The Effect of Using CALLA Instruction Strategies on 9th Grade Students' Writing Achievement and Satisfaction

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Abstract

This study aims to investigate the effect of using CALLA (Cognitive Academic Language Learning Approach)instruction strategies on 9th grade students' achievement and their satisfaction in learning by these strategies, and how are they influenced by certain strategies that are used in this research such as: visualizing and selective attention. The study aim is to explore the effect of using CALLA instruction strategies on 9th grade students' writing achievement and satisfaction in Mafraq city.   The researcher used a quasi-experimental design, the participants in this study were assigned randomly into four group: two experimental groups totaling (15) students in each and two control groups totaling (15) students in each. The control groups (30 students) studied the writing traditionally, while the experimental groups (30 students) studied the writing through CALLA. A pre-test was administered to the groups to make sure that there were no significant differences between their performances in writing achievement and satisfaction achievement scale.The findings of the study showed that there are significant statistical differences at the level of (α =0.05) attributed to the method as (f) value totaled 55.395 with a significance of 0.000 in favor of the experimental groups with no significant statistical differences attributed to gender or interaction between gender and method. Moreover, there are significant statistical differences at the level of (α =0.05) attributed to the method in wiring achievement satisfaction as (f) value totaled 206.501 with a significance of 0.000 in favor of the experimental groups with no significant statistical differences attributed to gender or interaction between gender and method.Based on the findings of the study the researcher presented several recommendations and implications.
Keywords: CALLA Instruction Strategies. Writing. Achievement. Satisfaction. 9th grade.

Introduction

Writing in the broad sense is a process of producing thoughts through several metacognitive processes. These thoughts need to be transferred into an external symbols that can be understood by others (Chayaningati, 2012).

Moreover, Writing is one of those skills that students should master so before they start mastering this skill they need to know what to write and to whom they write –purpose and audience- and once they know the purpose the form will become obvious (Al-Jarf, 2000). Explaining writing genres for students makes it easy for them to start writing. Descriptive, argumentative, narrative is listed under genre which students can use in writing paragraphs (Sullivan and Pratt, 1996).

In this context, teachers must use effective teaching methods that may enhance students writing skills as well as their satisfaction and enjoyment while writing. Among those strategies there is the Cognitive Academic Learning Approach (CALLA) which was developed in 1986 to improve students achievement in language as a whole (Chamot and O'Malley, 1994). This approach was proved to be effective in teaching language as it This model does not aim to teach all the topics of a specific course, but rather teaching several topics in detail (Chamot and El-Dinary, 1999, p. 321).

Cognitive theories indicate that most information is stored in long-term memory as either declarative knowledge (what we can declare) or procedural knowledge (what we know how to do). Declarative knowledge is learned best by elaboration, in which new information is linked to existing information or schemata, and by building on previous knowledge. "Cognitive theory indicates that the greater linkages and pathways to existing memory frameworks will lead to enhanced learning (Macaro, 2003).

Moreover, learners retain the important information in a suitable context and reflect on the success of their learning efforts. During this process of learning, cognitive theories of learning differentiate between three functions in memory. Long-term memory is used to store information derived from personal experience and education, short-term memory is used to remember information that is relatively unimportant (i.e. to retain more than a few moments or is easily forgotten); and working memory is memory in which information is manipulated (Macaro, 2003).

Chamot & O'Malley (1994: 17) confirmed that most of the stored knowledge either a declarative knowledge or procedural knowledge. The first is learned best by elaboration, in which new information is linked to existing information or schemata, and by building on previous knowledge. "Cognitive theory indicates that the greater linkages and pathways to existing memory frameworks will lead to enhanced learning and recall. On the other hand, the preferred method of learning procedural knowledge is by practicing complete and meaningful components of complex cognitive procedures. When this complex cognitive process becomes proceduralized, learners can use the knowledge gained rapidly with a minimum of errors and without awareness of the many

steps and decisions made while it is being executed.

Therefore, This study aims to investigate the effect of using CALLA (Cognitive Academic Language Learning Approach) instruction strategies on 9th grade students' achievement and their satisfaction in learning by these strategies, and how are they influenced by certain strategies that will be used in this research such as: visualizing and selective attention.

This study will take place in Mafraq secondary school students, and there will be four groups the first is controlled and, and the other three groups will be experimental. The controlled group will be taught traditionally, the second group will be taught by visualizing, the third group will be taught by using selective attention and the fourth group will be taught by both strategies visualizing and selective attention.

Statement of the Problem

The cognitive Academic language Approach (CALLA) is a teaching method based on the cognitive theory, integrating the content with certain learning strategies to ensure the quality of instruction and enhance students' achievement (Chamot and O'mally.1986).

