

USING INSTRUMENTAL ENRICHMENT ACTIVITIES IN IMPROVING READING COMPREHENSION SKILLS OF EFL PREPARATORY STAGE PUPILS AND THEIR ATTITUDES TOWARDS THE ENGLISH LANGUAGE

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ABSTRACT

This study aimed at investigating the effect of using activities based on instrumental enrichment (IE) on improving the reading comprehension skills of the first year preparatory stage pupils and their attitudes towards the English language. To achieve this aim, a quasi-experimental design was launched on sixty- six pupils from El – Ashraf Co-educational School, Belqas, Dakahliya. A reading comprehension sub-skills questionnaire was developed by the researcher to determine the reading comprehension sub-skills necessary for the first year preparatory stage pupils. Criteria checklist was also developed by the researcher to select and evaluate the suitable reading passages, and activities for the study. In addition, a pre - post reading comprehension sub-skills test was developed by the researcher to assess pupils' levels on reading comprehension skills before and after receiving the activities based on IE. Also, an attitude scale was developed by the researcher to determine pupils' attitudes towards the English language before and after receiving the activities based on IE. The results revealed that the activities based on IE had a high effect on the experimental group. The experimental group outperformed the control group on the post- administration of the reading comprehension sub-skills test. Furthermore, the experimental group's attitude was substantially improved compared with the control group. These results also led to a number of recommendations that related to the importance of IE in teaching and learning the language.

Key Words: Instrumental Enrichment, Attitude Scale, Reading Comprehension Skills, Preparatory Stage, English Language.

مستخلص الدراسة

تعتبر مهارات الفهم القرائي من اهم المهارات التعليمية التي يكتسبها المتعلم من خلال العملية لما لها من مميزات متعددة، فالقراءة تساعد المتعلمين على تحسين افكارهم، وتوسيع على مداركهم. وقد اثبتت العديد من الدراسات في تحسين فاعليه استخدام الاثرء الوسيلى الحاليه مهارات الفهم القرائى. وتهدف الدراسة على الاثرء الوسيلى الى استخدام انشطه قائمه في تحسين مهارات الفهم القرائى لدى طلبة الصف الاول الاعدادى وتحسين اتجاهاتهم الدراسة نحو اللغة الانجليزية. وقد تبنت التصميم شبه التجريبي باستخدام مجموعتين احدهما تجريبية و الاخرى ضابطه، حيث تتلقى المقرر المدرسيه المجموعة التجريبية الانشطة القائمه على الاثرء الوسيلى بجانب الانشطه اعداد الباحثه بينما تتلقى المجموعة الضابطه الدراسى المنهج الانشطه المقررة فقط فى اجريت وقد الخاص بالصف الأول الاعدادى مركز بلقاس فى فى مدرسة الاشراف المشتركه التابع لمحافظة الدقهليه. و استخدمت الباحثه اللازمه استبيان لتحديد مهارات الفهم القرائى

لطلبه الصف الاول الاعدادى ،قائمه معايير المستخدمه لتحديد وتقييم قطع القراءة والانشطه التجريه، بجانب اختبار مهارات الفهم فى قبلى- بعدى و بالاضافه الى مقياس القرائى قبلى وبعدى. وقد اتجاة نحو اللغة الانجليزيه اسفرت النتائج على وجود تحسن دال فى مستوى طلبه الصف الاول الاعدادى فى اختبار مهارات الفهم التجريه بالمجموعه البعدى وذلك عند مقارنة درجات القرائى اتجاة طلبه تغيير بجانب الطلاب قبليا وبعديا بالنسبه الانجليزيه التجريه نحو اللغه المجموعه فى الضابطه المجموعه لأقرانهم من طلبه مقياس الاتجاه وقد تأكد ذلك من خلال الفروق و الداله بين متوسطى درجات المجموعتين. هذه النتائج اكدت فاعليه استخدام الاثراء تدريس مهارات الفهم القرائى و فى الوسيطى باقى مهارات فى تدريس استخدمها كاستراتيجيه اللغه الانجليزيه. وفى ضوء هذه النتائج قدمت الدراسه عدد من التوصيات تتعلق باهميه دور تعلم اللغه فى تدريس و الاثراء الوسيطى الانجليزيه.

