The Inductive Method in English Grammar: A Case Study of Eméry Patrice Lumumba and Thomas Sankara “A” Senior Secondary Schools in Brazzaville-Congo

Rodrigue Lézin ALLEMBE
Lecturer-Researcher, Assistant Professor, Department of Languages and Literatures, Teachers Training College, Marien Ngouabi University, Brazzaville, Republic of Congo.

*Corresponding Author: Rodrigue Lézin ALLEMBE, Lecturer-Researcher, Assistant Professor, Department of Languages and Literatures, Teachers Training College, Marien Ngouabi University, Brazzaville, Republic of Congo.

Abstract: This article investigates the effectiveness of the inductive method in improving learners’ grammatical performances at senior secondary school level in the Republic of Congo. We carried out the investigation in two senior secondary schools in Brazzaville. To get genuine results, we used four (4) instruments for data collection: (1) observation checklist and tape recorder; (2) semi-structured interviews; (3) questionnaires, and (4) tests. We used analytic and experimental approaches. The Statistic Package for Social Sciences (S.P.S.S) software allowed us to analyze statistical data. The major findings reveal that the use of the inductive method helps learners improve their grammar performances. Unfortunately, many teachers lack mastery of this method.

Keywords: Inductive method, grammar, proficiency, senior, secondary school

1. INTRODUCTION

In grammar instruction, the use of effective methods is fundamental for the development of language competences (appreciating and writing various texts, communicating orally according to various modalities). In the Republic of Congo, English is included in the secondary school curriculum with an emphasis on the teaching of grammar notions. Unfortunately, despite the seven years for training at secondary school, EFL learners’ grammar proficiency is generally low at the end of their training. This is opposed to the learner’s profile as defined in the curriculum. Learners should normally be able to write accurately in the target language at the end of their secondary school training. This deplorable situation is due to the fact that many teachers have methodological problems.

In 2020, we carried out a survey among teachers and learners in two senior secondary school Agostino Néto and Chaminade, located in Brazzaville showed a controversy on the use of methods among teachers, the majority of them (75%) make use of traditional approach (teacher-centered approach) than communicative one (learner-centered approach). Then, they use the deductive method applying the grammar-translation technique that focuses on the translation of grammatical structures into learners’ official language (French) to facilitate their understanding and memorization. Consequently, learners (70%) have grammatical difficulties to practice the target language. In fact, the traditional approach deprives learners of the opportunities to practice the target language in real-life situation.

Considering that communication (both spoken and written) in the target language is impracticable without an accurate and efficient understanding and mastering of language structures, the inductive method seems likely remediable. In fact, the inductive method of grammar teaching as a learner-centered method encourages learners to discover or induce rules from their experience of using the language. Then, our main question is stated as follows: To what extent can the use of inductive method enhance learners’ grammatical proficiency? Our hypotheses are: The inductive method involves contextualizing grammar items to teach within typical sentences and making learners
generate rules on their own. In so doing, learners are more enthusiastic and they assimilate better grammatical items. Besides, the teacher privileges the use of target language in class and explains difficult words with synonyms, gestures and realia for difficult words.

This paper comprises the review of the related literature, the research methodology, the major findings, the discussions, and the conclusion.

2. THE REVIEW OF THE RELATED LITERATURE

In the context of language teaching, grammar is a key component of language. The main purpose of teaching grammar is to enable learners to achieve linguistic competence to use grammar as a tool or resource for understanding and producing efficient and proper oral and written discourse. However, there is a controversy on the effective methods to teach grammar. We came across some works dealing with grammar teaching method.

1.1. On the Teaching of Grammar

According to Larsen-Freeman (2001) Grammar is a system of meaningful structures and patterns that are governed by particular pragmatic constraints. In another definition, grammar is a description of the rules for forming sentences, including an account of the meanings that these forms convey (Thornbury, 1999, p.13). Then, teaching grammar helps learners discover the nature of language and the predictable patterns that make what we say, read, hear and write intelligible. Without grammar, we would have only individual words or sounds, pictures, and body expressions to communicate meaning. Grammar is the weaving that creates the fabric. To establish precise sentences, grammar knowledge is essential. In this regard, Ellis (2006, p.84) wrote:

Grammar Teaching involves any instructional technique that draws learners’ attention to some specific grammatical form in such a way that it helps them either to understand it metalinguistically and / or process it in comprehension and / or production so that they can internalize it.

