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**UNIVERSITY OF SOUTHAMPTON**

FACULTY OF HUMANITIES

Modern Languages

**General learning strategies: identification, transfer to language learning and effect  
on language achievement**

by

**Nahum Samperio Sánchez**

Thesis for the degree of Doctor of Philosophy

July 2016



UNIVERSITY OF SOUTHAMPTON

## ABSTRACT

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### **GENERAL LEARNING STRATEGIES: IDENTIFICATION, TRANSFER TO LANGUAGE LEARNING AND EFFECT ON LANGUAGE ACHIEVEMENT**

Nahum Samperio Sánchez

Each learner has a set repertoire of general learning strategies that he or she uses despite the learning context. The purpose of this study is to identify the general learning strategies that beginner learners of English have in their repertoire, the transfer of such strategies to language learning and the predictive value they have in language achievement. It is also intended to discover the effect that the teaching of not frequently used general learning strategies have on learners' language achievement. Additionally, to identify possible differences in strategy types and frequency of strategy use in low and high strategy users as well as high and low achievers of beginner English language learners. This study followed a mixed-methods research methodology by collecting numerical data by means of a 51-item general strategies questionnaire (Martinez-Guerrero 2004) applied in two administrations. The sample consists of 118 beginner English language learners in a language center at a northern Mexican University. Data were analyzed with the SPSS and Excel software. The qualitative data was collected through twenty individual semi-structured interviews; furthermore, three one-hour-forty minute strategy instruction sessions were included as the treatment. Quantitative results show that learners have a more frequent use of Achievement Motivation, Cognitive and Concentration strategies; and less frequent use of Study, Study Organization, and Interaction in Class strategies. Qualitative findings indicate that learners use Study and Study organization and Concentration strategies largely in both general learning and language learning. Qualitative data complement and extend the quantitative data gathered in the questionnaire. No significant differences were found on the type of strategies that learners use in general learning contexts and language learning, which suggests that learners transfer their learning strategies from their general strategy repertoire to language learning as the first tools to deal with language learning tasks. A positive correlation was found between learning strategy use and language achievement test scores. Achievement test scores were primarily predicted by the use of Achievement Motivation and Interaction in Class strategies, and to a lesser extent by affective and study strategies. Strategy instruction sessions had no significant increase in the adoption and use of strategies. Furthermore, high and low achievers and strategy users seem to use the same type of strategies; the frequency of strategy use and how they use the strategy represented the difference between types of learners. Finally, a number of language learning strategies emerge from qualitative data that learners use in language learning. Pedagogical implications of the findings of this study provide a potential framework to help not only teachers but also institutions in identifying and teaching new and specific learning strategies.

Keywords: General learning strategies, language learning strategies; transfer, strategy instruction, language achievement, high achievers, high strategy users.



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# Declaration of authorship

I, NAHUM SAMPERIO SANCHEZ declare that this thesis and the work presented in it are my own and has been generated by me as the result of my own original research.

GENERAL LEARNING STRATEGIES: IDENTIFICATION, TRANSFER TO LANGUAGE LEARNING AND EFFECT ON LANGUAGE ACHIEVEMENT.

I confirm that:

This work was done wholly or mainly while in candidature for a research degree at this University;

Where any part of this thesis has previously been submitted for a degree or any other qualification at this University or any other institution, this has been clearly stated;

Where I have consulted the published work of others, this is always clearly attributed;

Where I have quoted from the work of others, the source is always given. With the exception of such quotations, this thesis is entirely my own work;

I have acknowledged all main sources of help;

Where the thesis is based on work done by myself jointly with others, I have made clear exactly what was done by others and what I have contributed myself;

None of this work has been published before submission.

