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## **The Effect of using inductive, Deductive, and Interactive Approach on Students' Achievement in teaching Grammar to develop writing skills**

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### **Abstract**

This study aims to implement grammatical competence strategies (inductive, inductive, and interactive) in developing students' writing in grammar and their attitudes towards English as a foreign language. To achieve the purpose of the study, the researchers applied the tools to target a sample of the second intermediate grade female students at Maysaloon Girls School in two groups, Experimental and control were used in this study. The experimental group was taught the inductive, deductive, and interactive strategies, and then the control freeware was studied in the traditional way method. While at a time when new trends in language teaching encourage the use of interactive methods of stimulation and keeping student interest, and the constant tendency to keep a teacher-centered approach to teaching English grammar is counterproductive. The most effective methods currently available are monotonous by heart. Learning needs no longer dominate the main part of the lesson. The interactive strategy is multi-skilled and learner-centered and designed to teach a specific grammatical concept will also be introduced. To answer the main research question of whether inductive, deductive, and interactive methods are so the researchers used a more effective introductory method of teaching grammar instead of the traditional method, so grammatical competence plays a significant role in student language. When students have Grammatical Competence, they will be able to develop their writing comprehension. The present study aims to.

1. Explore the implementation of grammatical competence strategies for teaching writing to intermediate school students.
2. Whether there is any significant difference between students' achievement at the recognition level and that at the production level?
3. Whether there is any significant difference between the achievement of experimental groups in the pre and post-test. To verify the aims of this study, the following hypotheses were proposed:
  2. There are statistically significant differences between the mean scores of the control group, taught according to the conventional method, and the mean scores of the experimental group, taught by using the "grammatical competence strategy" in the post-test.
  3. Here are significant differences between the mean scores of students' achievement at the recognition level and those at the production level.

**Keywords:** Deductive approaches, Inductive approaches, Academic achievements.

### 1.1 Statement of the Problems

Michael (1996:275-308) States that Language is a structured system of communication. The structure of language is its rules and free components are its vocabulary. Languages are the primary means of communication between humans and can be transmitted through speech (spoken language), sign, or writing. Teaching English grammar is a huge challenge for both the teacher and the students. For teaching English grammar, the teacher follows different strategies to meet the needs, levels, and abilities of the students, and these are different strategies that negatively or positively affect the achievement levels of the students, especially in grammar and English language learning in general. Also, it will affect students' attitudes towards learning English as a foreign language.

As educators - participants in the teaching process, researchers need to know the effectiveness of using. Inductive, deductive, and interactive strategies on second-

grade students' achievement in grammar and their attitudes toward English as a foreign language.

### **1. What is grammar?**

Like vocabulary and culture, grammar is one of the essential components of every language. This explains why grammar is a very debatable issue in language learning and teaching, beginning with its definition. Diverse and different definitions have been proposed as we will try to discover in the rest of this part. (McCarthy, 2021, p. 17)

According to Penny Ur (1988, 04), ‘‘grammar may be roughly defined as the way a language manipulates and combines words (or bits of work form longer units of meaning.’’ For example, the singular and the plural forms of the verb are different; is and are respected the singular form is combined with a plural subject, for example, the sentence is ungrammatical.

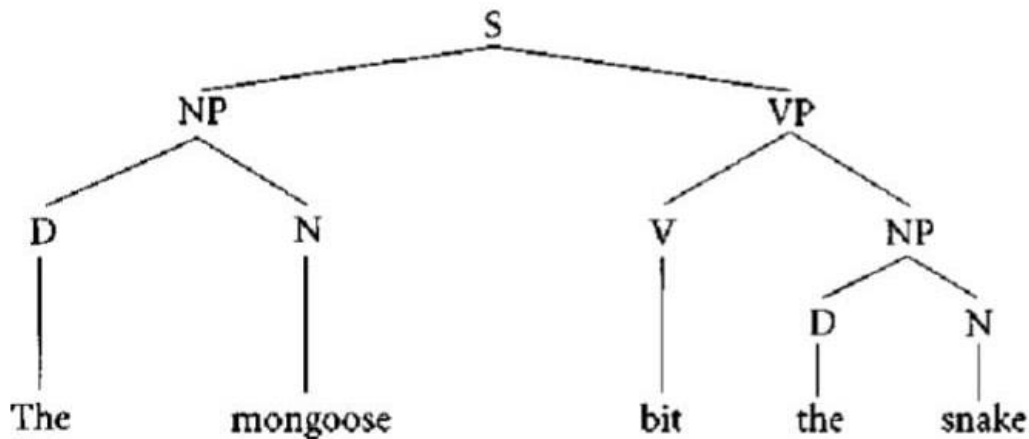
Thus, ‘‘I am Abdeslam’’ is acceptable or grammatical while ‘‘I am Abdeamm’’ is not. Despite being ungrammatical, the meaning of the last sentence can be understood. The problem with this definition is that it only looks at one part of grammar, but it is a good starting point because it simplifies the meaning for the learner.

Grammar may also be defined as the study of what structures are possible in a language expected a grammar is a description of the rules that govern how a language’s sentences are formed. For example, ‘‘not at home right now’’ is acceptable, but ‘‘we not at right home now are’’ is unacceptable because it does not respect English sentences or syntax.

