



Teaching Written Communication Strategies: A Training to Improve Writing

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ARTICLE INFO	ABSTRACT
Article history Received: December 07, 2017 Accepted: January 19, 2018 Published: March 01, 2018 Volume: 7 Issue: 2	This research can be described as an experimental quantitative one including: a strategy training; two homogenous experimental groups with different levels of proficiency; and two homogenous control groups. The subjects are 60 Spanish high school students, who have been selected after taking the Oxford Quick Placement-Test. The study aims at investigating the possible relationship between the effect of the strategy training and the subjects' level of proficiency. It is also designed to analyze the effect of the training on the use of communication strategies in the written medium. It is meant to study the effect of the strategy training on the subjects' writing
Conflicts of interest: None Funding: None	skill in English. The results show that the students' level of proficiency exerts a strong effect on the subjects' use of written communication strategies (CSs) and on their strategy preference in written production. They also demonstrate how strategy training improves the subjects' written communication ability.

Key words: Communication strategies, Strategy training, Writing

INTRODUCTION

The movement towards a new notion of teaching (Faerch & Kasper, 1980) includes not only the transmission of knowledge but also the development of competencies. The new teaching is supposed to lead the students to autonomous learning in which the teacher guides or judges the learning process. Notwithstanding, some competences prove themselves to be harder to develop than others because of the nature of the unlimited variables interfering in the process of working these competences out. Several research projects demonstrate that learners are more preoccupied with developing their speaking and writing skills than they are with the rest of the skills (Victori, 1992).

This study draws from the field of communication strategies (Dornyei & Scott, 1997; Faerch & Kasper, 1983; Poulisse, 1990; Tarone, 1989), since it is concerned with the investigation of the teachability of written communication strategies to enhance the students' communicative competence. It also offers a combination of questionnaires, tasks and observation in detecting and measuring CSs as a triangulation of data collection (Gao, 2007; Phakiti, 2003) to investigate the written communicative behavior although it has proved to be difficult to observe on some moments and hard to explain on others.

Another aim of this investigation is to compare the use of communication strategies in relation to the proficiency level of the language users since investigations in the field have not provided any specific classification of the types and frequency of use of the communication strategies in relation to the learners' proficiency (Cohen & Macaro, 2007).

The current study seeks to investigate the effect of strategy-training on the use of CSs by Spanish EFL high-school students in written production. It also compares the effect of language proficiency on the use of CSs in written forms, and studies the impact of the training on the subjects' fluency. The subjects of the two experimental groups had to sit for a pre and a post-test composed of two written tests before and after the strategy training. The results of the pre and post tests of these groups were compared to the control groups results to stay the effect of the training on the writing of our subjects. This study will be geared towards the following:

Research Objectives

- 1. To examine the quantity of written communication strategies used by Spanish EFL high- school students.
- 2. To investigate the impact of strategy-training on the use of communication strategies by Spanish EFL high-school students in written productions.
- 3. To scrutinize the interaction that comes into play between the training and the learners' writing skill.
- 4. To study the effect of the level of proficiency on the types and frequency distribution of CSs used by our subjects in written communication.

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Research Hypotheses

- 1. Spanish EFL low proficient students will use fewer CSs than high proficient ones.
- 2. The strategy-training will enhance the use of written CSs by the low and the high proficient EFL students.
- 3. The strategy-training will augment the low/high proficient EFL students' written fluency.

All the previously mentioned research objectives and hypotheses are based on results of previous research on CSs teaching or observation thereafter stated in the literature review to establish the theoretical framework of the study.

LITERATURE REVIEW

Teaching Writing

Writing skills are harder to develop than other skills since they are more demanding and are not regarded as a simply "individually-oriented, inner-directed cognitive process, but as much as an acquired response to the discourse conventions.... within particular communities" (Swales, 1990, p. 4). The act of writing is individual but it has to fit within the social context to which it is directed, and it has to respect the cultural and intellectual norms set by the target language community. Thus, teaching writing to non-native writers requires a detailed planning by the teacher in which s/he has to decide on the skill to be developed, the means of implementation and the appropriate topic to tackle which guaranties a high level of students' engagement. If the teacher manages to combine the previously mentioned characteristics in a lesson plan and integrate the target language culture as well as the supposed audience's expectations, he will be sure of generating an atmosphere of effective and creative learning that leads the language user to write with a "readerly" sensitivity (Kern, 2000). From all the former approaches it is clearly seen that the teaching of writing has arrived at a stage in which both the teacher and the learner should interact to create the input/intake. The goal of this is to relate the teaching of writing to the classroom and to the social context of the teaching/learning situation as pointed out by Bazerman, "We can no longer view writing as limited textual practice, understood only as the bounded rules of the page. Nor is writing to be understood only as the product of an isolated mind.... Writing is potentially responsive to and dependent on everything that is on the social stage" (1993, p. 9).

