Effects of Strategy Instruction in an EFL Reading Comprehension Course: A Case Study

Efectos de la instrucción de estrategias en un curso de comprensión de lectura en inglés como lengua extranjera: un estudio de caso

Sergio Lopera Medina*

Universidad de Antioquia, Colombia

Strategy instruction is useful in teaching contexts. This paper examines the effects of strategy instruction in an EFL reading comprehension course carried out with 26 undergraduate students at a Colombian university. As a research method, a case study was implemented. There were three instruments with which to collect data: reading comprehension tests, teacher's field notes and self-reflection in class at the strategy instruction phase, and a learning perception questionnaire. Given that students improved in reading comprehension, it would seem that reading strategy instruction is indeed very useful. Also, it was noted that when students applied reading strategies, they became more self-confident and this in turn enhanced their motivation. Finally, when students applied the reading strategy approach, the use of dictionaries decreased considerably.

Key words: Dictionary use, improvement in EFL reading comprehension, reading strategy instruction, self-confidence.

La instrucción basada en estrategias es útil en los contextos de lectura. Este artículo reporta los efectos de instrucción basada en estrategias de lectura en inglés como lengua extranjera a un grupo de 26 estudiantes de enfermería de una universidad colombiana. Como método de investigación se llevó a cabo el estudio de caso. Para recolectar la información, se aplicaron tres instrumentos: pruebas de comprensión de lectura, notas de campo y la autorreflexión en clase en la fase de instrucción de estrategias, y un cuestionario de percepción de aprendizaje. Debido a que los estudiantes mejoraron en la comprensión de lectura, se concluye que la instrucción basada en estrategias de lectura parece ser beneficiosa. Se observó que cuando los estudiantes aplicaban las estrategias de lectura, mostraban mayor autoconfianza, lo cual incrementó su motivación. Además, cuando los estudiantes aplicaban el enfoque de estrategias de lectura, el uso del diccionario disminuyó considerablemente.

Palabras clave: autoconfianza, instrucción basada en estrategias, mejora en la comprensión de lectura en inglés, uso del diccionario.

^{*} E-mail: serggiolop@hotmail.com

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Introduction

There is a common belief among educators that appropriate strategy use has a good impact on students when they are trained to apply effective strategies. Janzen (1996) proposes that strategy instruction is useful in reading contexts because students develop knowledge about the reading process. Janzen (1996), Winograd and Hare (1988), and Karbalaei (2001) have focused on the reading strategies that readers use here and throughout in processing written input and have made some suggestions on how to teach reading comprehension in foreign language (FL) / second language (SL) contexts. This paper reports a case study of the effects of strategy instruction in an English as a foreign language (EFL) reading course with students at the Universidad de Antioquia, Medellín, Colombia.

This paper begins with a review of the relevant literature followed by the research method and research question. Then, the data collection and analysis procedures are described. Finally, it reports the main findings and proposes some conclusions and an implication.

Literature Review

This section covers the concepts of reading strategy instruction, motivation, reading, and reading strategies.

The Process of Reading Strategy Instruction

According to Wenden (1985), and Oxford (1990), learner strategies allow learners to take responsibility for their own language learning. They posit that these learning strategies help them to solve learning problems, and as a result, students may become autonomous language learners. According to Wenden and Rubin (1987), the process of learner strategy instruction consists of two important issues: the first one is the description

of strategies that successful language learners use, presented as typologies. The second one is training FL/SL students in how to apply strategies that have been proven effective. When the reading strategies are outlined by good readers, teachers can use them to motivate poor readers thereby helping them learn more effectively (Hosenfeld, 1979).

Block (1986) supports the idea that reading strategies help learners to execute a task identifying which textual cues they have to focus on, to gauge how to make sense of what they read, and to know what to do when they have problems understanding the text. The reading strategies involved in this process range from the simplest (e.g. scanning, guessing word meaning, previewing), to the most complex (e.g. summarizing, making inferences, and identifying tone).

Carrell (1998) states that the difference between good and bad strategies is about using the strategies consciously or unconsciously. In order to have effective second language (L2) reading strategy instruction, she suggests the involvement of two important metacognitive factors that can be applied in FL/L2 reading strategy instruction: knowledge of cognition, and regulation of cognition. The former guides readers to be aware of the reading strategies they use when reading. The latter asks readers to choose appropriate or more effective strategies that will help them here and elsewhere to have a better understanding of the text.