Signed:

Date: July 2016



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## Definitions and Abbreviations

GLS	General Learning Strategies
LLS	Language Learning Strategies
FL	Foreign Language
EFL	English as a Foreign Language
GL	General Learning
LL	Language Learning
ESL	English as a Second Language
LSQ	Learning Strategy Questionnaire
LLSQ	Language Learning Strategy Questionnaire
LASSI	Learning And Study Strategy Inventory
SILL	Strategy Inventory for Language Learning
M	Mean
ST	Standard Deviation
1 <sup>st</sup> Admin	First Administration
2 <sup>nd</sup> Admin	Second Administration
df	Degrees of Freedom
HSU	High Strategy User
LSU	Low Strategy User
HA	High Achiever
LA	Low Achiever



# Chapter 1: Introduction

Learning, in a broad definition, is a process of gaining knowledge and expertise. Many factors need to converge at some point for learning to occur; for instance, the learner, the material, the learning environment, the subject or the methods or mechanisms for learning. Research has switched from teaching methods to learning methods; that is to say, what learners do to learn effectively. Learning strategies represent the methods or the procedural knowledge each learner has in order to manage information to achieve goals and be successful in learning. Research in cognitive psychology started out identifying the mechanisms, actions, and behaviors that helped learners attain success, the effective ways of processing information, and the link there is between strategies and their mental processes

Strategies are processes (Nisbet & Shucksmith 1986; Weinstein & Mayer 1986), behaviors (Mayer 1988; Wenden 1987a) techniques (Alley & Deshler 1979) or actions (Paris, Wasik & Turner 1991) that learners use to approach learning tasks or to reach goals (see Chapter 2). According to Riding and Rayner (2002:80), a learning strategy is a “set of one or more procedures that an individual acquires to facilitate the performance on a learning task,” which will vary depending on the task. Riding and Rayner (2002) also posit that learners develop strategies in response to demands of difficult material or the environment, which is usually not compatible with their cognitive style. Learners select strategies over others when they perceive that a strategy is not appropriate to the way they learn. They continue explaining that the selection of appropriate strategies will produce a repertoire of learning strategies. The strategy repertoire is the set of strategies that every individual has, and that has acquired through experience and time in order to make learning more manageable. Learners can develop a broad, or a small, repertoire, which becomes part of a purposeful toolkit for future learning situations. This process can be repeatedly used by the learners in early stages of their education and eventually some strategies will become fixated, discarded or adapted for future use.

Learners of different disciplines use specific strategies according to the complexity of tasks. A mathematician, a musician, a doctor or an engineer might have strategies that will help to manage the information in their disciplines better. Nonetheless, when strategies are used in fields other than a single discipline or learning context, such strategies become strategies for general use. It is feasible, then, to call them General learning strategies. Learners have a set of General learning strategies that they use across their areas of expertise, which are useful for any given learning situation. Their General learning strategies help learners succeed in dealing with their individual academic difficulties; thus, they transfer their general learning strategies to new learning contexts.

This transfer takes place whenever their existing knowledge, abilities, and skills affect the learning or performance of new tasks, and new learning situations (Fleishman 1987, p.xi) and language learning is not the exception. Learners will eventually transfer their repertoire of general learning strategies to ease the performance on a language learning tasks.

The work conducted in learning strategies has some theoretical base in cognitive psychology, and its influence reached learning strategies in the area of language learning (see Rubin 1975, Stern 1975). The strategies that learners use in language learning are referred by research as Language Learning Strategies. Early research on language learning strategies has contributed significantly to understanding the extent to which strategies enhance and support language learning.

The term strategy in language learning has been described for many researchers in a wide semantic variety of terms. The term "strategy" has been interchangeably used as plans (McDonough 1995; Oxford 1990), operations (Rubin 1987) routines (Rubin 1987), steps (Oxford 1990) procedures, actions or tactics (Oxford 1990) used to approach language learning. In broad terms, Language Learning Strategies are the strategies that a learner uses in order to perform tasks and reach goals in language learning (see Chapter 2). Researchers directed efforts to identify and underline the significant role of learning strategies, and how they aided learners in understanding, storing, retrieving and using information, and reaching success in language learning (Abraham & Van 1987; Chamot & Kupper 1989; O'Malley & Chamot 1990).

