The Effects of Integrating CALL Approach onStudents'Achievement in reading Comprehension and the related attitude for the 11th gradeStudents in East Jerusalem

Oraib Waari

PhD - Arab American University

Dr. Mohammad Omran

Associate Professor, Arab American University

Abstract

This study aimed at investigatingthe influence of integrating Computer Assisted LanguageLearning (CALL) on improvingthe English reading comprehension skills and the attitudes of the 11th grade student at a secondary school in East Jerusalem. To achieve the objectivesof the study, the researcher utilized the experimental approach with a quasi-experimental design. The study sample represented two literary stream classesof 72 female students. One of the two classes, which included (36 students)was randomly chosen as an experimental group. The other class (36 students) was chosen as a control group.To achieve the most valid and realistic results, the research utilized several aiding tools, such as pre and post-tests, andstructured interview.The data and the findings of the study that were analyzed depending on the SPSS program (T-test) showed the following :- the findings of the study against the research questions indicated no significant difference at a=0.05 between the experimental group and the control group pre-test, while a statically significant improvement was noticed in the reading comprehension posttest results for the benefit of the experimental group(M=) who were treated directly by CALL and the control group (M=) . Furthermore, thequestionnaire results proved good results towards students' attitudes to using CALL in learning reading comprehension. Based on the study findings the researcher recommended the importance of integrating CALL approach as a strategy for teaching other skills such as writing, speaking and listening. Another recommendation was directed to other researchers to conduct further researches on the same subject. The rest of the recommendations were addressed to the Ministry of Education

Keywords: CALL Approach, Student Achievement, Attitude

these skills is to enable students to interact successfully with native and non-native users of English in a variety of social and academic settings.

Besides listening and speaking,reading is considered as an additional tool of communication. People who have no chance to talk with native speakers of the target language can have an access through reading their literature, journals, and then can understand much about their civilization. In this sense, reading is the window through which other cultures can be seen and more general or specific knowledge can be gained (Shang, 2010).

The ultimate aim of reading is to enable users understand what theyread. As a result, there has been an increasing emphasis on the importance of reading comprehension in recent years.Mastering reading comprehension requires the development of new more effective and successful teaching methods. These methods need to considerindividual differences, and their motivationtowards education and learning. To achieve this objective,teachers must diversify their teaching techniquesto suit learners' needs in this modernized world, in

Introduction

People use languages as a mean of communication to express their thoughts, needs, feelings, different ideas and desires. English is one of these languages, forit is not only an international language, but also the spoken language in many countries and the official language in many others.

Learning English is very important, for it is usedwith tourists and foreigners,in reading books and magazines, and for communicating with others.Most countries worldwide consider English as their official language. Many people use it in writing scientific and academic articles and research articles.It is also the language used by international companies for communication and documentations; moreover,most hospitals use itfor medical reports and tests. As stated above, English is an important language as; as a result, it became an indispensableissue to learn it as a second languagein schools, which considerArabic asthe medium of interaction and English is taught as a subject.

To learn English, students must practice fourmain skills namely: listening, reading, speaking and writing. The main goal behindteaching

of students in special education, and the need for teaching methods that encourage students' involvement, such as digital means that can provide stimuli that cannot be provided by the teaching method, the researcherwould like to deepen theknowledge in this field through thiswork.In this study,the researcher intendsto investigate a secondary school located in East Jerusalem, for this school uses a learning method combined with CALL.Moreover, the researcher will examine whether there are differences in achievement of learners who have experiencedthe use ofcombined learning methods (CALL) in school.

Problem of the study:

From the researcher's point of view and experience as an English teacher for many years, the study problem can be seen in students' lack of adequate reading comprehension skills that are vital for them to become successful learners. Students are reluctant to learn reading comprehension because they lack understanding texts due to their poor competence of vocabulary. They are also unable to interpret, deduce, skim and scan the information implied in a text. Such poor comprehension skills limit their chances to participate

which computers play an essential role not only in individuals' daily life, but also in our way of teaching, especially in light of the existence of Corona pandemic.

In this context, computers are becoming an important tool in classroom's environment, with a great significant for what they offer in language learning (Farrah, 2014).

According to Ayyouby& Farrah (2014), computers and internet play a great role in the modern way of life. Undoubtedly, they have affected the way people work, learn, and communicate. Therefore, the great relationship of computer with language learning is obvious.

It should be noted that the rationale for choosing the subject is that the researcher isa teacher who teaches English in methods that are integrated into ICT. The researcher believesthat we are now living in the technological era in all aspects of our lives, including oureducational frameworks. The researcher alsobelieves that in view of the increasing integration of digital and technological means as a teaching tool, there is a need to expand the use of such means in special education frameworks. Given the characteristics

3. What are students' attitudes towards CALL approach in learning?

Hypothesis of the study :

1. First Hypothesis : There are no statistically significant differences at(α = 0.05) between experimental and control groups by pre-testing.

2. Second Hypothesis: There are statistically significant differences at (α = 0.05) between the experimental and control groups, through post-test, for the experimental group

3. Third Hypothesis : There are statistically significant differences at (α = 0.05) between the pre - and post - testing of the experimental group in favor of post - testing.

4. Fourth Hypothesis : There are no statistically significant differences at (α = 0.05) between the pre-test and post-test in the control group.

Purpose of the study

Based on the researcher's experience as a teacher, it is obvious thatstudents prefer technology. It is assumed that the integration of CALL approach that has been subjected to many studies and revealed its effectiveness increases achievement in various subjects. This study would shed light on whether CALL approach

in class.Furthermore, the researcher chose this topic because the educational system nowadays faces obstacles and challenges, and one of them isthe closure of the educational institutions due to Corona pandemic. This situation requires new actions to ensure the quality of education. As a result, the researcher thought of using new strategies in teaching, such as CALL approachto ease the educational process and to turn indoctrination that is used by many teachers into something that is more effective and efficient to help teachers and learners cope with this situation .