Research in reading has proved that when teachers use explicit reading strategies in classrooms, students improve their performance. Hamp-Lyons (1985) and Kern (1989) contrasted two different groups and found that a group that followed the strategy training did better than the one that did not follow this strategy instruction.

Winograd and Hare (1988, p. 134) outline five recommendations that teachers should follow in order to apply strategy instruction successfully:

- Explain the strategy to be covered in the lesson.
- Describe the importance and benefits of using the strategy.
- Model how to use the reading strategy.
- Highlight when and where to use the strategy.
- Show students how they can assess whether they are using the strategy successfully or unsuccessfully.

Motivation

When teachers apply strategy instruction in a consistent and realistic manner, students are engaged and this may increase their motivation. Bastidas (2006) claims that "motivation is a dynamic and an interactive process composed of beliefs, wants, reasons, and goals mediated by socio-cultural and historical conditions to learn a second or a foreign language" (p. 154). When students are guided to have a clear purpose in reading, motivation plays a very important role. Guthrie (1996) states that this motivation, or engaged reading, is beneficial because it is based on the cognitive characteristics of the reader. The reader uses cognitive strategies and interacts socially to learn from texts. Therefore, a motivated reader is better equipped to negotiate the process of reading comprehension.

Reading

Reading is an interactive process in which the writer and the reader dialog through a text. Barnett (1989, cited in Omaggio, 1993) defines reading as communication, as a mental process, as the reader's active participation in the creation of meaning, and as a manipulation of strategies. Moreover, Day and Bamford (2000) posit that reading is the construction of meaning from a printed or written message.

For academic purposes, reading is important because it is one of the most frequently used language skills in everyday life, as witnessed by the use of Internet. Students search for information through the web and most of it is published in English. "As a skill reading is clearly one of the most important, in fact in many instances around the world we may argue that reading is *the* most important foreign skill, particularly in cases where students have to read English material for their own specialist subject but may never actually have to speak the language; such cases are often referred to as English as a library language" (McDonough & Shaw, 1993, p. 89).

Reading Strategies

Mikulecky and Jeffries (2004) state that when learners receive strategy instruction, they build "on their already-established cognitive abilities and background knowledge" (p. 183). Students may also view reading strategies as a problem solving activity which takes the place of translating. Through this approach, students increase their confidence and motivation. As a result, they may have faster access to the reading material they have to use in their academic contexts. Poole (2009) points out that "a number of studies show the connection between increased reading strategy use and skilled reading among second language learners at the post-secondary level" (p. 30). Nunan (1999) highlights a typology of reading strategies developed by teachers in the ELTU (English Language Teaching Unit) at a Chinese university. His list is summarized and modified for this paper, in Table 1.

In order to guide students to use helpful strategies when they read in a foreign language, the teacher can design certain tasks. Tasks are exercises intended to facilitate learning and in which there is an objective to reach. A task is defined as

any structured language learning endeavor which has a particular objective, appropriate content, a specified working procedure, and a range of outcomes for those who undertake the tasks. 'Task' is therefore assumed to refer to a range of work plans

Cohesive devices

Guessing word meaning

Background knowledge

Strategy	Comment
Having a purpose	Knowing what you want to gain from the text
Previewing	Making a quick survey of the text, identifying the topic, main idea
Skimming	Getting the author's point of view
Scanning	Looking for specific details
Predicting	Anticipating what is coming next
Inferring	Getting the ideas that are not explicit

Identifying functions of conjunctions

Using context, word structure, cognates

Using what one already knows and applying it to new ideas in the text.

Table 1. Typology of Reading Strategies Developed By Chinese University Teachers (Based on Nunan, 1999)

which have the overall purpose of facilitating language learning – from the simple and brief exercise type, to the more complex and lengthy activities such as group problem, solving or simulation, and decision making. (Breen, 1987, cited in Nunan 1989, p. 6)

Some important aspects of language learning must be included when designing activities, namely, activation and building of background knowledge, activities to work on the comprehension of the specific message, or activities dealing with reflection and discussion. When designing tasks for students, one of the most recommended routines is to design them following the format of pre-activities, while-activities, and post-activities (Lopera, 2003).

