The Effect of Using Inductive and Deductive Methods on 7th Grade Students' Achievement in Grammar in Bethlehem District and their Attitudes toward EFL

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Abstract

This study aims to investigate the effect of using the inductive and deductive methods on 7th grade students' achievement in grammar in Bethlehem District and their attitudes toward EFL. To achieve the purpose of the study, the researchers applied the instruments to a purposeful sample from 7th grade students at two schools, one for boys and the other for girls. Two groups, the experimental and the control ones were used in this study. The experimental group was taught by the inductive and deductive methods, and the control group was taught by the traditional method. To answer the main research question whether the inductive and deductive methods are more effective in teaching grammar rather than the traditional way, the researchers used a pre and post-tests to measure students' achievement in grammar. The researchers also designed a questionnaire to measure students' attitudes toward English as foreign language (EFL). In this study, the researchers used the quasi-experimental design and the used Analysis of Covariance (ANCOVA) for measuring the contrast between the experimental and control groups. The research concluded that there are statistical significant differences between the mean scores of 7th grade students' achievement in grammar, due to interaction between teaching method and gender and the differences were in favor of the male students in the experimental group. Also, the results showed that there are no statistical significant differences between attitudes towards EFL, due to interaction between teaching method and gender.

Keywords: Effect, Inductive, Deductive, Methods, 7th Grade Students, Achievement, Grammar, Attitudes, EFL

1. Introduction

1.1 Background of the Study

Learning the English language is essential for many people who consider it as an international language because it is the language of economics, sciences and many other fields. In order to learn English, learners must master the four skills (listening, speaking, reading and writing), grammar and vocabulary, and each aspect has its own method of teaching.

Good knowledge at grammar and words in any language leads to good understanding of any speaking, reading, writing and listing activity. Also, any mistakes made in grammar will lead to misunderstanding in all language aspects (Zhong-guo, & Min-yan, 2007). Furthermore, grammar is thought to be the basis for all language skills. In listening and speaking, grammar plays an important role in grasping and expressing the spoken language. Also, learning the grammar of any language helps to acquire that language and its grammar rules and patterns (Widodo, 2004).

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Throughout the years, teaching English grammar has been an important issue that researchers studied. Also many different approaches discussed the idea of how to teach English grammar. These approaches focused on teaching the aspects of the language and focused also on teaching grammar (Brinton, Celce – Murcia & Snow, 2014). In English as a foreign language, teaching grammar was done by using the mother tongue, and it was important to extract the meaning of the target language by Translating grammar rules into the native language by following the Grammar – Translation approach.

Grammar has been defined in many different ways by teachers and researchers who deal with teaching grammar (Ellis, 2006). Learning grammar helps learning the rules of grammar and having a good knowledge of grammar. Learning grammar provides many bases on which learners can build their knowledge and use language correctly (Ellis, 2006).

Grammar was regarded as a form and also used to make meaning. The users of grammar not only express themselves accurately and meaningfully, but also use their knowledge of grammar to present themselves to other people in the way that they hope to be seen (Brinton, Celce- Murcia & Snow, 2014).

Teaching grammar, according to Ellis (2006, p. 84), is "any instructional technique that draws learners' attention to some specific grammatical form in such a way that helps them either to understand it meta linguistically and/or process it in comprehension and/ or production so that they can internalize it." In order to teach grammar, the most suitable ways can be followed are the inductive and deductive. In the inductive method, according to Mauntone (2004), the teacher shows the students a series of examples and non-examples, and then guides them toward noticing pattern and coming up with generalizations or concept rules. But in the deductive method the teacher helps students to be able to quickly and accurately solve problems in the classroom.

Following the suitable teaching method in teaching grammar improves students' achievement in grammar and also in learning English. But also, it affects students' attitudes towards English and grammar. And that depends on the students' level, age and the teaching method used. The term attitude was defined in many different ways during the year. In 1980s, Gardner (1985) defines attitude as an evaluative reaction to some referent on the basis of the individual's beliefs or opinions about the referent. In a recent study, Siti (2008) suggests that students' attitudes correlate with their proficiency level as well as the location of their school and their classes.

So, attitude may influence how people deal with different situations in their lives including learning a foreign language. Moreover, Daana and Tahaineh (2013) are of the opinion that attitudes are related to the classroom learning situations, so the learners of English as a foreign language need to be prepared psychologically to acquire English as a foreign language.

As teachers-participants in the teaching process, the researchers noticed that students' achievement in grammar was weak, and that encouraged the researchers to try using new teaching methods in teaching grammar so as to improve the students' achievement in it. Also, that improved the students' attitudes towards EFL. So this study is designed to investigate the effect of using the inductive and deductive methods on students' achievement in grammar, and also the attitudes of the learners toward teaching English as a foreign language (EFL).

1.2 Statement of the Problem

English grammar teaching is a big challenge to both, the teacher and the students. To teach English grammar, the teacher follows different methods in order to meet the students' needs, levels and abilities. And these different methods affect negatively or positively students' achievement level, especially in grammar and on learning English generally. Also, that will effect on the students' attitudes toward learning English as a foreign language. As teachers-participants in the teaching process, the researchers need to know the effectiveness of using the inductive and deductive methods on7th grade students' achievement in grammar and their attitudes toward EFL.