Keeping in mind that writing competence in the mother tongue is not always transferred automatically to the foreign language, though a minimal influence was empirically proved (Connor, 2002), the teacher should teach writing as a new area and avoid having great assumptions of what the students may do or know until they can prove the opposite. A good objective pre-assessment of the types of problems the learners have at the linguistic, functional and the procedural level is an essential starting point for teaching writing. According to Ellis, it is through analyzing learners' errors that we elevate "the status of errors from undesirability to that of a guide to the inner working of the language learning process" (2000, p. 53).

Defining and Classifying Communication Strategies

In second language acquisition, defining CSs is similar to defining the strategic use of IL (Interlanguage) system for communication. The FL learner resorts to CSs only when he finds difficulties in attaining a specific communicative goal through his IL system. Tarone, Cohen and Dumas, following the psycholinguistic approach to defining CSs, referred to this phenomenon as production strategies that do not include IL comprehension, and defined it as a ". systematic attempt by the learner to express meaning in the target language, in situations where the appropriate target language rules have not been formed" (1983, p. 5). Second language communication strategies have been regarded by CSs researchers as the procedures used because of IL deficiencies (Bialystok, 1990; Connor, 2002; Dörnyei & Scott, 1997; Lewis, 2011; Nakatani 2010; Tarone, 1977). CSs were mostly described as a non-native behavior or incorrect linguistic performance to overcome the obstacles or crises that occur either when their communicative ends outrun their communicative means (Corder, 1983; Faerch & Kasper, 1983; Lewis, 2011; Paribakht, 1986), or when they have difficulties in verbalizing a mental plan as a result of a linguistic deficiency (Ataollah, 2010; Cook, 1993; Faerch & Kasper, 1984;; Tarone, 1981; Váradi, 1973). Following the same stream, Dörnyei and Scott defined CSs as "the mismatch between L2 speakers' linguistic resources and communicative intentions (which) leads to a number of systematic language phenomenon whose main function is to handle difficulties or breakdowns in communication" (1997, p. 174). A wider definition which includes all types of CSs, and the one that will be adopted throughout this paper, was suggested by the interactionalists Tarone, Cohen, and Dumas who defined CSs as both the production and the comprehension of the TL. They state that "Communication strategies. a systematic attempt by the learner to express or decode meaning in the target language, in situations where the appropriate systematic target language rules have not been formed" (1983, p. 5).

However, there is still controversy surrounding the definition or identification of CSs as opposed to certain types of strategies like learning and production strategies. From this background of different definitions and approaches we can conclude that no conclusive definition of this term can be provided due to the various terminologies (for a clear comparison of the most important definitions of CSs including the ones cited above, see Appendix 1).

RESEARCH METHODOLOGY

The present work delves to probe the effect of teaching CSs on the subject's writing skill. It has the concrete objective of investigating the teachability of CSs, and the impact of the training on the use of CSs by Spanish high-school students.

It is worth explaining that the proficiency level of the subjects was measured through a proficiency test to avoid any wrong overgeneralization. The paper and pen version of the Oxford Quick Placement Test (University of Cambridge Local Examinations Syndicate: UCLES, 2004) especially designed for speakers of other languages was used. It was applied to ensure the homogeneity of the subjects in terms of proficiency level. The test was applied because it does not seem reliable to group the subjects according to their study level or to take for granted that all the students within the same class have the same level of proficiency.

Research Description

The actual study started with intensive piloting of the data collection instruments and training activities to achieve a good level of reliability and validity of the designed tasks. Once the first piloting study had been finished, all the necessary changes were applied to get final satisfactory instruments. After that, the main research was conducted.

The pilot study was conducted with a sample of 10 high-proficient (P2) and ten low-proficient (P1) students, who were regarded as a representative sample of each level following their results in the UCLES (see Appendix 2). The sample groups had to fulfil the tasks and answer a question-naire immediately after. The questionnaire was concerned with the clarity of the instructions of each task and the level of difficulty of the topics tackled in each one of the tasks. The results of the questionnaire were the main part of the pilot study, which were backed by the researcher's own observations.

The independent variable of the study was the strategy training that was the same for all the subjects, regardless of their level of proficiency. The dependent variables were the use of communication strategies in written performance, and the subjects' fluency. It is a within groups factor because two groups of high and low-proficient students will be compared to analyze the possible relationship between the effect of the strategy training and the subjects level of proficiency. It was also designed to analyze the effect of the training on the use of communication strategies in the written medium. There was also a consideration of the effect of the strategy training on the subjects' writing ability, sometimes also called fluency, while using written English.

