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Applying Metacognitive Strategies for Vocabulary Acquisition through Learning Portfolios

Claudia Patricia Mosquera Gaviria

Master in English Language for Self-directed Learning and
Graduate diploma in TESOL

Department of Foreign Languages and Cultures

Universidad de La Sabana

Chía 2013

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Claudia Patricia MOSQUERA GAVIRIA

Research report submitted
in fulfillment of the requirements for the degree of
Master in English Language for Self-directed Learning and
Graduate diploma in TESOL

Directed by: Professor Patricia Alvarez Ayure

Department of Foreign Languages and Cultures

Universidad de La Sabana

Chía 2013

RUNNING HEAD: METACOGNITIVE STRATEGIES FOR VOCABULARY ACQUISITION

Declaration

I hereby declare that my research report entitled:

Applying metacognitive strategies for Vocabulary Acquisition through Learning Portfolios

• is the result of my own work and includes nothing which is the outcome of work

done in collaboration except as declared and specified in the text;

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Subcommittee of the Department of Foreign Languages and Cultures;

has been submitted by or on the required submission date.

Date: June 19th, 2013

Full Name: Claudia Patricia Mosquera Gaviria

Signature: Muosquem

Applying metacognitive strategies for Vocabulary Acquisition through Learning Portfolios

Aplicación de estrategias metacognitivas para la adquisición de vocabulario a través portafolios de aprendizaje

Claudia Patricia Mosquera Gaviria*

Universidad de la Sabana, Colombia

Abstract

High school classroom experience consistently shows that lack of vocabulary is one of the main issues students face when learning English as a foreign language. This article reports the effect of the use of metacognitive strategies on vocabulary acquisition through learning portfolios with a group of fourteen A1 level teenagers, studying in a public school in Yumbo, Valle del Cauca, Colombia who were randomly selected as participants. They received instruction on metacognition and the use of learning portfolios through a 10 week period. The metacognition training model used was based on the framework for direct language learning strategies instruction proposed by Chamot, A. U., & O'Malley, J. M. (1996) and the use of learning portfolios was an adaptation from Hellen Barret's (2011) implementation of digital portfolios as storytelling devices. Findings showed that metacognitive instruction with lesson plans including learning portfolios may help students to enhance their vocabulary acquisition in the

^{*} Email: clapamos@hotmail.com

sense that this contributed to increase participants' awareness of what, why, and how they perform throughout their learning process and the consequent adoption of the most successful metacognitive and vocabulary learning strategies.

<u>Key words</u>: metacognitive learning strategies, vocabulary acquisition, learning portfolios

Resumen

Experiencias en la educación básica secundaria muestran consistentemente que la falta de vocabulario es una constante en la orientación del aprendizaje del inglés como lengua extranjera. Dicho vocabulario no corresponde al nivel de escolaridad ni a los estándares propuestos por el MEN. En este artículo se reporta el efecto del uso de las estrategias metacognitivas en la adquisición de vocabulario a través de portafolios de aprendizaje. Para alcanzar el objetivo de esta investigación catorce adolescentes, de nivel A1 de una escuela pública en el municipio Yumbo, Valle del Cauca, Colombia fueron seleccionados al azar como participantes. Ellos recibieron instrucción sobre las estrategias metacognitivas y sobre el uso de los portafolios de aprendizaje en un período de 10 semanas. El modelo de formación de metacognición estuvo basado en el marco de las estrategias de aprendizaje directo propuesto por Chamot, AU, y

O'Malley, JM (1996). y el uso de los portafolios de aprendizaje fue una adaptación de Hellen Barret (2011) quien integra la creación de portafolios con la narración de historias. Los resultados mostraron que la instrucción metacognitiva utilizando planes de estudio que incluían portafolios de aprendizaje, pueden ayudar a los estudiantes a

mejorar su adquisición de vocabulario, en el sentido que esto contribuyó a concientizar a los participantes sobre el qué, por qué y cómo se lleva a cabo su proceso de aprendizaje y la consecuente adopción de la estrategia metacognitiva de aprendizaje de vocabulario más efectiva.

<u>Palabras claves:</u> Estrategias metacognitivas de aprendizaje, adquisición de vocabulario, portafolios educativos.

Introduction

All the students in Colombia must take the ICFES¹ exam (Pruebas Saber 11) when finishing secondary school studies. The results of this test determine the path they will take. Depending on their scores, they may then choose to continue their studies at the university level.

At Institución Educativa Titán 90% of students were ranked in A- in English subject; this means that they did not get the minimal required to achieve an A, which is the lowest possible score on the test. After a quantitative (statistical data emerged from MEN²) and qualitative (the views of a group of students gathered by means of interviews) assessment, it was found that there were many words in the reading passages on the texts that students did not know. It is likely that it was the reason why the students found difficult to understand the passages and successfully complete the reading comprehension activities.

Despite the fact that students are constantly being trained on the meaning and usage of new words, it is clear that they are not retaining the vocabulary. One of the possible reasons could be the lack of awareness about learning strategies. Therefore, the purpose of this study was related to giving the students a possibility to succeed in the English component of the exam by building the vocabulary of the students using metacognitive learning strategies incorporating learning portfolios.

In this study, vocabulary acquisition, metacognitive learning strategies and learning portfolios were integrated to answer the question of whether the implementation

¹ ICFES (Instituto Colombiano para el Fomento de la Educación Superior) is a Colombian agency in charge of regulating the State exams when finishing studies, including high school and undergraduate ones.

² MEN: Ministerio de Educación Nacional

of metacognitive strategies for vocabulary learning through the use of learning portfolios influences the acquisition of basic English vocabulary in A1 learners from a public school.

The research question was supported by the following objectives:

General objective: To determine whether the implementation of metacognitive strategies through the use of learning portfolios may influence English vocabulary learning in A1 learners from a public school

Specific objectives:

- To identify the reasons why students often encounter difficulties when learning vocabulary in the foreign language.
- 2. To train students in the use of metacognitive learning strategies
- To create a strategy derived from the application of metacognitive learning strategies through learning portfolios to foster self-assessment and improve vocabulary acquisition

Literature Review

For the development of this research project, three variables were taken into account. They were learning strategies, metacognition and learning portfolios. First of all, it was necessary to establish whether or not students were using any learning strategies and how they used them. Secondly, it was necessary to introduce the principles of metacognition. Finally, learning portfolios were introduced as a pedagogical instrument to train students on the use of metacognitive strategies that would allow them to self-monitor and adapt instruction to their needs.