Introduction

Reading is seen as an internal, and a mental process that cannot be observed or studied directly. It is connected with the term "comprehension" because of its vital pedagogical goal. It is considered one of the most important aspects in evaluating learner's linguistic competence in English. The importance of reading comprehension was advocated by a number of studies like Ghaith & Obeid, 2004; Alptekin, 2006; and Erten& Karakas, 2007.

On the other hand, the literature review has indicated that linguistic competence in the language depends not only on intellectual capacity but also on the learners' attitudes towards the language. Number of studies has investigated the effect of attitude on the English language such as Alhmali 2007; Ghazali et al, 2009; and Fakeye, 2010. Rani (2000) noted that learners' attitudes towards learning may improve or change by suggesting new programs, and utilizing new approaches in teaching.

Feuerstein's Instrumental Enrichment program (IE) is considered an effective teaching program which provides learners with techniques, activities, and skills through Mediated Learning Experience (MLE). By MLE, learners learn "how to learn" which can lead to increase the academic performance, and make a positive attitude towards English. IE has been adapted in teaching and many studies uphold its positive effect on teaching such as Getz, 1992; El-Banna, 2000; Shoaer, 2003; Qorany, 2005; El-Se'ady, 2008; Hala, 2010; Abeid, 2010; and AL-Nifayee, 2010.

This study was set up to investigate the effect of using activities based on IE on improving the first year preparatory stage pupils' reading comprehension skills and their attitudes towards English.

Review of related studies

Brain (1982) studied the effect of an expanded form of IE delivery on the reading achievement, reasoning abilities, and task orientation of a group of sixth grade underachievers in Westchester County in New York. Major findings revealed that: (1) no significant differences between E- and C-groups' gain scores in reasoning abilities; (2) between-group analyses of Total Reading gains showed E-group's to be significantly greater. Task orientation data were discounted because of the absence of data from one c- class and the teacher subjectivity in ratings.

Getz (1992) developed a block course incorporating study skills, English, reading, and critical thinking to meet the academic needs of forty students from Pikes Peak Community College Colorado. The results showed an improvement in reading and English. The results also indicated the possibility to integrate some of the Feuerstein ideas into an existing developmental studies course curriculum.

William and Kopp (1994) measured the effect of IE on the reading comprehension. One hundred students from all sixth grade classes assigned to experimental groups that received three forty-five-minute sessions of IE per week, taken from the regular curriculum, and control groups that received the regular curriculum. The Stanford Achievement Test for Reading (SAT-R) was administered to the two groups at the beginning of the study and at the end of every year of the program. The results indicated that the total SAT-R mean scores showed an increasing gap between the groups in favor of IE group.

AL-Nifayee (2010) investigated the effectiveness of the IE Approach on enhancing the reading comprehension skills of the preparatory stage pupils with English Language learning difficulties. The researcher adapted materials by using the IE. A standardized intelligence test, and a reading comprehension test were used as instruments to collect the data. The results revealed that there was a statistically significant difference between the mean scores of the experimental and the control group on the post-application of the reading comprehension test in favor of the experimental group.

Statement of the Problem

Based on the results of the pilot study, and the literature review, the problem of the current study can be stated as follows:

The EFL first year preparatory stage pupils face difficulty in their reading comprehension skills, and have a negative attitude towards English. This difficulty

and their negative attitudes could be due to the lack of using the reading activities, and the stereotypes of teaching. Thus, there was a need for using activities based on IE to improve the reading comprehension skills of EFL first year preparatory stage pupils and their attitudes towards English.

Questions of the Study:

- a) What are the reading comprehension sub-skills necessary for the first year preparatory stage pupils?
- b) To what extent will activities based on IE enhance the reading comprehension sub-skills of the first year preparatory stage pupils?
- c) To what extent will activities based on IE improve the attitudes of the first year preparatory stage pupils towards the English language?

Purpose of the Study

The current study aimed at:

1. Identifying the reading comprehension sub-skills necessary for the first year preparatory stage pupils.
2. Designing activities based on IE to enhance reading comprehension skills and change the negative attitudes towards the English language.
3. Measuring the effectiveness of the activities based on IE on improving reading comprehension skills and attitudes towards the English language of the first year preparatory stage pupils.