All the data was collected using tasks that the subjects had to fulfil at the end of the experiment to investigate the effect of the training on the use of the CSs dealt with during the training phase of the study. At the end of the training we dedicated two sessions for each group to make use of all the introduced strategies in written production (before the posttest which was used to collect the data for this investigation). The aim of the last two sessions was to give the students the opportunity to put the results of the training into use. It was also used to provide a concise amount of data that was compared to the previously collected data (after each session) to have a complete idea about the use of each strategy not only when it was still fresh in mind, but also after a certain time. This helped the researchers to be sure of the results of the study and controlled one of the most important intervening variables that might affect the training, which is forgetfulness. The results of the subjects' fluency in the written tasks were measured by calculating the average number of words, T-units and clauses produced per minute by each subject at each individual task before and after the training. Hunt (1966) defined T-units as "One main clause plus whatever

subordinate clauses happen to be attached to or embedded within it" (p.735)

The design of the experimental quantitative research can also be qualified as cross-sectional because the data of the study was collected from subjects with different levels of proficiency. The data was gathered in two occasions rather than in one shot (the two final tasks used to investigate the effect of the strategy training on the use of communication strategies by the experimental groups). Evidently, as Brown (1998) explained, there is no best design, and the choice of the latter depends on the type of target data and the conclusions that the investigator aims to reach. Therefore, we consider the cross-sectional design, also known as the horizontal study, to be the most appropriate design for this research since it is presently considered by many researchers as Dulay, Burt and Krashen to be good at reflecting "the features of the language system developing over a period of time" (1982, p. 258) in a less time consuming environment in terms of the time dedicated to either collecting or analyzing the data.

Being an experimental study entails that this investigation has two types of participants: the control groups that did not receive any type of training and the experimental groups that received the strategy training. The members of the two control groups (high and low-proficient groups) are 60 Spanish high school students, who have been selected after taking the Oxford Quick Placement-Test. They did the written pre and post-tests and were concerned to be control groups who were oblivious to CSs in general and to the actual investigation, as a specific case. This was done with the aim of avoiding any possible effect of what Brown (1988) called subject expectancy.

The experimental groups were also formed by 60 students (30 low-proficient and 30 high-proficient students). These groups did the pre-test, and after receiving the strategy training they had to do the post-tests. Their homogeneity, both as members of the same group and as a whole group, when compared to the control group, was assured through the placement-test. Their ages range from 13 to 20 years. They obtained their primary education in public schools and they all received English classes with an average of 3 hours a week. In the actual study neither gender nor age were considered as an influencing criterion for subject selection. It is worth mentioning that there were problems with some subjects of the high-proficient group who could not assist 1 of our strategy training sessions which we considered to be an intervening variable that could affect the results of the research. Consequently, as a result of their non-assistance to one of the sessions, the data of two of our subjects (high-proficient group) was ruled out, which reduced the high-proficient group to 28 instead of 30 subjects. The graphic below represents the four groups that participated in this research and the way they were classified.

Research Design

The actual study has three major parts which are the pre-training, during the training and the post-training (conducted respectively). The first phase (the pre-training) had a specific aim: it was used to administer the pre-tests to collect the data that would be compared to the post-test. To be able to judge the effect of the training on the use of communication strategies by the subjects of the experimental groups, the instruments used in both parts were similar in form and requirements. These instruments consisted of:

- A story writing task.
- A writing composition task.

As far as the strategy training is concerned, two different types of instruments were used and it was divided into two phases:

• The training phase: authentic reading related to the target strategy, as well as the practice phase of each strategy (written tasks to practice the introduced strategy).

All the parts of the research are interrelated and the results of the investigation are the accumulation of each and every stage. This is what the following chart shows concisely:

Data Collection

Data collection took place in the subjects' usual classroom and during class time. Consequently, the high-proficient groups of the control and the experimental groups took the pre-tests and the post-tests before the low-proficient ones because their English class was scheduled to be previous to that of the low-proficient subjects. The students did the pre-test tasks in three different sessions as previously explained. As far as the control groups are concerned they were asked to fill in the questionnaire and to do the tasks at the beginning of their usual English class. Although there were no time limits imposed, subjects of the four groups (experimental and control groups) generally completed the questionnaire and the written composition task in about 30 minutes (10 minutes for the questionnaire and 20 minutes for the written task). As for the narrative task, it took about 15 minutes. As far as the post-tests are concerned, they were done in the same

conditions and they had more or less the same length as the pre-tests.

It was necessary to ensure comparable performance conditions for all the subjects. Therefore, students were informed that they were not allowed to use dictionaries, notebooks, laptops, mobile phones or any other resources in order to allow a fair comparison. In addition, research conditions were the same for everyone. The tests were administered in the same setting (the classroom) and with the same teacher.

The Pre-training

In this stage both the experimental and the control groups first had to do a proficiency test to avoid any possible variation in the level of proficiency (within the same group) which might interfere in the results of the study. The written UCLES test was administered, and the students had to complete multiple choice and fill-in-the gap test items. The test was administered using the student answer version and later graded using automated test scoring. Consequently, in the results of the proficiency tests some students proved to have a very low level of proficiency that did not coincide with the group. As previously mentioned, the researchers decided to exclude the data produced by those two subjects from the final analysis of the current study. This decision was supported by the belief that the differences in levels and the lack of homogeneity of the groups may influence to a great extent the results of the training which might create serious limitations for the implications and the results of the actual investigation.