Theoretically based on cognitive learning theory, CALLA focuses more on learning rather than teaching. It is clearly underscored that teachers can learn how to teach better by understanding how students learn (Chamot & O'Malley, 1994, p. 19). The model consists of three salient elements (Chamot & O'Malley, 1994, pp. 10-12): content topics, improving academic language skills, and teaching of language learning strategies. Depending on the level of students, content subjects can be chosen among mathematics, science, social studies, and literature. Therefore, The statement of purpose of this study is represented in answering the following research question (What is The effect of using CALLA instruction strategies on 9th grade students' writing achievement and satisfaction in Mafraq Educational Directorate)?

Study Objectives

The study aim is to explore the effect of using CALLA instruction strategies on 9th grade students' writing achievement and satisfaction in Mafraq city.

Study Questions

The study will seek to answer the following questions:

Q1: Are there any statistical significant differences at ($\alpha \leq 0.05$) in ninth grade students' achievement in writing due to the teaching method (CALLA Traditional method), Gender and interaction between procedure and gender?

Q2: Are there any statistical significant differences at ($\alpha \leq 0.05$) in ninth grade students' achievement satisfaction due to the teaching method (CALLA, Traditional method). Gender and interaction between procedure and gender?

Study Hypotheses

1. There are statistically significant differences at ($\alpha \leq 0.05$) in the achievement level in writing learning in the post test between the students of the experimental group (CALLA) and students in the control group.

2. There are statistically significant differences at ($\alpha \leq 0.05$) in the achievement satisfaction in writing learning in the post test between the students of the experimental group (CALLA) and students in the control group

3. There are statistically significant differences at ($\alpha \leq 0.05$) in the achievement in writing learning in the post test between the students of the experimental group (CALLA) attributed to gender (male, female).

4. There are statistically significant differences at ($\alpha \leq 0.05$) in the achievement satisfaction in writing learning in the post test between the students of the experimental group (CALLA) attributed to gender (male, female).

Study Significance

The importance of this study emerges from its general objective which tries to use a strategy place value on what the student previously knew as well as the experiences of their culture, and using this knowledge in their academic learning of a new language. Moreover, there are no similar studies in Jordan in the field of teaching English as a second language as this strategy has its own advantages in language development. Finally, such new strategies must be tested in order to measure the effect of these strategies on the students' achievement and satisfaction whether they are beneficial or not.

Definition of terms

CALLA: A teaching strategy focuses more on learning rather than teaching. It is clearly underscored that teachers can learn how to teach better by understanding how students learn Chamot and O'Malley, 1994: 19)

Achievement satisfaction: "Students status of success in the learning while enjoying the pleasure of experience" (Moore, 2009: 85). In this study it's the scores of 9th grade students on the achievement satisfaction scale.

Ninth grade Students: students who are studying in the English Language in the public schools in Mafraq Educational Directorate in the Academic year 2013/2014.

Empirical Studies

This section presents a review of related studies regarding the effect of to the use of CALLA model in students' achievement in language in general and in writing particularly.

Olson and Land's study (2007) assessed the impact of CALLA approach on the reading and writing abilities of English language learners secondary schools. Students receiving cognitive strategies instruction significantly out-gained peers on holistically scored assessments of academic writing for seven consecutive years. Teachers and students were exposed to an extensive set of cognitive strategies and a wide array of curricular approaches to strategy use (comprehensiveness) in a manner designed to cultivate deep knowledge and application of those strategies in reading and writing (density) over an extended period of time (duration). Findings indicated the efficacy of using the CALLA approach with English language learners.

Al-Jamal (2009) studied the effect of peer response technique in developing the writing skill in English lessons and building positive attitudes towards such skill. The population of the study consisted of all ninth grade pupils (male and female) at the School of King Abdullah the Second for Excellence in Irbid Directorate of Education for the scholastic year 2005/2006.The sample, which was purposeful, consisted of 55 pupils which was divided into two experimental groups (28 males; 27 females).Data collection instruments included; a writing test, peer response sheet, pre- and post-training questionnaires, and teacher observation reports of students' behavior in the classroom during training sessions of peer response. Data analysis revealed that both groups have benefited from the training on peer response which lasted for six weeks respectively. Some differences in the revision behavior between males and females were highlighted. Such notable differences were in the quality and quantity of responses between the two groups. The study found out that peer response technique affected the participants' attitudes positively in a way that enhanced the development of their writing skill.

Coskun (2010) investigated the effect of metacognitive listening strategy training on the listening performance of a group of beginner preparatory school students at a university in Turkey. The CALLA approach strategy phases were applied for the metacognitive listening strategy training. It was concluded that the CALLA approach five phases had a positive impact on the listening performance of EFL students

Karbalaei (2010) assessed the effect of training on CALLA model on ESL and EFL context. The sample of the study consisted of (189) college students selected randomly form several Iranian and Idian universities. Based on a proficiency test, students were grouped into high, moderate, and low level. Then, the underlining strategy was taught during the treatment sessions. The results suggest that intervention or explicit instruction was effective in increasing the reading comprehension of both Iranian and Indian students although Indian ESL students were able to perform better in comparison to their Iranian EFL counterparts. There was no significant difference between proficiency level and students' performance in reading comprehension in EFL and ESL contexts. In addition, there was no significant difference between males and females in both contexts.