4. Significance of the Study

It is hoped that the present study will contribute to:

1. Direct the attention of EFL teachers and curriculum planners towards the utilizing of IE in improving the reading comprehension sub-skills and the attitudes towards English.
2. Enrich the literature concerning with the effect of the IE on teaching.

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3. Evoke pupils' interests towards reading and English.
 4. Pave the way for other researchers to investigate the effect of IE on developing other language skills.

Delimitations of the Study

The current study was delimited to the following:

1. A sample from the first year preparatory stage pupils.
2. Activities based on IE designed by the researcher.
3. Nine reading comprehension sub-skills like Scanning, Skimming, Analyzing of written information, Identifying referent for pronouns, Identifying of word meaning, determining the truth of the sentence, Sequencing, Making an Inference, and Making Comparisons.
4. Number of IE such as Illustration, Comparing, Categorization, Instructions, Family Relations, Orientation in Space I, Orientation in Space II, Analytic perceptions, Syllogisms, Temporal Relations, The Numerical Progressions, Transitive Relations, Representational Stencil Design.

Hypotheses of the study

1. There is no statistically significant difference between the mean scores of the experimental group and the control group on the pre - administration of the reading comprehension sub-skills test.
2. There is a statistically significant difference at the 0.05 level between the mean scores of the experimental group and the control group on the post-administration of the reading comprehension sub- skills test in favor of the experimental one.

3. There is a statistically significant difference at the 0.05 level between the mean scores of the experimental group on the pre – administration and on the post – administration of the reading comprehension sub- skills test in favor of the post –administration.
4. There is no statistically significant difference between the mean scores of the experimental group and control group on the pre–administration of the attitude scale.
5. There is a statistically significant difference at the 0.05 level between the mean scores of the experimental group and the control group on the post administration of the attitude scale in favor of the experimental one.
6. There is a statistically significant difference at the 0.05 level between the mean scores of the experimental group on the pre– and post–administration of the attitude scale in favor of the post–administration.

Methodology

Design of the study

The study adopted a quasi - experimental design which involved two groups; an experimental group and a control group. The study was carried out at El- Ashraf Co-educational School, Belqas, Dakahliya. It was implemented in the first semester of the academic year 2014-2015.

Participants

The participants of this study were selected from the first year Preparatory stage in El Ashraf Co-educational School, Belqas, Dakahly. Two classes were selected and assigned as an experimental group and a control group. There were thirty-three pupils in each class. The experimental group received activities based on IE, which were designed by the

researcher, and textbook activities suggested by the Ministry of Education. On the other hand, the control group received only the textbook activities suggested by the Ministry of Education.

Instruments of the study

The researcher developed the following instruments:

1. A Reading Comprehension Sub-Skills Questionnaire to determine the reading comprehension skills necessary for the first year preparatory stage pupils.
2. Criteria Checklist for selecting, and evaluating the reading comprehension activities.
3. Activities based on IE to improve the reading comprehension skills of the first year preparatory stage pupils and their attitudes towards the language.
4. A pre/ post Attitude Scale to determine pupils' attitudes towards English.
5. A pre/ post Reading Comprehension Sub -Skills Test to assess pupils' reading comprehension skills levels.

Procedures of the study:

The study was carried out in the following steps:

1. Reviewing the literature related to the reading comprehension sub-skills, the attitudes towards the language, and the effect of IE on teaching.
2. Designing a reading comprehension sub- skills questionnaire to determine the reading comprehension skills that are necessary for the first year preparatory stage pupils.
3. Designing activities based on (IE).
4. Designing a criteria checklist to select, and evaluate the reading comprehension activities.

5. Designing a reading comprehension sub- skills test to apply it as a pre and a post- test, and assess pupils' reading comprehension skills levels.
6. Designing an attitude scale to identify pupils' attitude towards English, and apply it before and after the experiment.
7. Submitting the reading comprehension sub- skills test and the attitude scale to the jurors for validity.
8. Getting a permission to conduct the study from the school principal.
9. Conducting a pilot study on thirty- three pupils who did not participate in the study to ensure the reliability of the instruments.
10. Pre-administering of the reading comprehension sub- skills test on the two groups.
11. Pre-administering of the attitude scale on the two groups.
12. Implementing the activities based on IE on the experimental group.
13. Post - administering of the reading comprehension sub- skills test on the two groups.
14. Post-administering of the attitude scale on the two groups.
15. Comparing the results of the two groups.
16. Analyzing the data statistically by using the appropriate statistical methods.
17. Discussing the results and providing conclusions and recommendations.
18. Writing the thesis according to the guidelines presented in the guide for writing theses and dissertations at Mansoura University.