The training phase

Proponents of strategy training, who included instructions of CSs in their studies (Dörnyei, 1995; Faerch & Kasper, 1986; Nakatani, 2010; Tarone, 1984; Willems, 1987), clearly suggest a two-phase training scheme that includes both instruction and practice.



A Summary of the research design

During the instruction stage subjects should be aware of:

- 1. The existence of communication strategies.
- 2. Their important role in solving communicative problems.
- 3. The communicative efficacy of each CS.

Raising awareness can be done either by giving direct and explicit explanation (deductively) (Dörnyei, 1995) or through making the subjects work out the strategies by themselves via performance or observation (inductive teaching) (Faerch & Kasper, 1986; Nakatani, 2010; Tarone, 1984). The instruction stage, then, can be defined as a metacognitive stage in which input is given or elicited from the subjects to inform them about the types of communication strategies that they might use to solve their communicative problems, and about the when and how to use these strategies.

The second phase of the strategy training is the practice stage. After giving the subjects the necessary information about the existing CSs and their use and usage, there should be a period of practice. The practice is to give the subjects the opportunity to assimilate the input by experiencing it. It is crucial to create tasks or activities in which the subjects would feel obliged to use the newly introduced CSs.

In this investigation we adapted Faerch & Kasper's taxonomy (1983), since it is considered to be "the most carefully set up taxonomy" (Kellerman, Poulisse & Amerlaan, 1997, p. 165). However, this taxonomy has been slightly changed by adding 'chuncks' (by chunks we mean some T-units or clauses that we highlight with the students during the reading and we encourage them to use similar structures in their writing like introductory/concluding sentences and phrasal verbs) and deleting 'reduction strategies' to fit the objectives and the methodological framework of the study. Since the experiment aims at enhancing the subjects' writing skills in using English, we considered it trivial to deal with reduction strategies that cannot serve the aims of the actual study.

Therefore, the training stage of the actual investigation was divided into 4 sessions, the first 2 of which were dedicated to explicit strategy instruction after a warm-up reading activity meant to elicit data and to make the subjects deduce the CSs used in the texts. This was done by introducing specific written communication strategies that might enhance skills for managing interaction actively during the written communication. In addition to the first part of the training, there was another equally important part to which we dedicated 2 complete sessions. In this second part, the subjects of the two experimental groups who participated in the strategy training (the 4 sessions mentioned previously and detailed bellow) were all given the opportunity to consolidate what they had learnt and to put together all the CSs that they had been practicing separately during the first part of the training. That is, subjects of the high and low-proficiency groups were made to practice during two sessions with written communicative tasks in which they were required to use all the CSs they had learnt during the training. The whole strategy training experiment was structured as follows:

- 1st session: Modified output strategies (paraphrasing)
- 2nd session: Energy and time saving strategies (Chunks)
- 3rd and 4th sessions: Practice of all the previous CSs.

The teaching method adopted for this training was an inductive one. The subjects were provided with a reading at the beginning of each lesson. The reading worked as a warm-up activity which the trainees had to analyze, with the help of the researcher, in order to work out the CSs used by the author. After the warm-up activity students were made to write down the new CS and were asked to give written examples using the introduced CS. As a follow up activity the subjects were given a written task to be fulfilled (composition and story writing).

At the end of the training, the subjects of the control groups and the ones of the experimental groups had to fulfil two different written communicative tasks about a topic from the given list (See Appendixes 3). Their writings were corrected and handed back to them to make them aware of their difficulties in the use of the target language. The data obtained was compared to the data produced by the subjects of the experimental groups after the training.

The post-training

As previously shown, in chart 1 above, the post-training tasks were similar to the pre-training ones. Generally, all the conditions of the pre-tests (appendix 3), including the timing and the sequencing of the tasks, were strictly respected in the process of collecting data for the post-test (appendix 4). That is, subjects had to do similar conditions during different sessions to make the comparison reliable and valid. Consequently, the tasks of the post-test were collected following the same scheme used in the pre-test data collection.

DATA ANALYSIS

In the actual investigation, the data was analyzed primarily for the identification and categorization of CSs; then, the elicited strategies were statistically analyzed and interpreted numerically to answer the research questions and to prove or falsify the research hypotheses. Therefore, in addition to the descriptive statistics used for the analysis of the frequency distribution of CSs per proficiency level and per task, inferential statistical (the one-way-ANOVA-tets, Wilks' Lambda and the Canonical Biplot Analysis) analyses were also used to analyze the possible relationships and differences between the different variables involved in the study. These were of great use in gathering, organizing, analyzing and interpreting the numerical data.

