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Effectiveness of Deductive and Inductive Instruction in EFL Classes

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Abstract

Introduction: Deductive and Inductive instructions are the teaching methods which are used in education system, especially in teaching L2 and grammar. Both methods can be applicable to teaching L2 and ESP class. So, teachers can apply them based on the context and the subject's principles they teach as well as consider students' level, need, and interest in learning process. Since I am teaching grammar in Kabul University of Medical Sciences deductively, I recognized that most students understand all the rules regarding grammar they have been taught in the four semesters, but they cannot apply these rules when they use the language for communication. The aim of teaching grammar to students is to enable them to produce accurate speech that is essential for L2. Gollin (1998) defined deductive approach as "applying general rule to specific instances", while inductive approach is the reverse of deductive approach which exposes learners to the example of language use in order to enable them to use the target language and encourage students to generalize the rules and participate actively. Language teachers have essential role in the students' learning process. So, it is their responsibility to choose the methods in order to fulfill students leaning requirements in this vital process.

Objective: To find out which grammar teaching method Deductive or Inductive Instruction provides best learning opportunity in terms of grammar teaching for L2 (second language) adults learners.

Method & Material: A systematic review is used. In this research, I searched for the key words which relate to my research topic through online scientific sources such as ERIC, Hinari >ARDI - Access to Research for Development and Innovation). I reviewed twenty articles related to my research topic which explained the effectiveness of both approaches Deductive and Inductive instruction in the learning process. The articles reviewed were published between (2005- 2018) years.

Results: Twenty articles from 2005 till 2018 are included in the study which mostly explained the effectiveness of both approaches Deductive and Inductive instruction in the learning

process. Both approaches are applicable in Afghan context. Teachers should integrate both inductive and deductive methods in their teaching, especially grammar.

Conclusion: The discussion on both approaches Deductive and Inductive instruction explained that both approaches are effective in the learning process and have their role according to the subject principles and context. Teachers should be careful that grammar should not be ignored at all because learners never get enough mastery of grammatical features in second language (L2). It is the teachers' responsibility to try and create opportunities for learners to learn grammar communicatively in the target language.

Keywords: Afghan, EFL, Inductive and Deductive methods, grammar teaching method, Deductive-vs-Inductive

Introduction

Deductive approach is a "process that proceeds presentation of the rule by teacher to the provision example in which the rule is applied and followed by language practice that students can engage in" (Thornberry, Norris, and Ortega, 2000 cited in Erlam, 2005 as cited in Wong, 2012 p.180). Inductive grammar teaching creates opportunity for students to have an active role, but they do not search for rules or a basic pattern. Neither the teacher nor the learners point out to grammatical rules. Both methods are applicable in the teaching process of second language and teachers can apply them based on the context they teach in as well as consider students' level, need, and interest in the learning process. For instance, deductive instruction enables students to be master in certain grammatical points, while inductive instruction makes students life-long learners by using the grammar points in speech rather than to memorize.

Through teaching many years t grammar in Kabul University of Medical Sciences, I found out that most of students understand all the rules of grammar, but they cannot apply these rules in communication. While the main aim of teaching grammar is to produce accurate speech in L2. Language teacher should be careful about what to teach and how to teach in L2 to enhance learners' language knowledge and skills because teachers have essential role in choosing appropriate methodology in learning process.

Purpose/ Objective

To find out which grammar teaching method Deductive and Inductive Instruction provides best learning opportunity in terms of grammar teaching for adults.

Research Questions

1. Which method provides life-long learning opportunity in L2?

2. Which approach Deductive or Inductive instruction helps students to achieve the basic skills of learning by themselves regarding grammar of L2?

Method and Material

The research design is descriptive. In this research, first I searched for the key words which relate to the research topic through the online scientific sources such as ERIC. Among 52 articles I reviewed, twenty articles mostly explained the effectiveness of both approaches Deductive and Inductive instruction in the learning process for adolescents. Then I summarized them and used the information in my research. Finally, I selected twenty of them which all explained the effectiveness of both grammar teaching methods in leaning second language communicatively. The articles had been published between (2005- 2018) years. (**Figure 1**)

Inductive and Deductive methods, grammar teaching method, Deductive-vs -Inductive-Teaching

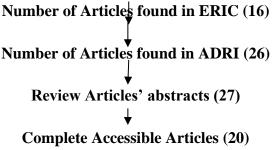


Figure (1) shows the way of searching and selecting articles for this study.

Result

Researchers stated their viewpoints on the effectiveness of both approaches Deductive and Inductive instruction in the learning process in difference ways. Adamson (2005) stated that the considerable difference between both approaches is the role of the teacher. In a deductive classroom, the teacher conducts lessons by introducing and explaining concepts to students. This approach is very teacher-centered, whereas inductive instruction is a much more student-centered.