Kim, Olson, Scarcella, Kramer, Pearson, Dyke, Collins, Land (2011) studied in England the effect of CALLA approach in text-based analytical writing for mainstreamed Latino English language learners in grades from 6-12. The sample of the study consisted of (103) English language teachers from (15) schools were assigned either in an experimental group or a control group. The experimental group was trained through CLLA approach for (46) hours while the other group didn't receive and training. A post test was conducted in both group showing that there significant statistical differences in the favor of the experimental group as teachers were able to help students understand, interpret, and write analytical essays about literature.

Takallou (2011) studied the effect of The Effect of Metacognitive Strategy Instruction on EFL Learners' Reading Comprehension Performance and Metacognitive Awareness through the application of CALLA approach in teaching. The sample of the study contained (93) male and female EFL learners in Iran, The study took place in four phases, the first contained a TOFEL test, the second SIL was administered to two experimental and one control groups before strategy instruction. At the third phase, two experimental groups received five sessions of instruction on metacognitive strategies, one on planning and the other on self-monitoring strategy based on the Cognitive Academic Language Learning Approach (CALLA). Both experimental and Control groups worked on authentic and inauthentic texts. The findings of the study showed that two experimental groups which received instruction on 'planning' and 'self monitoring' outperformed the control group on the reading comprehension test showing the effectiveness of CALLA in enhancing language achievement.

Gurses and Adiguzel (2013) studied the effect of CALLA on students achievement in reading in French and the extent of using reading strategies. The sample of the study contained (18) students at French Preparatory Program during the academic year of 2009-2010 . The researchers administrated in this action research Reading Comprehension Achievement Test, Reading Strategy Scale, and Think-Aloud Technique. The findings of the study indicated that CALLA has a positive effect on students' reading achievement and in the use

of effective reading strategies. Moreover, students were able to used alternative strategies base on CALLA instead of the traditional strategies they used before.

Keshavarz, Shahrokhi & Nejad (2014) provided that Cooperative Learning refers to instructional methods involving small heterogeneous groups working together, toward a common goal and teaching writing may be a difficult skill in Teaching English as Foreign Language, so the purpose of this study was to investigate The Effect of Cooperative Learning Techniques on promoting writing skill of Iranian EFL Learners. So that, one hundred Iranian English Foreign Language learners participated in initial population of this study and 60 learners were selected after a proficiency Test. The participants were at the intermediate level in compliance with Nelson English Language Proficiency Test. The selected participants were randomly divided into two experimental groups: Student Team -Achievement Divisions (STAD), Group Investigation (GI), and one control group Conventional Instruction (CI).The procedure lasted for 16 weeks. The statistical analysis of the results by one way ANOVA shows that the experimental groups (STAD and GI) performed better on writing skills than the control group (CI),and based on the results cooperative learning enhances students writing performance

Sahebkheir & Asl (2014) studied the effect of the think-aloud on EFL learners" attention to four different aspects of writing, lexicon, grammar, discourse and content; secondly, it attempted to determine the effect of think-aloud on developing EFL learners" writing performance. Students randomly assigned to an experimental and a control group by using a PET test and a writing task as a pre-test. Treatment had three stages, students were asked to write about a topic then students in the experimental group studied a model essay about that writing task, and they had think-aloud protocol about those aspects of language that they noticed in the model essays. In the third stage they were asked to rewrite the task. Think-aloud protocol showed that students pay attention to lexicon more than other categories. Furthermore, in the post test, experimental group outperformed the control group. The findings of the study suggest that thinking-aloud could be a good strategy for improving writing skill

Methods and Procedures
Study Approach
To achieve the aims of this study the researcher reviewed the related literature as well as previous studies to determine the statement of purpose and preparing the study tools and materials. The researcher adopted quasi-experimental approach to suit the nature of the study which aimed at examining the effectiveness of a CALLA on ninth graders' writing skills and writing satisfaction in Mafraq District. To know the effect of the independent variable (CALLA) on the dependent variable (Writing), four groups of the students were selected: two experimental groups (one for males and one for females) and two control groups (one for females and one for males). CALLA was used in teaching the subjects of the experimental groups while the traditional method was used with the control groups.

Study Design
The researcher used a quasi-experimental design. Two public schools in Mafraq District were chosen intentionally because it has the suitable number of 9th grade students. However, the participants in this study were assigned randomly into four group: two experimental groups totaling (15) students in each and two control groups totaling (15) students in each. The control groups (30 students) studied the writing traditionally, while the experimental groups (30 students) studied the writing through CALLA. A pre-test was administered to the groups to make sure that there were no significant differences between their performances in writing achievement and satisfaction.