Research Question

What, if any, are the effects of reading strategy instruction in an undergraduate group taking a reading comprehension course?

Research Method

This paper reports an exploratory case study (Cresswell, 2007; Merriam, 1998; Tellis, 1997; Yin, 2003) used as the research method to understand the effect of reading strategy instruction on students'

reading comprehension. A case study is the most qualitative method used in information systems. It involves a phenomenon which has to do with real issues and one's taking into account the context (Myers, 1997). In terms of this study, the teacher is seen as a researcher because she or he explores the effects of reading strategy training in his students (Freeman, 1998). On the other hand, researchers can also use a quantitative analysis in order to support data. One kind of quantitative design is pre-experimental. In this process, an evaluation is administered at the beginning of the experiment; then, treatment takes place with the group; finally, the same evaluation is given after the treatment in order to confirm the results. It is worth noting that this study favors qualitative analysis, and that the quantitative part aims at endorsing findings.

Context and Group Profile

A group of the Faculty of Nursing at Universidad de Antioquia was chosen to explore the effects of strategy training in reading comprehension in English as a foreign language. Reading Comprehension courses I and II are included in their curriculum. For this case study, Reading Comprehension I was

taken as the setting for data collection. Participants were instructed in the typology of reading strategies stated above in the section of reading strategies, namely: having a purpose, previewing, skimming, scanning, predicting, inferring, using cohesive devices, guessing word meaning, and activating background knowledge.

There were 26 students in the class. There were 24 women and 2 men, and their ages ranged from 19 to 22 years old. The course lasted 20 weeks, with one class period of four hours a week. The course was taught in the students' mother tongue (Spanish), but the exercises and readings were in English. Both the teacher and students used Spanish because the students did not feel sure of expressing their opinions, asking or requesting clarifications as well as giving explanations in English. The participants expressed a high level of motivation to attend this course because they knew the importance of being skilled readers for their academic purposes.

Research Procedure

The researcher used three instruments in the process of data collection:

The first instrument was a reading comprehension test which consisted of two paragraphs with 20 multiple choice questions that included main ideas, referents, guessing word meaning, and inference. Students had to circle the best answer based on four options. Students were allowed to use dictionaries and had 90 minutes to take the test. This test was implemented both at the beginning and at the end of the course. The second instrument was the documentation of the pedagogical intervention of the teacher, done through field notes in the class sessions and self-reflection in a diary, as the teacher was the researcher in the study. The teacher followed the five recommendations outlined by Winograd and Hare (1988) as described above in the section of the process of reading strategy instruction. The

teacher also involved the experience-text-relationship (ETR) method which has been applied usefully by researchers (Carrell, Pharis, & Liberto, 1989; Au, 1979). This method helps learners to activate and/ or develop their background knowledge of the text. This method also helps learners to monitor their reading comprehension and to become aware of the reading strategies they use when the teacher uses the reading strategy instructions. The teacher followed a diary in order to collect information of the process that students followed. A set of pedagogical activities are described:

- The teacher told the students the purpose for each reading strategy. He also emphasized the benefits of using them.
- Both the teacher and students looked at the title
 of the selected text and predicted the possible
 content of the reading. The teacher selected
 authentic readings not only about their specific area (nursing) but also about social issues,
 tourism, technology, education, and medicine.
 The teacher always motivated the students to
 activate their background knowledge related to
 the content of the text.
- The teacher usually introduced a reading strategy by explaining and modeling how to approach and apply the reading strategy to the text. During this process, the teacher highlighted some repair strategies such as using the context to guess the meaning of unknown words, continuing to read until the meaning becomes clear, re-reading difficult or problematic parts, finding the most important parts of the text, and asking classmates or the teacher for help.
- After the explanation, the teacher asked the students to do some exercises with the readings in order to apply a reading strategy or a set of reading strategies which had been just introduced. In order to apply the said reading

strategies, the teacher designed pre, while, and post activities for each reading. The teacher also asked the students to work in small groups of two or three students; the teacher timed the activities in order to prompt the students to be fast readers. They were allowed to use dictionaries.