It is clear that language acquisition without grammar will be confusing. Learners will fail to use the language correctly without grammar skills. Richards, Renandya (2002, p.145) believe that without a good knowledge of grammar, learners’ language development will be severely constrained and they (2002, p.152) point out two good reasons for teaching grammar as follows:

a)- Comprehensibility: knowing how to build and use certain structures makes it possible to communicate common types of meaning successfully. Without these structures, it is difficult to make comprehensible sentences. We must, therefore, try to identify these structures and teach them well.

b)- Acceptability: in some social contexts, serious deviance from native-speaker norms can hinder integration and excite prejudice; a person who speaks badly may be considered uneducated or stupid. Students may therefore want or need a higher level of grammatical correctness than is required for mere comprehensibility.

Grammar instruction provides learners with a better improvement. Grammar knowledge will increase learners’ comprehension of the language.

Speaking of the importance of grammar teaching, Mulroy (2003, p.118) states:

Sentences always have and always will consist of clauses with subjects and predicates and of words that fall into classes fairly well described as verbs, nouns, adjectives, adverbs, pronouns, prepositions, conjunctions, and interjections.

Otherwise, individuals who understand these concepts have a distinct advantage over others where the use of language is involved- and that means everywhere. However, there a controversy on methods of teaching grammar.

1.2. Difference between Deductive and Inductive Approaches in Teaching Grammar

The use of methods is a controversial issue. There has been a debate whether grammar should be taught through the explicit presentation of grammatical rules or through its use. E.S.L practitioners discuss about two possible ways of teaching grammar to students: the deductive and the inductive
The Inductive Method in English Grammar: A Case Study of Eméry Patrice Lumumba and Thomas Sankara “A” Senior Secondary Schools in Brazzaville-Congo

approaches. Deductive approach is an approach that focuses on instruction before practice. A teacher gives students an in-depth explanation of a grammatical concept before they encounter the same grammatical concept in their own writing. After the lesson, students are expected to practice what they have just been shown in a mechanical way, through worksheets and exercises. According to Nunan (1998), the principles of this approach are generally used in classes where the main target is to teach grammar structures. These principles are convenient for classes in which grammar translation method is applied. According to Thornbury (1999, p. 32-36), there are three basic stages in a deductive lesson. First, the lesson starts with the presentation of the grammatical rules by the teacher. Secondly, the teacher gives examples by highlighting the grammar structures. Then, students apply the rules and produce their own examples at the end of the lesson. The deductive method is based on the ‘Presentation, Practice and Production’(p.p.p) model.

So, the deductive method is to teach grammar in an explicit way to help learners to be aware of the grammar rules. Brown (2007) believe that deductive method is suitable for EFL adults learners. It meets their expectation because for them, the presentation of grammar rules at the beginning of a lesson is helpful. But the deductive approach has been criticized. According to Larsen-Freeman (2009, p.523):

One of the most trenchant criticisms of this approach is that students fail to apply their knowledge of grammar when they are communicating. Students know the grammar- at least, they know the rules explicitly- but they fail to apply them in communication.

In fact, there is no apparent connection between explicit knowledge of the rules and implicit control of the system and the learn ability problem following from the observation that grammar is not learned in a linear and atomistic fashion. Otherwise, with the deductive approach students are unable to use the grammar rules in speech. They do not understand how grammar rules work in a sentence. Grammar should be learnt within context in order to allow learners to see how rules can be used in sentences. Language is context-sensitive, which means that, in the absence of context, it is very difficult to recover the intended meaning of a single word or phrase (Thornbury, 1999, p.69). Teaching grammar in context will give learners an opportunity to understand how language works and this will improve their communication skills. However, the inductive approach is the communicative language teaching (CLT) method which gives students opportunities to experience the language. It involves presenting several examples that illustrate a specific concept and expecting students to notice how the concept works from these examples. No explanation of the concept is given beforehand, and the expectation is that students learn to recognize the rules of grammar in a more natural way during their own reading and writing. Discovering grammar and visualizing how these rules work in a sentence allow for easier retention of the concept than if the students were given an explanation that was disconnected from examples of the concept. The main goal of the inductive teaching method is the retention of grammar concepts, with teachers using techniques that are known to work cognitively and make an impression on students’ contextual memory. According to Brown (2000), teaching grammar inductively is more appropriate than teaching it deductively in most teaching contexts since it is more in keeping with natural language acquisition where rules are absorbed subconsciously with little or no conscious focus. Besides, it conforms more easily to the concept of inter language development in which learner’s progress, on variable timetables, through stages of rule acquisition and it allows students to get a communicative “feel” for some aspect of language before possibly being overwhelmed by grammatical explanations. Finally, it builds more intrinsic motivation by allowing students to discover rules rather than being told them (Brown, 2000, p. 365).