Questions of the study:

The aim of the study is to answer the following questions:

1. Does the use of Computer Assisted Language Learning (CALL) have any impact on students' achievements in reading comprehension?

2. Is there any significant difference between the achievements of the group that was taught using CALL-based method and the group that was taught using traditional methods?

also provide students with a better learning environment full of cooperation harmony, and fun away from fear, tension and anxiety.

*Nowadays, most students get bored quickly because they are almost addicted to Internet; they use theircell phones, iPods, and play computer games. As a result, it is important for teachers to vary their teaching methods, such as the integration of CALL approach to grab English learners' attention. Moreover,it is a joyful method that allows everyone to be an important asset who is valuable enough to be heard, and is responsible for his/her and others' learningachievement.

*The researcher hopes to draw the supervisors' attention to the effectiveness of using new methods in the teaching- learning process so that they could call for conducting courses for the teachers to undergo.

* As a researcher and a teacher, I very much hope that the syllabus designers would look at such studies and consider them. Then, they can make any necessary changes, modifications or adjustments to the syllabus in a way that enhances the material and enriches it with more effective activities.

is efficient to improve students' achievement in reading comprehension. It sought to determine whether CALL approach would be more efficient than using the traditional method of teaching and to examine the effectiveness of incrementing students' achievement in reading comprehension via using this approach. Additionally, this study attempts to find if there are any statistical significant differences in the students' results in the reading comprehension test after implementing CALL approach on the experimental group. Finally, to reveal students attitudes towards implementing CALL in their classes.

Significance of the study

This study may be beneficial to many categories of people who are involved in the teaching- learning process. The benefits may be summarized in the following:

* English teachers may be encouraged to implement new strategies and techniques to be utilized in their classes. These methods would help them move away from indoctrination into a joyful atmosphere full of positive interactions among students at various proficiency levels. They will

the experimental and control groups.

2. Chapter Two: Literature Review

Introduction

CALL (Computer Assisted Language Learning) method

What is CALLapproach?

Computer Assisted Language Learning (CALL) refers to any process where learners use a computer to improve their competence in a foreign language. The technology includes not only computers but also smart phones, tablets and MP3 players (Scott&Beadle, 2014).

The main goal of CALL is to find methods for using computers in the process of teaching and learning the language. Therefore, CALL is represented by the use of computer technologies that promote educational learning, including word processing, presentation packages, guided drill and practice, simulation, problem solving, games, multimedia CD_ROM, and internet applications for language learning purposes. (Alhujayla,2019)

Limitations of the study

This study has faced the following limitations:

1. **Topical limitations**: This study examined the impact of using CALL approach to improve 11th grade students' reading comprehension skills and the attitude towardsit ina governmental school based in East Jerusalem.

2. **Human limitations**: This study was conducted on a sample of 72 female students from the 11th grade in a governmental school in East Jerusalem.

3. **Locative limitation:**This study was carried out on one of the governmental schools in East Jerusalem.

4. **Temporal limitations**: This study was conducted in the scholastic year of 2020-2021.

5. **Conceptual limitation** : This study is defined by the procedural definitions provided by the researcher.

6. **Processuallimitation :**This studyused the experimental approach in a quasi - experimental design with both

The review of literature on second language learning has shown a growing interest in computer-assisted language learning and teaching. Several studies have investigated the role of new technological devices in language learning. Advances and increased availability of computers have developed the field of second/foreign language education. In this context, many studies have indicated the effectiveness of CALL on language instruction. They showed that the integration of technology and language instruction has had a tremendous effect on language education(Ghanbari, Shamsoddini, Radmehr 2015)**.**In addition, over the last twenty years,technology has a huge impact on education. With the development of new technologies, one can say that Second language Acquisition (SLA) has embraced Computer-Assisted Language Learning(CALL) as anew and useful tool (Cerozl, 2015).

CALL and its Effect on Education and Motivation

The effectiveness of CALL in improving students' English language skills:-

CALL has an important potential for English language teaching. If it is used properly with clear educational objectives, CALL can interest and motivate learners of English. CALL can increase learners' access toinformation, provide flexibility to instruction and thereby better serve the individual's learning pace, cognitive style and learning strategies. CALL allows learners to control their own learning process and progress. Using effective and suitable software applications, CALL can provide communicative meaningful language learning environments. In addition, good quality and well-designed CALL software can offer a balance of controlled practice and free communicative expression to the learners, including the immediate feedback (Alhujayla,2019).

CALLand Second language Acquisition (SLA)

language learning since it is considered to have a potential for language learning. Many aspects of CALL have proven to be valuable in the teaching of reading skills. For example, students can integrate meaningful and authentic communication into all aspects of language learning curriculum through computer-mediated communication and the internet (Jarvis,2013).

Advantages and limitations of CALL

Baz, Cagatay, Tekdal (2014) indicated that computer based language learning method has several advantages

1. It increases students' motivation to learn because it allows them to surf through different communicative activities, and helps reduce stress and anxiety.

2. CALL programs impose learner to the newest strategies of learning, such as using games, and problem solving skills that

CALL is one of recent educational technologies.Itwas a language learning and teaching approach in which computers were computer used as an instrument for performance, to help students and assess learning material. The invention of Internet, multimedia computing and World Wide Web offered unbelievable enrichment to CALL applications.Through interacting with multimedia programs,users of personal computers became active participants rather than passive participants. Multimedia permitted integration of text, graphics, audio and motion video. Communicating and interacting in real time with natural human speeches and full screen interactive videos were available for users at any time via computers (Adel, .Davoudi,Poufarhad, 2014).

Computer Assisted Language Learning (CALL)

This method explores the role of information and communication technologies in

5962

Communication Technologies)basic competencies that allow them to use the computer.

CALL in Classroom

Using CALL in classroom changes the roles of teachers and learners. On one hand, teachers change their role from thetraditional mode that ises the a frontal manner intoan online one that guides, the integration of new technologies in teaching. They useinternet resources, and activities to help learners adapt to a new technique. Therefore, teachers becamelike an architect whose job is to design the curriculum to suit thelearner' needs. Teachers operate in a supportive role. Since databases of information and content exist in the computer systems, teacher become only a mediator between the electronic content and the student (Hubbard,P. 2016). To do so,teachers must acquire great professionalism and knowledge to be able to managetheir classes professionally.