Population of the Study
The population of this study consisted of all ninth grade students in the public school at Mafraq Educational District schools in the Academic year 2014/2015 totaling (2355) students.

Participants of the study
The participants of this study consisted of (60) 9th grade male and female students who were 15 years old in the first semester of the scholastic year 2014/2015 at two public schools in Mafraq District.

Variables of the study
The study has two variables independent and dependent. The independent variables of the study are:
1. Teaching method (CALLA Vs Traditional method).
2. The dependent variable is: Students' achievement in writing and writing satisfaction.

Controlling the variables
To assure the accuracy of the results and avoid any marginal interference, the researcher tried to control the

general achievement variable before the study.

General Achievement Variable

To make sure that the sample subjects were similar in their previous writing achievement, the researcher applied the pre-achievement test. The results of the subjects were recorded and statistically analyzed using means and Standard Deviations according to group and gender variables as shown in table (1)

Table (1)

Means & Standard deviations for the general achievement test according to gender and group variables

Group	Gender	Mean	Std. Deviation	N
Experimental	Male	36.07	2.658	15
	Female	34.60	2.667	15
	Total	35.33	2.721	30
Control	Male	34.87	3.642	15
	Female	34.40	2.923	15
	Total	34.63	3.253	30
Total	Male	35.47	3.192	30
	Female	34.50	2.751	30
	Total	34.98	2.994	60

To find the statistical significance between the means, Two-way ANOVA was used as shown in Table (2)

Table (2)

Two-way ANOVA for the effect of gender and group variables and interaction between them on the general achievement test

Source	Sum of Squares	df	Mean Square	F	Sig.
GROUP	7.350	1	7.350	.817	.370
SEX	14.017	1	14.017	1.558	.217
GROUP * SEX	3.750	1	3.750	.417	.521
Error	503.867	56	8.998		
Corrected Total	528.983	59			

Table (2) shows that there are no significant statistical differences at the level of (α =0.05) attributed to the effect of the group. There are no significant statistical differences at the level of (α =0.05) attributed to the effect of gender. Moreover, there are no significant statistical differences at the level of (α =0.05) attributed to the interaction between the group and the gender. This indicates that all groups are equal in the general achievement test.

Instrumentation

To achieve the aims of this study the researcher designed the following instruments and tools:

1. an achievement test in writing
2. Writing satisfaction scale

The Initial Writing Skills drafts

In order to design the achievement test the researcher reviewed the general guidelines of teaching English for ninth grade as well as reviewing the literature, the related previous studies and identifying the required skills for the ninth grade, the researcher prepared the skills initial draft (See Appendix1)

1) Achievement test

Many studies (Al-Heela, 2005: 369; Odeh, 2008: 209) had stated that the test is considered one of the most important and common tools of measurement , and it is used to explore the extent the students achieved in a subject at the end of specific period of time according to the determined instructional objectives.

Therefore, the researcher designed an achievement test to measure the effectiveness of CALLA on writing achievement in English language among ninth grade students (See Appendix2).

Content validity refers to the representativeness of the measurement regarding the phenomenon in hand" (Mackey & Gass, 2005: 107). Moreover, a valid test is the one which measures what it is meant for (Al-agha, 1996). Therefore, the researcher used referee validity as well as internal consistency validity.

A) Referee Validity

The researcher presented the test to a jury of specialists in English language and methodology in Jordanian universities, and experienced supervisors and teachers in public schools (See Appendix3). The items of the test were modified according to their recommendations.

B) Internal consistency validity
According, to Al-Agha (1996: 121) the internal consistency validity indicates the correlation of the score of each item with the total average of the test . It also indicates the correlation of the average of each scope with the total average". This validity was calculated by using (Pearson Formula), the results showed that Pearson coefficient was (.092) showing a high validity.

2) Achievement Satisfaction Scale
The researchers reviewed the related literature and the as well as previous Arabic and foreign studies to develop a questionnaire. The questionnaire consisted in its first form of (17) The questionnaire was developed according to likert- 5 scale: always, often, sometimes, little and not at all (1,2,3,4,5)

Instrument Validity
Validity was established through content and face validity, and the instrument was standardized on the response of a experts group of in teaching language. The raters canceled two items and modified other items. The final form of the questionnaire consisted of (11) distributed into (Yes, No) responses (see Appendix, 4)

Instrument reliability
Reliability of the instrument was determined through a pilot study; sample of 30 respondents from of the study population. The reliability coefficient was (0.78- 0.93) and it seemed to be reliable for use a Jordanian

Study Procedures
The researcher followed the following procedures in implementing the
Study:
1. Reviewing the related literature and previous study to prepare the theoretical framework of this study.
2. Studying the previous related studies conducted on CALLA in general and the implementation of CALLA in teaching English in particular.
3. Designing the achievement test and satisfaction scale and checking its validity and reliability.
3. Designing teaching methods
4. Selecting the sample and distributing students into groups.
5. Implementing pre-test.
6. Starting the experiment at the beginning of may 2015 till the end of june2015.
7. Implementing the post-test and re- implement it to measure retention after one month of the end of the study.
8. Statistical analyses were used to answer and accomplish the questions and the objectives of the study.