1.3 Objectives of the Study

The study aims to investigate the effect of using the inductive and deductive methods on 7^{th} grade students' achievement in grammar and their attitudes toward EFL. The study will also be beneficial to teachers in the sense that it will enlighten them to the best and most effective methods that can be adopted in teaching grammar.

1.4 Questions of the Study

This study tries to answer the following questions:

- 1. Is there any effect of using inductive and deductive methods on 7th grade students' achievement in grammar due to teaching method, gender or the interaction between them?
- 2. Is there any effect of using inductive and deductive methods on 7th grade students' attitudes towards EFL due to teaching method, gender or the interaction between them?

1.5 Hypotheses of the Study

The hypotheses of this study are as follows:

- 1. There are no statistical significant differences at the level ($\alpha < 0.05$) between the mean scores of 7th grade students' achievement in grammar due to teaching method, gender or the interaction between them.
- 2. There are no statistical significant differences at the level ($\alpha \le 0.05$) between the means of 7th grade students' attitudes towards EFL due to teaching method, gender or the interaction between them.

1.6 Significance of the Study

This study is considered significant because it presents the following points:

- 1. This study is of great use to English teachers. Applying the inductive and deductive methods help teachers to choose the most suitable method in teaching grammar. As a result, the teaching process will be easy for the teachers and the students, and that will make the class more effective, interesting and enjoyable.
- 2. This study will benefit students. Using the suitable method in teaching grammar which fits students' need, level and age, and that improves students' abilities to learn English grammar.
- 3. This study helps writers and curriculum designers to consider the inductive and deductive methods in the future.
- 4. This study may help to lead to the investigation of more studies in this field for different populations and variables.

1.7 Limitations of the Study

The study is limited to the investigation of the effectiveness of using the inductive and deductive methods in teaching English grammar to 7th grade students in Bethlehem district in the academic year (2015-2016) and their attitudes towards EFL.

2. Review of Literature and Related Studies

This section is divided into two parts which are the Literature Review and Related Studies that relate to the effectiveness of using the deductive and the inductive methods in teaching English grammar and the attitudes toward EFL. The Literature Review discusses some topics which are: First, it contains different definitions of grammar, types of grammar and teaching grammar. Second, it discusses different definitions of the inductive method. Third, it discusses different definitions of the deductive method. Fourth, it discusses the students' attitudes toward learning English as a foreign language (EFL). Whereas, the Related Studies explore some previous studies that have investigated the effect of using the inductive and the deductive methods in teaching grammar and students' attitudes toward learning English as a foreign language (EFL).

2.1 Review of Literature

2.1.1 What is Grammar? Types of Grammar

"Grammar is generally thought to be a set of rules specifying the correct ordering of words at the sentences" (Nunan 2003, p. 154). According to the previous statement, the importance of grammar discussed many years ago. The sentences of any language are accepted if they follow the rules of that language (Nunan, 2003). Grammar, according to Cook (2001), is the central area of the language around which other areas such as pronunciation and vocabulary are centered. Grammar relates sound and meanings which is called sometime the computational system. Grammar is a unique aspect of language that has features which don't occur in any mental process and aren't found in animal languages. Also, grammar is learnt in many different ways.

Nunan (2003) believes that grammar has recursive rules allowing one to generate grammatically correct sentences over and over. Bruder and Paulston (1976) define grammar as the possible forms and arrangements of words in phrases and sentences. Grammar is not separated from other language skills and aspects.

It will be found in listening comprehension, pronunciation, reading and writing. English grammar has been divided by many grammarians into different types. The main popular grammar types that Nunan (2003) finds out are Prescriptive grammar and Descriptive grammar. Prescriptive grammar lays down the law, telling what is right and what is wrong. Whereas, Descriptive grammar describes the way that people actually use languages.

2.1.2 Teaching Grammar

Teaching grammar is rooted in the formal teaching of Latin and Greek which used in many schools in Europe for many centuries. In that time, the Grammar-Translation Approach was developed in order to analyze the languages and their complicated rules. Latin and Greek was the key to the thought and literature of a great and ancient civilization, so the reading and translation of texts was important as writing exercises in imitation of these texts. This approach aims at creating an understanding of the grammar of the language, expressed in traditional terms, providing the students with a wide literary vocabulary, and training the students to extract the meaning from foreign texts by translating it into the native language (Rivers, 1968).

Grammar, in the Grammar Translation Approach, is taught deductively. This means that rules, principles, concepts or theories are presented first, and then the applications of them are treated. In other words, start from general to specific principles (Widodo, 2006). In addition to the deductive method, the inductive method is used to teach grammar. Inductive means moving from the specific to the general. The learners are exposed to instances of language use, and then emerge patterns and generalizations. The learners in the inductive method directly attend to particular forms and try to arrive at metalinguistic generalizations on their own (Erlam, 2003).

2.1.3 Inductive Method

Inductive approach comes from inductive reasoning, stating that a reasoning progression proceeds from particulars which are observations, measurements and data, to generalities which are rules, laws, concepts and theories (Widodo, 2006).