In this research, the frequency of CSs and the number of words produced per minute were manually calculated by counting the number of CSs and words used by each subject per task. However, all the other analyses were run using the free Biplot program available on the page of the statistics department of Universidad de Salamanca. This method by (Galindo, 1986; Gower & Hand, 1996) has recently become one of the most popular techniques for analyzing multivariate data. Biplot methods are techniques for the simultaneous representation of the (n) rows and (p) columns of a data matrix (X). This data is presented in reduced dimensions, where the rows represent individuals, objects or samples and the columns the variables measured on them. Classical Biplot methods are a graphical representation of a principal components analysis (PCA) that is used to obtain linear combinations that successively maximize the total. However, PCA is not considered an appropriate approach for this research that has a prior known group structure in the data. The most general methodology for discrimination among groups, using multiple observed variables, is Canonical Variate Analysis (CVA). CVA allows us to derive linear combinations that successively maximize the ratio of 'between-groups' to 'pooled within-groups' sample variance.

Several authors propose a Biplot representation for CVA called Canonical Biplot (CB) (Gower & Hand, 1996), which is oriented towards the discrimination between groups or MANOVA–Biplot with the aim of studying the variables responsible for the discrimination between groups. The main advantage of the Canonical Biplot version that uses this technique (CVA) is that it gives not only the possibility of establishing the differences between groups but also that of characterizing the specific variables that cause those differences. This statistical method is not yet widely used, mainly because it is still not available in the major statistical packages.

THE RESULTS

Results of the Eriting Composition Task

The written data included a total of 232 written composition tasks. As shown by the One-Way ANOVA-test in table 1 the two written communication strategies included in the taxonomy of this investigation resulted non-significant in the pre-tests of the four groups. Thus, there is a strong need to apply the Canonical Biplot Analysis to go a step further in analyzing and representing these variables in the pre-tests.

Comparing the Variables between Groups

The Canonical Biplot Analysis provides a global comparison of the four groups in all variables based on Wilks' Lambda as a general t-test. The results of the writing composition task reflected in table 2 above demonstrate once again that both the variables and the groups are prominently interpretable

Variable	Total	Explained	Residual	F	Sign.
CPTWC	116	54.545	60.455	33.683	0
PPTWC	116	10.524	104.476	3.761	0.01288
CPOWC	116	108.012	6.988	577.075	0
PPOWC	116	102.947	12.053	318.875	0

PTWC: pre-test writing composition task.

POWC: post-test writing composition task.

P: paraphrasing.

F: f-Snedecor.

Sign: significance *P*<0.05.

(97.442 in axis 1 and 99.989 in axis 2) with a global contrast based on Wilks' Lambda that results in a p of 1.1708e-086 *in* a level of p < 0.05. To sum up, the Wilks' Lambda assures that all the variables and groups are going to be represented in the next plan (1) designed by the Canonical Biplot Analysis using the introduced data interpreted numerically from the writing composition tasks in the pre and the post-tests by the four groups.



PWC: pre	e-test writing	composition ta	ask.
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POWC: post-test writing composition task.

P: paraphrasing.

- C: chunks.
- E1: low-proficient experimental group.
- E2: high-proficient experimental group.
- C1: low-proficient control group.
- C2: high-proficient control group.

The plan above represents all 232 protocols collected from the writing composition tasks in the pre and posttests. The data was once more analyzed following the taxonomy of the current study. We can observe that the overall number of CSs increases after the strategy training. To provide a detailed analysis of the results of the pre and post-tests of the four groups in the writing composition task, we can say that both chunks and paraphrasing benefited from the strategy training and that there is a higher level of use of chunks in the pre and post-tests than that of paraphrasing. Furthermore, in the plan we can allude to the fact that the control groups C1 and C2 are overlapping when projected on chunks and paraphrasing in the pre-test (they both show a very low level of use of the two written communication strategies). The fact that both groups overlap is to be interpreted as no significant difference between the two control groups in the pre-test. Moreover, the short distance between the center point and the projection point shows the low level of use of those variables by both groups. In the post-test the two control groups do not overlap, but they show a very negative level of use of the written CSs since the projection of the groups appears on the opposite side of the variables direction. When it comes to the experimental groups, we can realize that they also overlap in the pre-test and they differ slightly in the post-

C: chunks.

	1	00	1				
Dimension	Eigenv.	%Expl.	Cumm.	TSS	ESS	F	p-val
1	5.391	97.442	97.442	30.065	29.065	1085.109	0
2	0.872	2.547	99.989	1.76	0.76	28.358	0
3	0.057	0.011	100	1.003	0.003	0.122	0.947

Table 2. The comparison of variables among groups

Global contrast based on Wilks' Lambda, P-value:1.1708e-086.

test. Generally, the high-proficient group E2 produced a higher number of written CSs in the post-test but the evolution of the two experimental groups after the training was remarkable and the frequency of use of both CSs was considerable which confirms the second hypothesis about the effectiveness of the strategy training in enhancing the subjects' use of written CSs.