Subsequently, researchers worked on the categorization of strategies according to how they help the learner (see Chapter 2). Several classifications appeared not only in cognitive psychology (Danserou 1985; Mayer 1988; Pozo 1990) but also in language learning (Chamot 2001; Cohen 2003; O'Malley & Chamot 1990; Oxford 1993). The work conducted in these areas led researchers to acknowledge that learners could display a complex use of strategies and behaviors in language learning. The broad range of individual differences in students makes the use of learning strategies an individual process. Thus, research on language learning strategies focused attention on the many individual variables that affect strategy choice. Variables such as proficiency, ethnicity, age, gender, learning styles, motivation, personality traits, and learner's beliefs, or even career orientation have been some of the most researched topics (Cohen 2003; Green & Oxford 1995; Griffiths 2003; Lan & Oxford 2003; Peacock & Ho 2003).

Later, research on language learning strategies explored the feasibility to teach strategies to the less able learners who would benefit from their use of them (see Chapter 2, 2.8). By teaching learners how to approach learning and how to process information, it was intended to increase the effectiveness of language learning. Although methods to teach learning strategies appeared (Cohen 2011, Chamot 1998), research in language teaching has considered that no single teaching method guarantees success in foreign language learning. Yet, learners become successful despite the teaching methods or techniques.

Research in language learning strategies (e.g., O'Malley, Chamot, Stewner-Manzanares, Kupper, and Russo, 1985, p.43) has posited that learning strategies are “an extremely powerful learning tool” (see Chapter 2 for a complete definition). They also posited that strategies play an important role not only in language achievement but also in the motivation that is increased when learners perceive the attainment of good results. Thus, it is necessary that learners discover and use learning strategies to help them attain good results.

### **1.1 Research problem**

For ages, researchers and teachers have tried to find the best way to teach not only language but other disciplines as well. They have tried different methods, methodologies, approaches, techniques and activities to make learning easier, more appealing, more significant, more productive or beneficial for learners who engage in the long and sometimes tiring process of learning a second or a foreign language. The focus on teaching has switched to learning in order to find what learners do to learn a language better. Research has established that in the process of learning, it is necessary an active contribution of the learners to their learning (Cotterall 2000; Zimmerman & Schunk 2008). It is also essential that learners take a responsible and a proactive role in their learning, and adopt behaviors that allow them to be consistent and persist longer in learning. This implies the use of learning methods that help them attain success and reach goals. One of these methods or mechanisms is the learning strategies.

Very frequently, learners stagnate on the beginner stages, and they are not able to achieve the standard level of English proficiency that institutions require or that they themselves expect. Learners hardly ever reach advanced levels, and they tend to drop out language classes before they get a communicative competence. Very few learners who start in basic levels finish a complete language course. Although many reasons could be attributed to this problem, learning strategies could provide valuable information for researchers about how to improve and assist elementary learners in the use of language learning strategies so that they can continue to reach higher levels of language than basic levels.

Although many reasons can be attributed to learning a language unsuccessfully, some problems are often related to the lack of learning methods, which results in a learner's poor understanding of the language. This reduced understanding of the language leads learners to lose motivation and, eventually, to quit learning, and very frequently in early stages of their learning.

Learning is believed to follow similar steps in cognition, even across languages. Then, it is sensible to assume that parts of the processes are similar in general learning and the learning of a foreign language. Learners in their early stages of education, and through everyday life, develop a strategy repertoire that helps them solve particular problems in learning and which later they apply to new learning contexts. However, research has not determined where the strategies that learners

use in language learning come from, or how strategies are developed in language learners. Furthermore, it is not clear the effect that general learning strategies have in English language learning.

University learners enter the language learning education system with numerous learning strategies that remain largely untouched by their teachers and classrooms. Exploiting the resources they already possess can improve achievement in language learning. This improvement, in turn, can make learners persist in the process of language learning. Research on the transfer of general learning strategies to language learning and the effect they have on language learning is important researching for different reasons.