Statistical Analysis
The researcher used a number of the statistical techniques that suit the study nature; the data were collected and computed by using (SPSS) Statistical Package for Social Sciences.
        To sum up, the researcher adopted the experimental approach. The sample was randomly selected and distributed. After controlling the variables and designing the study instruments and tools so as to collect the data, the program was designed and implemented to achieve the aims of the study. Several statistical techniques were used to analyze the data collected.

Findings of the Study
Groups Eqaualivance: Pre-test
To make sure of groups eqaualivance on the writing achievement test means and standard deviations were calculated according to group and gender variables. Table (3) shows the findings

Table (3)
Means and standard deviations for the pre-test according to group and gender variables

Group	Sex	Mean	Std. Deviation	N
Experimental	Male	36.07	2.658	15
	Female	34.60	2.667	15
	Total	35.33	2.721	30
Control	Male	34.87	3.642	15
	Female	34.40	2.923	15
	Total	34.63	3.253	30
Total	Male	35.47	3.192	30
	Female	34.50	2.751	30
	Total	34.98	2.994	60

To calculate differences between the means ANOVA measure was used as shown in table (4)

Table(4)

ANOVA measure for the effect of gender and group and interaction on pre-test

Source	Sum of Squares	df	Mean Square	F	Sig.
GROUP	7.350	1	7.350	.817	.370
SEX	14.017	1	14.017	1.558	.217
GROUP * SEX	3.750	1	3.750	.417	.521
Error	503.867	56	8.998		
Corrected Total	528.983	59			

Table(4) indicates that:
- There were significant statistical differences at the level of (α =0.05) attributed to group.
- There were no significant statistical differences at the level of (α =0.05) attributed to gender.
- There were no significant statistical differences at the level of (α =0.05) attributed to interaction between gender and group indicating the equalivance between groups.

Findings of the first question: Are there any statistical significant differences at ($\alpha \leq 0.05$) in ninth grade students' achievement in writing due to the teaching method (CALLA Traditional method), Gender and interaction between procedure and gender?

To answer this question means and standard deviations were used for achievement in sub-skills and as a whole according to the teaching method and gender

1. Form

Table (5)

Means and standard deviations for (form) domain according to method and gender

Group	Sex	Mean	Std. Deviation	N
Experimental	Male	16.47	2.167	15
	Female	17.00	2.171	15
	Total	16.73	2.149	30
Control	Male	12.27	2.404	15
	Female	12.20	2.597	15
	Total	12.23	2.459	30
Total	Male	14.37	3.102	30
	Female	14.60	3.390	30
	Total	14.48	3.223	60

Table (5) showed that there are differences in students' performance on (form) domain according to group and gender. To calculate those differences ANOVA was used as shown in table (6)

Table (7)

ANOVA analysis for the effect of group and gender and interaction between them

Source	Sum of Squares	df	Mean Square	F	Sig.
GROUP	303.750	1	303.750	55.395	.000
SEX	.817	1	.817	.149	.701
GROUP * SEX	1.350	1	1.350	.246	.622
Error	307.067	56	5.483		
Corrected Total	612.983	59			

Table (7) showed that :
- There are significant statistical differences at the level of (α =0.05) attributed to the method as (f) value totaled 55.395 with a significance of 0.000 in favor of the experimental groups.
- There are no significant statistical differences at the level of (α =0.05) attributed to gender as (f) value totaled 0.149. with a significance of 0.701 .
- There are no significant statistical differences at the level of (α =0.05) attributed to interaction between method and gender as (f) value totaled 0.246 with a significance of 0.622.

2. Coherence

Table (8)

Means and standard deviations for (Coherence) domain according to method and gender

Group	Sex	Mean	Std. Deviation	N
Experimental	Male	16.67	1.759	15
	Female	17.67	1.633	15
	Total	17.17	1.744	30
Control	Male	12.07	1.223	15
	Female	12.40	1.056	15
	Total	12.23	1.135	30
Total	Male	14.37	2.773	30
	Female	15.03	3.000	30
	Total	14.70	2.884	60

Table (8) showed that there are differences in students' performance on (coherence) domain according to group and gender. To calculate those differences ANOVA was used as shown in table (9)

Table (9)

ANOVA analysis for the effect of group and gender and interaction between them

Source	Sum of Squares	df	Mean Square	F	Sig.
GROUP	365.067	1	365.067	174.435	.000
SEX	6.667	1	6.667	3.185	.080
GROUP * SEX	1.667	1	1.667	.796	.376
Error	117.200	56	2.093		
Corrected Total	490.600	59			

Table (9) showed that:

- There are significant statistical differences at the level of (α =0.05) attributed to the method as (f) value totaled 174.435 with a significance of 0.000 in favor of the experimental groups.
- There are no significant statistical differences at the level of (α =0.05) attributed to gender as (f) value totaled 3.185. with a significance of 0.80 .
- There are no significant statistical differences at the level of (α =0.05) attributed to interaction between method and gender as (f) value totaled 0.796 with a significance of 0.376.