According to Nunan (2003), Inductive is presenting the learners with samples of language and, through a process of guided discovery, get the learners to find out the principle or rule for themselves. This method is most close with the Audio-lingual Approach in teaching languages (Gollin, 1998). This approach, according to Brinton, Celce-Murcia and Snow (2014) was driven from the reform movement. The audio-lingual approach appeared in the United States during World War II. Some features of this approach are:

- Lessons begin with dialogues.
- Grammatical structures are sequenced and rules are taught inductively.
- Skills are sequenced.
- A great effort is made to prevent learner errors.
- Vocabulary is severely controlled and limited in the initial stages (Brinton, Celce- Murcia & Snow, 2014).

Inductive, according to Celec-Murcia and McIntosh (1979), presents examples by which the learner induces the relevant second language rule. In the audio-lingual approach, inductive is dominant although the learner is never required to state the rule. Hulstijn (2005) says that students see the structure embedded in instances where it is naturally used, which later leads to an explicit definition of the grammar rule.

In 1942, Gullette, Keating and Viens agreed that the presentation of new material should be presented inductively whenever possible. Also psychologists agree that material which is learned through long use is easier to retain than that which is memorized. Inductive analysis of sentences will present variants of the already familiar material, and this will help students to pay closer attention and force them to work out new principles for themselves. Inductive method has learners participating actively in their own instruction. This method encourages learners to develop their mental set of strategies for dealing with tasks. This method tries to highlight grammatical rules implicitly in which the learners are encouraged to conclude the rules given by the teacher (Widodo, 2006). Schmidt (1990) says that inductive method has involved implicit awareness. That means learning without intention or awareness.

The inductive method, according to Widodo (2006), has some advantages and disadvantages which are in the following table:

	1- Learners are trained to be familiar with the rule discovery; this could enhance learning autonomy and self-reliance.
A. 1	2- Learners' greater degree of cognitive depth is "exploited."
Advantages	3-The learners are more active in the learning process, rather than being simply passive recipients. In this activity, they will be motivated.
	4-The approach involves learners' pattern-recognition and problem- solving abilities, in which particular learners are interested in this challenge.
	5- If the problem-solving is done collaboratively, learners get an opportunity for extra language practice.
	1- The approach is time and energy–consuming, as it leads learners to have the appropriate concept of the rule.
Disadvantages	2- The concepts given implicitly may lead the learners to have the wrong concepts of the rule taught.
	3- The approach can place emphasis on teachers in planning a lesson.
	4-It encourages the teacher to design data or materials taught carefully and systematically.
	5- The approach may frustrate the learners with their personal learning styles, or their past learning experience (or both) would prefer simply to be told the rule.

Table (2.1): Advantages and Disadvantages of the Inductive Method:

2.1.4 Deductive Method

Widodo (2006) says that the deductive method is derived from the notion that deductive reasoning from general to specific. That means rules, principles, concepts or theories are presented first, and then their application is treated. In this method, learners study grammar rules before applying the rules in doing exercises. That means the learners work from the general to the particular (Fortune, 1992).

Krumboltz and Yabroff (1965) define deduction as giving the generalizations to the students, then they are asked to deduce specific applications; whereas, deductive method according to Schmidt (1990), has involved explicit awareness, which means learning with intention and awareness.

Erlam (2003) defines the deductive method as a process that moves from general to specific. The learners are exposed to the general use, and then they apply the rule to particular instances of language use. And this method is most close with the Grammar-Translation approach (Gollin, 1998). This approach, according to Brinton, Celce-Murcia and Snow (2014) was used as a way to teach Latin and other languages. This Approach has some elements, which are as follows:

- The focus is on grammatical parsing.
- Using the native language of the students.
- Little use of the target language for communication.
- Atypical exercise is to translate sentences from the target language into the mother tongue.

The Deductive method is related to conscious learning. This method tries to place a great emphasis on error correction and presentation of explicit rules. The deductive method is often used with adult learners. The teacher in this method teaches the rule explicitly to learners, and they are ready to cope with exercises given (Krashen, 2002). As in inductive method, the deductive method has its own advantages and disadvantages, according to Widodo (2006), which are in the following table:

	1-The Deductive approach goes straight forwardly to the point and can, therefore, be time-saving.				
Advantages					
	2- A number of rule aspects (for example, form) can be more simply and clearly explained than elicited from examples.				
	3- A number of direct practice/application examples are immediately given.				
	4- The deductive approach respects the intelligence and maturity of many adult learners in particular and acknowledges the role of cognitive processes in language acquisition.				
	5-It confirms many learners' expectations about classroom learning, particularly for those who have an analytical style.				
	1- Beginning the lesson with a grammar presentation may be off- putting for some Learners, especially younger ones.				
Disadvantages	2- Younger learners may not be able to understand the concepts or encounter grammar terminology given.				
	3- Grammar explanation encourages a teacher-fronted, transmission- style classroom, so it will hinder learners' involvement and interaction immediately.				
	4- The explanation is seldom as memorable as other forms of presentation (for example, demonstration).				
	5- The deductive approach encourages the belief that learning a language is simply a case of knowing the rule.				

Table (2.2): Advantages and disadvantages of the deductive method

2.1.5 Students' Attitudes toward learning English as a Foreign Language (EFL)

In foreign language learning context, there are many factors that influence the learning process such as anxiety, motivation, intelligence, learning achievement, attitudes, etc. (Gardner, 1960, as cited in Shams, 2008). The issue of a learner's attitude is known as one of the most important factors that impact learning a language. Researchers in education and other fields put several definitions of attitude which express different meanings from different contexts and perspectives (Alhmali, 2007).