Learning strategies

The term learning strategies (LS) refers to the group of activities or techniques that a learner plans to accomplish to learn new knowledge. This concept was defined by Mayer (1988) as "behaviors of a learner that are intended to influence how the learner processes information" (p. 11). Later, Language Learning Strategies (LLS) were defined as "an attempt to develop linguistic and sociolinguistic competence in the target language" Faerch Claus and Casper (1983). These two definitions of LLS allow the practitioner to arrive at the conclusion that LLS are actions or behaviors that a learner accomplishes in order to learn a foreign language which include both linguistic and sociolinguistic competencies.

Oxford (1992/1993), stated that learning strategies should be defined as specific actions, steps, or techniques that students (often intentionally) use to improve their progress in developing L2 skills. "These strategies can facilitate the internalization, storage, retrieval, or use of the new language" (Oxford, 1992). LLS are important aspects to consider in language teaching and learning because they help learners to understand what they should do and allow them to identify the most appropriate way to achieve the ultimate goal of learning the target language.

Students that do not employ learning strategies tend to learn passively or fail in their studies. Learning strategy instruction focuses on making the students more active learners by teaching them how to learn and how to use what they have learned to solve problems and be successful (Sabuncuoblu, 2011). Therefore, it is important that teachers train their students in LS and their application to classrooms. However, the use of learning strategies does not guarantee language acquisition, as this is still tied to the needs and the interests of the students.

Oxford (1990), states that a learning strategy becomes useful only under certain conditions. These are: (a) relation to the L2 task, (b) the match between the strategy and the learners' preferences and (c) the appropriacy of the strategy and its connection to other strategies. "Strategies that fulfill these conditions make learning easier, faster, more enjoyable, more self-directed, more effective, and more transferable to new situations" Thus, during this study, students selected their strategies according to their preferences and interests and applied their chosen strategies under the guidance of the teacher.

Among the many possible strategies foreign language learners can adopt, metacognition was the primary method used for the purposes of this research project, although there are several LLS which have been classified under different taxonomies. While Schmitt (1997), includes a list of five strategy categories: determination, social, memory, cognitive and metacognitive; O'Malley and Chamot (1990), present the following taxonomy of LLS: cognitive, metacognitive, and socio-affective. Among these strategies, metacognition was the core strategy employed for the purpose of this research project due to the fact that metacognitive strategies are considered as the most relevant ones in developing learners' skills (Anderson, 1991).

Metacognitive Strategies

Anderson (2002a) defines metacognition as "thinking about thinking." It means to take active control over the thinking processes involved in learning. Therefore, "the use of metacognitive strategies ignites one's thinking and can lead to higher learning and better performance" (p.1). Additionally, reflection is an essential element of

metacognition as it allows self-monitoring during learning processes. This kind of selfassessment can be very valuable to support the process of learning a second language.

According to Chamot (1996), metacognitive strategies include four levels. These are: (1) *Plan*, this is the preparation stage before beginning the task. Here students identify what they must do, identify their objectives and chart a course to reach their goals. (2) *Monitor*, this is performed while working on the task. Here the students check their progress in order to assess how they are doing. This way, they will recognize if an adjustment is necessary or if they should continue forward with what they planned in the first stage. (3) *Evaluate*, this is the last activity, conducted after completing the task. Here, students evaluate how well they accomplished the learning task, how they have used the learning strategies and whether they were effective or not. Depending on the outcome of these assessments, the students then decide if changes are necessary the next time they are confronted with a similar task. Finally, (4) *Manage*, learners will look for opportunities to practice. Throughout this study, students were encouraged and guided in walking through these steps to facilitate their formulation of an ongoing self-assessment.

The importance of metacognitive strategies has been stated by researchers such as O'Malley (1990), Chamot (2009), Stewner-Mazanares, Russo, and Kupper (1985).

According to O'Malley et al. (1985), "learners without metacognitive approaches have no direction or ability to monitor their progress, accomplishments, and future learning directions". On the other hand, (Hauck, 2005), states that learners who have developed their metacognitive awareness are likely to become more autonomous language learners. It can therefore be said that metacognitive strategies allow students to be

aware of their learning process, including how to perform and enhance their learning. Therefore, students without metacognition awareness are learners with few opportunities to succeed in their studies. Additionally metacognition awareness gives students the possibility to coordinate their learning. For that reason, this study intends to raise awareness on metacognitive processes by using learning portfolios, which appear as an innovate instrument to acquire vocabulary.

Some previous studies on metacognitive strategies have showed the potential benefits of metacognitive instruction. I-Ping P. Fu (2005), conducted a research study on student approaches to learning Chinese vocabulary. The results showed that a learner X1 who used metacognitive strategies such as organizing, evaluating and planning her learning moved beyond the cognitive level to study and learn the foreign language. These strategies could be characterized as the learner's personal control over her learning. Because she was able to use "metacognitive" strategies along with "cognitive" strategies such as analyzing, reasoning, transferring information, and creating structure of input and output, she was able to achieve better language proficiency than another learner, a learner X2 who showed little interest in using "metacognitive" strategies to organize, evaluate, and plan her learning to improve her proficiency in the foreign language. Compared to learner X1, Learner x2's understanding of the foreign language was more superficial and limited.

In another study Razekh and Ranjbary (2003), conducted a research, finding that an explicit instruction about metacognitive strategies has positive impact on the lexicon knowledge development of EFL students. This instruction included actions such as planning their vocabulary learning, setting specific goals within a time frame, selecting the most appropriate vocabulary learning strategy, monitoring use of that strategy, and

finally evaluating the whole process. Also, they found that the learners who used metacognitive strategies were those who showed the greatest improvements in terms of vocabulary learning.

In one national study Barbosa Hernández (2012), conducted a research on the application of a metacognitive model of strategy learning (MMSL) in improving selective listening comprehension. The findings showed that after undergoing training in the use of the model, learners began to take control over their learning. The study demonstrated that MMSL helped learners to develop the listening tasks better than when they lacked awareness of the model. Also, she found that the application of the model exerted a strong impact on their learning habits since the students looked for a strategy in the moment they received a learning task, when one was not given.