Grammar is also the system of rules that cover the formation of words because writing the word ‘‘beep’’ like this ‘‘peel’’ is ungrammatical. Thus, ‘‘grammar is conventionally seen as the study of the syntax and morphology of sentences.’’ (Scott Thornbury, 1999).

A similar view of grammar is the one provided by Jeremy Harmer (2007,12). The latter defines grammar as ‘‘the description of how words can change their forms and can be combined into sentences.’’

Harmer suggests a diagram to show the description of the structure on which we can create any number of different sentences. For example, the sentence: “The mongoose bit the snake” is described as follows:



**Diagram 1:** The mongoose bit the snake.

In this diagram, we are not concerned with the way this sentence is structured, but with the fact that any sentence can be put in the same structure. For example: “the boy ate the cake”.

A very broad view of defining the word grammar is the one presented by Sidney Greenbaum and Gerald Nelson (2002: 1).

Grammar is all the components of language which are: morphology, syntax, pragmatics, (the use of utterances within particular situations) semantics (the system of meanings in the language), orthography (the writing system in a language), phonetics (the physical characteristics of the sounds in the language and how the sounds are produced) and phonology (the sound system in language). In other words, grammar is all the rules that govern language.

## 2. Why should we teach grammar?

The fact that we all bought our mother languages without being given lessons in their grammar is not arguable. The problem is why it does not happen for the second language.

Stephen Krashen, (1982) answers this question by distinguishing learning from the acquisition. Learning is a result of formal instruction in grammar the mar of limited use of communication. Acquisition, on the other hand, is a natural process by which mother languages are slowly acquired. (Scott Thornbury,1999). Thus,

there is no doubt that teaching grammar is essential to second language learners for various reasons.

**First**, without the knowledge of grammar, one will produce a set of sentences that will certainly cause confusion and ambiguity.

For example: · \* Seven years ago I would have wanted to go to New York but at this time anybody in my family did not want to go.

· \* I have been sleeping since last night.

· \* I wanted to go tomorrow to get my passport which I have left the office.

In these examples, we find ambiguity and confusion. The role of grammar is simply to put a specific meaning in a specific structure so that it can be understood by everybody in the same way. (David Crystal, 2004).

**Second**, the importance of grammar can also be seen if we try to communicate using only a dictionary. Imagine you are an Amazigh speaking person who has never been exposed to English and you are put among a group of English-speaking people. You are given only an Amazigh-English dictionary which means that you have a vocabulary. How can you ask for directions? You will certainly find yourself using your mother language's structure instead of the English one. Your problem here is at the level of syntax, which is part of grammar. Penny Ur (1988, 04) says “ you cannot use words unless you know how they should be put together.”

## **2.1.2 Strategies of Grammatical Competence**

### **2.1.2.1. Concept of the Deductive approach**

Widodo (2006:122-141) says that the deductive method is derived from the notion that deductive reasoning is 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, 1992:160-171).

Krumholtz and Yabroff (1965:223-235) define deduction as giving generalizations to the students, then they are asked to deduce specific applications;

whereas the deductive method according to Schmidt (1990:129-158), has involved explicit awareness, which means learning with intention and awareness.

Erlam (2003:242-260) defines the deductive method as a process that moves from general to specific. The learners are exposed to general use, and then they apply the rule to particular instances of language use. And this method is most close to the Grammar-Translation approach.

This approach, according to Brinton, Celce-Murcia, and Snow (2014:54-56) 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.
- A typical 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 the 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 the exercises given (Krashen, 2002:7).

Also, the deductive approach derives from deductive reasoning where the concept goes from general to specific. Rules, patterns, and principles are presented first, then moves to the examples. The deductive approach is also known as rule-driven teaching.

The most favorable method for this deductive teaching is Grammar Translation Method where the grammar instruction is commonly initiated by an explanation

(basically in learners' mother tongue) about the grammar points. (McCarthy, 2021, p. 24)

This is followed by practice activities involving translation to/from the target language. This practice involves only reading and writing, and little attention to speaking and pronunciation. For this method, a teacher is highly required to master both learners' mother tongue and the target language. Surely this is inapplicable for multilingual classes (Brown, 2007:292). Some possible activities in the deductive approach are:

- Rule-explanation
- Translation
- Doing worksheets
- Self-study grammar

The deductive method is one of the traditional approaches to teaching English grammar because it gives the priority to grammatical competence as the basis of mastering a language. The founders of this approach believed that grammar is best learned through direct instruction (Richards, 2006).

The deductive approach to teaching grammar is a Rule-driven approach. It starts with the presentation of a rule then it is followed by some examples through which the rule is applied (Thornbury, 1999).

A similar view of describing or defining the deductive approach is the one provided by Harmer (2007) who says: “In a deductive approach, students are given explanations or grammar rules, and then, based on these explanations or rules, they make phrases and sentences.”

The deductive approach, Haight, Herron, and Cole (2007) add, is the approach that focuses on the explicit explanation of the grammatical structure and on the form before meaning.

The deductive approach to teaching English grammar can be summarized in four steps: (Tjora, 2018, p. 30).



- **Step 1:** Give a rule that is concerned with a specific area of grammar to the student.
- **Step 2:** Explain the
- **Step 3:** Make students memorize the rule.
- **Step 4:** Ask students to give their examples depending on their understanding.
- **Step 5:** Correct the examples by providing at least one example.