According to Merriam-Webster, attitude means "the way you think and feel about someone or something". Whereas, Reid (2006) says that attitudes express our evaluation of something or someone. They may be based on our knowledge, our feelings and our behavior and they may influence future behavior. In the context of studies in the sciences, attitudes are evaluations which may influence thinking and behavior. An attitude is highly complex and can affect learning extensively.

From the previous definitions of the attitude, the importance of attitude appears. The students develop their own attitudes anyway. If the teacher ignores attitudes in his/her thinking about teaching and learning, this won't stop the students developing their attitudes. If the teacher thinks that his/her task is to teach English grammar and nothing more, that will not stop attitudes developing. In addition to that, attitudes are important because they can't be separated from the study. It is a relatively quick series of steps for a student with difficulty in a topic to move from that to a belief that they can't succeed in the topic, that it is beyond them totally and they will no longer attempt to learn in that area. In our life, attitudes allow us to make sense of ourselves, make sense of the world around us and make sense of relationships. So, students can make sense of themselves and others, then they will understand the world around them (Reid, 2006).

Over years, it was difficult to measure attitudes. But in 1929, the first serious attempt was made by Likert who has given his name to a technique which is used nowadays. The researchers' point out that if attitudes lead to behavior, then we can measure behavior and then deduce what the attitude might be (Reid, 2006).

2.2 Review of Related Studies

During the twentieth century, several language teaching studies led to the appropriate ways to teach grammar. Alsamadani (2015) tries to investigate the relationship between Saudi EFL students' attitudes towards learning English and their academic achievement. The sample of this study consisted of 112 English major students from Umm Al- Qura University. The students were chosen randomly from different levels. The tools of this study included an attitudes scales to measure the attitudes of Umm Al-Qura University students towards learning EFL. Also, the researcher conducted a number of semi-structured interviews with some students. The results of the study found that students have positive attitudes towards learning English as a Foreign Language (EFL). Also, the results showed that there was a clear correlation between students' attitudes and their achievement.

Al-Mekhlafi and Nagaratnam (2013) try to study the pre-service student teachers' general attitudes towards EFL grammar instruction and their attitudes towards explicit and implicit methods of teaching grammar in an EFL context. The sample size was 58 students in the Omani schools. The tool of the study was a questionnaire about the general attitudes towards EFL grammar instruction and their attitudes towards explicit and implicit methods of teaching grammar in an EFL context. The results of the study showed that students had positive attitudes towards EFL grammar instructions. The difference in the students' attitudes towards inductive and deductive was significant. Also, there was no significant difference in the pre-service student teachers' general attitudes towards grammar instruction as implicit and explicit methods of instruction based on their gender or the level they taught in their practicum.

Danna and Tahaineh (2013) try to identify the motivation orientations of the Jordanian EFL female undergraduates and their attitudes towards learning the target language and its community. The population of this study was 785 female undergraduates majoring in English during the academic year 2011/2012 in Amman-Jordan. The sample of the study comprised of 184 students. The tools of the study were an adopted questionnaire about attitude and motivation. The results of this study gave evidence that learning English to be part of the culture of its people had less impact in students' English language motivation. According to students' attitudes, the results showed that Jordanian undergraduates majoring in English as a foreign language had positive attitudes towards the English language. English-speaking people and their culture.

Chalipa (2013) tries to investigate the effects of inductive vs. deduction instructional approach in grammar learning of ESL learners in Iran. The sample of this study was consisted of 40-university students in Islamic Azad University, 22 were female and 18 were males. The tools of the study were a questionnaire and a grammar pretest and grammar posttest, in addition to immediate quizzes which were administered to the students following instruction of each grammatical structure. The results of this study showed that students learned better by the deduction method on short-term more than by the inductive method.

Darabad (2013) examines the effect of two types of corrective feedback on oral accuracy considering the attitudes towards foreign language. The sample of the study is 120 Iranian female EFL learners. The tools of the study are: placement test, Attitude/Motivation Test Battery (AMTB), pre-test, treatment sessions, immediate post-test and delayed post-test. The collection data was analyzed by SPSS and two-way ANOVA. This study found out that there was a statistically significant interaction between program types (corrective feedback) and the time, and also a substantial main effect for that with both groups showing an increase on the scores of oral accuracy across three time periods. The main effect comparing the two types of intervention was statistically significant suggesting a significant difference in the effectiveness of the two teaching approaches showing superiority of prompts over recasts in post-tests. In the meantime, the results didn't show any interaction between attitudes and feedback conditions in terms of target language accuracy.

Gorat and Prijambodo (2013) try to investigate the effect of using deductive and inductive approach in teaching English to students on their conditional sentence mastery. The study was a quasi-experimental study. The population of the study was 102 students in a vocational school. The sample was 64 students in the academic year 2012-2013. The instruments of this study were a pre-test, post-test, questionnaire and interview. This study found that there was a significant difference between the mastery on conditional sentences of the student taught using the deductive approach and those taught using the inductive approach. It was found that the inductive approach was more effective than the deductive approach to teach conditional sentences.

