Acquisition, Durability, and Productive Abilities in Explicit and Implicit Grammar Instruction

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Introduction

Grammar instruction is a topic of huge controversy among researchers. Many researchers are questioning whether teaching grammar is helpful in acquiring the second language or if it is even necessary. Others considered the methods that should be used in teaching the grammar of the second language and what structures of grammar should be taught. The opinions about the type of instruction needed in grammar varied among teachers and students. As for the students, there was a general agreement that explicit instruction is better: giving reasons such as feeling more secure and comfortable when knowing the grammar rule or that they consider grammar as an important element in their writing, though the teachers may be more concerned with the content than the grammar of the students' writing. As for the teachers, the opinions fluctuated. Some teachers such as those of the Adult Migrant Education in Australia preferred the implicit instruction within communicative activities. Others like the English for Academic Purposes (EAP) teachers, who are TESOL professionals, were almost all in favor of explicit instruction not only because it is preferred by their students but also some of the teachers themselves think it contributes to the smoothness of the lesson and helps accomplishing the classroom goals. The rest of the teachers believe that explicit instruction and natural exposure both are adequate, each at certain stages of the learning process (Burgess & Etherington, 2002).

This synthesis paper will focus on the explicit instruction of grammar vs. implicit or no instruction. According to DeKeyser (1995), explicit instruction is that in which the learners are aware of the grammar rule that is being given to them and are thinking of it at the same time when learning is taking place. Implicit instruction is that in which the learners are unaware of the rule to which they are exposed; this may happen through memorizing examples when the learners may acquire the rule without even knowing it. Research on this area of the grammar was focusing on a variety of issues that may result from those two different types of instruction. Among these issues are the acquisition of the grammatical structures themselves, their durability long after the instruction and their effect on the productive abilities of the language like speech or writing.

So the paper will be arranged according to this, placing the research findings of the two instruction types in relation to each one of these issues and comparing them. Considering the effects that these two settings have on the learners interlanguage, I raise the following questions: which of these two types is more effective in acquiring the grammatical structures?, which has a long term effect after the instruction? And, which is better in relation to the learners productive abilities?

The Acquisition of the Grammatical Structures

In this section I try to investigate, by reviewing some empirical studies, which of the two types of instruction (Explicit vs. implicit) has a better effect on the acquisition of the target grammatical structure. Van Lommel, Laenen, & d'Ydewalle, (2006) and Doughty (1991) empirically proved that grammar instruction, whether implicit or explicit, does affect the acquisition of the grammatical structures, while Erlam, (2003) was in favor of explicit instruction.

In the first study, the experiment included Dutch speaking group (17 year- old sixth-graders) which was randomly divided into two groups who were presented to a 25-minute cartoon in Dutch translated, through subtitles, into Esperanto. The subtitles varied in length but never more than 64 characters. The movie is preceded by a short story about the roots and development of the Esperanto language. For one group, the Esperanto story was used to introduce five grammatical rules of the Esperanto language without drawing the attention of the subjects to them. The rules were explained and orally practiced under the claim of introducing and clarifying the story. The other group received the story but no reference to the rules was made. The following day the subjects carefully watched a movie which was played in the school. Only after the movie the two groups were informed about the test and the purpose of the experiment. The test was multiple choice. It contained translated sentences which appeared in the subtitles and others that did not, but were examples of the same rules to which they were introduced. The results showed that the group which received implicit advance rule instruction did better than the other group that did not receive any kind of instruction. Older students made better use of instruction than younger (11 year old) students who had exactly the same experiment.

The results of this study may not be so reliable because part of the test was taking sentences exactly from the movie and the students' performance on this part may be that of retaining memorized sentences and not necessarily retaining the structure from the implicit instruction. The subtitles were time controlled and this may raise a problem of personal differences in reading speed; a fact which may suggest that not all the students were able to notice the structure in the same way.