Learning Portfolios

Learning portfolios usually display content represented in compilation and storage of students' work; reflections recorded before, during, and after learning activities; selection of specific artifacts to tell a story of learning, a presentation to a specific audience for a specific purpose; goal-setting; feedback (assessment for learning) and evaluation (assessment of learning) Barret (2011).

Learning portfolios are especially appealing to teenage students due to the technological era in which we are living. Young people enjoy sharing their personal experiences, their pictures, and their participation in social events through social networks. This principle can be applied to education where students will have the chance to share their learning process, but using a physical source rather than a digital

one. A learning portfolio appears as a storytelling medium that they assemble with a high level of motivation.

Additionally "The overarching purpose of portfolios is to create a sense of personal ownership over one's accomplishments, because ownership engenders feelings of pride, responsibility, and dedication." (Paris & Ayres, 1994). This could bring additional benefits because those feelings empower appropriation and self-efficacy, which is one of the core expectations of this study. Alongside determining if the strategies outlined above influence the English vocabulary learning where this research project was conducted.

Zubizaretta (2004), identifies three fundamental components of learning portfolios, documentation, reflection and collaboration, as shown in the following diagram. It illustrates how the process of creating a learning portfolio was developed with the students. In this process lesson plans, teamwork and reflection were promoted throughout.

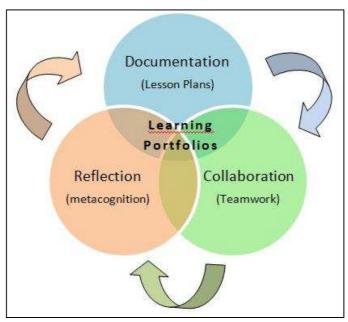


Figure 1. Adapted from The Learning Portfolio (Zubizaretta, 2004, p.20)

Research design

Context

Institución Educativa Titán is a public school located in Yumbo, Valle del Cauca. The school offers education to an average of 460 high school students. Classes consist of approximately 38 students. Although there is no language classroom, students have access to an IT room equipped with computers connected to a high speed internet service.

Most of the students belong to strata 1 and 2. Some students show a lack of motivation in education and particularly to English learning. Most of their parents did not finish the secondary education, and for that reason, they cannot support the learning process of their children. Therefore, it can be challenging to increase their level of motivation of the students.

Although there are not policies to promote the learning of English in this school, the principal has turned their eyes to teachers' proposals aimed to improve the English level in the students. This is due to the unsatisfactory results in the last round of Pruebas Saber 11, which showed a huge weakness in vocabulary as a whole.

Participants

This research was carried out with 14 (10 females and 4 males) seventh grade students who were selected randomly after a general announcement. Their ages were between 12 and 13 years old. They attend English classes two hours per week. Their English level is A1 according to the Common European Framework of References for Languages. Nevertheless they are false beginners. They can't handle the most basic greetings, verbs or vocabulary required to be ranked in A1 level.

Additionally, most students belong to a population with some social and affective needs. They belong to dysfunctional families, in which most of the times, the oldest sibling must be in charge of youngest. They are responsible not just for their studies but also for other activities such as household chores and cooking. Sometimes they are late at school because of that situation. These characteristics lower their motivation to learn. This is most apparent when it comes to learning English due to their circumstances; they believe that they will never have the opportunity to travel abroad nor will they be required to possess any bilingual training.

Research's role

The role of the researcher in this study was that of a teacher-researcher assuming the responsibility for the development of participants' learning process. In this case, the researcher had a role of facilitator since she provided guidance throughout the process.

The researcher identified some learning difficulties, then designed the research plan, some pedagogical interventions and all the data collection instruments needed for the study. She then analyzed data obtained through the instruments and reached conclusions in order to answer the research questions.

Type of study and data collection instruments

This is an action research study which is intended to observe how the use of metacognitive strategies through the use of learning portfolios may influence the vocabulary learning process. Action research as a method involves systematic

procedures for collecting data and understanding its meaning in a local context. Carr and Kemmis (1986: 1). It is also a mixed study including both, qualitative data which means capturing qualities, feelings, expectations, etc, and quantitative data used to support the qualitative data.

In order to get valid and reliable information, students were allowed to use Spanish when answering questions during the surveys and completion of questionnaires. The instruments used for this study were a needs analysis form, teacher journals, students' reflections and a vocabulary test.

Needs Analysis

A needs analysis is an instrument that researchers use to identify objectives and requirements for a learning teaching process. It is relevant to take into account students' needs when designing an action research. A needs analysis allows to match the strategies and materials to the students' needs in order to identify whether the design is appropriate to the proposed goals.

For this study, the instrument designed for this purpose consists of three parts:

(1) Use of vocabulary learning strategies, (2) use of metacognitive learning strategies

(planning, monitoring and evaluating) and (3) expectations and feelings.

Teacher's journal

The teacher's journal provides meaningful information. According to Sagor (2005), journals are important during the period of implementation because they are used to document a lot of information (as a complement to other instruments) which becomes useful at the end of the process. According to the views of Sagor, the more

observations the researcher collects in the journal, the more information will be available when analyzing data (Sagor, 2005).

Students' reflections

Students registered their thoughts and feelings about the process of vocabulary acquisition and the use of metacognitive strategies by using portfolio pages. They also wrote about the problems they faced and way the solved them.

Vocabulary test

This instrument (see appendix D) was applied at the beginning and at the end of the research. The test was one of the tools utilized to measure the impact of the pedagogical intervention and served as a referent of the vocabulary that students were handling at the beginning of the research and at the end of the intervention.

This instrument was designed by the English teacher and piloted by team members that support each other in order to refine the questions and check their relevance in the process. The vocabulary test was piloted before applying it to the whole focus group. It revealed some errors that were corrected. At the end, data analysis and findings were shared with the focus group in order to confirm their thoughts, feelings and expectations about this study.

Ethical Considerations

The ethical considerations for this study were as follows. First, the permission was given by the principal of the school. Second, the parents of the participants were

informed about this study; then they signed the consent letter. Finally, students signed a letter where they accepted to participate with responsibility in this study.