### **2.1.2.2 The role of the teacher and the learner:**

#### **a. The role of the teacher:**

Being related to the traditional approach to teaching foreign languages, the deductive approach to teaching grammar is an approach in which the teacher is the authority of the class. The students must follow what he says because he knows more than them. The teacher presents the English grammar in terms of rules, instructions, and explanations.

#### **b. The role of the learner:**

Concerning the learner, he is not the same as in the inductive approach where he interacts with the examples and tries to come up with the rule. The learner in this approach is a passive learner because he gets grammar rules without any effort. He just listens to the presentation of the rule in the beginning of the lesson. Then, he tries to apply it in some exercises.

#### **c. The lesson plan:**

In the deductive approach, the presentation and the explanation of the rules of grammar take place before everything. After understanding the rules, learners look at the examples given by their teacher then and begin to produce their examples. In the inductive approach, the lesson starts with examples that are provided by the teacher.

Next, learners work on them to come up with the rule. After concluding the rule, they test it on other examples and produce theirs. The difference is that the inductive approach starts with examples and through them learners meet up with rules while the deductive starts with rules on which learners build examples.

The other different feature is the roles of the learner and the teacher. The learner in the deductive approach is a passive learner in the sense that he just gets the rule from the teacher without effort. In the inductive approach, the learner is an active learner because he is responsible for drawing the rules from the examples provided by the teacher.

The latter (teacher) is the authority in the deductive approach; he controls and organizes the class by presenting the new grammar items and preparing the exercises. In the inductive approach, the teacher is just a guide watching the learners working on the grammar item by themselves. There are some other differences between these two approaches, such as the use of meta-language (language that is used to describe language). These differences give us the chance to say that both of them can satisfy all the kinds of learners that we may have in the classroom. To explain this, adults tend to work on rules rather than examples. Therefore, the deductive approach is more suitable for adults and meets their needs (Brown, 1994).

The deductive method has its own advantages and disadvantages, according to Widodo (2006:112-141), which are in the following.

### **2.1.3 Advantages and disadvantages of the Deductive approach**

#### **A. Advantages of deductive approach**

The Deductive approach goes straightforwardly to the point and can, therefore, be time-saving.

- Several rule aspects (for example, form) can be more simply and clearly explained than elicited from examples.

- Several direct practice/application examples are immediately given.
- The deductive approach respects the intelligence and maturity of many adult learners in particular and acknowledges the role of cognitive processes in language acquisition.
- It confirms many learners' expectations about classroom learning, particularly for those who have an analytical style (Widodo,2006:112141).

## **B. Disadvantages of the Deductive approach**

- Beginning the lesson with a grammar presentation may be off-putting for some Learners, especially younger ones.
- Younger learners may not be able to understand the concepts or encounter the grammar terminology given.
- Grammar explanation encourages a teacher-fronted, transmission style classroom, so it will learners' involvement and interaction immediately.
- The explanation is seldom as memorable as other forms of presentation (for example, demonstration).
- The deductive approach encourages the belief that learning a language is simply a case of knowing the rule (Widodo,2006:112-141).

### **2.1.5.2 Concept of Inductive approach**

The 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, 2006:112-141).

According to Nunan (2003:88), Inductive is presenting the learners with samples of language and, through a process of guided discovery, getting the learners to find out the principle or rule for themselves.

This method is most close to the Audio-lingual Approach to teaching languages (Gollin, 1998:88-89).

This approach, according to Brinton, Celce-Murcia, and Snow (2014: 54-56) was driven by 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, 2014:54-56).

Hulstijn (2005:124-140) 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.

Gillette, Keating, and Vines (1942:77) agree that the presentation of new material should be presented inductively whenever possible. Also, psychologists agree that material that 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.

The inductive method has learners participating actively in their own instruction. This method encourages learners to develop their mindset 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, 2006:122-141).

Schmidt (1990:129-158) says that the inductive method has involved implicit awareness. That means learning without intention or awareness.

Also, the inductive Approach starts with some examples from which a rule is inferred. In grammar teaching, teachers present the examples at the beginning and then generalize rules from the given samples.

Inductive grammar learning commonly happens for native speakers of English, where they can produce a grammatically correct utterance, but they do not know the rules underlying it (Thornburry, 2002:16).

Inductive approach is often correlated with the direct method and Natural Approach in English teaching. In both methods, grammar is presented in such a way the learners experience it.

In the Direct method, therefore, the rules of the language are supposedly acquired out of the experience of understanding and repeating examples that have been systematically graded for difficulty and put into a clear context ((ibid).

It is not very difficult to define the inductive approach since all the researchers in foreign language teaching (FLT) agreed on one idea: An inductive approach is one in which students come up with the rules from a set of examples (Rod Ellis, 2006).

The inductive approach is a result of inductive reasoning that starts with observations, measurements, or data and ends up with generalities. In other words, “when we use induction, we observe several specific instances and from them infer a general principle or concept.” (Widodo, 2006; 127).

Zhou (2008) introduces four steps that can be considered as the backbone of the inductive approach in English grammar teaching:

- **Step 1:** students are given a representative set of sentences about an area in English grammar.
- **Step 2:** students are asked to generalize a grammatical rule to account for a set of English sentences.
- **Step 3:** students are asked to check and test the grammatical rule against new sentences about the same area of English grammar.
- **Step 4:** students are asked to revise the grammatical rule to accommodate the new sentences.