Definition of Terms

1-Instrumental Enrichment:

Ben-Hur (2000) defined IE as a classroom curriculum designed to enhance the functions necessary for academic learning and achievement.

IE was defined operationally as a free content that consists of a collection of reading activities and techniques in which the mediator used to enhance pupils' reading comprehension sub- skills and their attitudes towards the English language.

2-Reading Comprehension:

In the opinion of Al-Ghoul (2009), reading comprehension was an understanding and extracting meanings from the reading material.

Reading comprehension was defined operationally as the dynamic procedures that establish the perception of a written material through a number of complex processes involving an interaction between the pupil, and the activity.

Table (1) t-test comparing the two group's mean scores on each reading comprehension sub- skill and their total mean scores overall reading comprehension sub- skills on the pre-administration of the test .

The reading comprehension sub-skills	Group	N	Mean	SD	T	DF(n1+n2-2)	Level of Sig.	Sig. (2-tailed)														
Scanning	Control	33	3.27	3.175	0.27	64	0.8	Not Sig.														
	Exp.	33	3.09	2.3098																		
Skimming	Control	33	1.82	1.9598	0.63		64		0.5	Not Sig.												
	Exp.	33	2.12	1.933																		
Analyzing the written information	Control	33	1.9697	1.7497	0.72				64		0.5	Not Sig.										
	Exp.	33	2.273	1.6587																		
Identifying of word meaning	Control	33	2.12	1.691	1.02						64		0.3	Not Sig.								
	Exp.	33	2.576	1.9126																		
Making inference	Control	33	0.9	1.33	0.2								64		0.8	Not Sig.						
	Exp.	33	0.85	1.121																		
Identifying referent for pronouns	Control	33	0.36	0.699	0.4										64		0.7	Not Sig.				
	Exp.	33	0.3	0.68																		
Determining the truth of statement	Control	33	1.27	1.076	0.34												64		0.7	Not Sig.		
	Exp.	33	1.36	1.07																		
making comparison	Control	33	0.3	0.47	0.00														64		1.0	Not Sig.
	Exp.	33	0.3	0.47																		
Sequencing	Control	33	0.39	0.61	0.66	64		0.5													Not Sig.	
	Exp.	33	0.3	0.51																		
Overall reading comprehension sub- skills	Control	33	12.42	11.53	0.28		64	0.8		Not Sig.												
	Exp.	33	13.18	10.448																		

Table (1) shows that the t – values which range between (0.00) and (0.66), are not statistically significant. This indicates that there is no statistically significant

3- Attitude

Al-Noursi (2013) also illustrated the attitude concept as the learners' perceptions, understandings, beliefs, or experiences of learning English as a foreign language as assessed by a specially designed questionnaire.

Attitude was defined operationally as a pupil's trend or a way of thinking to react positively or negatively towards the language.

Results and statistical analysis:

To test the first hypothesis "There is no a statistically significant difference between the mean scores of the experimental group and the control group on the pre-administration of the reading comprehension sub- skills test", the independent sample t – test was used for comparing the two groups on the pre-administration of the reading comprehension sub- skills test.

difference between the mean scores of the experimental and control groups. This means that the two groups have the same

low level on the reading comprehension sub- skills test.

To test the second hypothesis “There is a statistically significant difference at the 0.05 level between the mean scores of the experimental group and the control group on the post- administration of the reading

comprehension sub- skills test in favor of the experimental one”, the independent sample t- test was used for investigating the difference between the two groups.

Table (2) t- test comparing the two groups’ mean scores on each reading comprehension sub skill and their total mean scores on overall the reading comprehension sub- skills on the post administration of the test.