The findings, results and conclusions were informed in a meeting to principal, parents of the participants and the group of English teachers of the school. They were pleased to realize about the findings and advantage that this study could offer to the participants. The proposal, then, is to implement the use of learning portfolios as means of applying metacognitive strategies for vocabulary learning with all the students of the school and its inclusion in the syllabus will be discussed in the final teachers' meeting in order to take into account for the next academic year.

Pedagogical intervention and Implementation

This research project was carried out during three months. The steps to develop it were grouped into three phases: pre-implementation, implementation and post-implementation. The group received two 55 minutes sessions of English per week.

Pre-implementation

During this phase, students as well as their parents first signed a consent letter. (Appendices A and B). Then the needs analysis survey (Appendix C) was applied in order to identify their feelings, the way they used strategies to learn new vocabulary, as well as the students' previous knowledge about metacognitive learning strategies and the students' expectations about improving their English skills. This needs analysis was intended to find the most appropriate language learning strategy, then adapt it and implement it according to the CALLA model.

Implementation

The implementation was designed taking into account CALLA model (Chamot, A. U. 2009), and using the lesson plan template adapted from Rubin (n.d) model and suggested by Universidad de la Sabana. This stage required training on metacognitive learning strategies by using learning portfolios through the content area lessons, as follows:

- Four hour training on metacognition following CALLA approach. (Appendix D)
 First students reflected on the strategies they were already using. Then they were empowered in using them and take advantage of their preference.
- 2. Two hour training on learning portfolios. This included an explanation of the main components of a learning portfolio and the functionality of each.
- 3. Ten hour of content area lessons aimed to improve vocabulary learning were designed taking into consideration the syllabus of the course. A weekly task was assigned to students and they received ongoing feedback during the process. At the conclusion of each lesson they wrote their reflections about the session. During each implementation, the teacher registered observations in the teacher's journal.

For the purposes of this study, students were encouraged to share their personal learning experiences as well as artifacts, images and feelings in their own handwriting, through learning portfolios. The intent, then, is that if students are trained on metacognition and portfolios as a storytelling medium, motivation and attitude will be easily enhanced, creating the conditions for the project to be successfully developed.

Post-implementation

This phase was used to group and classify all the data. A vocabulary evaluation was applied to students (Appendix D). It was intended to determine whether the influence of metacognitive strategies produced an improvement of the vocabulary learning after the pedagogical intervention.

Data Analysis and Results

There were three important components of this analysis, content analysis, ongoing analysis, and data management. Content analysis has been defined as a systematic, replicable technique for compressing many words of text into fewer content categories based on explicit rules of coding (Berelson, 1952 and Weber, 1990). Ongoing analysis is a process where data is collected and analyzed almost simultaneously and is aimed to improve the instruction. Finally data management allows access to a valuable resource since it contains all the information about the entire study.

Content Analysis

After collecting all the data from the survey, the teacher's journal, and portfolio pages including students' reflections, content analysis was used to make sense of and understand the data. Content analysis is a method used to reduce the volume of qualitative material in order to identify core consistencies and meanings (Patton, 2002). Content analysis involves identifying, coding, categorizing, classifying, and labeling the primary patterns in the data. This essentially means analyzing the core content of instruments to determine what is significant. This information was used to answer the research question.

Ongoing Analysis

As for ongoing analyses, teaching journals and field notes were continuously reviewed in order to reflect on possible aspects needing improvement. These reflections and decisions made it possible to shape further inquiry. The data collection and analysis were actually happening at the same time. Lahman (2001), stated that this process is called the cyclical process of data collection. Some reflections were incorporated into some important threads suggested by Bogdan and Biklen (1998), such as (a) trying to make decisions that narrow the study, (b) developing analytical questions, (c) challenging teacher thinking and (d) exploring literature.

Data Management

Files were created to organize data for each student in order to facilitate future information retrieval. The students materials were therefore physically kept. The data collection started from the beginning of the pedagogical intervention.

Content Analysis procedure

For this study, the coding technique proposed by Corbin and Strauss (1990) in the grounded theory approach was applied. This approach is basically used for the purpose of generating or discovering a theory from data. It consists of reading and rereading the collected data and identifying variables, called categories and their interrelationships. These categories are identified by following a process called coding. Such coding process, according to Corbin and Strauss (1990), are "the operations by which data are broken down, conceptualized and put back together in new ways" (p.57).

The first procedure for data analysis was conducted using a technique called open coding, which refers to the process of generating initial concepts from data. This entails identifying, naming, categorizing and describing phenomena found in the data by assigning colors to the research questions and objectives with the purpose of identifying units of analysis which could be related to them.

The second procedure was based on axial coding. The purpose of axial coding is to relate categories and codes that emerged from open coding. Then, data and specific excerpts from the instruments are put together in charts to find the interrelationships among categories and subcategories.

The last procedure was based on selective coding. It is used to organize the relationships found during axial coding process into theoretical frameworks. This means that one category is chosen to be the core category, all other categories are then related back to that core category.

From these procedures some categories emerged around the research question.

Core Category	Main Category	Sub-categories
Inclusion of metacognitive strategies as a way to learn through the use of learning portfolios	Awareness of the use of metacognitive strategies	Organizing steps to reach a goal (goal setting)Use of strategies
	Vocabulary learning strategies	Activation of previous knowledgeWord-image association
	3. Teamwork effects	Building up confidence in learningRaise motivation

Table 1. Categories and Sub-categories Emerged from Data

Results

The categories that emerged were analyzed in terms of their relationship with the research question.

1. Awareness of the use of metacognitive strategies

This category emerged from a set of steps students followed when a task was given. Students had to write the language goals by using their own words. They created learning objectives dealing with learning vocabulary according to the topic. Then they expressed their thoughts which were recognized as patterns that consolidated this category. During the class students were motivated to work on their tasks. They were engaged in doing the activities. They clearly asserted that they realized if they planned and monitored a task, they were able to perform in a better way. It made the work more organized and easier for them.