The rule-discovery or inductive approach seems to be the way humans acquire the first language. Children are exposed to a great amount of language from which they understand the grammar of the language unconsciously and implicitly. Induction is the natural way of learning, and it can be proved from the language teaching approaches and methods that adopt it such as the Direct Method and the natural approach (Scott Thornburg, 1999).

Hossein Nassaji and Sandra Fotos (2011, 03) argued that the audio-lingual method was also influenced by the inductive approach because it shifted from the teaching of grammar through rule ‘to a description of its structural and phonological components.’

### **2.1.3.1 The role of the teacher and the learner:**

#### **a. The role of the teacher:**

As mentioned above, the inductive approach is adopted by some much-known foreign language teaching approaches such as the audio-lingual method, the direct method, and the natural approach. In this approach “The teacher is required to generate a constant flow of language input to assist students in interpreting the input.” (Jack C. Richards and Theodore S. Rodgers, 1986).

In other words, the teacher is required to provide a number of examples that express all the conditions of the grammar lesson he is teaching. “The inductive instruction is a much more student-centered approach and makes use of a strategy known as noticing” (Chalipa 2013,181).

“Noticing is the process of students becoming aware of something in particular. Noticing can be used to teach grammar when students are given the examples, and they come to understand the rule by noticing what those examples have in common.” ([www.educ.ualberta.ca](http://www.educ.ualberta.ca)).

It seems that the inductive approach to teaching English grammar does not put too much pressure on the teacher except in the process of gathering

and preparing the appropriate examples in which the rules he wants to teach are applied.

**b. The role of the learner:**

The learner, on the other hand, should be very active in the sense that he is the one who completes the building of the course. “This approach involves learners’ participating actively in their own instruction. In addition, the approach encourages a learner to develop her/his own mindset of strategies for dealing with tasks. (Gallagher, 2020)

Therefore, learners in the inductive approach to teaching grammar are active learners because they take the written or oral examples from the teacher, use the strategy of noticing as I have explained before, come up with what is common in the examples, and present it to the teacher and apply it on other examples.

The deductive method is one of the traditional approaches to teaching English grammar because it gives the priority to grammatical competence as the basis of mastering a language. The founders of this approach believed that grammar is best learned through direct instruction (Richards, 2006).

The deductive approach to teaching grammar is a Rule-driven approach. It starts with the presentation of a rule then it is followed by some examples through which the rule is applied (Thornbury, 1999). A similar view of describing or defining the deductive approach is the one provided by Harmer (2007) who says: “In a deductive approach, students are given explanations or grammar rules, and then, based on these explanations or rules, they make phrases and sentences.”

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- Step 5: Correct the examples by providing at least one example.

The inductive method according to Widodo (2006:122-141), has some advantages and disadvantages which are in the following:

#### **2.1.5.2.1 Advantages and disadvantages of the Inductive Approach**

##### **A. Advantages of the Inductive approach**

- Learners are trained to be familiar with the rule discovery; this could enhance learning autonomy and self-reliance.
- Learners 'greater degree of cognitive depth is —exploited.
- The learners are more active in the learning process, rather than being simply passive recipients. In this activity, they will be motivated.
- The approach involves learners' pattern-recognition and problem-solving abilities, in which particular learners are interested in this challenge.
- If the problem-solving is done collaboratively, learners get an opportunity for extra language practice (ibid).

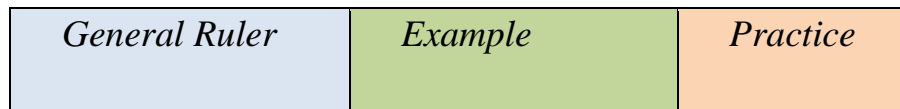
##### **B. Disadvantages of Inductive Approach**

- The approach is time and energy-consuming, as it leads learners to have the appropriate concepts of the rule.
- The concepts given implicitly may lead the learners to have the wrong concepts of the rule taught. The approach can place emphasis on teachers in planning a lesson.
- It encourages the teacher to design data or materials taught carefully and systematically.



- 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 (Widodo, 2006:122-141)

- Inductive (*rule-driven, top-down*)



Inductive (*rule-driven, bottom-up*)

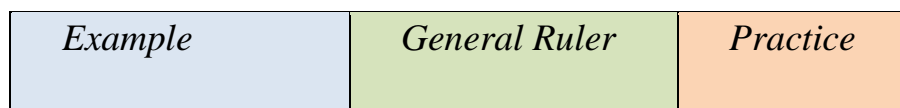


Figure (2) ( Deductive Vs Inductive method ) Adopted from (*Kolat,2009:12*)

#### 2.1.4 Concept of Interactive approach

To fully involve students in the session, interactive teaching and learning tactics are employed. This method helps students develop a variety of interpersonal skills, including as intelligent communication, negotiation, cooperation, and an understanding of different viewpoints, as well as their capacity to cooperate together in learning tasks. With their proposed systems to record information and participate, students have the chance to examine their knowledge and attitudes. Teachers may then use the evidence they have gathered from the students' replies (Linda:1998:1718).

##### 2.1.4.1 Interactive teaching

- Involves facilitator and learners to encourage and expect learners to participate.
- Use questions to stimulate discussion, emphasizing the value of answers.