3. Cohesion

Table (10)

Means and standard deviations for (Cohesion) domain according to method and gender

Group	Sex	Mean	Std. Deviation	N
Experimental	Male	16.73	1.486	15
	Female	17.27	1.792	15
	Total	17.00	1.640	30
Control	Male	12.60	1.298	15
	Female	12.80	1.424	15
	Total	12.70	1.343	30
Total	Male	14.67	2.510	30
	Female	15.03	2.773	30
	Total	14.85	2.629	60

Table (8) showed that there are differences in students' performance on (cohesion) domain according to group and gender. To calculate those differences ANOVA was used as shown in table (11)

Table (11)

ANOVA analysis for the effect of group and gender and interaction between them

Source	Sum of Squares	df	Mean Square	F	Sig.
GROUP	277.350	1	277.350	121.467	.000
SEX	2.017	1	2.017	.883	.351
GROUP * SEX	.417	1	.417	.182	.671
Error	127.867	56	2.283		
Corrected Total	407.650	59			

Table (11) showed that:

- There are significant statistical differences at the level of (α =0.05) attributed to the method as (f) value totaled 121.467 with a significance of 0.000 in favor of the experimental groups.
- There are no significant statistical differences at the level of (α =0.05) attributed to gender as (f) value

totaled 0.883. with a significance of 0.351 .
- There are no significant statistical differences at the level of (α =0.05) attributed to interaction between method and gender as (f) value totaled 0.182 with a significance of 0.671.

4. Total score

Table (12)
Means and Standard Deviation for the total score according to method and gender

Group	Sex	Mean	Std. Deviation	N
Experimental	Male	49.87	3.962	15
	Female	51.93	4.301	15
	Total	50.90	4.196	30
Control	Male	36.93	3.105	15
	Female	37.40	3.312	15
	Total	37.17	3.163	30
Total	Male	43.40	7.449	30
	Female	44.67	8.298	30
	Total	44.03	7.844	60

Table (12) showed that there are differences in students' performance on total score according to group and gender. To calculate those differences ANOVA was used as shown in table (13)

Table (13)
ANOVA analysis for the effect of group and gender and interaction between them according to the total score

Source	Sum of Squares	df	Mean Square	F	Sig.
GROUP	2829.067	1	2829.067	206.501	.000
SEX	24.067	1	24.067	1.757	.190
GROUP * SEX	9.600	1	9.600	.701	.406
Error	767.200	56	13.700		
Corrected Total	3629.933	59			

Table (13) showed that:
- There are significant statistical differences at the level of (α =0.05) attributed to the method as (f) value totaled 206.501 with a significance of 0.000 in favor of the experimental groups.
- There are no significant statistical differences at the level of (α =0.05) attributed to gender as (f) value totaled 1.757. with a significance of 0.190 .
- There are no significant statistical differences at the level of (α =0.05) attributed to interaction between method and gender as (f) value totaled 0.701 with a significance of 0.406.

Findings of the second question: Are there any statistical significant differences at (α ≤ 0.05) in ninth grade students' achievement satisfaction due to the teaching method (CALLA, Traditional method). Gender and interaction between procedure and gender?

To answer this question means and standard deviations were used for achievement satisfaction according to the teaching method and gender, table (14) shows the results

Table (14)
Means and standard Deviations foe students Satisfaction scale

Group	Sex	Mean	Std. Deviation	N
Experimental	Male	50.40	9.672	15
	Female	56.27	8.198	15
	Total	53.33	9.301	30
Control	Male	44.80	8.283	15
	Female	49.07	10.780	15
	Total	46.93	9.692	30
Total	Male	47.60	9.294	30
	Female	52.67	10.097	30
	Total	50.13	9.955	60

Table (14) showed that there are differences in students' satisfaction according to group and gender. To calculate those differences ANOVA was used as shown in table (15)

Table (15)
ANOVA analysis for the effect of group and gender and interaction between them according to achievement satisfaction scores

Source	Sum of Squares	df	Mean Square	F	Sig.
GROUP	614.400	1	614.400	7.112	.010
SEX	385.067	1	385.067	4.457	.039
GROUP * SEX	9.600	1	9.600	.111	.740
Error	4837.867	56	86.390		
Corrected Total	5846.933	59			

Table (13) showed that:
- There are significant statistical differences at the level of (α =0.05) attributed to the method as (f) value totaled 7.112 with a significance of 0.000 in favor of the experimental groups.
- There are significant statistical differences at the level of (α =0.05) attributed to gender as (f) value totaled 4.457 with a significance of 0.039 in favor of females.
- There are no significant statistical differences at the level of (α =0.05) attributed to interaction between method and gender as (f) value totaled 0.111 with a significance of 0.740.

