The Impact of 5E's Model on Seventh Grade Students Attitudes towards English in Ma'an Directorate of Education

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Abstract
The study investigated the impact of 5E's Model on developing seventh grade student's attitudes towards English during the academic year 2022/2023. The study employs a quasi-experimental design.The school was purposefully selected on convenient grounds. 40 participants of EFL female seventh grade students studying at Teebah Primary School were distributed into 20 for the experimental and 20 for the control one. To achieve the aim of the study, a post-attitude scale was used to determine the students' attitudes towards English language. Validity and reliability of the instrument was verified. The results of the study revealed that there were significant differences between the mean scores of the EFL seventh grade student's post attitude scale due to using the 5Es model favoring the experimental one. In light of the study results, the study recommends the necessity of implementing the 5E's instructional Model in English language teacher's book, and guide the teacher to use it effectively.

1. Introduction

English language plays an essential role in our lives as it helps in communication. It is the main language for studying any subject all over the world. English is important for students as it broadens their minds, develops emotional skills, improve the quality of life by providing job opportunities. Moreover, the use of English as an international language is growing with time because it is the only medium for communication in many countries. English is also used widely in the literature and media section to publish books, most of the writers write in the English language due to the vast majority of readers know only the English language and they can describe their ideas best in the English language (Spears English Language Lab, 2023).

The notion of teaching methods has had a long history in language teaching, as witnessed by the rise and fall of a variety of methods throughout the recent history of language teaching. These teaching methods have different views through the history. Some, such as Audio-lingualism, became the orthodox teaching methods of the 1970s in many parts of the world. Other guru-led methods such as the Silent Way attracted small but devoted followers in the 1980s and beyond, but attract little attention today (Richards & Renandeya, 2002). As a result, there has been a rapid shift of research and practice from discrete structure and much attention has been paid to focusing on a constructivist approach.

All of these methods and approaches tried to find out the best way of teaching English and creating the most effective design. Although methods, approaches, techniques, materials, and roles of the teacher and student have changed, a perfect model has never been created. In this research, the 5Es Model, which is a new model of one of the well-known learning theories, constructivism has evolved. 5Es Model is one of the most practical recommended models in the application of constructivist learning theory (Özmen, 2004). It is thought to be effective in providing a sequence of instruction that places students at the center of their prior experiences. Thus, the aim is to encourage students to explore and construct their own understandings of the new subjects.

According to Bybee (1997), the 5Es Model promotes a learning environment that provides opportunities to explore and investigate a way to understand new concepts. The model emphasizes collaborative learning to help students develop skills such as debate, discussion, writing, drawing, presenting thoughts, and social skills. The 5Es Model name represents all the stages and their numbers. This learning model applied in five stages and named as "5Es Model" is composed of five stages: Engagement, Exploration, Explanation, Elaboration and Evaluation (Carin & Bass 2005, Lorsbach, 2004).

1. **Engagement**: It is the entry stage of the model. Teachers, at this stage, pose questions, define a problem or demonstrate an event related to the subject and ask students to comment on the subject so that they can identify the students' preliminary knowledge (Bybee, 1997, Wilder & Shuttleworth, 2005). Therefore, it helps the teacher assess students' prior knowledge about the content.

2. **Exploration**: In this phase, students are encouraged to work and explore the ideas without any direct instruction. The teacher is the supplier of the materials and the guide to control their attention (Carin & Bass,2000).

3. **Explanation**: The teacher encourages learners to explain what they have learned and introduces new terms, ideas and explanations. The teacher utilizes more striking techniques such as oral explanation, movie, video and demonstration (Campbell 2000, Bybee, Loucks & Horsley 2002).

4. **Elaboration**: This is the stage where students adapt and implement the new information they acquired to new situations. The teacher encourages the students to use their information in different situations, and have responsibility (Morse, Roberts, Szesze & Wayne, 2004).

5. **Evaluation**: This is the last stage of the model in which the students change their behaviors and evaluate their progress. The teacher observes students' performance and products to assess their understanding. In conclusion, finding an appropriate method, approach, model or technique to motivate students and develop their learning is not easy. However, it is possible to overcome this situation by exploiting the 5Es Model in which, the five phases provide the best way of motivating and creating a comfortable atmosphere to help students start producing and increase their achievement.