- S1: "Con las estrategias metacognitivas (SM) se aprende mucho más fácil y eso es bueno"
- S4: "Con las SM se trabaja de una manera más ordenada, eso me gusta"
- S8: "Saber utilizar las SM es lo mejor que he aprendido porque me ayuda a hacer mejor mis trabajos"
- S14: "Profe, por qué a uno no le enseñan esto desde el principio?, así siempre le iría bien a uno en todas las materias"

Besides goal setting, students also needed to make an achievable plan which included finding the most appropriate resources to realize their learning goals. Then metacognition as a strategy began to look appealing and relevant to them. Students realized that having an understandable goal to reach made the learning process easier than having nothing. This was evidenced when they expressed their willingness to continue applying metacognitive principles in completing their academic tasks. They became more interested in learning the language since it was made meaningful to them and they were comfortable working on their tasks.

- S4: "como nunca lo había hecho no sabía que planear era tan fácil y además le ayuda a uno a hacer las cosas mejor"
- S5: "Cuando uno planea algo, es muy claro que es lo que se tiene que hacer"
- S10: "Si uno mismo planea su meta sobre lo que debe hacer, es más fácil llegar a lograrla"
- S11: "No sabía que si uno planea así las cosas, todo se da más fácilmente porque uno sabe desde el principio qué es lo que tiene que hacer"
- *S13*: "Bueno, monitorear no es fácil, pero entiendo que es bueno hacerlo. Hay que aprender a hacerlo"

Awareness of the use of metacognitive strategies is meaningful to the learning process because it allows students to set goals, plan how to achieve them and self-evaluate by using learning strategies. This gave them the possibility to manage any difficulty they may face during the process.

2. Vocabulary Learning Strategies

The results of the needs analysis survey showed that 43% of the students consider that learning new vocabulary in English is something difficult to do and 100% of them said they know that the use of learning strategies would help improve vocabulary acquisition. However, 57% of them do not use any learning strategies. Some students expressed that they did not know what vocabulary learning strategies they could use, other than using dictionaries, the results of which sometimes is confusing when a word has various possible equivalents in the target language. For this reason, it was necessary to begin by training the students in vocabulary learning strategies.

Through the development of the lessons, students used some VLS and ultimately they found that activation of their previous knowledge and word-image association were the vocabulary learning strategies that met their needs best, as illustrated in the excepts

below. As the main intent of this study was to enhance vocabulary acquisition all the lessons were planned to take this into account.

- S2: "Ver las imágenes era muy útil para tener una idea general del texto"
- S3: "Los dibujos de las lecturas le ayudan mucho a uno"
- *S7:* "Ver palabras que uno ya ha trabajado en otras clases, le da a uno como más seguridad en lo que se va a hacer"
- *S12:* "Aunque también hay necesidad de usar el diccionario, hay palabras que uno tiene que buscarlas"

The students' views shown above, illustrate that the most used and helpful actions to reach a goal were image interpretation and association and the use of tools such as dictionaries and/or websites. These actions were recognized as patterns for the subcategory called activation of previous knowledge, which they expressed as something they used when facing unknown vocabulary and obtaining good results at the end. The most valuable evidence of students' vocabulary improvement were the results of the vocabulary test, as shown below:

Student	First rating score	Second rating score
S1	42	72
S2	34	82
S3	42	78
S4	36	92
S5	28	78
S6	38	86
S7	38	90
S8	20	78
S9	40	94
S10	36	88
S11	44	82
S12	30	64
S13	12	72
S14	16	84

Table 2: Results of vocabulary test

As explained before, the students took the vocabulary test that was designed specifically for the purpose of this study. Then they participated in the pedagogical intervention studying new vocabulary which was focused especially on verbs in simple present tense. After the whole process finished, the students repeated the same vocabulary test. The results showed an improved student performance in the vocabulary component.

3. Teamwork effects

This category emerged when students made their reflections about the way they performed the task proposed. They realized they should be conscientious about how to solve the difficulties they faced during the activities. The activity they used most frequently was sharing their work with their classmates, comparing and finding ways to solve their difficulties. They occasionally asked for help from the teacher and other members of the group. These patterns were analyzed, after which then the last category, teamwork effects, emerged.

As explained previously, during the implementation, students were trained on metacognition and then, on learning portfolios. At this stage, students were taught to work in groups and progressed to teamwork. This is because one of the main functions of a portfolio is to demonstrate accomplishments. They learned that they should share their final product as well as the evidence of their progress. At the beginning, some students were reluctant to do it; they were used to thinking that the teacher is the only person able to make suggestions and correct assignments. However, they progressively found meaningful to share their papers with their classmates. After the experience of sharing and learning with others, they found real and concrete reasons to

work with their partners. In other words, they realized that teamwork allows them to perform better as illustrated in the excerpts below.

- S1: "Mostrarle el trabajo a los compañeros fue algo que no acostumbraba a hacer, pero me di cuenta que no estuvo mal"
- S6: "El trabajo en grupo me pareció genial; cuando no entendía algo, aveces lo entendía más fácil si me lo explicaba X compañero"
- S9: "Fue chévere compartir los trabajos con mis amigos, porque ellos le ayudan a uno a ver cosas que se pueden mejorar y dan ideas"
- *S12:* "Fue bueno hacer correcciones con mis compañeros antes de mostrarle el trabajo final a la profesora"

During the sessions, students were observed to exhibit better behavior than they did prior to the start of the implementation of this study. The atmosphere of the classroom was more conducive to learning. Students were working on their tasks without disruption and they were much more involved in their activities as they felt more confident working and sharing with their classmates. At the beginning, students were expectant about the process they were going to start, they felt anxiety when something new was presented, and some of them were stressed about the challenge. Once the interventions started and their levels of anxiety decreased they began to work in groups. They changed their minds about the teacher as the unique owner of knowledge. They realized that sharing their papers was an easier way to solve common difficulties they might encounter in the learning process. Then they began to talk to their classmates, not for the purpose of evading their responsibilities, as most of students did previously, but for the purposes of teamwork.