Reading comprehension skills	Group	N	Mean	SD	T	DF (n1+n2-2)	Sig. (2-tailed)
Scanning	Control	33	3.33	3.189	3.07	64	Significant at 0.05
	Exp.	33	5.78	3.212			
Skimming	Control	33	1.879	1.9326	4.16		
	Exp.	33	3.939	2.091			
Analyzing the written information	Control	33	2.12	1.867	4.5		
	Exp.	33	4.24	1.929			
Identifying of word meaning	Control	33	2.15	1.707	4.6		
	Exp.	33	4.24	2.001			
Making inference	Control	33	0.97	1.33	5.1		
	Exp.	33	2.42	0.97			
Identifying the relevant for pronoun	Control	33	0.46	0.87	7.5		
	Exp.	33	2.27	1.098			
Determine the truth of statement	Control	33	1.364	1.04	4.8		
	Exp.	33	2.576	1.032			
Making Comparison	Control	33	0.33	0.48	7.6		
	Exp.	33	1.52	0.76			
Sequencing	Control	33	0.42	0.63	5.01		
	Exp.	33	1.36	0.88			
Overall reading comprehension sub- skills	Control	33	13.03	11.75	5.1		
	Exp.	33	28.33	12.79			

Table (2) shows that the t – values which range between (3.07) and (7.6), are statistically significant at the 0.05 level. This indicates that there is a statistically significant difference between the mean scores of the experimental group and the control group in favor of the experimental one. These results validate the second hypothesis. The experimental group outperformed the control group and this may be attributed to the effect of the activities based on IE.

To test the third hypothesis “There is a statistically significant difference at the 0.05 level between the mean scores of the experimental group on the pre – administration and the post- administration of the reading comprehension sub –skills test in favor of the post – administration”, the correlated sample t – test was used to investigate the difference between the pre – and the post – administration of the reading comprehension sub- skills test.

Table (3) t-test comparing the mean scores of experimental group’s on each reading

comprehension sub- skill and its total mean scores on overall reading comprehension sub- skills on the pre- and post- administration of the test .

Reading comprehension skills	Measurement	N	Mean	SD	T	D. f (n-1)	Sig. (2-tailed)
Scanning	Pre	33	3.0909	2.30981	4.9	32	Significant at 0.05
	Post	33	5.7576	3.2116			
Skimming	Pre	33	2.1212	1.93258	4.8		
	Post	33	3.9394	2.09074			
Analyzing the written information	Pre	33	2.2727	1.65874	4.96		
	Post	33	4.2424	1.9289			
Identifying of word meaning	Pre	33	2.5758	1.91263	4.6		
	Post	33	4.2424	2.00047			
Making inference	Pre	33	0.85	1.12142	6.5		
	Post	33	2.4242	0.97			
Identifying referent for pronouns	Pre	33	0.3	0.68	10.5		
	Post	33	2.2727	1.09752			
Determine the truth of statement	Pre	33	1.3636	1.06999	5.9		
	Post	33	2.5758	1.03169			
Making Comparison	Pre	33	0.3	0.47	8.9		
	Post	33	1.5152	0.76			
Sequencing	Pre	33	0.3	0.51	7.2		
	Post	33	1.3636	0.88			
Overall reading comprehension sub- skills	Pre	33	13.1818	10.4484	6.6		
	Post	33	28.3333	12.79201			

Table (3) shows that the t –values which range between (4.6) and (10.5), are statistically significant at the 0.05 level. This indicates that there is a statistically significant difference between mean scores of the experimental group on pre – and post – administration in favor of the post administration of the reading comprehension sub –skills test. These

results validate the third hypothesis. This indicates that the activities based on IE were effective in enhancing pupils’ reading comprehension skills.

The effect size of treatment:

After estimating the t-values, eta square was used in order to evaluate the effect size of the activities based on IE on the experimental group.

Table (4) Values of (η^2) and the effect size of activities based on IE on improving the reading comprehension sub -skills of the experimental group.