- In the classroom, the teacher was always around the small groups in order to observe their reading endeavors and was always available to answer questions or guide students.
- When time for a specific activity was up, the teacher asked certain students to socialize the possible answers to the whole group.
- At this socialization stage, the teacher encouraged the students to relate the content of
 the reading to their personal experiences by
 applying the Experience-Text-Relationship
 (ETR) method.
- The teacher demonstrated to students how they could assess themselves. He asked the students to summarize and socialize the most important parts of each reading as a way of assessing the process of applying the reading strategies.
- Public praise was given by the teacher as a motivational strategy for learners.
- The teacher took notes in his diary during the development of the classes.
- Homework was assigned for each class, and students socialized it with the whole group at the beginning of each class. Most of the homework emphasized the reading strategy being worked in class; the homework had to be done individually.

Finally, the third instrument was a learning perception questionnaire (see Appendix). It was an open questionnaire about students' experience as regards the reading strategy learning process; it was administered at the end of the course.

Data Analysis and Findings

The analysis of data shows that students improved in reading comprehension after having had the strategy instruction.

Reading Comprehension Test

The results of the first and second tests given to the 26 students are different, but they both keep the same structure and the same level of difficulty. They are shown in Table 2 and Figure 1, and suggest an overall gain in reading comprehension ability.

Table 2 and Figure 1 show that the average score of evaluation moved positively (Mean Before= 9.69; Mean After= 12.12). The median shows that 50 percent of the students selected more than 9 and 13 questions right on both tests respectively. This means that the course had a positive impact on students. This positive movement is represented in the graphic which shows that the mean on the second test is higher than the mean on the first test (black arrows). Nevertheless, the variation (Std. Deviation) increased (Before= 2.494; After= 3.456). This variation suggests that new tries have to be applied in order to improve and check efficiency.

Regarding the qualitative part, the teacher made notes in his diary related to students' group work, their performance on the tests, and the use of dictionaries in class. When learners took the first test, their time was mostly devoted to using the dictionary; most of the learners wrote the meaning of unknown words in the paragraphs. Five students out of 23 finished the test in 60 minutes; the others handed in their tests after the allotted 90 minutes. Some questions (two or three) were left out by four students. Finally, the teacher noticed that some students doubted or were not sure of the answers they marked.

Students were faster on the second test. Eight students finished the test in 40 minutes, and the others took an hour. They considerably lessened

Table 2. Results of the First and Second Tests

	Before instruction	After instruction
Valid	26	26
Missing	0	О
Mean	9.69	12.12
Median	9.00	13.00
Std. Deviation	2.494	3.456
Minimum	7	5
Maximum	16	20

N=26

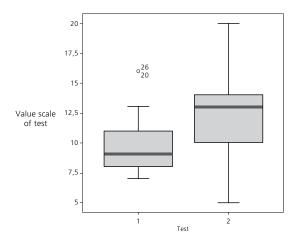
the use of dictionaries compared to the use on the first test. Nobody left out questions on this test, and only three students wrote the meanings of some unknown words in the paragraphs. The teacher noticed that students seemed to feel more confident when answering the questions.

Pedagogical Intervention

To persuade students of the importance of each topic –that is, of each reading strategy– the teacher modeled it and showed how, when, and where to use it. He then gave students two readings to which they could apply each topic (having a purpose for reading, previewing, skimming, scanning, predicting, inferring, identifying cohesive devices, guessing word meaning, and activating background knowledge). The teacher made notes about the students' application of the reading strategies and these notes resulted in the following observations:

 In the early stages of the experiment, some students used their fingers to guide their eyes across the lines of the paragraphs. The teacher interpreted this to mean students were reading word by word. However, towards the end of the strategy training period, students did not

Figure 1. Results of the First and Second Tests



use their fingers to follow the reading in the last topics of the strategy training. Thus, for the teacher-researcher, this appeared to indicate that students were using the context to guess the meaning of unknown vocabulary.