Conclusions and Pedagogical Implications

The implementation of metacognitive strategies through the use of learning portfolios influenced English vocabulary learning as follows. First, the research shows that metacognitive training seems to have contributed to vocabulary learning through the use of learning portfolios. Since students perceived that engaging with the learning process through the utilization of metacognitive learning strategies strongly affected their performance, the learning of new vocabulary increased. Students participated enthusiastically in the metacognition instruction because they realized it was something relatively easy to do and it could facilitate their learning process. They made their own plans that included setting their own language and task goals, selecting the most appropriate learning strategy by finding the right resources, monitoring the strategy used and evaluating the process. Students then clearly expressed that when they made their plan for vocabulary learning, it contributed to the enhancement of their lexical knowledge. This was due, on the one hand, to feelings of confidence in what they were doing step by step, which added a measure of self-efficacy, and on the other, to their enjoyment of the dynamic nature of the proposed learning activities. The activities clearly empowered them to become engaged and enabled them to achieve their goals.

Secondly, students enjoyed sharing their portfolios at the end of the process and receiving feedback from their classmates, other teachers, and administrative personnel at the school. They were proud of their newly acquired skills. This indicates that levels of motivation increased through the pedagogical intervention. The requirement to show their portfolios at the end of the process motivated the students to do a good job. Therefore, the use of portfolios ultimately proved to be a highly successful method that was integral to the success of the learning process investigated. (see appendix F).

Finally, the findings of this study support foreign language research literature on strategic training in the use of learning portfolios (Brown, 2002) which states that portfolio development increases students' understanding of what, why, and how they learned throughout their learning process and reinforces the importance of reflection in learning. Moreover, it can be asserted that the model used to teach metacognitive strategies and the uses of learning portfolios is practical and useful because the method yielded positive effects in the development of skills and components of language, in this case, vocabulary.

To conclude, the results of this research project showed that the metacognitive strategy instruction influences English vocabulary acquisition in terms of awareness of the use of metacognitive principles and teamwork. It is worth paying attention to metacognitive language strategies which help students overcome their challenges related to unknown words and provide them a way to improve their ability to learn vocabulary. This was especially apparent with the use of learning portfolios, which appear to be appealing for young learners in terms of self-assessing, sharing, and enhancing teamwork.

Pedagogical Implications

The findings of the present study have implications for both teachers and students. This kind of learning instruction helps teachers to improve their teaching practice, which is very valuable to them in terms of commitment to student development. It is applicable not only when teaching vocabulary in a L2 but in other areas of the syllabus as well. Teachers should help students to use different metacognitive strategies to facilitate the learning process in any subject matter. This would bring a

certain level of proficiency, which would then encourage students to be intrinsically motivated to use metacognitive strategies in benefit of their studies. Rubin and Thompson (1994), stated that the attempts to teach students to use learning strategies have produced good results because it helps them become more responsible for meeting their own objectives, since they become more independent and effective learners.

Teachers also need to be aware of the potential benefits of using learning portfolios because of the high level of motivation students experience when they are responsible for their own learning process. As shown in the results above, portfolios are appealing to kids and teenagers as this method allows them to share not just a learning process but personal experiences, especially if the portfolios can be constructed as narratives, telling a story of the students' progress. To support this analysis, it is worthwhile to name two of the six factors that Oxford and Shearin (1994), stated as impacting motivation in language learning. First, involvement, which refers to students' engagement actively and consciously in the language learning process. The second factor is environmental support from teachers and peers along with integration of cultural and extracurricular support to the learning process.

Implementing the enduring use of metacognitive strategies during English lessons in a public school and encouraging students to use them is a challenge for teachers, since this would entail a change in their teaching routines. For that reason, it would be appropriate to create a collaborative team of teachers who are able to lead that kind of implementation and facilitate the process by bringing support to their colleagues

In this context, English teachers would be the pioneers of this implementation and the inclusion of the whole group of the teachers of the school would be progressive according to the results they observe from students. This process would not be difficult since our students are used to working with learning portfolios as part of their high school training, as this is an academic requirement of SENA³. For that reason, they would only need training on metacognitive learning strategies This means that the implementation would be easier because adding metacognitive strategies only represents a small step to be added in the learning process.

The rest of the students in the school who did not participate in this research study would need to be trained in the complete process, as it was developed with the focus group of this research study. The focus group students would serve as references for their classmates. They would share the experiences they had during this process, and how they were able to improve their learning habits and English performance by planning, monitoring and evaluating their own learning process.

One of the main constraints teachers have in this context is that the hours of English classes are limited to two per week. However, it has been shown that if students are motivated enough, they can become involved in their own language learning process. Therefore, it is meaningful to take advantage of the high level of motivation and engagement that using metacognitive strategies can encourage in order to increase the time that students invest in their language learning outside of the classroom.

³ SENA: (Servicio Nacional de Aprendizaje). It is a Colombian public institution focused in the development of programs of professional formation. It's a government initiative to develop education in Colombia and foment employment.

As shown by the results of this study, awareness of the use of MLS, the use of LLS and teamwork effects can be successfully integrated to help students to enhance their vocabulary learning.

Limitations and Further Research

During the development of this study some limitations emerged, namely reduced numbers of English classes and a limited number of participants. These limitations will open the door to opportunities for future research which will be outlined accordingly.

As showed in the context section of this article, the students in the school where this study was developed have two hours of English class per week. This reality represents a very marked limitation for learning a foreign language. Although the implementation was planned according to their English class schedule, the time was not enough for teacher to train the students. However, the results of this study were not affected by this situation, due to the collaboration of colleagues in making the study a success. As additional hours were necessary in order to complete the proposed implementation, some colleagues voluntarily gave up their class hours to make it possible to finish this study as proposed. Due to the persuasive nature of these kinds of limitations, it is important to consider employing blended learning which could involve learning tasks that students could do during their classes and autonomously in their free time.

The number of participants for this study was determined while taking into account the reduced time to develop the implementation. To some extent this might have affected the results, since the fourteen students participating in this study might not represent a generality of seventh graders in a public school. Hypothetically, then, the

results could vary if the participants were, for instance, from different age ranges. To correct this situation, it would be helpful to work by levels, not by grades, meaning that students of different ages would be placed in the same level, grouped according to their language proficiency. This methodology would introduce and allow the investigation of the effects of different ages, interests and motivations on the learning process. Then, the researcher believes that this would produce more valid and reliable results.