1.1Statement of the problem:

Learning English is not an easy job for the majority of students, especially within the limited capabilities of Jordanian schools. As an English teacher for 10 years, the researcher has noticed many obstacles such as crowded classes, difficult curricula and conventional evaluation methods that make students' motivation and participation in the classroom low and weak. This has led the researcher to reflect on how English can be taught and studied more effectively, and thus, to investigate the impact of 5E's Model on developing seventh graders' attitudes towards English in Ma'an Directorate of Education.

1.2 Questions of the study

The study was conducted to answer the following question:

Are there any statistically significant differences at the level of significance ($\alpha = 0.05$) between the mean scores of the EFL seventh grade student's post attitude scale due to using the 5Es model?

1.3 Purpose of the study

This study aimed to determine the impact of using the 5E's model(Engagement, Exploration, Explanation, Elaboration and Evaluation) on developing seventh grade student's attitudes towards English.

Pointed out in the following:

Identifying the effectiveness of using 5E's Model on developing seventh graders' learning of English and examining the students' attitudes towards English language as a result of using a constructivist 5E's Model as a teaching method.

2. Literature Review

Al-Dollat (2022) in his study, investigated the effect of using the 5E Model of instruction on Jordanian EFL tenth-grade students' grammar learning and their attitudes towards it. The participants of the study were (70) tenth grade students from Shurahbeel bin Hasna Secondary School for Boys (KufrYouba) in Irbid Directorate of Education. To achieve the objectives of the study, a 5E Model-based instructional program, a grammar pre-/post-test, and an attitudinal questionnaire were developed by the researcher. The study followed a two-group pre-/ post-test design in which the control and experimental groups were compared in terms of the dependent variable once before the treatment and once after it. The treatment lasted for eight weeks during the second semester of the academic year 2021/2022. The findings revealed statistically significant differences (at $\alpha = 0.05$) between the pretest and post-test mean scores which can be attributed to implementing the instructional program. They also showed improvement in the participants' grammar learning after engaging in the grammar activities in the program. The study also revealed positive attitudes towards using the 5E Model, as the participants described the instructional program as beneficial, exciting, and effective.

Dawod (2021) conducted a study aimed at identifying the impact of the (5E) strategy of teaching the English language on the development of the habits of mind and learning attitudes of the tenth grade students in Amman in a sample collected mainly from Al Hassan Al-Basry secondary school in the academic year (2020/2021). The study is substantially depended on the semi-experimental approach. The sample which consists of (60) male students in the tenth grade was divided into two groups; one of them is set as an experimental, was using the (5E) strategy, and the other in the convential way. In order to achieve the objective of the study, two scales were prepared and verified the validity and consistency, one to measure the habits of mind and the other to measure learning attitudes then the scales were applied to the sample of the study. The results showed that statistically significant differences at the level ($\alpha = 0.05$) between the arithmetic mean of the member's experimental and standard deviation scores in the scales of the habits of mind and learning attitudes due to teaching method.

In the same context, Jendeya (2015) investigated the impact of 5E Model on developing tenth graders'

English grammar learning and their attitudes towards English. To achieve this aim, the researcher adopted the experimental approach and employed a sample of (68) EFL male learners studying at Jamal Abdu-Nasser Secondary School for Boys in the Gaza Strip. The researcher chose two classes of the four ones which he was teaching: one class was as an experimental group consisting of (34) students and the other was as a control group consisting of (34) students. The conventional method was used in teaching the control group, while the 5E model was used with the experimental one in the first term of the school year (2015-2016). As a main tool for the study, the researcher used an achievement test of four domains with (35) items designed and validated to be used as a pre- and posttest. Being used as a pretest, the achievement test was meant to prove groups' equivalence. Besides, it was used as a post-test to measure any possible differences between the two groups. Also, the researcher used an attitude scale (pre & post) to   determine the students' attitudes towards English language. The collected data were analyzed and treated statistically through the use of T-test and to identify the direction of the effectiveness. Furthermore, the effect size equation was used to measure the effect size of 5E Model on the experimental group in each scope of the test. The findings of the study revealed that there were significant differences in learning English grammar between both groups: the experimental and the control ones, favoring the experimental group, and this is due to using 5E Model in teaching the experimental one. Based upon the previous findings, the study recommended the necessity of implementing 5E Model in teaching and learning English grammar to bring about better outcomes in students' achievement. Also, the researcher suggested that further research should be conducted concerning the effectiveness of using 5E Model on different English language skills and other school subjects as well.