Catherine Doughty (1991) examined the acquisition of the English relativization of 20 international students who are of middle proficiency and have little knowledge of the rules of relativization. All the students had instruction in English either in high school or at university before coming to the US. They were randomly assigned to a rule oriented group 'ROG', a meaning oriented group 'MOG' and a control group 'COG'. The pretest reported no significant differences between the groups who were informed about a posttest that would include answering questions and writing summaries. The three groups had different treatments but the same lesson format. The lesson started with rapidly skimming highlighted sentences in a passage, then reading in depth for understanding; here the treatment differed. The ROG group received explicit rule instruction, through animated grammar, which included identifying the relative pronoun, the head noun, their positions in the sentence and observing how a sentence containing a relative clause can be decomposed to two simple sentences and then how it was recombined. The MOG received lexical and semantic rephrasing through dictionary help, sentence clarification and an implicit grammar instruction through capitalizing and highlighting. The control group received nothing but the original test sentences which were viewed one by one. Immediately after the treatment the three groups were tested. The results showed that both MOG and ROG achieved almost the same gains with a bit higher score for the ROG. The COG gain was less than that of the two experimental groups which is evidence of the effect of instruction on the acquisition of the grammatical rules.

Both studies showed that the implicit and the explicit instruction affected the learners' acquisition of the grammatical rules. Doughty's study even proved that the implicit and explicit types of instruction had almost the same effect on the acquisition of the English relativization.

Claiming that the implicit instruction does not make significant differences when compared to no instruction of control groups, Erlam

(2003), favored the explicit (deductive) over the implicit (inductive)2 instruction. "The study focused on the relative effects of the deductive and inductive instruction on the acquisition of direct object pronouns in French" (p. 244). The students of three classes, in high school in New Zealand, on which the study was conducted were already studying French but had not taken this particular structure. They were randomly assigned to deductive, inductive and control groups and showed no differences in the pretest. During the treatment, the deductive group received explicit explanation, exercises, exemplary sentences, rewriting of sentences, corrective feedback, and a chart that contained the object pronouns including the gender, person and number, which was available all the time during the treatment. The inductive group received pictures and sentences that included the target structure and were asked to relate the correct sentence to each picture, negotiation of meaning and sentence correction exercises where they were to explain their choices but there was no explanation of the rules. The control group was instructed about a different structure. In the posttests on the first and the sixth weeks after the instruction, the deductive group outperformed the other two groups in the provision and the replacement of object pronouns in all the test parts, while the inductive group gains varied showing no important differences from those of the control group in the different parts of the test.

In this study the students already know the linguistic form (the pronouns) and they are only using them in a new function. So, for the deductive group, the explicit instruction of the structure could have served as a kind of review or focus on noticing the structure and that's why they did better than the other two groups, while the two other groups did not get this chance of explicit focus on the structure. "However, if the new learning required is that of assigning a different function to an already acquired form, learnability may be less of a problem" and "no noticing, no acquisition" (Ellis, 1995, p:89, 95).

Durability

Many researchers went in their research beyond investigating the mere acquisition of the grammatical structure by the explicit, implicit type of instruction to questioning the durability of these structures long after their being instructed and acquired. So, the question is which of these two types of instruction has a longer term effect? According to Tode (2007),

durability is still questionable because the long- term studies are of limited number.

In his study, he examined the durability effect of the explicit and implicit instruction of the English copula 'be' before and after introducing the auxiliary 'be'. Eighty nine seventh grade Japanese students were the subjects of the study that lasted for six months. They were divided into three groups: explicit and implicit instruction groups and a control group. The pretest and the posttests followed the same format of a written test assessing the students' provision and overuse of the copula 'be' in its obligatory contexts and in the simple present sentences. The results of the pretest were almost the same among the three groups. The first group was instructed by using sentences as examples where the target structure was explained and the group was asked to translate them. The native language was used to help the students. The implicit instruction group used the same sentences but was asked to memorize them. The control group was instructed about the modal auxiliary 'can'. Though explicit group outperformed the other two groups in the first posttest and though their gains increased after the three- week instruction about the auxiliary 'be', however, the long term effect varied for all three groups as shown in the table below:

Table 1

Tests		Explicit group	Implicit group	Control group				
Pretest		No significant differences between the groups						
Posttest 1 (immediately afterthe		Outperformed the 2 groups	No great difference between the two					
treatment)								
Posttest 2 (three weeks later)		Apparent decrease in score	No significant changes					
Three weeks instruction about the auxiliary 'be'								
Posttest 3 (a month later)	Same test	Significant increase in results	The implicit group gains fluctuated.					
Posttest 4 (three moths later)	about the	The results decreased	They were higher, same, or even					
Posttest 5 (a month after)	copula	Failed to increase	lower than those of the control					
	'be'	significantly	group.					

Results of Tode (2007), Durability Study

Though the explicit group outperformed the other groups, the explicit instruction has a strong short term effect as shown by the posttests but its durability is questionable because of the fluctuation of the results along the posttests. The significant increase of the results in posttest three may be because of the instruction on the auxiliary 'be' and not necessarily retaining the copula 'be' rules. The implicit group failed to show significant differences from the control group which suggests that implicit instruction through memorization was not enough. Finally, since the explicit group results increased in the last posttest and since the implicit instruction is cumulative, the results could have changed if the study lasted longer (Tode, 2007).

Though Erlam (2003), was in favor of the deductive instruction in terms of acquisition, it was hard to decide which of the deductive, inductive or no instruction is better in terms of long term effects. The deductive group showed a decrease in gains in all test parts (written, oral, listening, and reading) over time between the first posttest, a week after instruction, and the late posttest five weeks later; still, their gains were higher than those of the other two groups. The inductive group was able to keep some gains in the same level (written part of the test), while in other parts gains decreased. Unlike the first two groups, the control group was able to increase some of its gains (in the written part of the test) over time.

Another study on college students of French (seniors, juniors, freshmen and sophomores) showed a clear effect of a guided inductive instruction over the deductive instruction. In the ordinary courses at college the focus was on communication and interaction. The students were treated by being introduced to eight grammatical structures of French, one structure per week. For the inductive group, the rules were explained explicitly, sample sentences were provided and oral practice of the structure through a power point presentation. The inductive group had a reversed order of the treatment but with no explicit explanation of the rule. They practiced the structure orally through the power point show. To help the students induce the rules and solve the exercise, the teacher asked them leading question about the oral practice they had where the target structure was introduced. Finally the teacher gave them some feedback about the exercise. At the end of each week they had a fill in the blanks quiz to measure the short term effect of the instruction where the inductive group highly outperformed the deductive group. Although there were no significant differences between the groups in the pretest, the posttest, six weeks after the treatment, showed important increase in the gains of the two groups, but the inductive group gains were greater. This suggests that the inductive instruction, in terms of long term effect, is more positive than the deductive instruction (Haight, Herron, & Cole, 2007)

This study was paying attention to many aspects in order to insure the reliability of the results. All the grammatical structures introduced to the students were taken from the course syllabus so that the students will not be confused, each group had both types of instruction interchangeably (four structures were introduced inductively and four deductively), the same two teachers did the different types of instruction and were observed to insure that they are following the treatment, all the students had an average of 1.5 years' previous study of French and the scores were calculated in terms of a mean score for the whole group.

Productive abilities of the language

Since the goal of any language learner is to be able to use the language whether in its written form or in speech, and since grammar has a major effect on the language usage, some researchers investigated the effect of the explicit or implicit grammar teaching on the learners' productive abilities. But the question is which of these two types of instruction is more effective? Two studies (Macaro & Masterman, 2006) and (Cheng, Mojica and Clara, 2006) proved that no significant improvement of the productive abilities is gained by explicit grammar instruction.