- When the teacher moved around the classroom in order to observe whether or not the students were applying the reading strategy approach, he noticed that the students showed an awareness of knowledge of cognition (Carrell, 1998). They produced expressions like "let's look at the title, subtitles, and images first, then..."; "read the first and last sentence of each paragraph to get the main idea"; and "let's use the context to get the meaning of that word."
- At the beginning of the course, some students claimed that reading in English was difficult and complex. They also said that the readings were too long and that they could not handle them. The teacher noticed that their motivation was low. During the course, however, the students' motivation and attitudes toward reading changed. Through the process of reading strategy instruction, students were able to develop and apply reading strategies which resulted in a boost of their confidence.

 When homework was checked, the teacher asked them if they had followed the recommendations given. Some of them said that it was difficult with some readings, especially the ones about technology; but the ones about medicine, social issues, and nursing were okay and they said "they were workable."

Learning Questionnaire

The teacher analyzed the answers on the questionnaire (see Appendix) by categorizing as follows the students' comments into the most significant issues:

Application of Reading Strategies

They now apply reading strategies when they read materials in English. They can also manipulate unknown vocabulary because they try to contextualize the words in the reading, or by using morpho-lexical strategies.

Use of Dictionary

They noticed that the frequency in the use of the dictionary could be decreased when they used the reading strategies mentioned above. Also, they observed that they saved time when they did not use it.

Self-confidence

On the questionnaire, they stated that they now felt more confident when reading in English because they could interact with the reading in order to get the meaning. Also, after the strategy instruction, they felt more confident with the vocabulary.

The Course

They were of the opinion that the methodology implemented in the course was quite useful; it facilitated the understanding of the readings. They felt they were more skilled after the strategy instruction.

Findings

The three instruments –tests, teacher's field notes and self-reflection in class at the strategy instruction phase, and a motivation questionnaire—were contrasted with one another in order to find similarities. The answers to the research question "What, if any, are the effects of reading strategy instruction on an undergraduate group taking a foreign language reading comprehension course?" are the following:

- The effects of the reading strategy instruction were quite useful for these foreign language readers because they improved in reading comprehension.
- When the students applied the reading strategies, their self-confidence improved and this resulted in higher levels of motivation.
- When the learners applied the reading comprehension strategies as they read, the use of a dictionary was considerably reduced.

Conclusions and Implication

The primary goal of reading strategy instruction is to improve students' reading comprehension. This paper has shown that students improved not only in EFL reading comprehension but also in knowledge of strategies. With the strategy instruction, students were able to develop meta-cognitive awareness in using reading strategies. Moreover, students' attitudes and motivation changed positively toward reading in a foreign language. Specifically, students gained self-confidence as they showed they could interact with different kinds of readings. Finally, as the students applied the reading strategies as they read, the use of a dictionary was reduced as a consequence of reading strategy instruction. However, with these and no doubt other students, it was necessary to guide them in order for them to become autonomous.

This study did not cover how, if at all, the process of becoming autonomous learners is linked to the use of reading strategies. Knowing how to use reading strategies helps EFL readers to interact with the reading but it does not mean that they are autonomous readers. Further research is necessary to examine the issue of learner autonomy when students are applying reading strategies.

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About the Author

Sergio Lopera Medina, candidate for the PhD in linguistics; MA in linguistics; specialist in teaching foreign languages, Universidad de Antioquia, Colombia. He is a full time professor at Universidad de Antioquia. His research interests are teaching EFL reading comprehension, compliments in pragmatics.

Appendix: Learning Questionnaire*

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Learning questionnaire in reading comprehension in English

Dear student,

The following questionnaire is aimed at verifying your progress in reading comprehension in English as a foreign language. Please answer the questionnaire as objectively as possible.

The information gathered here will be used for research purposes in human sciences. Proper names will not be used in order to protect the informants' identities. You agree with participating as soon as you fill out this questionnaire.

Last name:				
Age:				
Year you finished your undergraduate program:				
Do you have an undergraduate degree?	Yes No			
Do you have a job?	Yes No			
Are you graduated from a public high school?	Yes No			
Has this course helped you improve your reading Yes No Why?				
What did you learn in this course?				
Do you feel more confident reading texts in Engres No Why?				
What was the positive part of this course?				
What about the negative part?				

^{*} This questionnaire was administered in Spanish and translated into English for the purpose of this publication.