In addition, Koksal (2009) in his study researched the effectiveness of 5E model based on constructivist approach on seventh grade students' understanding of simple past tense in English lesson curriculum and their attitudes towards English in Abidin Saniye Erçal primary school in Konya in Turkey. Fifty seventh grade students from two different classes of an English course taught by the same teacher in Konya Abidin Saniye Erçal Primary School 2008-2009 spring semester were enrolled in the study. The classes were randomly assigned as control group and experimental group. Students in the control group were instructed by the conventional designed English instruction whereas students in the experimental group were taught by the instruction based on 5E model. Multiple choice tests and exercises about simple past tense were administered to both groups as a pre-test and post-test in order to assess the students' understanding of concepts related to simple past tense. The results of the tests were evaluated in Microsoft SPSS 10.00 programme. As statistics technique Independent Sample Test was used .As a result it has been observed that 5E model based on constructivist approach has positive effect on students' success according to the conventional method and their attitudes and perceptions of English.

3. Methodology

The study uses a post-attitude scale due to the nature of the research which aimed at finding the impact of 5E Model on the seventh graders attitudes towards English language, depending on the post attitude scale which were applied on the sample. The study instrument (the attitude scale) was post-applied on the research group. The participants of the study consisted of (40) female EFL seventh grade students at Teebah Primary School during the scholastic year 2022/2023. The school was purposefully selected on convenient grounds.

3.1 Instruments

To achieve the aim of the study, an attitude scale was used as a main tool. This scale was applied after the experiment on participants. The scale consisted of four domains. The first one tackled attitudes towards learning English, the second one expressed attitudes towards enjoying learning English, the third domain tackled attitudes towards English teachers and methodology and the last domain was about attitudes towards 5E model. The five-point Likert scale was used ranging from 5 to 1 (5 = strongly agree, 4 = agree, 3= neutral, 2 = disagree and 1 = strongly disagree) to measure students' responses.

The scale was applied on a random pilot sample of (20) seventh graders

from Fatima Abd-alhameed Secondary School in Ma'an governorate, to examine the clarity of the scale items and instructions. It was also applied to identify the scale validity and reliability. The scale was introduced to a jury of specialists in English language, methodology and psychology university professors in Jordan universities, Ministry of Education and experienced supervisors. The items of the attitude scale were modified according to their recommendations.

3.2 Data Analysis

To answer the question of the study, descriptive and analytic statistic measures were calculated based on SPSS program.

  - Descriptive statistic measures were used to describe the features of the study sample in percentages, and to describe the performance level on the study instrument.

-Alpha Cronbach coefficient to ensure the reliability of the attitude scale.

3.3 Procedures for the study

- Obtaining permission from Ma'an Directorate of Education and the selected school, Teebah primary School.
- Reviewing the related literature.
- Selecting the participant of the study (EFL female seventh grade students).
- Preparing the student's attitudes scale depending on the related literature and ensuring its validity and reliability.
- Conducting the post- application of the study instrument on the participants.
- Correcting the post attitudes scale towards English language.
- Collecting data and results, then analyzing and processing them statistically by using the (SPSS) program.
- Concluding the results, then discussing and comparing them with the findings of related studies.
- Introducing recommendations and suggestions based on the findings of study.

4. Results and Discussion
Results Pertaining to the Study Question
To answer the study question, "Are there any statistically significant differences at the
level of significance ($\alpha= 0.05$) in the EFL seventh grade student's post attitude scale between the experimental group and the control one due to using the 5Es model?"
The means and standard deviations and estimated marginal means of participants' psychological well-being score, due to group (experimental, control) are shown in the table below:

Table (1)
Means, standard deviations and estimated marginal means of attitude scale due to the groups' variables.

Group	N	Pre		Post		Estimated Marginal Means	Std. Error
		Mean	Std. Deviation	Mean	Std. Deviation		
Experimental	20	3.19	.155	3.80	.244	3.795	.053
Control	20	3.20	.151	3.43	.228	3.434	.053

Table (1) shows a slight variance in the means of the pre and post attitude scale attributed to group (experimental, control), to find out whether there are statistical significant differences in these means, one-way ANCOVA was conducted and the results are shown in the tables below:

Table (3)
Means, standard deviations and estimated marginal means of domains of the attitude scale due to the two groups (experimental, control)