On the other hand, learners became more involved and highly motivated to learn during classes. They enjoyed learning and felt satisfied with what they learn becausethey are fully make learning more interesting and fun.

3. CALL provides feedback to learners throughimmediate error correction.

4. Using computers in teaching can offer various types of activities with a considerable potential for learning situations.

5. CALL programs not only provide learners with learning new technique in studying a foreign language, but also providethem with new technological skills that can be useful in daily life situations.

In the 5th International Conference EDU-WORLD 2012, Aurora stated some limitations to CALL approach. She mentioned that computerscannothandle unexpected situations due to the limitations of computer's artificial intelligence. Secondly, financial and technical problems. Thirdly, teachers and students need training to acquire ICT (Information and

students' ability to concentrate. It alsoincreases the pleasure and effectiveness. Moreover, it helps on the level ofall other subjects and on the level ofpersonal and professional lives. In the same context, Badr El-Deen (2011) concludes that reading is an essential skill for students who are learning English as a foreign language and the development of good reading abilities will greatly help them progress in other academic areas.

Miller (2014) defines comprehension as an essential part of successfully developing 21stcentury literacy. It is a vital tool for reading in our modern age, a vehicle through which we:

- Gain meaning from the words someone else has constructed.
- Learn something new to confirm something we think.
- Understand others'viewpoint.
- Relax, and escape from the every day's pressures of life

Importance of Comprehension

Reading is the most important skill that needed to be acquired by humans, for it is considered as the mean of communication.Itis one of the cognitive and emotional factor for humans, and the foundation to learn new knowledge and gain new

engaged with something they love. Moreover, computers helped learners become independent and autonomous learner as they choosethe activities and programs that encourage them to explore language, and become active learners rather than passive ones .In addition, using computersis an open space for slow-learners to catch up easily with their colleagues; advanced students can do extra assignments. Learners believed that CALL activities are beneficial, and that "acquiring such knowledge [would help facilitate language learning and academic andprofessional readiness" (Wong, http://www.coe.missouri.edu/~cjw/call/intern.htm).

Reading comprehension

What is reading comprehension?

Reading is the process in which the learner interacts with a text. It involves knowledge of vocabulary, understanding of sentence structure and syntax, and ability to interpret the intentions of the writer (Flowers, 2012).

Abu Shamla (2010) states that reading is the most essential skill needed to acquire knowledge. It develops critical thinking and increases

5964

and out of classroom(Looi&Yusop. 2011).

Improving reading comprehension through CALL

Through interacting with multimedia programs,learners are becoming interactive and dynamic since,computer provides the flexibility in surfing through its websites and access to different topics according to the reader preference .Furthermore, learners get the opportunity to develop, revise and store their information and recall it when needed. Learners can combine visual and oral skills which enable them to effectively utilize the information in all areas of life and develop further competence. Moreover, thedynamic incorporation of computers and language learning has empowered language learners to access and develop various resources and internalize information more easily and meaningfully through personal engagement(Adel, Davoudi, Poufarhad, 2014).

How to integrate reading comprehension through CALL approach

Programs of computer language learning engage students in a number of interesting and

skills, and comprehension is the heart of reading (Chen, Teng, Lee and Kinshuk,2011). Moreover, it has a social value where the humans' culture and social heritage pass from one generation to anotherand from one individual to another.

Reading for comprehension requires more attention than just reading for enjoyment. When a student is learning new information or studying for a test, he/she must be aware of the writer's intentionand meaning. Without having these comprehension skills, a student will struggle in recalling information and understanding concepts (Flowers, 2012).

Reading Comprehension in a Foreign Language

Foreign language reading comprehension is the most important skill required by learners. It plays an essential role in developing students' English skills and learning capacities (Khaki, 2014). From a social constructive view, reading is perceived as a social practice, which provides wide chances for learners to initiate active interaction among learners in

sources. From the researcher's perspective, the challenges are in all the educational frameworks that intend to adopt this method of study.

It should be noted that the integration of technological means in teaching is revolutionary. Naturally, any change brings many fears. Teachers and principals are also human beings, who have their concerns related perhaps to considerations of success / failure, willingness to invest and the mobilization for this change.

2 Previous Studies:

Introduction:

In this chapter, the researcher will be reviewing other researchers' point of views on the effect of using CALL in teaching reading comprehension. In addition, the researcher will assess some other related studies that examined the effect of using CALL method on improving students' achievement and attitudes towards integrating CALL in their classes.

Effects of CALL Model on Developing Learners'Reading Skills

Elradi, Nehad (2013-2014) investigated the effect of CALL approach on developing reading comprehension skills among the 7th

interactive activities meant to enhance reading skills(Davies, & Hewer, 2011). Reading comprehension has remained a neglected language skill in secondary schools in South Asia because teachers teach reading without understanding. Moreover, students consider reading as a boring skill and teachers think it is less important. On the contrary, computers have potential to address these issues at secondary and higher secondary level.

CALL investigated the contribution of information and communication technologies in language learning. It is believed to have future for language learning. Many features of CALL have revealed a great importance in the teaching of reading skills. Forinstance, students can join meaningful and genuine communication into all aspects of language learning skills (Davies & Hewer, 2011).

Summary

The review of literature shows that the subject of digital ICT is a broad subject and includesmany complex challenges. The integration of this subject requires multi-system organization from many

pre –posttest for one semester. After the experiment work was carried out, the result showed that the experimental class obtained better results in reading comprehension because of using CALL approach.

In their study,Melihami and Vaemaghani (2013) investigated the effect of incorporating CALL materials in ESL (English as a Second Language) reading comprehension classrooms. In their research that was published by Atlantis Press, they indicated that using CALL materials on the experimental and control group promotes reading comprehension skills among EFL learners. Moreover, experimental and control group reveled that integrating CALL materials stimulates reading comprehension skills among EFL low advanced students, as well as effective perspectives from most of the students towards using CALL.