3. RESEARCH METHODOLOGY

The present paper uses analytic and experimental approaches. The analytic approach allows us to pinpoint the forces and weaknesses of the methods that teachers use in grammar instruction. The experimental approach allows us to validate the inductive method for an effective teaching of grammar. In the second term of the academic year 2020-2021, we carried out the investigation at two
The Inductive Method in English Grammar: A Case Study of Eméry Patrice Lumumba and Thomas Sankara “A” Senior Secondary Schools in Brazzaville-Congo

senior secondary schools: Eméry Patrice Lumumba and Thomas Sankara “A”, both located in Brazzaville. The target population consist of EFL teachers and learners from grade 3.

2.1. Participants

We randomly selected fifteen (15) teachers of English and two hundred and eighty (280) learners (one hundred and forty (140) per school).

2.2. Instruments Used for Data Collection

We selected four (4) instruments for data collection: (1) classroom checklist and a tape recorder; (2) semi structured interviews; (3) questionnaires and tests.

2.3. Classroom Observation

Classroom observation is of paramount importance in the teaching and learning process. It enables to record objectively the different phenomena that occur during a class, such as the teacher’s behavior, the didactic methods and strategies he or she uses to teach grammar, pupils’ interventions, the frequency of interactions between teachers and pupils. We selected randomly four different teachers of English language and four classes from grade 3 of senior secondary for classroom observation (two teachers and two classes per school). We also designed a checklist with items to assess teachers and learners during the classes. Three sessions were observed per teacher, that is, a total of twelve (12) sessions for the present study.

2.4. Semi-structured Interviews

The semi-structured interviews involved four teachers of English language whose classes were observed. The purpose was to inquire about the method the teacher uses to develop learners’ accuracy in grammar. The interviews were recorded and interpreted.

2.5. Questionnaires

In order to get genuine information about the grammar teaching, we designed two questionnaires, one for teachers and another for learners. The objective was to investigate on the methods teachers use for grammar instruction and the learners’ appreciations. The results of this study are presented in the next session entitled major findings and discussion.

Test

Pilot tests, pre-test and post test

The Administration of the Pilot Test

For the practicality and the reliability of our pre-test and post-test content, on January 9, 2021 the pre-test content was submitted as a pilot test to learners from grade 3 of Immaculée conception a religious private senior secondary school and on April 27, 2021 the post-test content, was also submitted as a pilot test to the same learners.

Pre-test

Considering the results of the questionnaires, which revealed that the majority of learners have grammatical difficulties to communicate in the target language and after the administration of the pilot test, a pre-test was conducted to the learners of Eméry Patrice Lumumba senior secondary school to assess their grammar accuracy and proficiency. Our pre-test took place on January 13, 2021.

Post-test

After the result of the experimentation and the administration of the pilot test, a post-test was given to the learners of Eméry Patrice Lumumba senior secondary school to assess their grammar accuracy and proficiency. Our post-test took place on May 5, 2021.

For the authenticity and the validity of the results, the tests content (pre-test and post-test) were submitted to the jury members consisted of all teachers of the English language department for some amendments. And to avoid subjectivity and personal bias in scoring, the tests were corrected by two different teachers. The reliability coefficient was obtained by comparing the score of the two teachers. The correlation is found to be (0.96) and this was considered to be a high and stable coefficient.
2.6. Instruments Used for Data Analysis

The Statistical Package for Social Sciences (SPSS) software allowed us to analyze statistical data.

4. MAJOR FINDINGS AND DISCUSSION

4.1. Results Related to Questionnaires

The two questionnaires designed for teachers and pupils focused on the different methods and techniques to teach grammar. Fifteen (15) teachers and two hundred and eighty (280) learners responded to the questionnaires. We presented the outcomes in the graphs below.

Questions for teachers

Question n°1: How do you introduce English grammar notions?

We designed this question to know from the different steps of introduction the method the teacher during a grammar instruction.