Independent variable	Reading comprehension sub skills	T	D. F (n-1)	Value of Eta – square (η^2)	Level of Effect Size
The activities Based on IE	Scanning	4.9	32	0.43	High
	Skimming	4.8	32	0.42	
	Analyzing the written information	4.96	32	0.44	
	Identifying of word meaning	4.6	32	0.40	
	Making inference	6.5	32	0.50	
	Identifying referent for pronouns	10.5	32	0.78	
	Determine the truth of statement	5.9	32	0.52	
	Making Comparison	8.9	32	0.71	
	Sequencing	7.2	32	0.62	
Overall reading comprehension sub skills	6.6	32	0.58		

Table (4) presents the eta square values (η^2) which are between (0.40) to (0.71). The values of (η^2) indicate a high effect size of activities based on IE on improving the reading comprehension sub skills of the experimental group.

To test the fourth hypothesis: " There is no a statistically significant difference

Table (5) t-test comparing the two groups' mean scores on each dimension and their total mean scores on overall the dimensions on the pre – administration of the attitude scale.

Attitude's dimensions	Group	N	Mean	SD	T	DF(n1+n2-2)	Level of Sig.	Sig. (2-tailed)								
Reasons for learning English	Control	33	12.33	4.929	0.15	64	0.13	Not Sig.								
	Exp.	33	10.58	4.32												
Way of Teaching	Control	33	7.3	2.823	0.23		64		0.82	Not Sig.						
	Exp.	33	7.12	3.525												
Pupil's interest towards English	Control	33	10	3.708	0.14				64		0.89	Not Sig.				
	Exp.	33	10.15	5.197												
English as a subject	Control	33	7.18	2.4297	0.22						64		0.82	Not Sig.		
	Exp.	33	7.36	3.999												
overall the attitude scale dimensions	Control	33	36.82	12.203	0.44								64		0.66	Not Sig.
	Exp.	33	35.21	16.874												

Table (5) presents the t-values which range from (0.15), to (0.44). These values are not statistically significant. This indicates that there is no statistically significant difference between the mean scores of the experimental group and the control group. This means that the two groups have the same low level on attitude towards the language. Based on these results, any differences in the post –

between the mean scores of the experimental group and the control group on the pre – administration of the attitude scale”, the independent sample t– test was used for comparing the two groups on the pre –administration of the attitude scale.

administration can be attributed to the effect of the activities based on IE.

To test the fifth hypothesis “There is a statistically significant difference at the 0.05 level between the mean scores of the experimental group and the control group on the post – administration of the attitude scale in favor of the experimental one”, the independent sample t-test was used for investigating the differences between the two groups.

Table (6) t-test comparing the two groups' mean scores on each dimension and their mean scores on overall the dimensions on the post- administration of the attitude scale.

Attitude's dimensions	Group	N	Mean	SD	T	DF (n1+n2-2)	Sig. (2-tailed)								
Reasons for learning English	Control	33	12.7576	4.63701	4.5	64	Significant at 0.05								
	Exp.	33	17.1515	3.20275											
Way of Teaching	Control	33	7.5758	2.83979	2.7			64	Significant at 0.05						
	Exp.	33	9.4242	2.65789											
Pupil's interest towards English	Control	33	10.2727	3.61657	5.2					64	Significant at 0.05				
	Exp.	33	15.5152	4.47298											
English as a subject	Control	33	7.4545	2.47602	5.4							64	Significant at 0.05		
	Exp.	33	11.3333	3.26599											
Overall the attitude scale dimensions	Control	33	38.0606	11.6671	4.99									64	Significant at 0.05
	Exp.	33	53.4242	13.27599											

Table (6) shows that the t-values which range between (2.7) and (5.4), are statistically significant at the 0.05 level. This indicates that there is a statistically

significant difference between the mean scores of the experimental group and the control group in favor of the experimental one. These results validate the fifth

hypothesis. These results also give a support to the effectiveness of the activities based on IE on improving pupils' attitudes towards English.

To test the sixth hypothesis "There is a statistically significant difference at the 0.05 level between the mean scores of the

experimental group on the pre – and the post – administration of the attitude scale in favor of the post – administration", the correlated sample t-test was used for investigating the differences between the pre – and the post – administration of the attitude scale.

Table (7) t-test comparing the experimental group's mean scores on each dimension and its total mean scores on overall the dimensions on the pre- and post - administration of attitude scale.