BhattiTariq (2013) studied the way in which reading can be improved in schools throughintegrating computers. His study was carried out for one year, and he compared between using CALL approach and an instructed-led class. The researcher divided 9th grade students in a public secondary school

grade students at Gaza Governmental School. She used the experimental approach to achieve the goal of the study on (58) female students who were randomly chosen from Jabalia Girls School.A pre and posttest were designed to fulfill the study's needs. Students were divided into two groups: the experimental group which was taught through integrating CALL approach,and the control group which was taught traditionally. The results of the study was in favor of the experimental group which used CALL approach against the control group which was taught traditionally .Considering its results, the study endorsesthe necessity of implementing CALLapproach in teaching English to improve students' achievement ofEnglish.

Another study examined the effect of CALL approach on reading comprehension was conducted by XianghuLiu, (2015). In a university in Northeastern China, 120 Chinese EFL (English as a Foreign Language)students were randomly divided into two classes (experimental and control). The CET (College English Test) Band Reading Test was conducted toexamine both classes as

teachers, for it increasesand expands the creativity of teachers and learners, who are considered as the agents of change in this world.

Chapter Three Methodology

Introduction:-

In this chapter, the researcher prescribes the strategy and methodology used in conducting the research. It includes an introduction to theresearch design,sample of the study,procedures of the study, instruments of data collection, methods used to analyze data, in addition to the validity and reliability of the instruments.

Study Design:

To achieve the goal of the study thataims at integrating CALL approach in teaching reading comprehension, theresearcher used the experimental approach in a quasi - experimental design with both the experimental and control groups, and by the virtue of using pre and posttest. The experimental group was taught through CALL approach, whereas the control group was taught in the traditional way.A structured interview was carried out with the experimental group tohelpthe researcher gathering

based in Pakistan randomly into two groups. Bothexperimental groups were taught 24 lessons either using CALL or instructor-led method. Pre- and posttests were conducted to measure the improvement of reading skills among the selected students. Although the results indicated that CALL was35% more effective than the traditional instructor-led class, it must be used effectively.

Summary

CALL approach is perceived as a subject with a positive connotation, through which we are exposed to worlds that we did not know before and with immediate availability. Therefore, teachers' knowledge and learners'perceptions and beliefs regarding this subject is essential. Followingup on their impressions and difficulties will improve and advance the assimilation of the subject in the various frameworks. In addition, it is essential to monitor the success of the program and examinethe program's implications for the students who are the main target audience.

From the review of the literature above, the researcher hasthe impression that this issue is very important for both learners and

The participating sample in the current study consistsof (72)11thgradersaged (15-16) from a governmental high school in East Jerusalem. As the pretest indicated its validity towards the level of the students before conducting the experiment, both groups were divided equally into two heterogeneous classes. (36)students in the control group weretaught by their English teacher using the traditional method. The other experimental group, which consisted of (36) students wastaught by the same teacher using a new method of teaching, which is CALL approach for a period of three weeks around 15 classes.

Table (1) :-Sample distributed according to methodology variable.

Methodology	Frequency	Percent
Control	36	50%
Experimental	36	50%
Total	**72**	**100%**

Instrument of the study:

This study was carried out through applying a pre-reading comprehension test for the study sample that consisted of (72) student. After carrying on withthe experiment for three weeks, the researcher implemented a posttest on both the control and experimental

related data to students' attitudes towards using CALL approach in teaching reading comprehension.

The Study

This study attempts to investigate the effect of implementing CALL approachon English reading comprehension achievements on (72) Arab EFL 11th grade students, who were divided into control and experimental groups. The control group consisting of (36 students) was taught in traditional teaching method, while the experimental group (36students)was taught through CALL approach. Subsequently, a pre-test wasconductedbefore the interventions and posttest was administered after 15 lessons of intervention.A structured interview questionnaire was distributed on Google form to the experimental group to examine their attitude after being taught through CALL approach.

Study Population

The population of this study is all the eleventh grade students in governmental secondary schools in Jerusalem for the scholastic year 2020-2021. The population contained around (380) students from the literary streams.

Sample of the study:

5969

The researcher verified the validity of the questionnaire by presenting it to a group of judges whose comments and suggestions were taken into consideration to create the questionnaire, which investigates the students' attitude towards CALL learning model.

groups. In addition, astructured interview on Google Form was submitted to the experimental group to shed light on students'attitudes and feelingstowards integrating CALL in their learning process.

Validity of the instrument:

Table (2): Results of Person Correlation Matrix paragraphs study tool correlation with the total score of the instrument

N	Person correlation	Sig
1	0.788	0.000
2	0.439	70.00
3	0.789	0.000
4	0.495	20.00
5	0.841	0.000
6	0.441	70.00
7	0.678	0.000
8	0.783	0.000
9	0.636	0.000
10	0.586	0.000

To ensure the validity of the test, three experts in the field of teaching English as a foreign language at Bethlehem University and Al-qasimi college reviewed the test. The items in the test were multiple choice questions and closed ended questions. A posttest (same as the pretest) was given to both groups at the end of the research period.

Reliability of the Instruments: -The researcher used Cronbach Alpha to determine the reliability of the instruments as it is clear from table number (3):

Table (3):Results of (Cronbach Alpha):

	No. of cases	No. of items	Cronbach Alpha
Total degree	36	10	0.83

Reliability has been verified tool study examined the internal consistency of the paragraphs of the tool calculates the Cronbach alpha coefficient (Cronbach Alpha) on the total study sample as the value of consistency (0.83). Thus, the tool has a very good degree of consistency. That means if the questionnaire was distributed again it should give same or near results .

Variables of the study :

The study included the following :

-Dependent Variable	Students' reading comprehension skills.
Independent Variables	CALL approach
Moderator Variables	Female Students
Academic Stream	Literary

planfor teaching reading comprehension units..At the end of the experiment, a posttest was conducted on both groups; the results of the posttest will be used as data for the study.

