omit, or modify any question they see to be fit. The test proved to be valid as the jury approved most of the questions and suggested some modifications. The correlation coefficient of the total critical reading skills test was 0.76 at significance level 0.01. Using Cooper's equation, the researcher estimated the correlation coefficient between the score of each skill and the total score of the whole test. Cooper's equation results of the critical reading skills' test validity was 90.77 of the total test.

3.3.2.4.2 Test Reliability

Test reliability was calculated by administering the test on a pilot sample, other than the experimental group at the first week of March 2023; the second semester of the academic year 2022/2023. The researcher used the Cronbach alpha to estimate the reliability of the test. The Cronbach alpha was calculated using the SPSS (V .24) program.

After statistical calculation, it was revealed that the value of the Cronbach alpha was 0.997, which means it is statistically accepted and highly reliable. It is clear that the coefficient reliability of the Cronbach alpha for the test as a whole is (0.997) and the values are < 0.5. This indicates that the whole critical reading skills test and its questions are reliable and can be administered with a high truthfulness. The test items were analyzed using the discrimination and difficulty coefficient for each item which ranged from 90% to 60% and %50 to 20% respectively in most of the test items.

3.3.3 Critical Reading Scoring Rubric:

A critical reading scoring rubric was prepared by the researcher to be used for scoring the critical reading test. It

was submitted to the jury committee for validation. The rubric was proved to be valid as the jury approved most of the criteria. The Cronbach alpha coefficient was employed to estimate the reliability of the scoring critical reading rubric which was 0.893 that is significant at level 0.01. This proved that the scoring critical reading rubric was statistically reliable.

3.3.4 Administration of the pre-test

The researcher pre-tested the one group using the critical reading test to deduce the necessary critical reading skills and skills needed to be developed for the postgraduate students.

3.4 Administration of the suggested experiment:

The main goal of this study was to help postgraduate students to improve their critical reading and enable them to read English critically and effectively. The essential goal was to help the students to practise some more Web-Quest skills for the sake of developing critical reading skill and improving the attitude towards it. The researcher used Piaaza CU Link; https://piazza.com/class/le1tpfe952n6ty Platform named 'Critical Reading Cairo University' with the password 01001194660 to facilitate the learning process. He also used the WhatsApp, the cell phone (when needed) and Microsoft Clipchamp program to record videos and publish the sessions asynchronously.

3.5 Learning Objectives of an Implementation Based on Web-Quest to Develop EFL Critical reading

By the end of this implementation, students are expected to improve their abilities and thoughts to read EFL texts critically, especially the new generations

endanger the explosion of knowledge of different cultures through electronic media, by using Web-Quest strategy. However, they varied among critical reading skills and critical thinking. This program was designed to develop the critical reading skills (See Table 1).

3.5.1. Materials:

The Web-Quest activities made use of different materials such as online PowerPoint slides, surf the internet, online library search, media of current events of the world and other authentic sources.

3.5.2 Sessions of the experiment were as follows:

The program's sessions included the following:

- Identifying the Web-Quest
- Pre- critical reading phase
- Critical reading phase
- Post- critical reading phase

The introductory session was the first step. In this session, the researcher explained what critical reading is, what skills students should develop to improve their critical reading and the nature of the Web-Quest to be used. The first two sessions (beginning of the task); identifying what Web-Quest is, its characteristics, components, types, stages and benefits of implementing a Web-Quest in EFL classrooms choosing a Web-Quest model suitable for each task (Appendix VI). The implementation included the following sessions: 1- One introductory session. 2- Two sessions for Web-Quest design and implementation. 3- Three sessions for identifying critical reading, practising its skills and using critical reading rubric. 4- Five supporting sessions for two more topics; implementing Web-Quest activities and critical reading skills.

3.5.3 Students' material:

The researcher didn't need a handout for students as the activities were available online all the time and rarely used online handout. The activities were in the form of sessions to be practised by the students through the chosen material. The researcher was to carry out the sessions synchronously or asynchronously. However, the study was carried out asynchronously because of the inaccessibility of the internet most of the time. In the same time, the activities were available in Microsoft Word files on the Piaaza Platform. These activities were based on Web-Quest strategy (with its stages; introduction, task, process, evaluation & conclusion) related to the validated critical reading skills (identifying the author's opinion, making inferences, prediction and comparison, forming opinions, identifying cause & effect relationship, drawing conclusions, suggesting alternative ideas and identifying fact and opinion) to enable students to succeed in critical reading.