First, by identifying learners who do not have a developed repertoire of strategies or which they are not fully aware provides an idea of how strategic learners will be in language learning. Therefore, teachers or institutions can take the necessary measures to equip learners with strategies that can help them learn the language faster or easier. With this in mind, learners who find language learning complicated, difficult or unappealing can benefit from enhancing procedures they already use, and that will help them acquire the language in a way they usually learn. Second, knowing the strategies learners already use and the impact these strategies have in their language achievement can help strategy instructors in selecting and enhancing the right strategies for strategy instruction emphasizing on the type of strategies learners need. Finally, raising learners' awareness of their already-owned learning strategies in the early stages might help learners acknowledge the potential benefits strategies can have in their learning. Consequently, they can explore their strategies, reorganize their strategy repertoire, look for new strategies, and developed new ones; and eventually, contribute to their language learning success.

In this experimental study, I will gather data through interviews and questionnaires from basic beginner language learners who attend a Language Center of a University in the Northwest of Mexico. It is sought to determine the extent to which learners use strategies in their general learning contexts and the extent to which they transfer their general learning strategies to language learning. Additionally, it is proposed to examine the degree to which the strategies they transfer improve their language learning.

## **1.2 Significance of the study**

The contributions of this study would be of interest to scholars in learning strategies as well as teachers of beginner language levels, in particular, teachers of the very first level of an English language course, to which this study would be significant.

Learning strategies are methods or mechanisms that learners use to perform tasks in a faster or easier way across different learning contexts. This study sets out to identify General Learning Strategies (GLS) that beginner English language learners use when they start their lessons.

Therefore, this study contributes to the literature by presenting the learning strategy profiles that Mexican learners in Baja California have in general learning and language learning. The study also contributes to the existing body of literature by continuing lines of research on learning strategies along existing ones but expanding it to the transfer of strategies across contexts. From this perspective, the study seeks to call attention to a new insight in language learning by examining it from the angle of the general learning strategies transferred to, and used in, language learning.

Although much is known about learning strategies and the effect it has on achievement, this study contributes to identifying General Learning Strategies as predictors of achievement in language learning; that is, strategies used in one context as predictors for learning in another. Results will be beneficial for enhancing the general learning strategies that learners already use to improve their language achievement. Findings will also provide necessary information about strategy instruction and the benefits of teaching strategies to beginner language learners. Moreover, findings in the study might help to characterize the way high achievers and low achievers use learning strategies. They will help explain language academic performance of the learners, and allow institutions' authorities to make decisions on specific actions to help beginner language learners and low achievers to go further than basic levels by equipping learners with the necessary tools.

### **1.3 Aims of the study and research questions**

This study has five ultimate goals. Firstly, to examine, to identify, and to describe learners' strategies used in general learning contexts. Secondly, to determine the transfer of strategies used in general learning contexts to English language learning focusing on the effect on their language achievement. Thirdly, this project seeks to identify the type of GLS that has more impact on language learning achievement. Fourthly to observe the effects of strategy instruction on the increase and raising awareness of learners' language learning strategies (LLS) use. Finally, to observe possible differences in frequency of strategy use and types of strategies that low achievers have in comparison to high achievers (see Chapter 3 for a description of low and high achievers); as well as the possible differences, there are among high and low strategy users.

With the purpose of achieving the stated objectives, this study is guided by the following research questions:

To what extent do learners use general learning strategies?

To what extent are general learning strategies used in language learning?

To what extent do general learning strategies predict language achievement?

To what extent does strategy instruction influence L2 strategy use?

To what extent do high and low achievers, and high and low strategy users use strategies differently?

Data from the first administration of the questionnaire (LSQ) will answer research question one by identifying the strategies learners have in their actual repertoire before they start language learning. By contrasting pre and post data of the questionnaires (LSQ and LLSQ), and by examining a possible increase in strategies used in the second administration of the questionnaire (LLSQ) research question two will be responded. Research question three will be answered by conducting regression analysis to data to identify the predictive value strategies have in achievement. Research question four will be responded by observing the increase of strategies between the administrations of the questionnaire after teaching learning strategies to the experimental group. A contrast of quantitative and qualitative data of high and low achievers and high and low strategies users will answer research question five.