- Give participants hands-on experience .
- Engages the pupils in their learning
- It is organized to meet objectives
- Builds on existing skills
- Provides for a range of learning styles
- Cultivates transferable, independent learning.
- Use teaching aids to gain and retain attention objectives
- To identify the different learning styles
- To explore how interactive teaching strategies support all learners
- To share practical ideas for whole class teaching (Angelo and cross:1933:36).

#### **2.1.4.2 Characteristics of Interactive Learning**

1. Communicative: These activities should be carried out in a communicative environment - students should live the activities in pairs or in small groups. Each activity develops both the language that targets a particular structure as well as the language needed for the daily classroom routine.
2. Meaningful: These interactive activities are meaningful in that the students use language to get things done. It is so meaningful and reliable that students practice and learn the grammar point without having to constantly think about it.
3. Integral: These activities should not be carried out in isolation, but rather should be part of a series of activities related to a contextual learning situation in which a focus on a particular structure is required. The target structure must be linked and practiced in a purposeful mission.

4. Allow for personalization: These activities allow students to provide personal input and reinvest their prior knowledge.
5. Provide ample training: Interactive activities provide ample opportunities to practice functional language as well as grammatical structure (Choquette:2000:55).

### **2.1.4.3 Advantages and Disadvantages of interactive approach:**

#### **A. Advantages approach of Interactive approach:**

- They stimulate group cohesion (cooperation between pupils);
- There is no downtime occur;
- They have wide applicability;
- They stimulate creativity.
- Students take part in their own development;
- Students lead the discussion towards what interests them; There is much dialogue, to the detriment of monologue; The teacher can easily apply the feedback; They develop critical thinking, They help organize and systematize knowledge; They offer assessment in Favour of the student; They capitalize the student's own previous experience; They develop motivation for learning; They develop the capacity of deliberation, of responsibility and They are attractive to the students (Altaxonova , 2002:12).

#### **B. Disadvantages of the Interactive approach:**

- The discussion can slip into uninteresting topics (unrelated to the lesson);
- There may be disturbances during the lesson; Time consuming; The results are unexpected; Students are unmanageable; The teacher may be

put in situations that he/she does not know how to handle; They require high costs for providing the necessary resources and It is difficult to determine the contribution of each student because not all students get involved;

- They cannot be applied to any lesson, on any subject.
- The curriculum puts pressure on the teachers so that they cannot afford to use interactive methods; Monotony, and repetition may occur; Some details may be ignored, and as a result, there may occur errors in learning, often students do not have any notes in their notebooks, there may be the risk of remaining behind the schedule and They require experience from the teacher (Altaxonova, 2002:12).

### **2.1.5 Concept of Writing**

Brian (2005:151), explains written language in English language teaching. It is a written language that serves many purposes for individuals and society as a whole and is not limited to communicating information. He further explains that for an individual author, writing can have cognitive functions to clarify, and support thought while at the level of society as a whole, written language serves the functions of record-keeping and storage of both information and literary works.

#### **2.1.5.1 Types of Writing**

According to Troyka (1987:39), writing is divided into four types, namely narration, description, exposition, and argumentation.

1. Exposition is one of four rhetorical model of discourse, along with argumentation, description, and narration. It is also used for speeches. The purpose of exposition is to provide some background and inform the readers about the plot, character, setting and theme of the essay, story, or motion picture.
2. Argumentation theory, or argumentation also called persuasion, is the interdisciplinary study of how humans should, can and do reach

conclusions through logical reasoning that is claims-based, soundly or not, on-premises. It concluded the arts and sciences of civil debate, dialogue, conversation, and persuasion. It studied rules of inference, logic, and procedural rules in both artificial and real-world settings. Argumentation includes debate and negotiation, which are concerned with reaching a mutually acceptable conclusion. It is used in law, for example in the trial, in preparing an argument to be presented to the court, and in testing the validity of certain kinds of evidence.

3. Description is one of four rhetorical modes (also known as model of discourse). It is also the fiction-writing mode for transmitting a mental image or the particulars of a story. Description as a rhetorical mode the purposes of description are to re-create or visually present a person, place, event, or action so that the reader may picture that which is being described. Descriptive writing may be found in the other rhetorical modes. Description as a fiction writing mode fiction is a form of narrative, fiction-writing also has distinct forms of expression, or modes, each with its own purposes and conventions. Together with dialogue, narration, exposition, and summarizations, description is one of the most widely recognized of the fiction-writing modes.
4. Narration is some kind of retelling, often in words (though it is possible to mine a story), of something that happened (a story). Narration recount events, perhaps leaving some occurrences out because they are from some perspective insignificant, and perhaps emphasizing other. Narration thus shapes history (the scene of the event, the story of what happened) (ibid).

## 2.2 Previous Studies

This section reviews studies that are related to the current one in one aspect or another. Previous studies mostly investigated Implementing grammatical

competence strategies for teaching writing to intermediate school students, as follows:

### **1.2.1 Nafi (2016)**

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 of 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 of whether the inductive and deductive methods are more effective in teaching grammar rather than the traditional way, the researchers used pre and post-tests to measure students' achievement in grammar. The researchers also designed an achievement test to measure students' attitudes toward English as a foreign language (EFL). In this study, the researchers used the experimental design and the used Analysis of Covariance for measuring the contrast between the experimental and control groups.

The research concluded that there are statistically significant differences between the mean scores of 7th-grade students' achievement in grammar, due to an 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 statistically significant differences between attitudes towards EFL, due to interaction between teaching method and gender.