3.5.4 Assessment during the Sessions

As assessment is essential in the learning process, formative and summative assessments were conducted, home assignment in every session to detect the progress students achieve using Web-Quest, acquaint to points of strength and weakness, plan for the next session and modify the following procedures to deal with the points of weakness. Students' Web-Quest published on Piaaza Platform assisted in assessing students' critical reading progress. Self, peer and teacher evaluation were distinctive during the study.

3.5.5 Administration of post-test:

After conducting the experiment, the subjects of the study were post tested using the critical reading test to reveal the changes in the students' critical reading

performance of the one experimental group. So, the post administration aimed at measuring the effectiveness of using a Web-Quest strategy in developing the postgraduate critical reading skills. After marking the test, the data was treated statistically and findings were discussed and interpreted in the light of the hypotheses of the study.

The first hypothesis indicated that there are statistically significant differences at significance level (0.01) between the mean scores of the experimental group students in the pre-posttest administration of critical reading skills in favor of the posttest. The test was administered and the t-test for the one (experimental) group (Paired Sample t-test) was also administered using the statistical package SPSS for Windows (V.24) to detect the difference significance between the mean scores of students of the experimental group critical reading pre-posttest.

Table (3): Mean Scores, Standard Deviation and t-test for the Significance Difference between the Mean Scores of the Students Sample in the Pre-post Administration in Critical Reading Skills as a Whole.

Group Experimental	N	Pre		post		Df	t	Sig. (2-tailed)
		Mean	SD	Mean	SD			
Total Tests	30	22.27	5.40	44.10	8.28	29	15.39	0.000

Figure 5
Sample Figure of the Pre-post Test Mean Scores as a Whole of the Experimental Group
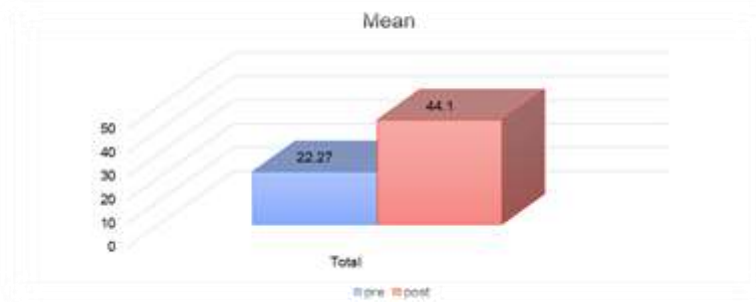
As previously stated, it is clear that there is statistically significant effect of the independent variable (Web-Quest) on the dependent variable (Critical Reading skills) but it didn't indicate the effect size. To detect the effect size of the Web-Quest, the researcher used the equation of the Eta squared η2 depending on t-value that resulted from the comparison between the mean scores of the pre-posttest administration of critical reading.

- From the result of the previous equation, the Cohen's d equals
- Eta Squared (η2) =
- Eta Squared (η2) represents the ratio of the total variance in the variable through changing Eta (η2) to d through using the following equation:
- D = as d is the effect size.

Table (4): The Effect Size of Web-Quest on Developing the Critical Reading Skills

Critical Reading Skills	T	Df	Cohen's d	η	effect size
Identifying the author's point of view	29	4.83	1.79	0.66	Large
Making inferences	29	5.11	1.89	0.68	Large
Forming opinions	29	5.43	2.01	0.71	Large
Making prediction	29	3.57	1.32	0.55	Large
Identifying cause& effect relationship	29	7.45	2.76	0.81	Large
Drawing conclusions	29	8.00	2.97	0.82	Large
Making comparisons	29	3.53	1.31	0.54	Large
Suggesting alternative ideas	29	4.57	1.69	0.64	Large
Identifying the fact and opinion	29	5.10	1.89	0.68	Large

From the table, it is clear that there is statistically significant difference of the effect level of the independent variable (Web-Quest) on the dependent variable (critical

reading skill) as t-value is (15.39) as it is an acceptable value for the first hypothesis. For more knowledge about the effect range of the Web-Quest on critical reading skill, it is clear from the table that the value of effect size (d) reached (.66) : it ranged from (0.55 to 0.88). This refers to the large effect of Web-Quest on developing Critical Reading skill among special diploma students. The researcher relates all results mentioned previously to the benefit of online work represented in Web-Quest strategy.

Note: Cohen suggested that d = 0.2 can be considered a 'small' effect size, 0.5 represents a 'medium' effect size and 0.8 a 'large' effect size.

4.1 Results of the Study

Based on the statistical analysis performed on the data, the following results were reached:

There are statistically significant differences at significance level (0.01) between the mean scores of the experimental group students in the pre-posttest administration of critical reading skills in favor of the posttest. Thus, the first hypothesis was verified.