Results of the Written Story Tasks

In the One-Way ANOVA-test of the second written task shown in table 3 above, the two written CSs introduced in the strategy training resulted significant in the post-test and the results of the written storytelling task are interpretable and represent a good source of analysis. Besides, this type of tests is not complete and does not answer the questions of this research because it does not allow us to compare the four groups in the two variables in the pre and the post-tests. Thus, the use of the Canonical Biplot Analysis in this case has the advantage of representing all the groups and variables in one single plan. In this way, we will be able to compare and contrast the control groups and the experimental groups and see the variables responsible for the differences between them in the pre and the post-tests.

Comparing Variables between Groups

As explained in the earlier analyses, the Canonical Biplot offers a global comparison between the groups in each and every variable based on Wilks' Lambda that equals a global t-test. In this way we can compare the four groups in the two tests and variables. By analyzing table 4 above we can deduce that again both the variables and the groups are highly interpretable (which means that they can be analyzed, compared and contrasted: 99.241% in axis 1 and 99.992% in axis 2) with a global contrast based on Wilks' Lambda that gives a p of 1.9258e-081 in a level of p < 0.05. Summing up, the Wilks' Lambda demonstrates that all the variables and groups are well represented in the following plan generated by the Canonical Biplot Analysis based on the introduced data collected from the written storytelling task in the pre and the post-tests.

This plan includes the 232 protocols interpreted numerically from the data of the written storytelling tasks in the pre and post-tests. This data was again analyzed following the taxonomy of the actual research. From the plan above we can notice that the control groups C2 show a higher level of use of both chunks and paraphrasing than the other control group C1 although they both show a very low level of

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22.631	92.369	9.147	0.19416
5.353	109.647	1.823	0.14713
109.376	5.624	726.002	0
108.15	6.85	589.409	0
	22.631 5.353 109.376 108.15	22.631 92.369 5.353 109.647 109.376 5.624 108.15 6.85	22.631 92.369 9.147 5.353 109.647 1.823 109.376 5.624 726.002 108.15 6.85 589.409

PWS: pre-test written storytelling task.

POWS: post-test written storytelling task.

C: chunks.

P: paraphrasing.

F: f-Snedecor.

Sign: significance *P*<0.05.

use of the two written communication strategies in the pretest which confirms the 1st hypothesis stating that Spanish EFL low proficient students will use fewer CSs than high proficient ones. The same results are reflected in the experimental groups' projection. To conclude, unlike the writing composition task, in the written storytelling task the two high-proficient groups used more written CSs than the two low-proficient groups in the pre-test.

However, there is still a general low level of use of the two written CSs in the pre-test demonstrated in the short distance between the center point and the projection point of the four groups on the variables of the pre-test. As far as the post-test is concerned, the two control groups appear as overlapping and the projection of both results on the opposite direction of the two variables. Consequently, the two control groups' written communication strategies did not develop and the differences between them are non-significant. Hitherto, when comparing the two experimental groups in the post-test we can clearly see that the projection of the center of the circles is on the positive direction of the variables. This can be interpreted as a difference in the frequency distribution of the use of variables between the control and the experimental groups in the post-test.

Another important remark is that the high-proficient experimental group (E2) shows a higher level of use of the two written CSs than the low-proficient experimental group (E1), which maintains the differences between the two groups appearing in the pre-test, but which does not lessen the importance of improvement achieved by the low-proficient group who moved from being projected on the opposite (negative) side of the variables in the pre-test to being projected on the positive direction of the variables in the post-test. Hence,

Table 4. The comparison of variables among groups							
Dimension	Eigenv.	%Expl.	Cumm.	TSS	ESS	F	p-val
1	5.739	99.241	99.241	33.932	32.932	1229.473	0
2	0.499	0.751	99.992	1.249	0.249	9.306	0
3	0.05	0.008	100	1.003	0.003	0.094	0.963

Table 4. The comparison of variables among groups

Global contrast based on Wilks' Lambda, p-value:1.9258e-081



PWS: pre-test written storytelling task.

POWS: post-test written storytelling task.

- P: paraphrasing.
- C: chunks.
- E1: low-proficient experimental group.
- E2: high-proficient experimental group.
- C1: low-proficient control group.
- C2: high-proficient control group.

once again we can say that the results of the written storytelling task confirm the 2nd hypothesis about the effectiveness of the strategy training in developing the subjects' use of written CSs.