### **2.2.2 Farzana (2018)**

This study aims to determine the value of the interactive approach in the English language and its impact on developing language skills. The sample of the research consisted of 90 students in 9th grade of F.G, Govt Girls High School

Peshawar Cantt. Topics from the textbook, grammar, and composition of 9th grade of Federal Board were covered. Three teachers teaching English, having equal qualifications, experience, and considerably equal potential were selected and given two weeks of training to teach English through an interactive approach.

The instrument of this study's experimental method was used to conduct the research. Previous achievement scores in the subject of English were obtained from the school record and also a pre-test was administered. T-test for no independent sample was used for the analysis and interpretation of data, obtained from the school record, pre and post-test approaches.

After the pre-test experimental group was given treatment using interactive approach techniques and strategies. When the treatment was over post-test was administered to the experimental group. Pre and post-tests were matched by using the t-test for non-independent samples.

The result was analyzed through the SPSS program. It was concluded that through the interactive approach students outscored more than those using the traditional methods of teaching English. It is recommended that language teachers should be given training in In-set programs using an interactive approach. It will be helpful in developing skills of language proficiency /fluency for language teachers as well as the students.

### **2.2.3 Rahmatullah & Shanti (2019)**

This study aims to teach English using traditional teaching methods that have begun in the education system in Afghanistan. Teachers preferred such types of classical methods of teaching grammar as well. As far as researchers know, there is a lack of research that has been done to indicate whether the two popular methods of grammar teaching, i.e., inductive or deductive, are more effective in the context of Afghan teaching and learning.

The sample of this study was conducted to investigate the effectiveness of using inductive and deductive teaching methods for teaching English grammar in the Afghan context using the achievement test conducted for 218 students from

English language departments from the faculties of education and literature in both. University in Afghanistan.

The results indicate that there is no significant difference in using one approach over another and Afghan students can learn through both deductive and inductive approaches in grammar teaching. However, from the teachers' point of view, it has been found that teachers generally prefer the deductive method and rarely use the inductive method as they are trained in the classical method of teaching English.

#### **2.2.4 Correia, (2019)**

This study aimed that the purpose of testing two methods for teaching grammar in English as a Foreign Language (EFL) classes: the deductive and inductive approaches in terms of effectiveness and rapport.

This research was conducted in a public high school in Ecuador. Seventy students enrolled in the second year of the senior high school participated. One in-service teacher taught the EFL classes during the process of intervention (10 weeks), and two EFL teachers observed all these classes and recorded the information by filling in observation sheets. The students were administered grammar pre-tests and post-tests to assess their grammar knowledge.

The results of the tests showed a significant difference in the scores in favor of the inductive approach. After the statistical analysis of the data obtained from the tests and observation sheets, we concluded that the inductive approach is more effective for teaching grammar in the EFL classroom in terms of instruction and rapport.

#### **Tests for the purpose of the study**

Two pre- and post-grammatical achievement tests were conducted to develop student writing, where 5 main questions were prepared where this test measures both levels of student achievement to:

1. A. Do as required To apply and choose the suitable word, to measure the learner understanding.  
B. Give these people advice To measure the students' understanding, and knowledge.



2. A -Match the correct word and select the and e correct word to measure students' comprehension.

B - Match To write the missing words, to measure the extent to which students, recall, understand and comprehend.

3. A Write the correct sentence grammatically to retrieve, understand, apply and analyze sentences.

B. Write the question form by using (wh-questions) To make *wh*-questions, to measure the extent to which students are able to analyze and apply.

4. Answer the following questions To measure the student's ability to differentiate and organize.

5. Write a paragraph by using the past, present, and present perfect tenses. To build a meaningful paragraph, to measures the students' ability to apply, analyze and constru

### **Variables of the study**

The variable refers to the research topic that becomes the focus of the research. There are two types of variables: the independent variable (X) and the dependent variable (Y). Therefore, the variables in this study are:

#### The independent variable

1. The independent variable is a variable that affects or becomes a cause of change or the emergence of the dependent variable.
2. The dependent variable in this research is the use of grammatical competence to develop writing through deductive, inductive, and interactive strategies. The experimental group learned to write through GCS while the control group learned to write through traditional materials (using lecture only).

This study was conducted in the first semester of the academic year 2022 for the second stage students is average. the following the procedures were followed for the purpose of the study:

1. Obtaining the approval of the selected school for the procedure study.
2. Sample fee from the study.

3. Preparing the inductive, deductive, and interactive strategies that have been conducted

taught to the experimental group and the control group to

Make sure it is correct.

4. Constructing the pre/post-test and verifying its validity and reliability.

5. Administration of the initial test for the two study groups

Measure their grammar and writing skill level before applying the programs.

6. Training of trainers and volunteer teachers in

Program implementation by the researcher.