![Graph1. Teachers’ responses on their way of teaching grammar lessons](image)

The results from the above graph show that the majority of teachers (73.33%) use the deductive method which focuses on the presentation of rules beforehand and implies the grammar-translated technique to facilitate the memorization, give some examples to help them to practice within sentences. And few teachers (26%) only use the communicative inductive method which requires that learners work out the structures naturally through the illustrating sentences. This inductive method implies the use of the target language exclusively.

Question n°2: Is there any improvement with regard to learners’ grammar skills?

We asked this question to check the effectiveness of the instructor’s method and techniques on learner’s grammar performances.
From the results above, we notice that there is no improvement as far as learners’ grammar is concerned. The majority of teachers (80%) confirmed it. Though many teachers privilege the deductive method with the use of French for a better understanding, learners remain unskillful. It might be that learners are not participative with the method and the lesson is taught mechanically.

Questions for learners

Question n°1: Does your teacher teach you grammar notions including their contexts of use?
This question aims at knowing if the teacher in teaching grammatical structures refers to their context of use in the real-life communication.

The results from the above graph shows that many teachers do not apply the rules taught in the concrete sentences to show learners their context of use. Many learners (75%) rebutted it. In fact, a teacher should teach grammar in context to give learners an opportunity to understand how language works and this will improve their grammatical skills.

Question n°2: What is your perception of the method used by your instructor?
We asked this question to know learners’ appreciation of the method their teacher uses in class.
Graph 4. Learners’ appreciation of the method the teacher uses in grammar instruction

The results above revealed that the majority of learners (76.79%) feel unsatisfied with the method the teacher uses in class. It might be that they feel more receptive than participative and would like more practice of the taught rules in their context of use, the use of flashcards, relia, videos.

4.2. Results Related to Classroom Observation

The data collected from the checklist that the majority of teachers (90%) focus on the deductive approach that applies the grammar-translation. However, the learners’ grammar proficiency is too low; almost all learners have difficulties in grammar.

4.3. Experimentation

The aim was to assess the effectiveness of the inductive method in developing learners’ grammar proficiency.

For practical reasons, the experimentation took exclusively place at Eméry Patrice Lumumba senior secondary school during the second term from January to April 2021 school. It concerned four classes of grade 3 with fifty (60) learners each.

Sequence of the experimentation

We conducted the experimental method within three phases: the pre-test, the experimentation and the post-test. We use a grammar-controlled test to assess learners’ grammatical potentials and weaknesses.

➢ Scoring Scheme of the Writing Proficiency Test

We applied, for scoring, the grammar skills rubric by Luis R. Villalobos (2010). As described below:

Table 1. Adapted from the grammar skills rubric by Luis R. Villalobos (2010)

<table>
<thead>
<tr>
<th>Scale</th>
<th>Indicator</th>
<th>Qualification</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>The student demonstrates very high command of grammatical and usage patterns (correct use of relative clauses, prepositions, modals, articles, verbs forms and sequencing; no run-on sentences). He/she is excellent at manipulating the language with accuracy and confidence. He/she makes very occasional errors that do not interfere with the meaning.</td>
<td>Excellent</td>
</tr>
<tr>
<td>4</td>
<td>The student demonstrates very good command of grammatical and usage patterns. He/she is good at manipulating the language with accuracy and confidence. He/she makes some minor grammatical and usage discrepancies that do not interfere with his/her linguistic competence.</td>
<td>Very Good</td>
</tr>
<tr>
<td>3</td>
<td>The student has internalized part of the grammatical and usage patterns. He/she is good at manipulating the language with some accuracy and</td>
<td>Good</td>
</tr>
</tbody>
</table>
The Inductive Method in English Grammar: A Case Study of Eméry Patrice Lumumba and Thomas Sankara “A” Senior Secondary Schools in Brazzaville-Congo

<table>
<thead>
<tr>
<th>Confidence</th>
<th>Description</th>
<th>Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>The student has internalized part of the grammatical and usage patterns. He/she is able to manipulate the language to express meaning. However, grammatical and usage errors impair linguistic performance. Remedial action is necessary.</td>
<td>Fair</td>
</tr>
<tr>
<td>1</td>
<td>The student has internalized part of the grammatical and usage patterns. He/she is able to manipulate the language to express meaning. However, a large of grammatical and usage errors impair linguistic performance. Immediate remedial action is required.</td>
<td>unsatisfactory</td>
</tr>
</tbody>
</table>

Legend: 1 Poor; 2- Average; 3-Good enough; 4- good; 5- Excellent

• Pre-Test results

We set up two classes from the results of the pre-test: a control and an experimental class. The control class got an average of 6.72/20 and the experimental class got an average of 6.60/20. Moreover, we observed the two classes were observed on the method and the strategies teachers use. And based on the statistical methods, we used a comparative approach to analyze the results of the two classes through the Statistic Science Package for Social Science (S.P.S.S) software.