Structured interview

The structured interview was designed to shed light on the students' attitudes towards CALL approach. A short questionnaire was given to students in the experimental group at the end of the experiment.(See Appendix B). The

The Pre-Posttest

The study aimed at finding theeffectiveness and students'attitudes after implementing CALLapproach with the experimental group. To achieve the goal of the study, a pre-test was carried out on both groups at the beginning of the experiment.It is worth mentioning here that only the experimental group was treated by implementing CALL method through activities prepared by the researcher in form of a teacher guide and a lesson

5971

earlier, the researcher taught both groups.Firstly, the researcher designed the pre and posttest that were checked by a jury of experts in the field of teaching English as a foreign language. The questions were prepared in a manner that could test students' ability in understanding reading comprehension.A table of specification was designed to serve the purpose (see Appendix 4)which is to ensure that fair and representative samples of questions appear on the test. Secondly, the researcher designed a rubric to evaluate students. Thirdly, a lesson plan was designed to be used during theexperiment with the 36 students in the experimental group, while the control group, which consists of36 students, was taught in the traditional way.Finally,the questions of the interview were cross-validated against the researcher study questions.All of these steps were considered to ensure that data collected wouldhelp the researcher in his study.

Planning for CALL Classroom

This stage illustrates lesson procedure that is based on using CALL to improve reading comprehension skills. It depended on using the NearpodStrategy as a tool to explain

questionnaire consisted of ten questions focusing on students' perception,attitudes, feelings and opinions concerning their new learning experience after implementing CALL approach.

The researcher chose these instruments believing that they could be reliable and credible enough. As for the pre-test, it helped the researcher to ensure that the sample of the study is homogeneous.

The questionnairehelped the researcher in clarifying students' reactions and attitudes towards using new method.

To sum up, the tools that were used to collect data were:

1. Pre and posttest (seeappendix 1).
2. A questionnaire (see appendix 2).
3. Table of specification (see appendix 3)
4. Lesson plan(see appendix 4).
5. Design unit using CALL approach (see appendix 5).

Procedures of Data Collection and StatisticalAnalysis:

The study was implemented at a secondary girls' school based in EastJerusalem fromthe 10th of January until the 12th of February2020-2021, which makes up a total duration of three to four weeks. As mentioned

degrees, neutral wasgiven 3 degrees, disagree wasgiven 2 degrees, and the strongly disagree answer was given 1degree.Therefore, the higher the degree is the higher the students' attitude towards CALL approach in learning is going to be. The data has been statistically processed, by extracting the numbers, the percentages, the averages, and the standard deviations, T-test, (Pearson Correlation), and (Cronbach Alpha) byusing the Computer with Statistical Packages for Social Sciences (SPSS).The results indicated that all paragraphs correlation values with total degree of the instrument are statistically significant. This indicates that the internal consistency of the paragraphs of the tool share together the measurement of the students' attitude towards CALL approach in learning.

Findings Related to the Questions of the study

The first question:

Does the use of Computer AssistedLanguage Learning (CALL) have any impact on students' achievements in reading comprehension?

Unit Two and Three from the English for Palestine Reading plus. The supervisor of English language at the school with the help of the researcher prepared and organizedthe lessons, and the researcher, who is an English teacher for many years at the same school, conducted the experiment.

Summary

In chapter three, the researcher presented the methodology and procedures used to achieve the purpose of the study.

Chapter Four: Findings

Introduction

In this chapter, the researcher demonstrates the findings of the research and the results of the test to investigate the influence and attitudes of integrating CALL approach in improving the 11thgrade students' reading comprehension skills in a governmental school in East Jerusalem.

Statistical treatment

After collecting the study data, the researcher reviewed it in preparation to be statically analyzed.It hasbeen given specific figures to transfer the answers from being verbal into digital.Theanswer strongly agree wasgiven 5 degrees, agree wasgiven 4

standard deviations, as shown in table number (4)

To answer this question, the researcher analyzed the numbers, means and the

Table (4):Means and standard deviations

	Number	Minimum	Maximum	Mean	Standard Deviation
Traditional method pre test	36	17	49	33.00	8.60
Traditional method post test	36	20	50	33.97	8.25
Experimental pre test	36	20	48	34.19	8.37
Experimental post test	36	25	50	38.33	7.56

We used (T-test) to test check whetherthere is any significant difference between the achievements of the group that was taught using CALL–based method and the group that was taught using traditional methods.

The results of (T-test) as shown in table (5) presents the differences between the achievements of the group that was taught using CALL–based method and the group that was taught using traditional methods.

As shown inthe previous table, the use of (CALL) has an influence onthe students' achievements in reading comprehension, for it is clear from the mean of the posttest, whichwas (38.33).

The second question:

Is there any significant difference between the achievements of the group that was taught using CALL–based method and the group that was taught using traditional methods?

Way	Number	Mean	Std. Deviation	DF	T	Sig
Traditional methods	36	33.97	8.25	70	-2.338	0.022
CALL–based method	36	38.33	7.56			

After teaching both groups for nearly fourweeks, the researcher gathered feedback from students who were taught through CALL about their attitudes, feelings, impressions and experience.

To answer this question, the means and standard deviations were analyzed to find out the results that are shown in table (6).

Means and standard deviations for the questions of the study organized from higher to lower according tothe importance

The results of analysis in the table above indicated that there were significant differences at α=0.05 forthe achievements of the group that was taught using CALL based method and the group that was taught using traditional methods. The differences are in favor of CALL based method with meanof (38.33), inverses the traditional methods with mean of (33.97).

The third question:

What are students attitudes towards CALL approach in learning ?