7. Post-test groups to measure students' writing development through grammatical competence.

8. Analysis of the obtained data.

### 3.4.1. Students' Scores in the Pre-Test

The pre-test has been conducted for equalization. Both the experimental and control groups are given to the same pre-test. The mean pre-test scores for the experimental group are (37.00), while the mean pre-test scores for the control group are (38.76), with standard deviations of (15.06) and (13.22), respectively, two groups. At the degree of freedom (58) and the level of significance (0.05), the calculated t-value is determined to be (0.483), which is smaller than the tabulated value (2.00). As showed in the table, this result implies that there is no statistically significant difference between the two groups in the pre-test as shown in Table (8) below

**Table (8) The T-Test Value of the Two Groups in the Pre-test**

Groups	No. of students	Mean	SD.	T-Value		DF	Level of Significance
				Calculated	Tabulated		
C G.	30	38.76	13.22	Calculated	Tabulated	58	0.05
EG.	30	37.00	15.06	0.483	2.00		

### 3.6. Construction of the post-test

An achievement posttest is constructed in terms of the contents and behavioral objectives of the instructional material. The first question branch (A) and the third question branch (A, B) measure students' achievement at the recognition level, while the first question branch (B) and second question branch (A, B) and (4, 5) questions measures students' achievement at the production level.

### **3.6.1. The students' achievement at the recognition level**

The first question, Section A, asks students to answer a variety of questions. This question measures the students' level of understanding. This question consists of five items, where each item is assigned two marks, so 10 marks are assigned to these items 5.

The second question, Section A, asks students to complete the sentences using the words in the box. This question measures students 'comprehension. This question consists of five items for each item, two marks. This question is assigned 10 marks.

The second question, Branch B, asks the students to write the missing words in the sentences. This question measures the extent of students 'comprehension and understanding.

This question consists of five items, each item being two degrees, as the total scores for this question are 10 degrees.

The third question, Branch A, where this question asks the students to rearrange the words of the sentence correctly, as this question measures the level of students' understanding, application and analysis of the sentences, as this question consists of five items and each item has two degrees, as the sum of the degrees of this question is 10 degrees for these five items.

The third question, Section B, asks students to write questions using the question tools (where, where, what, which, and how much) where this question measures the student's ability to analyze and apply where this question consists of five items and 10 marks are assigned to these five items.

### **3.6.2. The students' achievement at the production level**

The first question, Branch B, asks the students to write advice sentences. This question measures the level of understanding and knowledge of the students. This question consists of five items and 10 marks are assigned to these five items, as each item has 2 points.

The fourth question asks the students to write answers to the questions of the book section. This question measures the student's ability to differentiate and organize. This question consists of five items for each item, five degrees, where 20 degrees are allocated for this question.

The fifth question asks the students to write a paragraph about how people do sports using the present, past, and present perfect tenses. This question measures the ability and application of student's analysis and the construction of grammatical sentences where 20 marks are allocated for this paragraph., as explained in Table (9).

**Table (9) The specifications of the Content, Behaviors, Items Category ,and Marks of the post-test**

Level	No. of Questions	Content	Behaviors objectives	Category	No. of Items	Marks
Recognition	Q1.A	Do as required grammatically	To apply and choose the suitable word, to measure the learner understanding.	Objective	5	10
Production	Q1.B	Give these people advice	To measure the students' understanding, and knowledge.	Subjective	5	10

Recognition	Q2. A	Match the correct word	Select the correct word to measure students' comprehension.	Objective	5	10
Recognition	2.B	Match	To write the missing words, to measure the extent to which students, recall, understand, and comprehend	Objective	5	10
Recognition	3.A	Write the correct sentence grammatically	To retrieve, understand, apply and analyze sentences.	Objective	5	10
Recognition	3.B	Write the question form by using (wh-questions)	To make <i>wh</i> -questions, to measure the extent to which students are able to analyze and apply	Objective	5	10
Production	Q.4	Answer the following questions	To measure the students' ability to differentiate and organize.	Subjective	5	20
Production	Q.5	Write a paragraph by using the past, present, and present perfect tenses.	To build a meaningful paragraph to measure the student's ability to apply, analyze and construct a grammatical sentence.	Subjective		20
Total	5				35	100

## 4.1 Analysis of Data

### 4.1.1 The First Hypothesis of Study

Comparison between the Mean Scores of the Experimental Group and that of the Control Group in the Posttest to find out if there is any significant difference between the mean scores of the experimental group and that of the control group in the post-test; all mean scores are obtained and compared. Statistics show that the mean scores of the experimental groups are (73.73) and that of the control group is (61.86).

By using the t-test formula for two independents, the measured t-value is found to be (2.932), while the tabulated t-value is found to be (2.00) at the degree of freedom (58) and level of significance (0.05), These means indicate that there is a significant difference between the achievement of the two groups and in Favour of the experimental group.

Thus, the first hypothesis, which states that there is any significant difference between the mean scores of the experimental group and that of the control group in the post-test, is accepted, as shown in Table (10).

**Table (10) Means, Standard Deviation, and t-Values of the Two Groups in the Achievement Test**

Groups	No. of students	Mean	SD.	T-Value		DF	Level of Significance
				Calculated	Tabulated		
EG.	30	73.73	15.29	Calculated	Tabulated	58	0.05
CG.	30	61.86	16.05	2.932	2.00		

### 4.1.2 The Second Hypothesis of Study

#### **Comparison between Students' Achievement at the Recognition Level and that at the Production Level**

The mean scores of the student's achievements at the recognition level and that at the production level of the experimental group in the post-test are calculated and

compared to find out whether there is any significant difference between them. The obtained results show that students' mean scores at the production level are found to be (38.16) and that at the recognition level is (35.56). The t-test formula for two paired samples is used and the results show that the calculated t-value is (4.240) and the tabulated t- value is (2.04) at the degree of freedom (29) and level of significance (0.05), as shown in table (4).