The Effect of the Strategy Training on the Subjects' Writing Fluency in the Pre and Post-tests

Table 5 shows the results of the One-Way ANOVA-test that demonstrates the effect of the strategy training on the subjects' fluency in the pre and the post-tests. The subjects' fluency was measured by counting the number of words per minute produced by each subject in each task. In this case, we are confronted with another difficulty in interpreting the results since almost all the tasks (variables on table 6 above) are shown as significant. The question will be how to see the differences between the variables and how to analyze them having in mind that all what we have in the One-Way ANO-VA-test is that the variables are significant. Hence, it was necessary to use the Canonical Biplot Analysis to see the differences between the groups in all the variables.

Table 5. One-way ANOVA-test					
Variable	Total	Explained	Residual	F	Sign.
PWS	116	20.233	94.767	7.971	7e-005
POWS	116	85.223	29.777	106.848	0
PWC	116	33.306	81.694	15.221	0
POWC	116	83.983	31.017	101.087	0

PWS: pre-test written storytelling task.

POWS: post-test written storytelling task.

PWC: pre-test writing composition task.

POWC: post-test writing composition task.

F: f-Snedecor.

Sign: significance.

Comparing the Subjects' Fluency between Groups

The Canonical Biplot Analysis applied to the data compiled by counting the number of words produced per minute by each subject in each task supplies a general contrast of the four groups in all the written tasks based on Wilks' Lambda (the equivalent of a t-test represented in a global form). The table below reflects the results of this exhaustive test and shows a very high level of interpretation of all the data.

To conclude, all the results demonstrated in the One-Way ANOVA-test (table 6) are highly interpretable and represented in the following plan produced by the Canonical Biplot Analysis. On the whole, again this program offers a complete diagnostic of all the numerical data and does not ignore any variable. Consequently, the generated plan is vast and includes all the words produced by all the subjects in each and every task.

The plan above represents all 232 protocols collected from the written tasks in the pre and the post-tests. The data was calculated and represented numerically. From the plan we can notice the differences between the high and the low-proficient groups (E1/C1 and E2/C2). In the pre-test the projections of the center of the low-proficient groups E1 and C1 appear on the opposite direction of the tasks which demonstrate the low level of fluency of these groups in the pre-tests; however, the high-proficient groups E2 and C2 show a relatively higher level of fluency than the low-proficient groups (the projection of the center of the circles results on the positive direction of the variables). In the post-tests the two control groups had a very low level of fluency and their production was poor when compared to the experimental groups. Another important remark is that the experimental high-proficient group E2 appears to be more fluent than

Dimension	Eigenv.	% Expl.	Cumm.	TSS	ESS	F	p-val
1	5.258	92.285	92.285	28.641	27.641	1031.948	0
2	1.471	7.227	99.512	3.165	2.165	80.812	0
3	0.382	0.488	100	1.146	0.146	5.457	0.002

 Table 6. One-way ANOVA-test

Global contrast based on Wilks' Lambda, P-value:2.9843e-091

Plan 3



E1: Low-proficient experimental group
E2: High-proficient experimental group
C1: Low-proficient control group
C2: High-proficient control group
PWS: pre-test written storytelling task
POWS: post-test written storytelling task
PWC: pre-test writing composition task
POWC: post-test writing composition task

the low- proficient group E1. As a result of this we can again conclude that the 3rd hypothesis were confirmed and that the strategy training improved the subjects' fluency in written production.

CONCLUSIONS AND DISCUSSION

The conclusions of the actual investigation can be summarized in the following general points:

- Statistically, it is found that the low-proficient subjects used less CSs in the pre-test than the high-proficient ones. This finding shows that the study level variable has a significant effect on the subjects' use of CSs. This puts in doubt the idea of the inverse relationship between the subjects' level of proficiency and the number of CSs employed.
- The subjects' level of proficiency is shown to exert a strong effect on their strategy preference in the pre-tests. In other words, as suggested in the research hypotheses.
- 3. Although both groups benefited from the training sigificantly, the high-proficient group had better results than the low-proficient group.

4. The strategy training improves the degree of fluency of the subjects in written production.

Although many of the results of the actual study have already been reported by previous researchers (Al-Haj, 2011; Cohen and Macaro, 2007; Nakatani, 2010; Jamshidnejad, 2011 and Jidong, 2011), what distinguishes these findings from others is that they measure fluency in written production, including a strategy training that raises the participants' awareness of a set of productive CSs with practice of each strategy alone and then of all the CSs together. Hence, this study provides a unique contribution to research in this field and brings new evidences that support the importance of the strategy training in the EFL context. Furthermore, the investigation included different types of tasks that eventually had different demands and contexts, and, consequently, generated heterogeneous data. The research made use of descriptive and narrative writing styles that created some difficulties to oblige the subjects to use CSs.