Abidin, Alzwari and Mohammadi (2012) try to see Libyan secondary school students' attitudes towards learning English language in terms of behavioral, cognitive and emotional aspects. The participants were 180 students from different secondary schools in the west of Libya. The tool of this study was an adapted attitude questionnaire. The collected data was analyzed by the SPSS program and one-way ANOVA analysis test. The results of the study showed that the participants had negative behavioral and cognitive attitudes towards learning English. But the emotional aspects of attitude towards English were different from the behavioral and cognitive aspects of attitude. The participants preferred studying in their mother tongue rather than in any other foreign language.

Ahmed, Yossatorn and Yossiri (2012) try to investigate the students' attitudes towards activities used in an EFL classroom in one Thai university. The sample of the study included first year students (bachelor students of medical and engineering faculties) who had studied public speaking. The tools of the study were class observations and semi structured interviews. The results found that more than half of the participants regarded their teacher's use of activities to determine their success in language learning. However, less than half of the participants showed dissatisfaction with the EFL teacher using humor about their cultures as part of his teaching. It was recommended that further studies be undertaken on larger scales to develop more understanding of students' attitudes towards teachers applying activities in EFL classrooms. And this study could encourage further research to investigate the relationship between EFL teachers' using wide range of activities and promoting learners' interest, as well.

Berendse (2012) tries to explore the effectiveness of inductive and deductive instruction when learning grammatical structures in an ESL (English Second Language) classroom with Dutch secondary school pupils. The participants in this study were 54 secondary school pupils who were divided into two groups: a deductively taught group (28 pupils) and an inductively taught group (26 pupils). The tools of this study were pre-post tests, which had three grammatical judgment tasks, post-test and retention task. This study found that both the inductive and deductive group performed significantly better in both, the past tense and the present perfect tense in the post-test, when compared to the pre-test.

Dehbozorgi (2012) tries to investigate the effects of attitude towards language learning and risk-taking on EFL students' proficiency. The sample of this study was 120 female and male college students in Iran. The study used three data gathering instruments which were: attitude towards language learning scale, questionnaire and Oxford Quick placement Test (2005). The results of the study showed that the relationship between proficiency level-high, middle and low- and attitude towards language learning was not significant and the middle proficient participants were higher risk-takers, the results demonstrated differences in risk-taken between high and intermediate levels. Moreover, there were no significant differences between high and low groups and low and middle groups. Correlation analysis revealed a significant positive relationship between attitude towards language learning and risk-taking. Besides, language proficiency and attitude towards language learning didn't have a significant correlation. Also, the correlation between language proficiency and risk taking was not significant.

Wang (2012) compares the effect of inductive and deductive approaches in teaching English verb tenses to Taiwanese English-majored freshmen of field independent and dependent cognitive. National Kaohsiung University of Applied Sciences was randomly selected of this study.

The students were divided into two classes, class A consisted of 51 students who were taught by deductive instruction and class B consisted of 49 students, who were taught by inductive instruction. This study applied some tools which were a self-designed English tenses comprehension test, and this test was used as the pre/post- test of the study. The second tool was the group embedded figures test which is a popular instrument used to determine the field dependent/independent cognitive style. The study found that while both groups exhibited remarkable improvement after two months of instruction, students in the deductive group improve more significantly than those in the inductive group. This result implied that explicit instruction of grammatical rules is the most efficient way to learn English for most Chinese learners.

Osafo-Adu, Simpeh and Soku (2011) try to examine students' attitudes towards the study of English and French in a private university setting in Ghana. The sample of the study consisted of 130 students and the instruments were a survey questionnaire to measure the attitudes of students to the study of English and French. The results of this study showed that gender had a significant effect on students' attitudes to the study of English, where females showed a better attitude to the two languages than their male counterparts. However, gender had no significant effect on students' attitudes to the study of French. Thus no significant differences exist between males and females in their attitudes to French. It also found that age and level of students had no significant effect on students' attitudes towards the study of both English and French.

Also, language back group had no effect on students' attitudes to the study of English and French. But the results showed that language block had a significant effect on students' attitudes towards the study of French.

Galloway (2011) tries to investigate Japanese university students' attitudes towards English and English teachers in relation to the use of English as a Lingua Franca (ELF). The sample of the study was the students majoring in English at Kanda University of International Studies in Japan, a private university in Chiba. The tools of the study were questionnaires, interviews and focus groups. The findings showed that English is seen as a language belonging to native English speakers and those students want to learn native English. However, the results highlighted that a number of factors influence students' attitudes. The findings also demonstrated that the study of Global Englishes influenced students in a number of ways, including their motivation for learning English. attitudes towards varieties of English and attitudes towards English teachers.

AlRifai (2010) tries to study students' attitudes, motivation and difficulties involved in learning English language and factors that affect motivation in learning it. The sample of the study was about 200 students who have taken different English courses in Kuwait University. The tool of the study was a questionnaire and the data analysis was done by using the SPSS software package. The results of this study found that there was a high correlation between any two independent variables related to students learning the English language. This means that if the attitude toward learning English increases, the student gets much more in class courses and also from teachers during the teaching sessions Also, appropriate changes can be recommended in teaching methods, teaching strategies and various techniques can be designed and implemented to motivate the students to learn English. One of the recommendations of the study was to implement teaching strategies and do further research on any topic that will bring about an improvement in teaching strategies, and this will help change the students' attitudes toward learning the English language and motivate students in learning the English language.