Comparison of Statistical Means of the Two Classes during the Pre-test

The objective of this comparison of statistical means is to check to know whether the learners of the experimental and control classes have the same level in terms of means.

• Group Statistics

<table>
<thead>
<tr>
<th>classes</th>
<th>N</th>
<th>Mean</th>
<th>Std. deviation</th>
<th>Std. Error mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experimental</td>
<td>60</td>
<td>6.6000</td>
<td>2.61081</td>
<td>.36922</td>
</tr>
<tr>
<td>Control</td>
<td>60</td>
<td>6.7200</td>
<td>2.24099</td>
<td>.31692</td>
</tr>
</tbody>
</table>

• Independent Samples Test

<table>
<thead>
<tr>
<th>Equal variances assumed</th>
<th>Levene’s test for equality of variances</th>
<th>T-test for equality of means</th>
<th>95% confidence interval of the difference</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>F</td>
<td>Sig.</td>
<td>T</td>
</tr>
<tr>
<td></td>
<td>3.180</td>
<td>.078</td>
<td>-2.47</td>
</tr>
</tbody>
</table>

The above tables (group statistics and independent sample test) reveal that the experimental and the control classes are almost equal as far as means are concerned. Though the control class mean (6.72) is higher than that of the experimental class (6.60), the mean difference of the two classes is not significant: 0.12. The levene’s test for equality of variances is 0.078; which is greater than 0.05 (the critical threshold or probability). Consequently, the two classes are equal.

Table2. Comparison between the different teaching approaches and strategies used for vocabulary courses in the two groups (control and experimental)

<table>
<thead>
<tr>
<th></th>
<th>Control class</th>
<th>Expérimental class</th>
</tr>
</thead>
</table>
| Method: deductive which applies grammar-translation that consists in translating English grammatical rules into French. | Method: inductive which applies the use of contextand the target language for grammar instruction. The use of contexts help tomake connections between grammatical patterns and the meaning of texts. Isthows the grammatical form of the target languageand gives learners an opportunity to understand how the language works. Whereas the exclusiveuse of the target language (English) with
The Inductive Method in English Grammar: A Case Study of Eméry Patrice Lumumba and Thomas Sankara “A” Senior Secondary Schools in Brazzaville-Congo

<table>
<thead>
<tr>
<th>Strategies:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>a-</strong> Presentation</td>
<td>- Check, in French, learners’ pre-requisites about the English grammar notion to teach. The use of French language and grammar is due to learners’ low level in English.</td>
</tr>
<tr>
<td></td>
<td>- Introduce the general rule of the English grammatical notion to teach.</td>
</tr>
<tr>
<td></td>
<td>- Make learners repeat the general rule individually and collectively.</td>
</tr>
<tr>
<td></td>
<td>- Provide learners with typical sentences to show the functioning of the general rule and different particularities for facilitate learners’ understanding.</td>
</tr>
<tr>
<td></td>
<td>- Make learners memorize the general rule to develop their grammar proficiency.</td>
</tr>
<tr>
<td><strong>b-</strong> Practice</td>
<td>- Give applied exercises in English to help learners internalize structure.</td>
</tr>
<tr>
<td><strong>c-</strong> Production</td>
<td>- Ask learners to make their own sentences in applying the taught structure to check whether they have understood the taught notion.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Strategies:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>a-</strong> Presentation</td>
<td>- Write on the board some typical sentences including the grammatical notion to teach. These sentences can be extracted from a text or a dialogue.</td>
</tr>
<tr>
<td></td>
<td>- Make learners focus their intention intelligently on the different grammatical variations within those sentences.</td>
</tr>
<tr>
<td></td>
<td>- Ask learners to make similar sentences in English following the model of sentences on the board.</td>
</tr>
<tr>
<td></td>
<td>- Ask learners to work out the rule or the structure by themselves for a better assimilation or internalization of the notion.</td>
</tr>
<tr>
<td></td>
<td>- Make learners repeat the general rule individually and collectively.</td>
</tr>
<tr>
<td></td>
<td>- Explain in English (with simple words or synonyms, realia and gestures) the functioning of the taught grammatical structure and different particularities.</td>
</tr>
<tr>
<td><strong>b-</strong> Practice</td>
<td>- Give applied exercises in English to help learners practice the structure.</td>
</tr>
<tr>
<td><strong>c-</strong> Production</td>
<td>- Ask learners to make their own sentences in applying the taught structure to assess their understanding of taught notion.</td>
</tr>
</tbody>
</table>