Findings: Discussion, Conclusion & Recommendation
Findings
Based on the statistical results of this study the following findings were observed:
1. There were significant statistical differences at the level of (α =0.05) attributed to group.
2. There were no significant statistical differences at the level of (α =0.05) attributed to gender.
3. There were no significant statistical differences at the level of (α =0.05) attributed to interaction between gender and group indicating the equalivance between groups.
4. There are significant statistical differences at the level of (α =0.05) attributed to the method as (f) value totaled 55.395 with a significance of 0.000 in favor of the experimental groups.
5. There are no significant statistical differences at the level of (α =0.05) attributed to gender as (f) value totaled 0.149. with a significance of 0.701 .
6. There are no significant statistical differences at the level of (α =0.05) attributed to interaction between method and gender as (f) value totaled 0.246 with a significance of 0.622.
7. There are significant statistical differences at the level of (α =0.05) attributed to the method as (f) value totaled 174.435 with a significance of 0.000 in favor of the experimental groups.
8. There are no significant statistical differences at the level of (α =0.05) attributed to gender as (f) value totaled 3.185. with a significance of 0.80.
9. There are no significant statistical differences at the level of (α =0.05) attributed to interaction between method and gender as (f) value totaled 0.796 with a significance of 0.376.
10. There are significant statistical differences at the level of (α =0.05) attributed to the method as (f) value totaled 121.467 with a significance of 0.000 in favor of the experimental groups.
11. There are no significant statistical differences at the level of (α =0.05) attributed to gender as (f) value totaled 0.883. with a significance of 0.351 .
12. There are no significant statistical differences at the level of (α =0.05) attributed to interaction between method and gender as (f) value totaled 0.182 with a significance of 0.671.
13. There are significant statistical differences at the level of (α =0.05) attributed to the method as (f) value totaled 206.501 with a significance of 0.000 in favor of the experimental groups.
14. There are no significant statistical differences at the level of (α =0.05) attributed to gender as (f) value totaled 1.757. with a significance of 0.190 .
15. There are no significant statistical differences at the level of (α =0.05) attributed to interaction between method and gender as (f) value totaled 0.701 with a significance of 0.406.
16. There are significant statistical differences at the level of (α =0.05) attributed to the method as (f) value totaled 7.112 with a significance of 0.000 in favor of the experimental groups.
17. There are significant statistical differences at the level of (α =0.05) attributed to gender as (f) value totaled 4.457 with a significance of 0.039 in favor of females.
18. There are no significant statistical differences at the level of (α =0.05) attributed to interaction between method and gender as (f) value totaled 0.111 with a significance of 0.740

Discussion
The current study aimed at exploring the effect of using CALLA instruction strategies on 9th grade students' writing achievement and satisfaction in Mafraq city. . As a result of the extensive literature review as well as the test conducted, the researcher attempted the constructive approach and the quasi-experimental approach to

examine the research questions . Data were collected through testing the target groups before and after the implementation of the program. The results of the pre and post tests were recorded and statistically analyzed.

Discussion of the first questions

The findings of the first question showed that there are significant statistical differences in achievement in favor of the experimental group in all domains with no differences attributed to gender or interaction between gender and method. It seems that the activities carried out through CALLA lessons had developed students' achievement equally in all domains.

Moreover, CALLA enhanced students' learning strategies, developed their comprehension, improved their achievement, created on-going interactive environment which increased their motivation and interest in learning. CALLA also offered continuous feedback which reflected in students' learning if the answers were right or modifying them if they were wrong. Furthermore, CALLA included several stimuli and responses that supported learning and interaction. This finding agrees with what the study pointed out in the literature review.

The findings agreed with the findings of almost all the previous studies such as Olson and Land's (2007) which indicated the efficacy of using the CALLA approach with English language learners. Moreover, Kim, Olson, Scarcella, Kramer, Pearson, Dyke, Collins, Land (2011) study which showed that there significant statistical differences in the favor of the experimental group as teachers were able to help students understand, interpret, and write analytical essays about literature.

Discussion of the second question

As seen in the second question there are significant statistical differences at the level of (α =0.05) attributed to the method as (f) value totaled 7.112 with a significance of 0.000 in favor of the experimental groups. There are significant statistical differences at the level of (α =0.05) attributed to gender as (f) value totaled 4.457 with a significance of 0.039 in favor of females. Moreover, there are no significant statistical differences at the level of (α =0.05) attributed to interaction between method and gender as (f) value totaled 0.111 with a significance of 0.740.