Fakeye (2010) tries to find out the relationship between students' personal variables such as academic ability as correlates of academic achievement in English as a second language in Nigeria. The sample was chosen randomly from some secondary schools in Nigeria. The tools of the study were a questionnaire and an academic ability test. The results of the study found that there was positive relationship between students' attitudes and their academic achievement in English. Also, there was a significant difference in the academic ability of male and female students with male students having higher academic ability mean scores.

Kuder (2009) has worked on her study to examine the implications of the inductive and the deductive approaches to SLA grammar instruction in Spanish to 44 college – aged participants in two separate intermediate classes. Students were divided into two groups, 20 students in the control group and 24 in the experimental group. Each group experienced a 50-minute instruction, administered by the some instructors. The researchers used diagnostic and identical assessment measures. The results of this study showed there were a higher level of achievement as well as a higher level of satisfaction in the group exposed to the inductive lesson, in comparison to the group exposed to the deductive lesson.

Takimoto (2008) worked on a study to investigate the effects of the deductive and inductive instruction on the development of language learners' pragmatic competence in Japan to 60 participants, who were randomly assigned to one of four. Three treatment groups and one control group, the three treatment groups were: the deductive instruction (DI) group, the inductive instruction with problem solving tasks (IP) group, and the inductive instruction with structured input tasks (IS) group. The four groups of participants, the DI, IP, IS and the control groups took part in four types of English language classes. Each teaching session for the three control groups lasted 40 minutes. This study used pre-tests and post-tests, and they had modifications of prototypic measures of cross- culture pragmatics. Each test has two outputs-based parts, discourse completion test and role-play tests, and two input-based tests, a listening test and an acceptability judgment test. The results of this study indicated that inductive instruction was effective when combined with problem-solving tasks or structured input-tasks for which the emphasis is on pragma linguistic.

Mohammad (2008) tries to investigate the effects of deductive and inductive approaches of teaching on Jordanian University students' use of the active and passive voice in English. This study was conducted in two university students in Jordanian: Al – Balqa' Applied University and Jarash Private University. Three sections of students participated in the study, two classes from Amman Faculty of Engineering Technology in the first university, and one class from the Faculty of Arts (English Department) in the second university. The students of each class were divided randomly into two groups: one group was taught the passive and the active voice by the deductive approach and the other group by the inductive approach.

The tools in this study were pre-test, which was used as a mean of feasible evaluation, and a post-test. The results of this study indicated that students in the deductive groups made significant better gains than those in the inductive group in the use of the passive and the active voice.

Erlam (2003) focuses on the relative effects of deductive and inductive instruction on the acquisition of direct pronouns in French. This study was conducted in one of New Zealand's largest secondary schools. There were 69 students which were divided into three groups. Group one was taught by deductive instruction and consisted of 21 students, group two was taught by inductive instruction and had 22 students, and group three was the control group, which had 26 students. The three groups received three lessons, each lesson was 45 minutes and spread over the period of one week. The tools of this research were oral production tests, written production tests, and listening comprehension tests. The results of this study provided evidence in support of the effectiveness of deductive language instruction in a teacher-centered classroom language learning environment with school-age learners.

As has been seen above, some previous studies show that students learned better by the deductive method, while other studies show the opposite. However, some other studies find out that the students performed better in the both methods which are inductive and deductive such as Berendse's study which investigated the effect of inductive and deductive instruction when learning grammatical structures in an ESL classroom with Dutch secondary school pupils. Also, there are some previous studies investigate the relationship between the students' attitudes towards learning English and their academic achievement such as Alsamadani's study which found that students have positive attitudes towards learning English as a foreign language (EFL). According to this study, it shows the effect of using the inductive and deductive methods on the students' achievement level in grammar and their attitudes towards EFL. This study doesn't separate between the two teaching methods and compared between them, but it used them as one new teaching method. This study also is the first study and research which investigates the effect of using inductive and deductive methods on the students' achievement in Palestine, and this is what characterizes this study and distinguishes it from the previous empirical studies. In addition to that, this study measures the students' attitudes towards EFL. Also, this study uses the two previous methods as one method and compares it with the traditional way of teaching grammar to know their effect on students' achievement in grammar and also measures the attitudes of students towards EFL.

3. Methods

3.1 Methods

The research followed the experimental approach and quasi-experimental design.

3.2 Population and Sample of the Study

The research population consisted of all male and female 7th grade students in Bethlehem Educational Governorate schools during the first semester of the Scholastic Year 2015-2016 and their number was (3528). The number of the males was 1823 and the females 1705.

The sample of the study was purposeful which was from the population of the study. However, the control and experimental groups had been assigned randomly. The overall sample consisted of (108) taken from the population of (3528) learners at the 7th grade governmental schools at Bethlehem District. The sample consisted of two groups from two schools which were Al-Ta'akhy primary school for boys and Beit Sahour Secondary School for Girls. Each school had two groups, one was the experimental group and the other one was the control group. The experimental group (23 males and 29 females) learned by using the inductive and deductive method, and the control group (25 males and 41 females) learned by the traditional method.