**Source:** Investigation R. Allembre, 2021.

The two comparative tables above reveal both the effectiveness and the inefficiency of the method the teacher uses in grammar instruction. The deductive method requires that a teacher introduces the rule or the structure of the notion to teach beforehand. Besides, he should use the learners’ official language for a better understanding and memorization (grammar-translation). Consequently, learners appear to be more like passive recipients than participative during the instruction. Whereas, the inductive method, also called rule-discovery learning, suggests that a teacher starts a lesson with typical sentences-examples including the notion to teach. In this way, learners can work out by themselves the grammatical rule from the proposed examples. The advantages are: 1-) learners are trained to be familiar with rules discovery; this enhances learning autonomy and self-reliance; 2-) learners are more active in the learning process rather than being simply passive recipients. They feel motivated; 3-) The. At the end of the experimentation, the two groups (control and experimental) had been submitted to a final test, called “post-test” as to check whether or not there has been a change with the proposed method and techniques of teaching writing skill.

- **Post-Test results**

- **Comparison of Statistical Means of the Two Classes during the Post-test**

The aim of this statistical comparison is to check whether there have been improvements within the two classes (experimental and control) after the experimentation stage.

- **Group Statistics**

<table>
<thead>
<tr>
<th>classes</th>
<th>N</th>
<th>Mean</th>
<th>Std. deviation</th>
<th>Std. Error mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experimental</td>
<td>60</td>
<td>10.3800</td>
<td>1.61485</td>
<td>.22837</td>
</tr>
</tbody>
</table>
The Inductive Method in English Grammar: A Case Study of Eméry Patrice Lumumba and Thomas Sankara “A” Senior Secondary Schools in Brazzaville-Congo

| Control | 60 | 6.8400 | 2.43579 | .34447 |

- **Independent Sample Tests**

<table>
<thead>
<tr>
<th>Equal variances assumed</th>
<th>Levene’s test for equality of variances</th>
<th>T-test for equality of means</th>
<th>95% confidence interval of the difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>F</td>
<td>Sig.</td>
<td>T</td>
<td>Df</td>
</tr>
<tr>
<td>13.105</td>
<td>.000</td>
<td>8.565</td>
<td>98</td>
</tr>
</tbody>
</table>

The above comparative tables show that the two classes (experimental and control) are not equal in terms of means. In fact, there have been some improvements in the experimental group which class mean is now higher than the control group’s one (10 against 6.84). The levene’s test for equality of variances is 0.00, which is less than 0.05 (the critical threshold or probability). Consequently, the two classes (experimental and control) are not equal in terms of means. Although both classes experienced improvement, the difference in means is significant at 3.54.

- **Pre-Test and Post-test means Comparison of Experimental Class**

- **Comparison of Statistical Means of the Experimental Class during the Pre-test and Post-test**

The goal of this intra-group means comparison is to see the improvements within the experimental group.

- **Group Statistics**

<table>
<thead>
<tr>
<th>Experimental class</th>
<th>N</th>
<th>Mean</th>
<th>Std. deviation</th>
<th>Std. Error mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-test</td>
<td>60</td>
<td>6.6000</td>
<td>2.61081</td>
<td>.36922</td>
</tr>
<tr>
<td>Post-test</td>
<td>60</td>
<td>10.3800</td>
<td>1.61484</td>
<td>.22837</td>
</tr>
</tbody>
</table>

- **Independent Sample Tests**

The above tables related to the comparison of the experimental class means at the pre-test and the post-test reveals that the intra-group means are not equal; 6.60 at the pre-test and 10.38 at the post-test. The means difference is at 3.78, which shows that the intra-group means’ difference is so significant. The levene’s test for equality of variances is 0.00, which is lower than 0.05 (the critical threshold). The experimental class has experienced improvements.