		Statement	Mean	Std. Deviation	Degree
Q8		I think that my experience in using CALL was effective/ motivating / engaging	4.56	.690	High
Q5		I have been excited when the teacher used a new method in teaching	4.53	.770	High
Q3		I think using CALL approach simplified my learning process	4.50	.690	High
Q10		I feel using CALL approach helped me in mastering what I learnt effectively and efficiently	4.50	.730	High
Q2		I think CALL approach motivated me in learning reading comprehension	4.44	.600	High
Q7		I think that learning through CALL is better than learning in	4.39	-.830	High

5975

	the traditional way			
Q9	I think teachers should use CALL approach in other topics or subjects	4.36	.960	High
Q6	I think using CALL approach motivated me to participate more in classroom	4.33	.820	High
Q1	I was excited to using a new method (CALL approach) in classroom	4.33	1.04	High
Q4	I think using CALL approach focused on me as a learner	4.14	1.04	High
	Total degree	4.40	0.53	High

As shown from the table above, students' attitude towards CALL approach in learning was highwith a mean of(4.40). Q8 **:**I think that my experience in using CALL was effective/ motivating / engaging)scored amean of (4.56) which got the highest score. The lowest score was to Q4: I think using CALL approach focused on me as a learner which scored a mean of (4,14).

Findings Related to the Hypothesis

The first hypothesis:

There are no statistically significant difference α=0.05 between experimental and control groups by pre – testing.

We used (t-test) to test if there is any significant differenceα=0.05 between experimental and control groups by pre – testing

Table (7)

The results of (t-test) for the differencesα=0.05 between experimental and control groups by pre – testing

Group	Number	Mean	Std. Deviation	DF	T	Sig
experimental	36	34.19	8.37	70	0.597	0.553
Control	36	33.00	8.60			

The results of analysis in the table above indicated that there were no significant differences at α=0.05 betweenexperimental and control groups by pre – testing. Where the general rates of the experimental group was (34.19) and the control group was (33.00).These differences in rate between the two groups are statically insignificant .

The second hypothesis:

There are statistically significant differences α=0.05 between the experimental and control groups, through posttest.

We used (t-test) to test if there is any significant differences α=0.05 between the experimental and control groups, through posttest

Table (8)

The results of (t-test) for the differences significant differences α=0.05 between the experimental and control groups, through posttest

Group	Number	Mean	Std. Deviation	DF	T	Sig
experimental	36	38.33	7.56	70	2.338	0.022
Control	36	33.97	8.25			

The third hypothesis:

There are statistically significant differences α=0.05 between the pre- and post- testing of the experimental group.

We used (t-test) to test if there is any significant differences α=0.05 between the pre- and post- testing of the experimental group

The results of analysis in the table above indicated that there were significant differences at α=0.05 between the experimental and control groups, through posttest. The differences were in favor of experimental group with mean (38.33), inverses of control group with mean (33.97).

5977

Table (9)

The results of (t-test) for the differences significant differences α=0.05   between the pre- and post- testing of the experimental group

experimentalgroup	Number	Mean	Std. Deviation	DF	T	Sig
Pre	36	34.19	8.37	70	-2.200	0.031
Post	36	38.33	7.56			

The results of analysis in the table above indicated that there were significant differences at α=0.05 between the pre- and post- testing of the experimental group. The differenceswere in favor of the posttest for the experimental group with mean (38.33), inverses of pre group with mean (34.19).

The fourth hypothesis:

There are no statistically significant differences α=0.05   between the pre- and post- test in the control group.

We used (t-test) to test if there is any significant differences α=0.05   between the pre- and post- test in the control group

Table (10)

The results of (t-test) for the differences significant differences α=0.05   between the pre- and post- test in the control group

Control group	Number	Mean	Std. Deviation	DF	T	Sig
Pre	36	33.00	8.60	70	-0.489	0.626
Post	36	33.97	8.25			

6.4 Summary

The current study investigated the effect and attitudes of using CALL approach in teaching reading comprehension. The T-test statistical analysis revealed that using a new

The results of analysis in the table above indicated that there were no significant differences at α=0.05 between the pre- and post- test in the control group.

5978

that the active integration of computers in language learning gives language learners the ability to improve and develop different resources and understand information more easily through personal participation.

.

In addition, the results showed a statistically significant improvement in the reading comprehensionrecognized in the experimental participants after twenty lessonsguided through CALL. The results of T-tests concerning the post-test also indicated that the experimental group who were treated directly byCALL proved better results than the control group who were taught through the traditional way. Thus, the findings suggest that using computer in teaching reading comprehension is beneficial for learners.

Furthermore, this study indicated that students in the experimental group had higher scores in answering the posttestthis inducted that the performance of the experimental group has improved in different levels, such as thinking skills,analyzing, inference and understanding what they read.Therefore, it is obvious that after integrating CALL technology, there is a good effect on improving students'

model in teaching had a good impact on students' achievements in reading comprehension. Moreover, students who participated in this experiment liked learning in this way and had positive attitudes towards CALL model.

Chapter Five:Discussion, conclusion and recommendations.

7.1 Introduction

This discussion shows the result of implementing CALL techniques in the learning process and its positive impact on the students' learning experience. In addition,some notes and recommendations for future studies will be proposedto teachers, school principals and the Ministry of Education.

7.2 Discussion of the results

Looking at the theoretical background and comparing it with the findings against the questions gives the researcher a good idea on the rate of success of the research.The results showedan increase in the achievement of the experimental group in reading comprehension compared to the control group.These results go along withAdel, Davoudi, &Poufarhad (2014) study, in which they declared

5979

It was noted that during the study, some students in the control group felt embarrassed oranxious to give wrong answers to questions in front of the whole class, the matter that prevented them from participating. Usingdifferent CALL techniques provided a safeatmosphere, and learnersfelt more secure, concentrated, and willingto participate, the issue that affected their achievement positively.

Another important point is that the results of the questionnaire has tested thoroughly. This means that CALL has proved to be much more interesting, attracting and engaging, in contrast to the traditional learning methods, which are considered to demotivating, exhausting and boringfor the learners. This point matches Dina &Ciornie's (2013) claims, when they believed that CALL is a motivating tool by which students can experience a lot of funny games and communicative activities; and they can reduce stress and boredom.