4.2 Discussion of the Results:

The study aimed to investigate the effectiveness of using Web-Quest among special diploma students to develop EFL critical reading skill through investigating the following main question:

What is the effectiveness of using the Web-Quest strategy to develop EFL critical reading skill among special diploma students?

To answer this question the researcher had to answer the following sub-questions:

- What are the critical reading skills necessary for higher studies for education students?
- What are the critical reading skills that higher studies for education students already have?
- What are the characteristics of Web-Quest to develop higher studies for education students' critical reading skills?
- What are the effects of using Web-Quest on developing higher studies for education students' critical reading skills?

To overcome the study problem and achieve the study aim, the following procedures and instruments were designed by the researcher and used through the study:

- Critical reading sub-skills inventory.
- A critical reading pre-posttest.
- A scoring rubric for post graduate students' critical reading skills.
- A page on Piaaza Platform to implement the study online.
- Participants' attitude scale
- A strategy to be carried out.
- To answer the first, second and third sub-questions, the researcher:
  - ✓ reviewed literature and related studies to determine the EFL critical   reading skills and the characteristics of using Web-Quest,
  - ✓ carried out a pilot study to determine the EFL critical reading skills students already have and implemented the EFL critical reading pretest.
  - ✓ To answer the fourth sub- question, the researcher:

- ✓ designed a syllabus of objectives, content, means of teaching and activities to be taught asynchronously using Web-Quest,
- ✓ implementing a posttest to evaluate the effectiveness of Web-Quest, reporting the results, analyzing them concluding suggestions and recommendations,
- ✓ analyzing the educational situations and obstacles, quantitatively and qualitatively that hindered the researcher and the learners to acquire EFL critical reading skills and
- ✓ using t-test and SPSS V. 24 to conclude the statistical differences and Alpha Cronbach and Spearman to compare results and indicate the difference.

The results of the present study was that the strategy of the Web-Quest was effective in developing EFL critical reading skills of special diploma students. As shown before in chapter four, the statistical analysis results of the mean scores of the pre-administration of the test indicated that the group level was low which may be attributed to the traditional strategies of teaching. In addition, there were significant differences between the mean scores of the experimental group in the pre-posttest in favour of the post test. Therefore, it could be stated that any progress occurred in the performance of the group was attributed to proposed strategy.

Results of this study indicated that using Web-Quest facilitated learning critical reading skills and affected it positively which coincided with the study of Abd Elfatah (2016) that revealed that participants also noted that their own personal use of Web-Quest positively impacted their work by increased ease with interventions and more in-

depth responses. This online exploration showed how students made sense of experiences through Web-Quest and how these activities were followed by conversations they had with their educator positively. The study of Mohammadi (2018) indicated that using engaging technology and techniques along with appropriate assessment strategies is a powerful way of making learning efficient. Web-Quest provides a medium in which learners can receive feedback through interaction and help them notice their weakness and strength.

To sum up, the results came in close lines with the findings of the previous studies of Abu Ghlasi, (2023); Hendawi, 2019; Al-Habsi et. al., (2021); Ali (2019); Khodary& Abd-Allah, (2014) and Anthony et al., (2020), that used modern technology for enhancing critical reading skills. The current study proved Web-Quest generally to be a valuable instrument enhancing personal development, professional growth and practical learning.

The results of the current study was substantiated with those studies of Abdel Latif (2022), Coiro (2017), Bird (2019), Abd Kadir et. al. (2014), Alshaye (2021) and Din (2020) which asserted the importance of critical literacy and teaching critical reading skills. Some of us think that critical reading is only for adults, however critical reading is for all of us. Reading can be therapeutic to unlock critical reading and it allowed for the opportunity for tutors and the students they tutored to deepen their reading processes. The process of reflection which involves critical thinking and problem-solving needs to be assessed, instead of grading the written component only.

Findings of this study agreed with Stetter & Hughes (2017) Romero, (2018) and Zahran (2021) regarding what is common in critical reading in EFL context. It is

noticeable that critical reading is in an area that was underexplored in most academic contexts.

4.3 Conclusion

To conclude, the first hypotheses of the study was verified. After the implementation, it was noticeable that the experimental group students achieved a remarkable progress in their critical reading skills, as compared to their critical reading skills before the implementation. Thus, the findings of the study proved Web-Quest to be an effective strategy for developing the critical reading skills of special diploma students. This was also confirmed in the data collected from the attitude scale survey and focus group interviews which supported the value of Web-Quest.

The results of the current study proved the effectiveness of the suggested Web-Quest strategy in developing the EFL critical reading skills of special diploma students.

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