5. **DISCUSSION**

In this section, we will examine the results of our study on this following point. Grammar plays a crucial role. To be an effective language user, learners should study grammar because grammar skills will help learners to organize words and messages and make them meaningful. In other words, grammar study enhances learners’ speaking and writing performances. They will not confuse verbs (lie and lay, infer and imply) misuse pronouns (who and whom) mismatch subjects and verbs, mix up pronoun reference, use double negatives (Tabbert, 1984, p.39). Considering the results of our study, the majority of teachers (73%) use the traditional deductive method for grammar instruction. They apply the grammar-translation to help learners internalize rules. Unfortunately, many learners fail to apply their knowledge of grammar when they are communicating. The majority of teachers (80%) confirm this (see graphs n° 1 and n°2). Therefore, the majority of learners (76,79) do not appreciate positively the way their teacher instructs grammar notions (see graph 4). This can result to the fact that the deductive method introduces grammar item in a linear and atomistic fashion (Long &
Doughty, 2009, p.523). Otherwise, the deductive method presents rules abstractedly or unclearly. McLaughlin, Rossman, McLeod (1983, p.138) underline that “presenting grammar in isolated sentences will not allow learners to see how grammatical structures function in sentences. By dealing with related units of information rather than isolated bits, more efficient processing becomes possible.” In reality, a teacher should not teach grammar rules mechanically (see graph 3). Rather, he should contextualize rules within typical sentences to make them explicit and learners practice easily. In fact, the objective of grammar instruction not only consists in the internalization of a wide range of grammatical structures but also in the use of them in the real-life communication (speaking and writing). In this regard, Harmer (1991, p.56) wrote:

The teacher’s chief task when teaching grammar is to show the students what the language means and how it is used; and must also show them what the grammatical form of the new language is and how it is said and written.

Learners need to get an idea of how the target language is used by native speakers and the best way of doing this is to present language in context. Then, teaching grammar in context will give learners an opportunity to understand how language works and this will improve their communication skills. In this sense, Wajnryb (1990, p.6) wrote: “context gives a more precise understanding of how to use the grammar, and provides accuracy in the studied language both in oral and written skills”.

Therefore, the teacher should use the communicative inductive method that implies the use of texts, dialogues (written or oral), games (problem-solving), songs and realia in order to contextualize the grammar items in study. This learner-centered method encourages learners to observe genuinely the texts and generate structures within them on their own. This allows them to better assimilate grammar notions and apply them appropriately when they communicate. Context-based instruction helps learners perceive the structures of the language effectively.

6. Conclusion

This paper investigates the efficiency of the inductive method in grammar teaching. Our hypotheses were as follows: The inductive method involves introducing grammar items in context with typical sentences and making learners generate rules on their own. In so doing, learners are more enthusiastic and they assimilate better grammatical items. Besides, the teacher emphasizes the use of target language in class and explains difficult words with synonyms, gestures and realia. It results from our survey on grammar teaching methods used in class and their effectiveness that most of teachers privilege the traditional deductive method. Unfortunately, the majority of learners fail to use appropriately grammar when they communicate (writing and speaking). Hence, the traditional deductive method presents rules abstractedly or mechanically. However, the use of the inductive method helps learners improve their grammar knowledge. The inductive method presents grammar items in contexts and involves learners’ participation to discover rules. In so doing, it gets learners more enthusiastic and enhance their learning interest and performances.

References

New Jersey: Prentice Hall.

**AUTHOR’S BIOGRAPHY**

**ALLEMBE Rodrigue Lézin**, is an Associate Professor. He teaches English Didactics at Teachers’ Training School (Ecole Normale Supérieure), University Marien Ngouabi in the Republic of Congo. He is a head of English language Department and author of numerous papers and a book on the English teaching and learning process among which are: Qualified versus unqualified EFL teachers: a case study of Lycées Chaminade and Thomas Sankara “B”. The use of dialogue and role-play’s activities: an efficient technique in teaching and learning english as a foreign language (E.F.L.). Improving E.F.L learners’ writing skill through the dictogloss technique. Implementing Flipped classroom method at senior secondary school and a book entitled l’enseignement de l’anglais au secondaire au Congo.

**Citation:** Rodrigue Lézin ALLEMBE. "The Inductive Method in English Grammar: A Case Study of Eméry Patrice Lumumba and Thomas Sankara “A” Senior Secondary Schools in Brazzaville-Congo" International Journal of Humanities Social Sciences and Education (IJHSSE), vol 9, no. 5, 2022, pp.37-48. doi: https://doi.org/10.20431/2349- 0381.0905004.

**Copyright:** © 2022 Authors. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.