Deductive instruction involves rules explanation while inductive instruction, in which the learner takes an active role in hypothesis testing but does not search for any rules. Neither the teacher nor the learners stated grammatical rules. Gollin (1998) mentioned that deductive reasoning applies general rule to specific instances while inductive reasoning involves interpretation from particular to the general. A deductive approach is closely related to the grammar - translation method of teaching while an inductive approach is considered the characteristic of audio-lingual method.

The research report by Wong showed the effect of inductive grammar teaching on adult students learning in secondary school. The findings of the research showed that brighter students received more benefit from inductive approach than the average or weaker students as well as they showed their favor of inductive approach in learning English grammar. He also emphasized that inductive instruction looks like as if students are trying to solve a mystery or doing a puzzle with interest. Therefore, an inductive approach looks like a mystery to students (Wong, 2008).

Ellis asserted that language learners have an essential role in adopting a teaching approach in a language classroom because students' performance directly affects the way the teacher teaches.

According to Chomsky (2005), applying an inductive approach for teaching English grammar helps students to "rediscover their subconscious knowledge of English grammar and bring it to consciousness, as the grammar of a language is acquired through abstracting a set of grammatical rules from language data rather than through imitation." (Chomsky 2002, p.177 as cited in Wong, 2008)

Dekeyser, (2000) asserted something important about the effect of deductive approach on students' learning process. He argued that this approach may not facilitate learners' long-term memory and his report also showed that deductive learning is the same as behaviorism methodology which does not help students understand the grammar in a useful way. While inductive approach is like giving a mystery to students in order to solve and find the grammatical rules by themselves. In addition, they do not forget the rule as they work by themselves, therefore the process will lead to more successful learning grammatical points communicatively.

Most researchers as, Willis, Willis (2007), Widodo, (2006), Richard-Amato (2010), Lightbown, & Spada (2006) stated their opinions on the disadvantage of deductive approach in the same way. The major disadvantage of deductive approach is the role of the teacher and students in which students have a passive role while the teacher dominates the most process of teaching in the class. In contrast, with inductive approach, there is a balance between both teacher and students' performance in learning and teaching process. Students work themselves in order to find the specific grammatical rule themselves under the guidance of their instructor. In my point of view, inductive approach builds up friendly relationship between teacher and students as they collaborate with each other in the learning process. They can openly state their ideas without any fear or anxiety of making mistakes.

Table (1) shows the research result of studies on the Effectiveness of Deductive and Inductive Instruction in teaching process.

Researchers	The Deductive Instruction	The Inductive Instruction
Gollin (1998)	Deductive approach involves "applying general rule to specific instances",	Inductive approach is the reverse of deductive approach which exposes learners to the example of language use in order to enable them in the use of target language and encourages students to generalize the rule and takes an active role.
(Chomsky 2002, p.177 as cited in Wong, 2008)	A deductive approach is closely related to the grammar-translation method of teaching	While inductive approach is considered the characteristic of audio-lingualism, Inductive approach builds up friendly relationship between teacher and students as they collaborate with each other in learning process.
Wong (2012) Willis (2007)	Deductive approach is a "process that proceeds presentation of the rule by teacher to the provision example in which the rule is applied and followed by language practice that students can engage in."	In Inductive Instruction learner does not search for rules or a basic pattern. Neither the teacher nor the learners stated grammatical rules.
Adamson (2005)	The role of the teacher in deductive classroom instruction is that teacher conducts lessons by introducing and explaining concepts to students. This approach is very teacher-centered.	Inductive instruction is much more student-centered. Inductive approach is like giving a mystery to students in order to solve and find the grammatical rules by themselves. They do not forget the rule as they work by themselves, and the process will lead to more successful learning grammatical points communicatively.
Clasquin- Johnson, (2016)	Teachers are the core of language teaching; they are the ones who create situations for better learning and pave the way for learners to acquire a second language effectively and consistently	A general advantage of inductive approach that makes inductive grammar teaching superior is to involve the students more fully as thinking people with ideas of their own and therefore increase motivation.