Further research

The main area for further research with a similar focus would be in enhancing vocabulary learning through e-portfolios. This would incorporate the technological component promoting a blended learning. It could facilitate the learning process in terms of saving time and creating opportunities to self-directed learning, which are meaningful in a blended learning environment. Likewise, other researchers could consider the creation of a virtual community to give more opportunities for participants to interact among learners and other members of their school environment.

Finally, another possibility to consider is that metacognitive learning strategies could be applied to the writing process. Overall, the results of the study were promising, and suggest that it is possible that metacognitive strategies could be useful in developing all aspects of language proficiency. These encompass not only general vocabulary knowledge, but also areas in need of development, such as reading, composition, and listening comprehension.

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About the Author

Claudia Patricia Mosquera Gaviria holds a B.Ed in Modern Languages from the Universidad Santiago de Cali. She has worked for several years in primary and high school. She currently works in the Institución Educativa Titán.

APPENDIX A

UNIVERSIDAD DE LA SABANA

MAESTRÍA EN LA ENSEÑANZA DEL INGLÉS PARA EL APRENDIZAJE AUTO-DIRIGIDO PROYECTO DE INVESTIGACIÓN "IMPROVING VOCABULARY LEARNING THROUGH THE USE OF METACOGNITIVE LEARNING STRATEGIES"

CARTA DE AUTORIZACIÓN ESTUDIANTES

Este proyecto de investigación se lleva a cabo como parte del trabajo de grado para obtener la maestría en didáctica del inglés para el aprendizaje auto-dirigido, la cual tiene el propósito de ayudar a los estudiantes principiantes a mejorar el aprendizaje del vocabulario de una lengua extranjera, a través del uso de estrategias metacognitivas. Usted, estudiante del grado 7-2 ha sido escogido para participar en este proyecto, ya que usted es un factor importante para desarrollar dicha investigación. Su participación en el proyecto consistirá en llenar algunas encuestas enfocadas en sus estrategias para el aprendizaje de vocabulario nuevo; participar en entrevistas y desarrollar un trabajo específico que será guiado por su docente durante las horas de clase de Inglés, con todo lo anterior se pretende recolectar información que será incluida en los resultados del proyecto.

Participar en esta investigación podría traerle grandes beneficios a toda la comunidad estudiantil ya que con ella se pretende generar cambios significativos en la manera en que se aprende el inglés como lengua extranjera en estudiantes de 11 años en adelante.

También es importante mencionar que su participación en este proyecto es totalmente voluntaria. Usted es libre de decidir si desea o no participar sin que ello le traiga ninguna consecuencia académica o no poder disfrutar de los beneficios que la investigación pueda generar.

Si tiene alguna pregunta adicional acerca del proyecto, no dude en preguntar por información adicional.

Con la firma del presente documento acepto que he leído y entendido la información arriba

suministrada y estoy de acuerdo en participar en este proyecto de investigación.			
Ciudad y fecha:			

APPENDIX B

UNIVERSIDAD DE LA SABANA

MAESTRÍA EN LA ENSEÑANZA DEL INGLÉS PARA EL APRENDIZAJE AUTO-DIRIGIDO PROYECTO DE INVESTIGACIÓN "IMPROVING VOCABULARY LEARNING THROUGH THE USE OF METACOGNITIVE LEARNING STRATEGIES"

FORMATO DE AUTORIZACIÓN PADRES DE FAMILIA

Yumbo, 15 de Junio de 2012

Apreciados Padres de Familia,

Mi nombre es Claudia Patricia Mosquera. Soy la profesora de inglés de su hijo(a). Actualmente estoy cursando segundo año de maestría y me encuentro trabajando en mi proyecto de grado que consiste en un proyecto de investigación, en el cual pretendo implementar estrategias metacognitivas de enseñanza/aprendizaje del inglés a través de portafolios educativos y examinar su efectividad en la adquisición de vocabulario en inglés como lengua extranjera. A partir de este momento inicio el proceso con los estudiantes del grado 7-2. La información requerida y la efectividad de las estrategias trabajadas durante el proyecto se recogerán siempre dentro de la jornada escolar, en los horarios dedicados a clase de inglés durante la semana.

Un portafolio educativo es la recopilación de información y evidencias de las experiencias realizadas por los estudiantes que nos habla de sus progresos y logros.

Espero poder trabajar con sus hijos durante este proyecto. Cualquier duda que tenga con respecto al proyecto será atendida y respondida antes de firmar la carta de autorización.

De antemano gracias por su valiosa colaboración.
Cordialmente,
Lic. Claudia Patricia Mosquera Gaviria
Nombre de estudiante
Firma del padre y/o acudiente
Mi hijo puede ser incluido en el proyecto de investigación. SI NO

Formato tomado y adaptado de

http://www.broward.k12.fl.us/hrd/actionresearchstudies/datacollection/pdflinks/pdflinksConsent/Sampleconsentletter.pdf

APPENDIX C

Online-questionnaire to participants

The questionnaire was designed with googledocs technology. It can be seen in the following link:

 $\underline{https://docs.google.com/spreadsheet/viewform?formkey=dE9xNXVJTDJaZEZtSFFrU1p}\\ \underline{Pc284OUE6MQ\#gid=0}$

APPENDIX D

UNISABANA-ANAHEIM UNIVERSITY Master Degree in Teaching English for Self-Directed Learning Development Project

ENGLISH TEST

Name:	Date:
I. Vocabulary	
Read the following text. Think and write the word in each space. (You must complete this	word which best fits in each space. Use only one part of the test in 15 minutes)
18 items – 2 point	each - 36 total points
	<u>Lions</u>
Lions are the largest members of the cat far teeth and whiskers. Male lions	mily. Like other cats, have paws, big _ manes, but female lions do not.
When lions roar, all animalshunting area and to call other lions in their far	in the jungle. Lions roar to their milies.
	. Lions in the grasslands of AFRICA. ecause they cannot live water.
Lions live most of their lives in one area, the sat least 18 each	same one. Lions are so sleepy, they
A is called Pride lions and some cubs in it.	A pride has a lion, some
	like to eat large such as en such in

(Taken from Book Club - Mc Graw Hill)

II. Grammar

What is the best word to complete the sentence? Choose one option. (You must complete this part of the test in 15 minutes). 10 items - 4 point each - 40 total points