This means that there is a significant difference between student's achievement at the recognition level and that at the production level and for the benefit of the production level. Therefore, the second hypothesis is accepted, as shown in table (11).

**Table (11) Students' Mean Scores, Standard Deviation, and T-Value of the Experimental Group Performance at the Recognition and Production Level**

Group	No. of students	Mean	SD.	T-Value		DF	Level of Significance
				Calculated	Tabulated		
Production	30	38.16	8.08	4.240	2.04	29	0.05
Recognition	30	35.56	7.56				

## 5.1 Conclusions

Since all three hypotheses are accepted, grammatical competence is required in the teaching of writing in Iraqi schools. Teaching grammatical competence requires highly skilled or competent teachers. It also needs to teach students how to develop writing through grammatical competence strategies (inductive, inductive, interactive).

Thus, it is suggested that much attention on the part of the government, along with resources, be directed towards improving teaching standards in Iraq.

According to the obtained results of the current study, the following points have been concluded:

1. The students of the experimental group who were taught through grammatical competence strategies got to learn more grammatical competence than the students of the control group who follow the traditional method of studying grammar.
2. Using these strategies, students can learn to write correct grammatical sentences.
3. Enabling students to understand grammatical competence clearly and easily.
4. It also increased the students 'motivation and participation in the class.
5. Using the deductive strategy helps students explain the topic and give examples without the teacher's help.

## **5.2 Recommendations**

Regarding the conclusions of the results obtained, the following recommendations are made:

1. EFL teachers in general, and middle schools in particular, must be well trained in the use of grammatical competence strategies to develop students' writing.
2. As a teacher, he should always learn to understand students and upgrade their teaching skills to create the best generation in the future.
3. Teachers should encourage students to exchange ideas with each other during the lesson, or interaction between teacher and students, and this is the interactive strategy that creates a good interactive atmosphere in the classroom.
4. Specialists and designers of EFL textbooks should recognize the positive role of grammar mastery strategies in student achievement and try to add writing development training exercises because of our students' poor writing.



## References

1. Angluin, D., & Smith, C. H. (1983). Inductive inference: Theory and methods. *ACM Computing Surveys*, 15(3), 237–269. <https://doi.org/10.1145/356914.356918>
2. Angluin, D., & Smith, C. H. (1983). Inductive inference: Theory and methods. *ACM Computing Surveys*, 15(3), 237–269. <https://doi.org/10.1145/356914.356918>
3. March, A. (1996). Le Château-Trompette de Bordeaux et son décor architectural. *Bulletin Monumental*, 154(4), 317–327. <https://doi.org/10.3406/bulmo.1996.4614>
4. Angluin, D., & Smith, C. H. (1983). Inductive inference: Theory and methods. *ACM Computing Surveys*, 15(3), 237–269. <https://doi.org/10.1145/356914.356918>
5. March, A. (1996). Le Château-Trompette de Bordeaux et son décor architectural. *Bulletin Monumental*, 154(4), 317–327. <https://doi.org/10.3406/bulmo.1996.4614>
6. Nunan, T. (1999). Exploring the concept of flexibility. In *Flexible Learning, Human Resource and Organisational Development*. Routledge. Retrieved from <http://dx.doi.org/10.4324/9780203991817.ch4>
7. Angluin, D., & Smith, C. H. (1983). Inductive inference: Theory and methods. *ACM Computing Surveys*, 15(3), 237–269. <https://doi.org/10.1145/356914.356918>

8. March, A. (1996). Le Château-Trompette de Bordeaux et son décor architectural. *Bulletin Monumental*, 154(4), 317–327.  
<https://doi.org/10.3406/bulmo.1996.4614>
9. Nunan, T. (1999). Exploring the concept of flexibility. In *Flexible Learning, Human Resource and Organisational Development*. Routledge.  
Retrieved from <http://dx.doi.org/10.4324/9780203991817.ch4>
10. Webb, R. G. (1975). Taxonomic Status of *Aspidonectes californiana* Rivers, 1889 (Testudines, Trionychidae). *Copeia*, 1975(4), 771.  
<https://doi.org/10.2307/1443333>
11. Angluin, D., & Smith, C. H. (1983). Inductive inference: Theory and methods. *ACM Computing Surveys*, 15(3), 237–269.  
<https://doi.org/10.1145/356914.356918>
12. March, A. (1996). Le Château-Trompette de Bordeaux et son décor architectural. *Bulletin Monumental*, 154(4), 317–327.  
<https://doi.org/10.3406/bulmo.1996.4614>
13. Nunan, T. (1999). Exploring the concept of flexibility. In *Flexible Learning, Human Resource and Organisational Development*. Routledge.  
Retrieved from <http://dx.doi.org/10.4324/9780203991817.ch4>
14. Stern, M., & Stern, R. (1992). An ELISA-like assay for hyaluronidase and hyaluronidase inhibitors. *Matrix*, 12(5), 397–403.  
[https://doi.org/10.1016/s0934-8832\(11\)80036-3](https://doi.org/10.1016/s0934-8832(11)80036-3)

15. Webb, R. G. (1975). Taxonomic Status of *Aspidonectes californiana* Rivers, 1889 (Testudines, Trionychidae). *Copeia*, 1975(4), 771.  
<https://doi.org/10.2307/1443333>