	Group	N	Pre		Post		Estimated Marginal Means	Std. Error
			Mean	Std. Deviation	Mean	Std. Deviation		
learning English	Experimental	20	3.45	.314	3.97	.333	3.961	.072
	Control	20	3.43	.253	3.65	.295	3.649	.072
Enjoy learning English	Experimental	20	2.75	.361	3.64	.459	3.651	.100
	Control	20	2.79	.409	3.23	.424	3.219	.100
English teacher and Methodology	Experimental	20	3.33	.195	3.73	.347	3.713	.075
	Control	20	3.30	.200	3.41	.343	3.425	.075
Learning English Grammar	Experimental	20	3.23	.394	3.88	.656	3.881	.122
	Control	20	3.28	.425	3.46	.340	3.456	.122

Table (3) shows a slight variance in the means of the pre and post domains of attitude scale attributed to group (experimental, control), to find out whether there are statistical significant differences in these means, one-way MANCOVA was conducted and the results are shown in the tables below:

Source	Dependent Variable	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Group Hotelling's Trace= .643 P= .003	learning English post	.964	1	.964	9.423	.004	.217
	enjoy learning English post	1.839	1	1.839	9.345	.004	.216
	English teacher and Methodology post	.818	1	.818	7.324	.011	.177
	learning English Grammar post	1.782	1	1.782	6.070	.019	.151
Pre learning English (Covariate)	learning English post	.193	1	.193	1.885	.179	.053
Pre enjoy learning English (Covariate)	enjoy learning English post	.141	1	.141	.716	.404	.021
Pre English teacher and Methodology (Covariate)	English teacher and Methodology post	.656	1	.656	5.871	.021	.147
Pre learning English Grammar (Covariate)	learning English Grammar post	.004	1	.004	.015	.904	.000
Error	learning English post	3.479	34	.102			
	enjoy learning English post	6.692	34	.197			
	English teacher and Methodology post	3.798	34	.112			
	learning English Grammar post	9.982	34	.294			
Corrected Total	learning English post	4.779	39				
	enjoy learning English post	9.111	39				
	English teacher and Methodology post	5.498	39				
	learning English Grammar post	12.173	39				

Table (4) shows that there are statistically significant differences at (a= 0.05) in all domains (learning English , enjoy learning English, English teacher and Methodology, learning English Grammar) due to group variable in favor of the experimental group.

5. Conclusions
The primary purpose of this study was to evaluate the use of the 5E's model as a new teaching model in TEFL classes and it's effect on student's attitudes towards English language. For teaching English to primary stage students, the model proved useful and applicable as revealed in the results of the post attitude scale applied in the present study. However, it is important to mention that the results of the study are limited by the sample size and the instrument used.

Based on the current study findings, the following conclusions were derived:
- 5E Model is more effective and has superiority over the conventional method in teaching
English language.
- 5E Model provided students with a better learning environment, which affected their achievement and performance in English.
- 5E Model promoted a learning environment that provided opportunities for exploring and investigating ways for understanding new concepts.
- 5E Model increased students' motivation to learning and raised the degree of cooperation among students.
- 5E Model also allowed students to reflect on their own misunderstanding and take ownership of their learning through the different phases of the model
- By applying the five phases of the model, students felt relaxed, amused and comfortable and this led to easier learning and acquisition of the language.
- 5E Model increased student-student communication, which provided fluency practice and reduced the dominance of the teacher.
- 5E Model strengthened the relationship between the teacher and the students and made the teacher as a close friend, which facilitated the process of teaching and learning.

- 5E Model gave the students the chance to play several roles as thinkers, problem-solvers, observers, decision makers and better communicators. These roles helped them acquire and employ English language in different situations more easily. In addition, by practicing these roles, students' characters could be formed in an effective way, which reflected positively on them.
- The model provided a tangible referent for the teacher to scaffold his expertise in structuring a learning environment that facilitated students' interaction with a learning context in a critical, reflective and analytical way.
- 5E Model allowed the students and teacher-researcher to experience common activities, to use and build on prior knowledge and experience, to construct meaning, and to continually assess his understanding of a concept.
- 5E Model considered the individual differences among learners with its various activities and techniques that were suitable for students with different levels of proficiency.

6. Recommendations

The study suggests the following recommendations for further studies:
- It is recommended that more studies should use the "5E Model" in the future.
- The current study was limited to teaching English language.
- Other researchers can conduct evaluative studies based on 5E Model to examine to what extent English encompasses interactive and communicative activities and exercises.
- It is also recommended to investigate the effectiveness of using 5E Model on other school subjects.
- It is also recommended to investigate the effectiveness of using 5E Model on students' attitude towards English language.

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