The first study examined two groups (an intervention group of 12 students and a comparison group of 10 students) of French freshmen at a university in the UK. The two groups were selected on the basis of their scores in the Admission Grammar Test of the university. The pretest showed no important differences between the groups. While the two groups were taking university courses, the intervention group received additional treatment of intensive explicit instruction of certain grammatical structures. The treatment duration was 13 hours, 3 hours every day, where students practiced the target structures orally and through writing. In the two posttests (a week after the treatment and 12 weeks after) the intervention group showed significant improvement in grammaticality judgment tasks but no significant development in free composition and

even a decline in translation between the two posttests. The comparison group who had only a pre and one post test did not show any significant improvement and even a decline in the grammaticality judgment tasks between the two tests.

Table 2

Subjects	Treatment	Pretest		Interim	Posttest
IG: 12 french students	Intensive grammar	GJT No		Improved significantly	
	course + regular	T	important	Decline	No important
	university courses		differences		development
		FC	between	No significant improvement	
CG: 12 french	Regular university	GJT	the two	Declined	
students	courses only.	T	groups.	No significant improvement	
		FC			

A Summary of Macaro & Masterman (2006), Study

*IG= Intervention Group, *CG= Comparison Group, *CJT= Grammaticality Judgment Ttasks, *T= Translation, *FC= Free Composition.

According to Macaro & Masterman (2006) even the little improvement in the grammaticality judgment tasks that theintervention group gained is questionable; "Whether students were applying explicit knowledge gained from the course, or whether they were correcting 'by feel' cannot be ascertained, as there was no apparent parallel improvement in their ability to articulate rules" (p. 319).

In the second study (Cheng et al., 2006) investigated the use of the Spanish subjunctive (in obligatory, variable and hypothetical contexts) in the speech of a group of advanced learners, English teachers of Spanish, after they were given a traditional explicit instruction of this structure in a graduate course in Mexico. The instruction lasted for 4 weeks, 2 hours a day where they discussed and practiced the target structure. Because the Spanish subjunctive is related to the speakers' 'mood', it is considered to be one of the hardest grammatical structures of the Spanish language. The results of the of the 2 posttest in comparison to those of the pretest showed an increase in the use of the target structure in the learners' speech but no significant improvement in the accuracy of its use. This is a fact that differentiated the learners' speech from that of a baseline group of native speakers. Though some of the learners were able to use the target structure

accurately in single sentences, the research and the tests- which were those of Simulated Oral Proficiency Interview (SOPI)- aimed at investigating the learners' ability to produce extended speech using the target structure and not single sentences.

According to (Cheng et al.) "For foreign language learners, therefore, it is not sufficient simply to know just how a form functions within a given sentence; one must also master the discourse features of grammatical forms" (p. 33).

Whatever results shown in this study, I do not think we can take them for granted or rely on them when speaking about other learners of this target structure because the study sample was so small. They were only ten subjects.

In order to be as accurate as possible in deciding which of the two types of instruction (explicit vs. implicit) has more effect on the learners' productive abilities, and to avoid any differences in between the two groups, Scott (1989) conducted a study where she applied both the types of instruction interchangeably on the same group. The groups were 34 students of advanced conversation classes. The target structure was two French relative pronouns and the French subjunctive. 27 of the students took these structures before and the rest were only taking the semester courses in which the grammar is not focused on. The teacher, an experienced and fluent nonnative speaker, decided to give the 9.00 am class an explicit instruction on relative pronouns and implicit instruction on the subjunctive. The 1.00 pm class received a reversed order. For both target structures the explicit instruction involved explaining the rules explicitly and composing sentences that contain the structure but without any kind of practice whether oral or written. For example, the instruction on the subjunctive included defining, stating differences, how to know the sentences that require the subjunctive mood, etc. The implicit instruction included telling a part of a story where the target structure is embedded (15-25 RP or Sub. per part), asking questions about the story content, rereading the part, and in the last day of class repeating the whole story. The results of the pre and posttests proved that the explicit instruction is more effective than the implicit in the written part of the test. Concerning the oral part, there was no important differences in the results under both types of instruction.