3.3 Instruments of the Study

The following instruments were used in the study:

1. Achievement test (pre-test and post-test): The test was designed to measure the students' achievement in the present perfect tense from *English of Palestine*. This test had five questions and every question had five items which needed to be answered by the students in the experimental and control groups. The total mark in this test was 25%.

2. Questionnaire: A questionnaire was designed in order to measure the students' attitudes towards EFL. This questionnaire had 24 items. The questionnaire contained first a cover page which contains the researchers' letter to the students and personal data. Second, it has the 24th items about students' attitudes. To answer the questionnaire, the students needed to read the 24 items carefully then decided the suitable answer that expressed his/her opinion. The researchers designed the questionnaire in the form of a 5 point Likert scale ranging from strongly agree to strongly disagree. The questionnaire was submitted to students in English. Valuable instruction and assistance was offered during the whole process. All copies were filled out and returned to the researchers.

3.4 Data Analysis

The researchers used the descriptive statistics which are means and standard deviation, in addition to the inferential statistics, which had analysis of variance (ANCOVA), using SPSS, and Pearson correlation after correcting data from the per-test and post-test.

4. Results

This study was designed to determine the effect of using the inductive and deductive methods on 7th grade students' achievement in grammar and their attitudes towards EFL. In this section, the researchers present the results of the study, alongside examining the two questions of the study and the two hypotheses. The results are divided in accordance with the questions and the hypotheses of the study. The Analysis of Covariance (ANCOVA) was used to test these hypotheses. To answer the questions of the study, they were changed into hypotheses as the following:

4.1 Results Related to the First Hypothesis

There are no statistical significant differences at the level ($\alpha \leq 0.05$) between the mean scores of 7th grade students' achievement in grammar due to teaching method, gender or the interaction between them. To examine the hypothesis, Analysis of Covariance (ANCOVA).

Source	Type III Sum of Squares	Df	Mean Square	F	Sig.
Pre-test	1718.421	1	1718.421	83.765	0.000
Method	.936	1	25.936	1.264	0.263
Gender	7.43825	1	7.438	0.363	0.548
gender * method	481.550	1	481.550	23.473	0.001
Error	2113.024	103	20.515		
Total	26011.000	108			
Corrected Total	4194.102	107			

Table (4.1): Interaction between teaching method and gender.

The results show that there are no statistical significant differences at the level ($\alpha \leq 0.05$) between the mean scores of 7th grade students' achievement in grammar due to teaching method.

Also, the results show that there are no statistical significant differences at the level ($\alpha \leq 0.05$) between the mean scores of 7th grade students' achievement in grammar, due to gender.

But, there are statistical significant differences between the mean scores of 7th grade students' achievement in grammar, due to the interaction between teaching method and gender. And the differences were for the males who studied in the experimental group.

Table (4.2): Adjusted means and standard errors of the post test scores due to teaching method.

Method	Mean	Std. Error
Experimental	13.60	0.67
Control	14.71	0.65

Table (4.3): Adjusted means and standard errors of	of the post test scores due to gender.
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Gender	Mean	Std. Error	
male	13.89	0.65	
female	14.42	0.58	

Table (4.4): Adjusted means and standard errors of the post test scores due to interaction between gender and method.

Gender	Method	Mean	Std. Error
male	experimental	15.55	0.95
female	experimental	11.66	0.92

4.2 Results Related to the Second Hypothesis

There are no statistical significant differences at the level ($\alpha \le 0.05$) between the means of 7th grade students' attitudes towards EFL due to teaching method, gender or interaction between them. To examine the hypothesis, Analysis of Covariance (ANCOVA) was used.

Source	Type III Sum of Squares	Df	Mean Square	F	Sig.
Pre-test	19.037	1	19.037	94.010	0.000
Method	0.016	1	0.016	0.078	0.780
Gender	0.025	1	0.025	0.124	0.725
gender * method	0.546	1	0.546	2.698	0.104
Error	20.858	103	0.203		
Total	1412.979	108			
Corrected Total	41.713	107			

Table (4.5): Interaction between teaching method and gender.

The results show that there are no statistical significant differences at the level ($\alpha \le 0.05$) between the means of 7th grade students' attitudes towards EFL due to teaching method.

Also, there are no statistical significant differences at the level ($\alpha \le 0.05$) between the means of 7th grade students' attitudes towards EFL due to gender.

Moreover, the results show that there are no statistical significant differences between the means of 7th grade students' attitudes towards EFL due to interaction between teaching method and gender.

Table (4.6): Adjusted means and standard errors of the attitudes due to teaching method.

Method	Mean	Std. Error
experimental	3.57	0.06
Control	3.55	0.06

Table (4.7): Adjusted means and standard errors of the attitudes due to gender.

Gender	Mean	Std. Error	
Male	3.58	0.06	
Female	3.55	0.05	

Table (4.8): Adjusted means and standard errors of the attitudes due to interaction between gender and teaching method.