To conclude, the researcher can state that the study has succeeded in providing enough evidence to prove the efficacy of CALLmethod and

achievements in reading comprehension. These results support the claim that CALL technology could influence students' achievements positively. Moreover these results are similar to Elradii explanations (2014); who stated that computers can play a significant and extensive role in improving the reading skills.

The resultsin this study are in alignment with the findings of Al-Udaini (2011) study in Gazza. It showed that the computerized program was effective in developing the reading comprehension skills for 11[th]graders.

Likewise, according to a study done byAdel, .Davoudi,Poufarhad,(2014), when teachers integrate CALL technology, the text can be shown in a different way from an ordinary printed one. The text can be presented with animation and sound, which makes reading more enjoyable. Moreover, teachers can design and create (with the assistance of technology experts) different computer applications that help students engage in the learning process easily. These applications can provide audiovisual and clear texts thatmotivated learners to fully engage in the experiment .

2- Focus on the variety of techniques that CALL provides to help learners overcome their fear of learning a foreign language.

3- Do not sticktothe past and its outdated methods, and they have to be creative, open-minded to using new strategies and techniques that help learners achieve their goal in learning process and this modularized world.

4- Be positive towards using this techniqueand advise other teachers to use different techniques in teaching different subjects.

Recommendations for Researchers:

1- In light of the study findings, the researcher advises other researchers to conduct similar studies to show the extent of CALL influence on developing other skills such as listening, writing and speaking .

2- Future studiesare advised to be conducted on the influence of gender in using CALL approach.

tocreate a solid ground for future studies.

Recommendations:

Based on the above interpretations, the researcher presents some of the following recommendationsforstudents, teachers, researchers and the Ministry of Education

Recommendations for students:

1- Students should be encouraged to use new technological instruments in learning process, and they should not beintimated by usingnew technological applications that aid the learning process.

2- They need to tryadapting to the changing environments in schools since the aim is for the benefits of our future generations.

3- Give feedback after using the new technological approach to help teachers improve it to serve the learners'needs .

Recommendations for Teachers: They should

1- Encourage other teachers to try out the new approaches for teaching.

References

Abo Oda, A. (2010). The Effectiveness of Computer-Based Learning on Developing the 4th Graders' English Language Achievement in Gaza UNRWA Schools. M.ED. thesis. Al Azhar University-Gaza. Retrieved from:

http://www.alazhar.edu.ps/Library//lib_resulta.asp?ts11=??&id=35980

Abu Shamla(2010) The Effectiveness of a Suggested Program Based on Prior Knowledge to Develop Eighth Graders' English Reading Comprehension Skills. MA thesis. Islamic University of Gaza. Available: elibrary.iugaza.edu.ps

Adel, S. Davoudi ,M. Poourfarhad,M. (2014). Enhancing Reading Comprehension and Motivation by Using a Model of Multimedia (CALL) on Post Intermediate EFL Learners. Publication at:

https://www.researchgate.net/publication/303812611

Alhujaylan , H. (2019   ) An Assessment of the Effectiveness of CALL in Teaching English Language Writing Skills in Saudi Arabia. Arab

3- The researcher advises other researchers to conduct more studies that are experimental over a longer period. This helps to give more reliable and general results.

Recommendations for the Ministry of Education

1. The decision makers in the Ministry of Education are advised to hold training courses and workshops for teachers to train them master using different technological tools in teaching.

2. The decision makers in the Ministry of Education should provide access to computers and stable internet connection in schools to enable teachers and students to use technological methods effectively and efficiently.

3. The researcher advises decision makers in the Ministry of Education to utilize platformsthat provide virtual classrooms environment to make the learning experience smoother and reachable for both teachers and learners to communicate.

Learning . Volume 17, Number 2 .Iqra University, Karachi, Pakistan.

Baz, Çagatay;F&Tekdal (2014)Evaluation of Computer Based Foreign Language Learning Software by Teachers and Students. Turkish Online Journal of Educational Technology - TOJET, v13 n2 p71-78

Brandenberg, Denise.(2012)."What are Some Reading Comprehension Problems in the Classroom?".E How contributor. Web. http://www.ehow.com/list_5868988_reading-comprehension-problems-classroom_.html

Cerezo,l . (2015)Theoretical approaches to CALL research: Toward a psycholinguistic perspective. American University Washington D.C.p,26

Chen, N.S., Teng, C.E., & Lee, C.H. (2011). Augmenting paper-based reading activity with 14 direct access to digital materials and scaffolded questioning. Computers & Education, 57 (2), 1705 – 1715. doi: 10.1016/j.compedu.2011.03.013 Available:
www.elsevier.com/locate/compedu

Davies G. & Hewer S. (2011) Introduction to new technologies and

World English Journal (AWEJ) . Pp. 18 -27 DOI: https://dx.doi.org/10.24093/awej/call5.2

Alotaibi, Nouf Ali, "Teaching English as a Foreign Language: A Multicultural Perspective" (2015).All Graduate Plan B and other Reports Paper 677..

Al Udaini, A. (2011). The Effect of a Computerized Program on Developing 9thGraders' Reading Comprehension Skills and their Attitudes towards Reading

in Palestine. Published Master Thesis. The Islamic University – Gaza

Aurora – Tatiana, D, Ciornei ,S. (2012).The Advantages and Disadvantages of Computer Assisted Language Learning and Teaching for Foreign Languages. Procedia - Social and Behavioral Sciences 76 (2013) 248 – 252 online at www.sciencedirect.com

Badr El-Deen, Z.(2009). The Effectiveness of Assisted Extensive Reading onDeveloping Reading Comprehension Strategies for Ninth Graders in Gaza

Bhatti , T .(2013).Teaching Reading through Computer-Assisted Language

Farrah ,M&Ayyoub (2014) The Effectiveness of CALL in the Palestinian Schools. Hebron University No.1 Arab world English Journal (AWEJ, No.1Pp-30-54

Farrah, M.&Tushyeh, H. (2010). Enhancing the English reading and writing skills of Palestinian English majors by using CALL . Hebron University Research Journal .5,(2), 259-282.