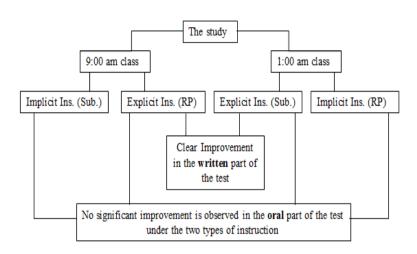


Figure 1. The results of Scott (1989) study.

*Ins.= instruction, *RP= relative pronoun, *Sub.= subjunctive.

Findings

By reviewing the results of the studies mentioned under each section of the paper, it was hard to give credit to one type of instruction over the other.

In answering research question number one, which of these two types is more effective in acquiring the grammatical structures? We can see that the results mentioned under this section varied between favoring the explicit instruction once, and at the same time other results revealed that it does not make great difference than the implicit instruction which is sometimes even shown to have no significant difference from 'no' instruction. So, there was no greater effect, in terms of acquisition, for one type of instruction over the other.

The second question, which has a long term effect after the instruction? Two studies showed greater effect of explicit instruction. Though the scores were going up and down along study period, they were higher than the implicit instruction group scores which were sometimes less than those of the control group. But this fact was faced by other results that showed greater effect for the inductive instruction over the deductive.

Giving an answer to the third research question: which is better in relation to the learners' productive abilities? We can see that explicit

instruction has a great effect on some of the productive abilities, while the implicit has little or no significant effect on the productive abilities in general whether oral or written.

Although it is hard to favor one type of instruction over the other, what can be concluded from all the reviewed studies that instruction in general, whether explicit or implicit, has a positive effect on the development of the language of the L2 learners. According to Radwan (2005), since grammar teaching has a positive effect on the language development of the L2 learners, it should be considered as an integral element in the learning process of a second language.

The differences in the results in between the studies can be related to many reasons. Among these reasons are: the subjects in each study differ in age, educational background, mother tongues, level of proficiency in the language and treatment; the duration for each study is different; the ways researchers use to measure the results vary from one study to another; and the structures that are given to the student are various. All these reasons affect the results and consequently our judgment of which type of instruction is better. According to Douglas (2001) SLA researches, in general, fail to meet the reliability and validity aspects such as steadiness of performance, authentic ability of the language, social effects of tests, etc. As for the structures, a suggested solution for the debate of the deductive vs. inductive approaches to teaching grammar is: the structures that can be learned without explicit presentation of the rule are to be taught implicitly, others are to be taught with rule presentation (Hammerly, 1975).

Implications

Among the implications for language teaching that can be drawn from the research review is the incorporation of meaningful texts with grammar instruction. It is worth mentioning that whenever the implicit instruction outperformed or was of similar effect as the explicit it was incorporated to a meaningful story. Another feature that may be incorporated to teaching is the use of computers. We already observed that the implicit instruction was as good as if not better than explicit instruction when the computers are used as in Doughty (1991) study where an animated grammar was presented by the computer or the use of power point presentation in (Haight et al., 2007) study. The performance of both the explicit group in Erlam (2003), study and the implicit (inductive) in

(Haight et al., 2007), study was superior. A feature that was available in both these different types of instruction and might have contributed to the superiority of gains in these two types of instruction is the feedback which seems to have a positive effect in relation to teaching under both types of instruction.

It may also be useful to take students' opinions into consideration while making the curricula. By doing so, the teacher can design a curricula that both meets the classroom needs and pleases the students in terms of feeling secure and comfortable about the type of instruction which of course will enhance the learning process.

Finally, a mid way of instruction (between the explicit and implicit) will probably be useful. Andrews (2007), empirically proved that explicit and implicit instruction are of the same effect when teaching simple grammatical structures and that explicit instruction is more effective in relation to hard grammatical structures.

FOOT NOTE

- (1) This study was focusing on other aspects along with the implicit instruction such as age and 'no' movie effect. Since this paper focuses on the explicit vs. implicit instruction, I took only the 'with' movie part where it is considered as part of the implicit instruction.
- Only the studies that used the terms 'deductive' and 'inductive' in the exact meaning of 'explicit' and 'implicit' are used in this paper.

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