Nunan (2005), Oshima & Hogue (2007)	They emphasized that teacher should integrate both inductive and deductive methods in their teaching.	Inductive instruction can involve students more fully in understanding the language as they work out different rules for forming and using L2. In the current situation, researchers mostly emphasize on meaning in learning L2 rather than grammar that best achieved by inductive teaching.
Erlam (2005), Robinson (1992), and Seliger (1975 as cited in Wong, 2008)	The major disadvantage of deductive approach is the role of the teacher and students in which they both have a passive role and the teacher dominates in most process of teaching in the class.	Inductive instruction looks like as students are trying to solve a mystery or doing a puzzle with interest and looks like given a mystery to students in L2. There is a balance between both teacher and students' performance in learning and teaching process. Students work themselves in order to find the specific grammatical rule themselves under the guidance of their instructor.
Batstone & Elli (2009)	Deductive approach may not facilitate learners' long-term memory and his report also showed that deductive learning is the same as behaviorism methodology which do not help students understand the grammar in a useful way.	It helps instructors to clear up misconceptions about learning grammar. Adopting of inductive approach helps teachers of L2 to teach grammar effectively.
Lightbown & Spada (2006)	Deductive instruction enables students to be master in certain grammatical points.	Inductive instruction makes students long- life learners by using the grammar point in speech rather than memorize.
Richards (2005) & (Chomsky 2002, p.177 as cited in Wong, 2008)	It does not cover most students' learning style as the teacher explains and the students just listen, and not engage fully in the learning process.	teaching English grammar helps students to "rediscover their subconscious knowledge of English grammar and bring it to consciousness, as the grammar of a language is acquired through abstracting a set of grammatical rules from language data rather than through imitation."
Wong (2012)	Through deductive instruction weaker students receive more benefit.	Effect of inductive grammar teaching showed that brighter students received more benefit from inductive approach than the average or weaker students and they

	showed their favor of inductive approach in
	learning English grammar.

According to many scholars such as, Gollin (1998), Wong (2012), Willis (2007), Adamson (2005), Clasquin-Johnson, (2016), Nunan (2005), Oshima & Hogue (2007), Wong, (2008), Batstone & Elli (2009), Lightbown & Spada (2006), viewpoints, I made this table on February 2021.

Discussion

As I studied the researchers' ideas about Deductive and Inductive Instruction, I saw similarities among them. They mostly point out that both approaches can be used in learning process. They explained that both approaches are effective in learning process and have their roles according to the subject principles and context. It is teachers' responsibility to be careful about not to ignore grammar in teaching second language (L2) because learners never get enough mastery of grammatical features in (L2). It is the teachers' responsibility to try and create opportunities for learners to learn grammar communicatively in the target language.

Based on the advantage and disadvantage of both approaches it is difficult to judge which one is better for second language teaching. In my point of view teachers should care about the point as to which one works well in their own context, irrespective of the advantages and disadvantages regarding grammar teaching. Nunan (2005) mentioned that in the current situation, researchers mostly emphasize on meaning in learning L2 and he stated that it is the teachers' responsibility to try and create opportunities for learners to communicate in target language. In addition, he said, it does not mean that grammar should be ignored at all because learners never get enough mastery of grammatical features in L2. Nunan emphasized that teacher should integrate both inductive and deductive methods in their teaching. Deductive grammar teaching helps students to be masters in certain grammatical points, while inductive teaching procedure may reverse this process and students work themselves on grammar principles/ rules under the guidance of the teacher.

Erlam (2005), Robinson (1992), and Seliger (1975 as cited in Wong, 2008) find out a general advantage of inductive approach that makes inductive grammar teaching superior. Inductive grammar teaching is useful for a number of reasons: It can involve the students more fully as thinking people with ideas of their own and therefore increase motivation. It can involve them more fully in understanding the language as they work out different rules for forming and using English. It helps instructors to clear up misconceptions about learning grammar and makes it clear for both the students and the teachers, what ideas they have about how grammar works in L2.

I believe that if students work themselves and struggle hard to find the rules of grammar, this will help them integrate and enhance the efficiency of their reading and speaking skills. They will never forget because I have experienced this issue myself. When I was a student, I never learned completely how to change an active voice into passive though it was presented by the teacher clearly. I had problems but when I became a university teacher and looked at some grammar books to find the principle behind changing active into passive, I understood the rule completely. I believe that inductive grammar teaching method helped me to understand through which my students now learn second language grammar which is the main focus of my research. Through inductive instruction, I can teach effectively grammatical points because my students are adults and adolescents who like to engage in learning process by analyzing, synthesizing, and experiencing the issues. In addition, inductive method helps and enables students to think critically and find the rules/principles of L2 grammar themselves. Most of these research papers helped me in choosing appropriate grammar teaching method for medical students.

In inductive grammar instruction, learners become aware of how a particular meaning is determined by a particular grammatical form which is currently a challenge for second language learners. In most private courses, schools and governmental/ nongovernmental universities, teachers fail to use the grammar points which have been taught already in meaningful context or in appropriate situation. That is why most of students know all required grammar rules in L2 but still they are not able to use them in communication. The primary focus of second language learning is communication. So, I am in favor of inductive instruction because I believe that communication is the core of language learning. Inductive grammar teaching covers communication from both sides (teacher and students) unlike deductive grammar teaching in which students are 'spoon-fed' by their instructors during a passive learning process.