This study gives several evidences of the teachability of CSs and provides teachers and syllabus designers with results that can lift the EFL syllabuses out of the traced route to prevent learners from running into any problems. However, not all CSs are worth mentioning in a classroom context; therefore, being eclectic is very important in designing a real communicative EFL syllabus. Focusing on productive strategies can favor hypothesis formation and therefore learning. However, not all productive strategies can be dealt with in the same way. The used tasks should be adapted to the target strategy for the learning to occur. Consequently, as Oxford (1990) arguments heightening awareness to strategies focuses learners' attention on the process of language learning and their stage in L2 acquisition, improving comprehension, storage, retrieval and use of the learning material and ultimately improving language learning

In conclusion, the strategy training improved the use of communication strategies and the written fluency of the two experimental groups and proved the hypotheses of the research. This assures that the strategy training may be fruitful, by making learners more aware of why they are doing a particular learning task. Another argument in favor of strategy training is that it gives learners the tools to be more self-directed or autonomous and less dependent on the teacher. Researchers in this field (Benson & Voller, 1997; Dickinson, 1987; Holec, 1981) assert that learners who are responsible for their own language learning, take control of how, where and when they learn the language, they are more aware of their language learning goals and are consequently more effective at attaining them.

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APPENDIX

Appendix 1: Definitions of Communication Strategies

Tarone, Cohen & Dumas (1983, p. V): "systematic attempt by the learner to express meaning in the target language, in situations where the appropriate target language rules have not been formed".

Tarone, Cohen & Dumas (1983, p. V): "systematic attempt by the learner to express or decode meaning in the target language, in situations where the appropriate systematic target language rules have not been formed".

Dörnyei & Scott (1997, p. 174): "The mismatch between L2 speakers' linguistic resources and communicative intentions leads to a number of systematic language phenomenon whose main function is to handle difficulties or breakdowns in communication".

Tarone (1980, p. 420): "mutual attempts of two interloc-

utors to agree on meaning in situations where the requisite meaning structures do not seem to be shared".

Feerch and kasper (1983, p. 36): "potentially conscious plans for solving what to an individual presents itself a problem in reaching a particular communicative goal".

Stern (1983, p. 411): "techniques of coping with difficulties in communicating in an imperfectly known second language".

Poulisse (1990, p. 88): "strategies which a language user employs in order to achieve his intended meaning on becoming aware of problems arising through the planning phase of an utterance due to (his own) linguistic short comings".

Bialystock (1990, p. 138): "the dynamic interaction of the components of language processing that balances each other in their level of involvement to meet task demands".

Appendix 2. CEFR Levels

Level	Description
A1	Can understand and use familiar everyday expressions and very basic phrases aimed at the satisfaction of needs of a concrete type. Can introduce him/herself and others and can ask and answer questions about personal details such as where he/she lives, people he/she knows and things he/she has. Can interact in a simple way provided the other person talks slowly and clearly and is prepared to help.
A2	Can understand sentences and frequently used expressions related to areas of most immediate relevance (e.g. very basic personal and family information, shopping, local geography, employment). Can communicate in simple and routine tasks requiring a simple and direct exchange of information on familiar and routine matters. Can describe in simple terms aspects of his/her background, immediate environment and matters in areas of immediate need.
B1	Can understand the main points of clear standard input on familiar matters regularly encountered in work, school, leisure, etc. Can deal with most situations likely to arise whilst travelling in an area where the language is spoken. Can produce simple connected text on topics which are familiar or of personal interest. Can describe experiences and events, dreams, hopes & ambitions and briefly give reasons and explanations for opinions and plans.
B2	Can understand the main ideas of complex text on both concrete and abstract topics, including technical discussions in his/ her field of specialisation. Can interact with a degree of fluency and spontaneity that makes regular interaction with native speakers quite possible without strain for either party. Can produce clear, detailed text on a wide range of subjects and explain a viewpoint on a topical issue giving the advantages and disadvantages of various options.
C1	Can understand a wide range of demanding, longer texts, and recognise implicit meaning. Can express him/herself fluently and spontaneously without much obvious searching for expressions. Can use language flexibly and effectively for social, academic and professional purposes. Can produce clear, well-structured, detailed text on complex subjects, showing controlled use of organisational patterns, connectors and cohesive devices.

C2 Can understand with ease virtually everything heard or read. Can summarise information from different spoken and written sources, reconstructing arguments and accounts in a coherent presentation. Can express him/herself spontaneously, very fluently and precisely, differentiating finer shades of meaning even in the most complex situations.

Appendix 3: Pre-test Tasks

Written task:

Write 10 lines about a topic of your choice from the following list:

- 1. Gender roles.
- 2. The new educational system in Europe BOLONIA.
- 3. Do domestic animals really exist?
- 4. Gossip and rumors.
- 5. Unemployment in Spain. Written story task:

Students will have to write a story based on the given pictures:

Story 1:



Story 2:



Appendix 4: Post-test tasks

Writing composition task:

Write 10 lines about a topic of your choice from the following list:

- 1. Drugs.
- 2. Unhealthy diets.
- 3. Generation gaps.
- 4. Annoying things.
- 5. Prejudices.





Written Story task: Write a short story following the sequence of the pictures.