The scale's dimensions	Measurement	N	Mean	SD	T	D. f (n-1)	Sig. (2-tailed)
Reasons for learning English	Pre	33	10.5758	4.32312	12.7	32	Significant at 0.05
	Post	33	17.1515	3.20275			
Way of Teaching	Pre	33	7.1212	3.52454	7.2		
	Post	33	9.4242	2.65789			
Pupil's interest towards English	Pre	33	10.1515	5.19688	8.4		
	Post	33	15.5152	4.47298			
English as a subject	Pre	33	7.3636	3.99858	7.7		
	Post	33	11.3333	3.26599			
Overall the attitude scale dimensions	Pre	33	35.2121	16.87409	9.6		
	Post	33	53.4242	13.27599			

Table (7) shows that t – value which range between (7.2) and (12.7), are statistically significant at the 0.05 level. This indicates that there is a statistically significant difference between the mean scores of the experimental group on the pre – and the post – administration in favor of the post – administration. These results validate the sixth hypothesis. This means

that the activities based on IE were effective in modifying pupils' attitude towards the English language.

The Effect Size of treatment

After estimating the t-values, eta square was used in order to evaluate the effect size of the activities based on IE on the experimental group.

Table (8) :Value of (η^2) and the effect size of activities based on IE on improving the attitude of the experimental group.

Independent variable	Dimensions of Attitude scale	T	D. F (n-1)	Value of Eta –square (η^2)	Level of Effect Size
The activities Based on IE	Reasons for learning English	12.7	32	0.83	High
	Way of Teaching	7.2		0.62	
	Pupil's interest towards English	8.4		0.69	
	English as a subject	7.7		0.65	
	Overall the attitude scale dimensions	9.6		0.74	

Table (8) presents the eta square values (η^2) which range from (0.65) to (0.83). These values indicate a high effect size of activities based on IE on improving the attitude of the experimental group.

Results revealed that there were significant statistical differences between the two groups favoring the experimental one on the post – administrating of the reading comprehension sub – skills test, and the attitude scale. These differences could be attributed to the effect of the activities based on IE.

Discussion of results

The improvement of pupils' reading comprehension levels and their attitude towards the English language occurred due to the correlation between the reading comprehension skills and IE. Each instrumental of IE has enhanced one or two reading comprehension sub – skills, and paved the way for promoting another reading comprehension sub – skill.

In addition, the way of handling the activities played an effective role in this study. The activities have been applied through the MLE. The activities were arranged, and implemented in a different way than usual. This way attracted pupils' attention and evoked their interests. Pupils who admitted at the beginning that they had a negative attitude towards English, positively modified their attitudes and expressed their pleasure with English lessons. They stated that English became more enjoyable to them than before.

Furthermore, the teacher's tasks changed and became a mediator. The mediator helped pupils learn how to think, and how to learn. This new way of teaching motivated pupils, and encouraged them to participate. This led to improve their reading comprehension skills, and modify their negative attitudes to positive attitudes towards the language.

In addition, the results revealed that there was a correlation between the performance in reading comprehension and attitude towards the language. This result is in line with the results of the study conducted by Momani (2009) which reported that there is a strong correlation between the learners' attitudes toward learning English and their performance in reading comprehension.

The results of this study are in line with those of the studies concerning with the effect of IE like Getz (1992), El-Banna (2000), Shoaer (2003), El-Seady (2008), Qorany (2005), Hela, et al (2008), Abeam (2010), and AL-Nifayee (2010).

Recommendations

In light of the results and conclusion of the study, the following recommendations can be suggested:

1. EFL teachers should not limit themselves to the Teacher Guide or textbook activities; they should adapt the curriculum according to their pupils' needs and interests.
2. IE should be used as a framework for developing reading comprehension skills
3. Adapting IE in teaching other language skills.
4. Searching for new techniques, approaches or programs to develop the pupils' attitudes towards learning EFL, and enhancing reading comprehension skills.

Suggestions for future researches

It is recommended to:

1. Design activities based on IE for improving other language skills than reading.
2. Test the effect of the activities which were used in the study on improving different language skills.
3. Adapt IE in developing the reading comprehension skills of other EFL learners at different stages (e.g. secondary stage or primary stage), or for pupils with special needs (blind and deaf pupils).
4. Design a training program for the teachers on how to implement IE in their teaching.

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