Conclusion

To sum up, many researchers stated their viewpoints on Effectiveness of Deductive and Inductive Instruction in learning process. The discussion on both approaches explained that both are effective in learning process and have their certain role according to the subject principles and context. It is the teachers' responsibility to try and create opportunities for learners to learn grammar communicatively in the L2 language.

Teachers are the core of language teaching; they are the ones who create situations for better learning and pave the way for learners to acquire a second language effectively and consistently (Clasquin-Johnson, 2016). Teachers should be careful that grammar should not be ignored at all because learners never get enough mastery of grammatical features in second language (L2). It should also be noted that, regardless of how students are grouped,

teachers should deliberately incorporate different teaching methods. Teachers should not forget that they are the main element responsible for the organization, effectiveness, efficiency, and quality of the educational process. Finally, it is better to be familiar with different kinds of grammar teaching methods in order to choose the one or integrate some approaches to teach effectively in our own context and consider the learners' need and interest in learning process.

Suggestion

Some of the challenges that always teachers experience during teaching EFL classes are directly related to pedagogical skills that they should be better prepared in the future. This paper recommends that more seminars, workshops, and in-service courses be organized for teachers to help, train and boost their attitudes on the significance of different teaching method especially in terms of L2.

References

Adamson, В. (2003).Deductive-vs -Inductive-Teaching Retrieved from http://knol.google.com/k/micha-b-paradowski/deductive-vs-inductive-teaching/2qpvzotrrhys1 /23#

Batstone, R. & Ellis, R. (2009). Principled grammar teaching. Auckland University, 194-204. Retrieved from www.elasevier.com/locate/system

Christison, M. (2003). Learning styles and strategies. In D. Nunan (ed.), Practical English Language Teaching (pp.267-288). City: Publishing Company. Retrieved from http://eltj.oxfordjournals.org/Kabul Education University

Dekeyser, R.M. (2000). The robustness of the critical periods effects in second language acquisition. Studies in Second Language Acquisition.22 (4) Retrieved from http:// eltj.oxfordjournals.org/Kabul Education University

Ellis, R. (2002). *Grammar teaching- practice or consciousness – Raising*, 167-174 New York: Cambridge University press.

Gabriel, R. (2009). The efficacy of explicit grammar instruction and its impact on L2 Rule-Learning: A literature review, 1-11 Retrieved from

http://www.sasked.gov.sk.ca/docs/policy/approach/instrapp05.html

Gollin, J. (1998). Key concepts in E LT: Deductive Vs Inductive, language learning Journal Volume 52/1Junuary Oxford University press Retrieved from http:// eltj.oxfordjournals.org/Kabul Education University

Harmer, J. (1998). How to teach English. Harlow: Longman

Lightbown, P.M. & Spada, N. (2006). How languages are learned. Oxford: Oxford University press.

Marks, J. & Bowen, T. (2012). The book of pronunciation: Proposal for a Practical

Pedagogy. UK: Delta Publishing

Nunan, D. (2003). *Practical English language teaching:* Grammar. 153-172 NewnYork: New York.

Nitta, R. & Gardner, S. (2005). *Consciousness –raising and practice in ELT course books:* ELT Journal Volume 59/1 January 2005©Oxford University Pressdoi:10.1093/elt/ccioo1 Oshima, A. &. Hogue, A. (2007). *Writing Academic English*. Level: Printed in the United States of America.

Penny, Ur. (2012). A Course in English Language Teaching. New York: Cambridge University Press.

Richard-Amato, P. A. (2010). *Making it happen*. New York: Pearson education, Inc.

Richards, J.C. (2006). *Communicative language teaching today*. Cambridge: Cambridge University press.

Silvia, A. (2013). *Deductive and inductive grammar teaching*: Academia.edu. Retrieved from http://academia.edu/2344319/deductive-and-inductive-Grammar-Teaching

Widodo, H.P. (2006). English teaching: Approaches and procedures for teaching grammar. *Practice and Critique*. Volume 5, number 1, 122-141

Retrieved from http://education.waikato.ac.nz/research/file/etpe/2006v5n1nar1.pdf

Wong, C. (2012). Examining the effectiveness of adopting an inductive approach to the teaching of English grammar. *Journal of English Grammar*, 177-200. Retrieved from http://www.sasked.gov.sk.ca/docs/policy/approach/instrapp05.html

Willis, D., & J, Willis. (2007). *Doing task based teaching*. Oxford: New York University Press. Retrieved from http://www.sasked.gov.sk.ca/docs/policy/approach/instrapp05.htm