The researcher attributed the satisfaction of the experimental groups towards CALLA to that the variety of activities and hands-on work of students and to the immediate feedback which not only motivated the students but also reinforced their previous learning, not to mention that it provided them with a novel way of learning language which raised their awareness of CALLA as a viable method for learning writing.

These findings are consistent with Takallou (2011) study whivh concluded that the two experimental groups which received instruction on 'planning' and 'self monitoring' outperformed the control group on the reading comprehension test showing the effectiveness of CALLA in enhancing language achievement and satisfaction.

Conclusion

Based on the findings, derived from the results of this empirical study, the following conclusions were reached:

1. The effectiveness of CALLA approach in improving students' writing achievement.

2. CALLA students with enjoyment, pleasure, enthusiasm and variation which were significant enough to affect the students' achievement positively

3. CALL improved students' achievement satisfaction.

Pedagogical Implications

The following pedagogical implications are offered for the teachers regarding CALLA method:

1- Teachers should be aware of their students' needs and abilities and choose the suitable lessons for them.

2. Teachers should discuss CALLA with their students' to clarify its importance and procedures.

3- Teachers have to identify the students' initial behavior as well as competencies to start teaching.

4- Varied techniques of instruction in writing lessons encourage students to write.

Recommendations

Based on the findings of this study the researcher recommended the following:

1. Enriching the n English Language curriculum with different activities which enhance CALLA model and practicing English inside and outside the classroom.

2. Conducting traigring courses for teachers to help them in implementing CALLA model is an instructional model for second and foreign language learners to integrate instruction in priority topics from the content curriculum, development of the language skills needed for learning in school, and explicit instruction in using learning strategies for academic tasks.

3. Preparing and publishing instructional materials that increase teachers' awareness of

CALLA as a new method that suits modern trends in teaching and learning.

4. Conducting more studies by using CALLA model in teaching other language skills such as reading, speaking and listening in Jordanian schools

References

Al-Jamal, D. (2009).The Impact of Peer Response in Enhancing Ninth Grader's Writing Skill. Umm Al-Qura University Journal of Educational & Psychologic Sciences, 1(1): 14-140

Chamot, A., & O'Malley, J. (1994). The CALLA handbook: Implementing Cognitive Academic Language. Journal of Education and Learning, 2(2): 22-67.

Chamot, A., & O'Malley, J. (1996). The Cognitive Academic language learning Approach: A model for linguistically diverse classrooms. The Elementary School Journal, 96(3): 2-15.

Chamot, U., and El-Dinary, B. (1999). Children's learning strategies in language immersion classroom. The Modern Language Journal, 83(2), 319-338.

Chayaningati, D. (2012).The effectiveness of calla models on improving Engineering students' communicative competence. Teaching language, 1(1): 22-56.

Coskun, A. (2010). The effect of metacognitive strategy training on the listening proficiency of beginner students. Novitas-ROYAL.Youth and Language, 4(1): 35-50

Gurses, M., Adiguzel, C. (2013). The Effect of Strategy Instruction Based on the Cognitive Academic Language Learning Approach over Reading Comprehension and Strategy Use. Journal of Education and Learning, 2 (2): 15-68.

Karbalaei, A. (2010).Assessing Reading Strategy Training based on CALLA model in EFL and ESL Context. Department of English, Islamic Azad University,Safashahr Branch, Safashahr, Irán.

Keshavarz, E., Shahrokhi, M., & Nejad, T. (2014).The Effect of Cooperative Learning Techniques on Promoting Writing Skill of Iranian EFL Learners. International Journal of Language Learning and Applied Linguistics, 5(1): 78-90

Kim, J., Olson C., Scarcella, R., Kramer, J., Pearson, M., van Dyk, D., Collins, P., and Land, (2011). R. A Randomized Experiment of a Cognitive Strategies Approach to Text-Based Analytical Writing for Mainstreamed Latino English Language Learners in Grades 6-12. Journal of Research on Educational Effectiveness;4(3):231-263.

Moore, J. C. (2009). A synthesis of Sloan-C effective practices. Journal of Asynchronous Learning Networks, 13(4):84-94.

Olson, B., & Land, R. (2007). A cognitive strategies approach to reading and writing instruction for English language learners in secondary school. Research in Teaching of English, 41(3), 269-303.

Sahebkheir, F., & Asl, H. (2014).The Role Of Think -Aloud Protocols On Developing Iranian Efl Learners' Written Performance. Indian Journal of Fundamental and Applied Life Sciences, 4(3): 1-7

Sullivan, N. and Pratt, E. (1996). A Comparative study of two ESL writing environment: A computer-assisted classroom and a traditional oral classroom. System, 24 (4), 491-501.

Takallou, F. (2011). The Effect of Metacognitive Strategy Instruction on EFL Learners' Reading Comprehension Performance and Metacognitive Awareness. Asian EFL Journal, 1(1): 272-300