1.	-		sounds that the human ear cannot.	
	a)	Hears		Hearing
	b)	Hear	ď	Not hear
2.	Frogs	can	ten times the length of their bodies	
	_	Jump		Jumpies
	•	Jumpes	•) Jumping
	υ,	oumpoo	u,	, camping
3.	An ele	phant	sticks to scratch otherwise unread	hable places.
	a)	Usies	c)	Uses
	b)	Use	d	Using
4	Parrots	s use their	beaks as an extra foot to th	ne trees
•		Climbing		Climbs
		Climb	,	Climbes
	5)	Ollifib	u,	, Olimbes
5.		chimpanz	ees stay close to their mothers until they	at least 4 years-
	old.		,	
	•	Are	•	Is not
	b)	Is	d	Are not
6.	Older I	lobsters ho	ld hands with younger one to	them.
	a.	Guides	C.	Do not guide
	b.	Guideing	d	Guide
7.	A Rat	k	peautiful and tiny nests out of cloth, pape	r and straw.
	a.	Make		Makes
	b.	Is make	d	Making
8.			to their babies when they are	
		Talkies		Talkes
	D.	Talk	a	Talking
9.	Rabbits in colonies in underground burrows			
		Lives	C.	Lives
	b.	Live	d	Do not live
10.	Cats u	se their lor	ng whiskers to the way in t	he dark.
		Feeling	,	
		Feels		
		Feel		
	d.	Not feel		

III. Writing

You, as a member of the "Be more animal" (Animal Protection Organization) are going to start a campaign against animal cruelty in your neighborhood. Write down the six (6) argumentative sentences (reasons) that you will use in your posters to motivate people to love and respect animals according with what you have learned about them. 6 items – 4 points each - 24 total points.

Example:

Dogs are men's best friend. They give love and company asking nothing in return.

1.	Animals are very special.
	Live in cages is not fun
3.	Animal babies need their moms
4.	Wild animals suffer in captivity
5.	Zoos are not educational
6.	Circus are not funny to animals

<u>APPENDIX E</u>

PROYECTO DE INVESTIGACIÓN "MEJORAR EL APRENDIZAJE DE VOCABULARIO A TRAVÉS DEL USO DE LAS ESTRATEGIAS METACOGNITIVAS"

STAGE 1: Learning about metacognition

GENERAL			
OBJETIVE	Understand what metacognition is and why it is important		
SPECIFIC OBJETIVES	 Identifies most of the components of metacognition Demonstrates considerable depth in understanding the role of metacognition to a variety of learning situations Explains with considerable clarity how metacognitive strategies work together to help learners succeed Demonstrates considerable ability to explain how metacognitive processes apply both to in-school and to out-of-school experiences 		
GUIDING QUESTIONS	Why does metacognition matter?		
LEARNING GOALS At the end students will be able to	 What does it mean "to reflect?" Understand that effective learners are metacognitive: they think about their thinking; plan and set learning goals; monitor and reflect on their progress; purposefully select learning strategies understand what reflection is and how to do it understand that any learning activity is effective when intertwined in learning 		
MATERIALS	 Hand mirrors, 2 mazes 4 colored markers, chart paper 		
ACTIVITY 1	APROXIMATE TIME: 20 minutes - Pairs work Each pair will receive two mazes and one hand-mirror to each pair. While one student holds the mirror at a suitable angle, the other completes the maze by looking at the pen and maze in the mirror. Pairs reverse roles, using the other maze.		

- Did you have to make adjustments?
- How could you become better at the task?

KEEP IN MIND: Make connections between the task and other kinds of learning and problem solving — where they have to concentrate, employ strategies, obtain feedback, practice, and so on. Point out that they have been reflecting on the maze task (which also involved reflection) that is, they are looking back at and into themselves, describing what they see, connecting aspects and integrating them with what they already know to make meaning of it. Share the learning goals.

Approximate time: 60 minutes

Pairs work

Model a personal response to the stem, "Learning is like...", e.g., cooking a meal, playing soccer, camping, climbing a mountain, playing a video game.

In pairs, students select or create their own a stem-activity combination, and together develop an explanation of how "Learning is like..."

Model making jot notes as students share their explanations for these comparisons. Then, model how to summarize students' comments, e.g., cluster ideas to identify similar points, accurately and concisely rephrase, and list points made.

CONCEPT BUILDING

ACTIVITY 2

Discuss how each of these activities involves before, during, and after phases: (a) preparation, planning, and goal-setting, (b) monitoring and adjusting, (c) assessing, reflecting, and goal setting for the next step. Introduce the term metacognition, power point presentation, and referring back to the maze and "Learning is like..." tasks. PPP will be used as an anchor chart to reinforce continual application of metacognitive strategies.

Lead a discussion about the role metacognition plays in the successful accomplishment of daily, sports, work, and school tasks.

Graffiti - GROUP WORK

This questions will we written in a separate paper each one:

- What are some of the things you do to help you learn?
- What do you do to get ready to learn? (set goals, plan)
- Once you've begun a learning activity, what are some things that might get in the way of your learning and/or doing your best work?
- How do you know when you really understand what you are learning?
- How do you use feedback about your learning or your work

	from teachers or peers? Model how to make a thoughtful, personal response to each of these questions. Students will be asked to form groups of about 4-5 and each group will receive a different colour marker. A group member will be called on to report out based on an arbitrary criterion. Each group responds to a question, then rotates to another question, taking their marker with them.
	On a cue card, groups summarize the responses from their chart paper, orally and then in writing. One student from each group shares orally with the class. Start a discussion to go deeper about their responses.
	Approximate time: 20 minutes - individual work
SELF- ASSESSMENT	Consolidation Students are asked to indicate how easy or difficult it is to think about thinking and informally self-assess their confidence as "metacognitive learners." Students do a 10 minutes writing journal entry in which they articulate their understanding of metacognition and reflect on how useful the lesson's strategies might be to them as learners. They are giving the metacognition rubric and motivated to start using it.
EXTENSION ACTIVITY	For the next class, identify an out-of-school activity in which you plan and set goals, monitor and adjust what your're doing, and assess or reflect on what you've done. Draw it on a card paper and share with your classmates.

APPENDIX F