Gender	Method	Mean	Std. Error
Male	experimental	3.66	0.09
Female	experimental	3.49	0.08

5. Discussion

The inductive and deductive methods in teaching grammar have been shown in a range of previous studies to determine the best method that can be used to teach grammar. Also, the students' attitudes towards English as a Foreign Language (EFL) affect their achievement level of English. This study is an attempt to find out the effect of using inductive and deductive methods on 7th grade students' achievement in grammar and their attitudes towards EFL in Bethlehem district. Here, the researchers discuss the results that have been displayed in the previous section. This presents discussion of findings of the study concerned with the effect of the groups (ie. Experimental and control groups for both girls and boys). The students' achievement in grammar due to interaction between the new teaching method and gender will be studied. Also, the students' attitudes towards EFL due to interaction between teaching method and gender will be highlighted. The results are also compared with other related studies to find whether these results are consistent with them.

5.1 Discussion of the Results of the First Hypothesis

The hypothesis indicated was there are no statistical significant differences at the level ($\alpha \leq 0.05$) between the mean scores of 7th grade students' achievement in grammar due to teaching method, gender or the interaction between them.

For testing this hypothesis, Analysis of Covariance (ANCOVA) was used to determine if there is a significant difference due to interaction between the method of teaching and gender.

The results show that there are statistical significant differences between the mean scores of 7th grade students' achievement in grammar, due to the interaction between teaching method and gender, and the differences were for the males who studied in the experimental group.

The results of this hypothesis are consistent with Wang (2012) who compared the effect of inductive and deductive approaches in teach English verb tenses to Taiwanese English-majored freshmen of field independent and dependent cognitive. The results showed that students in the deductive group improve more significantly than those in the inductive group. This result implied that explicit instruction of grammatical rules is the most efficient way to learn English for most Chinese learners. But in this study, the researchers try to find the students' achievement in grammar by noticing the interaction between teaching method and the gender. The result can be explained like this because most of the students who were taught grammar by using this new teaching method in learning grammar were males, so the result shows that there were statistical significant differences between the mean scores of 7th grade students' achievement in grammar due to the interaction between teaching method and gender.

The result isn't consistent with Ahmed, Yossatorn and Yossiri (2012) who try to investigate students' attitudes towards activities used in an EFL classroom in one Thai university. The results found that more than half of the participants regarded their teacher's use of activities to determine their success in language learning. However, less than half of the participants showed dissatisfaction with the EFL teacher using humor about their cultures as part of his teaching.

5.2 Discussion of the Results of the Second Hypothesis

The hypothesis was there are no statistical significant differences at the level ($\alpha \le 0.05$) between the means of 7th grade students' attitudes towards EFL due to teaching method, gender or interaction between them.

For testing this hypothesis, Analysis of Covariance (ANCOVA) was used to determine if there is a significant difference of 7^{th} grade students' attitudes towards EFL due to the interaction between teaching method and gender.

Table (4.3) shows that there are no statistical significant differences between the means of 7^{th} grade students' attitudes towards EFL due to the interaction between teaching method and gender,

These results are not consistent with Fakeye (2010) who tried to find out the relationship between students' personal variables such as academic ability as it correlates with academic achievement in English as a second language in Nigeria. The findings of this study showed that there was positive relationship between students' attitudes and their academic achievement in English. Also, there was a significant difference in the academic ability of male and female students with male students having higher academic ability mean scores. But in this study, the researchers have studied the interaction between teaching method and gender. Also, the results aren't consistent with Osafo-Adu, Simpeh and Soku (2011) who try to examine students' attitudes towards the study of English and French in a private university setting in Ghana. The results of this study showed that gender had a significant effect on students' attitudes towards the study of English, where females showed a better attitude to the two languages than their male counterparts. However, gender had no significant effect on students' attitudes towards the study of French. It also found that age and level of students had no significant effect on students' attitudes to the study of both English and French.

6. Conclusion and Recommendations

6.1 Conclusion

The results indicate that there are statistical significant differences between mean scores of 7^{th} grade students' achievement in grammar due to the interaction between teaching method and gender. According to the second hypothesis, the results showed that the interaction between teaching method and gender do not affect the means of 7^{th} grade students' attitudes towards EFL, and this proved the hypothesis. The first conclusion to be drawn from this study is that the view that using new teaching method (inductive and deductive) in teaching grammar is beneficial to male students' achievement in grammar and that may depends on the students' level, their learning style, their teacher and their school location. Moreover, the result showed that the interaction between teaching method and gender do not affect on the means of 7^{th} grade students' attitudes towards EFL, and this can be explained according to the period of using the new teaching method. The application of this study didn't last a long time enough to change or affect the students' attitudes towards EFL. Also, the researchers focused on the previous experience of students. It affects students' attitudes if it is bad or good. In addition to that, 7^{th} grade students are in a critical stage in their life and that may affect their attitudes.

6.2 Recommendations

According to the findings of the study, the researchers recommend and suggest the following:

2. Encourage researchers to undertake more studies to investigate the effect of using inductive and deductive methods on students' achievement level in grammar on other educational levels and subjects.

3. The researchers suggest that teachers be trained on the use of the inductive and deductive methods.

4. Encourage English teachers to use these teaching methods in teaching English grammar to improve both students' attitudes towards EFL and their achievement level.

5. Encourage the Ministry of the Education (schools' headmasters and teachers and supervisors) to create an encouraging atmosphere in the English classes to help students have positive attitudes towards EFL.

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