Flowers, Debbie.(2012) "What is Comprehension Reading". Web.

http://www.ehow.com/about_6625410 _comprehension-reading_.html

Ghanbari ,N. Shamsoddini, M,R, &Radmehr, A,(2015). The effect of CALL on vocabulary learning and reading comprehension of Iranian EFL learners. IOSR Journal of Research & Method in Education …

Hubbard, P. & Levy, M. (2016). "Theory in Computer Assisted Language Learning Research and Practice." In F. Farr & L. Murray

how they can contribute to language learning and teaching. Module 1.1 in Davies G. (ed.) Information and Communications Technology for Language Teachers (ICT4LT), Slough, Thames Valley University.

Elradii, N.(2014). The Effect of CALL on Developing Reading Comprehension Skills among the Seventh Graders at Gaza Governorate Schools.

EsmaeiliFard, H.,&Nabifar, N.(2011).The Effect of Computer-Assisted Language Learning (CALL) on Reading Comprehension in Iranian EFL Context. Department of English Language, Urmia Branch, Islamic Azad University, Urmia, Iran. Department of English Language, Tabriz Branch, Islamic Azad university, Tabriz, Iran

Fang, L. (2010) Using Multimedia To Motivate EFL Students' Interest In English Language Learning. MA thesis. University of Wisconsin Platteville

Fareh, S. (2010). Challenges of teaching English in the Arab world: Why can't EFL programs deliver as expected?. Procedia-Social and Behavioral Sciences, 2(2), 3600-3604.

Students" (2013).Doctoral Dissertations. Paper 62.

Looi, C.Y., &Yusop, F.D. (2011). Potential use of social networking tool to assist reading comprehension: Implications for practice and future research. JurnalPendidikan 31(1),189–201. Retrieved from https://umexpert.um.edu.my/file/public ation/ 00006651_78950.pdf.

McEnery A., & Wilson A. (2011) Corpus linguistics. Module 3.4 in Davies G. (ed.) Information and Communications Technology for Language Teachers (ICT4LT), Slough, Thames Valley University. Available: http://www.ict4lt.org/en/.

Miller. (2014). The Simplicity and Complexity of Reading Comprehension International Journal of Business and Social Science Vol. 7, No. 6

Miller, C.P. (2015). What is comprehension. Retrieved from http://literacyconections.com/WhaIsCo mprehension.php.

Meihami,M&Varmaghani,Z. (2013) "The Effect of Integrating Computer-Assisted Language Learning Materials In L2 Reading Comprehension

(Eds.) Routledge Handbook of Language Learning and Technology. New York: Routledge.

Indrawati, E. F.(2008). Advantages and Disadvantages of CALL(Computer Assisted language Learning). Retrieved from: http://efidrew.wordpress.com/20 08/08/01/assignment- 4-article-on-call/

Jarvis ,H, (2013) .Computer Assisted Language learning CALL to Mobile Assisted Language Use,MALU. University of Salford, UK. Volume 16,No 4.

Kaplan, A., &Yahia, Y. (in press/2017). High school students' academic causal attributions in the cultural-political context of the Arab school system in Israel. Intercultural Education, 28(1).

Khaki, (2014).Improving Reading Comprehension in a Foreign Language: Strategic Reader. The Reading Matrix © 2014 Volume 14, Number 2.

Lencioni, Gina M., "The Effects of Explicit Reading Strategy Instruction and Cooperative Learning on Reading Comprehension in Fourth Grade

learning. Journal of Research in Reading, 37(2), 138-158.

Scott & Beadle,(2014) Improving the Effectiveness of Language Learning . CLIL and Computer assisted language learning . ICF GHK Watling House 33, Cannon St London EC1R 5BL

Shang, H. F. (2010). Reading strategy use, self-efficacy and EFL reading comprehension. Asian EFL Journal, 12(2), 18-42.

SolimanAwad . 2020 the effect of a computerized program on develpoing ninth graders' reading comprehension and their attitudes towards reading Australian college of Kuwait Tabassum, M. ; Parveen, S.(2013). A Study on Perceptions of EFL Teachers on

Efficacy of CALL in Pakistan .Retrieved from: www.languageinindia.com

Ugochukwu C. Okonkwo (2011). "Computer Assisted Language Learning (CALL) Software: Evaluation of its Influence in a Language Learning Process". Vol 12,No 1. Available on: DOI: http://dx.doi.org/10.4314/uja h.v12i1.4

Classroom", International Letters of Social and Humanistic Sciences, Vol. 9 . PP 49-58 .

Pan, C. Y., & Wu, H. Y. (2013).The cooperative learning effects on English reading comprehension and learning motivation of EFL freshmen. English Language Teaching, 6(5), 13.

Park, H.; and Kim, D. (2011) Reading-strategy use by English as a second language learners in online reading tasks. [Online] Computers & Education 57 (2011) 2156–2166. University of South Florida. Available: www.elsevier.com/locate/compedu

Philip, M.; Jackson, T. and Dave,W. (2011) .The Effect of Computer-Assisted

Instruction on Student's Attitudes and Achievement in Matrices and Transformations in Secondary Schools in UasinGishu District, Kenya. [Online] International Journal of Curriculum and Instruction Vol. 1(1), pp. 53 - 62. Available:http://www.muk.ac.ke/ijci/

Rojas-Drummond, S., Mazón, N., Littleton, K., &Vélez, M. (2014).Developing reading comprehension through collaborative

Wong, Chi James. "Integrating CALL into an ESL Reading & Writing Class". http://www.coe.missouri.edu/~cjw/call/intern.htm

XianghuLiu , (2015).The Effectiveness of Using CALL Environment on Reading Skills of English. College of Foreign Languages, Bohai University, Jinzhou, 121013, China.

Yossuke, Y. (2011). Definition of Reading Comprehension. Available on. http://yoyoii.blogspot.com/2011/06/definition-reading-comprehension.html

Zuo, W. (2011).The effects of cooperative learning on improving college students' reading comprehension. Theory and Practice in Language Studies, 1(8), 986-989.