## **1.4 Overview of the thesis**

In the introductory Chapter 1, I describe the research problem and specify the purpose of the research. In this chapter, I also explain the significance, and I enumerate the questions that intended to guide the research.

Chapter 2 provides a review of General learning strategies in educational psychology, their definitions, and their categorization. Later, empirical research conducted on General learning strategies. Definitions, categorizations and empirical research conducted on language learning strategies are also provided. A contrast between General Learning Strategies and Language Learning Strategies is also provided. This chapter additionally offers a view of some factors that contribute to strategy choice; for instance, motivation, learner autonomy, self-regulation and prior learning experience. Furthermore, this chapter deals with the development of the learners' strategy repertoire and the transfer of strategies to language learning. It also considers strategy instruction and methodologies for teaching strategies as well as factors that influence the success in strategy instruction such as the teacher and the student. The chapter ends with a review of learning strategy research conducted in Mexico.

Chapter 3 provides an explanation of the methodology used for the study as well as a detailed description of the educational context of the study. It also describes the participants, the instrumentation, the questionnaire, the achievement test, the interviews, data collection and data analysis procedures of interviewing and coding qualitative data along with a description of the process used in strategy instruction sessions.

Chapter 4 reports the results of the quantitative data collected that answer the research questions of this study and qualitative data gathered from interviews. Data collected of the first and second administrations of the questionnaires are reported, that is, LSQ and LLSQ alongside the results of

the first and second administrations of the achievement test. Strategies used in strategy instruction are also reported. Furthermore, Chapter 4 also provides the strategies and a key list of strategies that high achievers and low achievers reported not only in general learning but also in language learning.

Chapter 5 discusses major findings of the strategic behavior of beginner English language learners. It also offers the discussion of the general learning strategies and the impact on language achievement. Additionally, it discusses the implications of strategy instruction in language learning, and the differences found in high and low strategy users and high and low language achievers.

Chapter 6 delineates the major conclusions of the thesis; a summary of the main findings, the contribution of the study, and the limitations of the study are addressed. Later, the pedagogical implications and suggestions for further research are explained.



## **Chapter 2: Literature Review**

### **2.1 Overview**

This chapter provides an overview of three main meaningful aspects of this research. Learning strategies defined in cognitive theory and Language learning theory will be issued, additionally, their categorization and empirical research. Later, a contrastive view between concepts of strategies in both areas is addressed. The second aspect of strategies will review the development of strategies and the strategy repertoire along with factors that influence the choice of strategies, and the transfer to different learning contexts. Finally, a review of strategy instruction and its impact on language learners will be observed. It will conclude with empirical research conducted in Mexico.

### **2.2 General Learning Strategies (GLS) and their categorization**

Strategy theory suggests that learning strategies are an important part of the learners' academic development in learning. There are three lines of research in the field of learning strategies. The first one examines the value and the importance of learning strategies and the relationship between success, achievement or performance. The second line of research explores the variety and diversity of factors that affect the choice, the use of learning strategies, and the relationship there is with each of such factors. Moreover, the third line examines the teaching of strategies to learners to help them become more efficient, more effective or successful and better strategy users.

The origin of learning strategies lies in the field of educational psychology, which started to pay attention to the way humans process, organize and store incoming information in memory (Greeno, Collins & Resnick 1996; Van Dijk & Kintsch 1983). The learning strategies term has been used alternatively with the term cognitive strategies, and they are described as mental processes, plans, scripts, routines or procedures for handling incoming information.

While a variety of definitions of the term strategy has been suggested, from the educational psychology's perspective, learning strategies are mental routines or procedures for accomplishing a cognitive goal. They constitute cognitive resources that individuals use in learning to aid in the performance of specific cognitive tasks. Learning strategies are "any thoughts, behaviors, beliefs or emotions that facilitate the acquisition, understanding or later transfer of new knowledge and skills" (Weinstein, Husman, & Dierking, 2000, p. 727). The term strategy is used by Pinzano (2012) to refer to resources that involve processes of planning, control, and direction as well as motivational-affective components such as disposition and motivation. This definition is close to

that of Mayer (1988) who argues that strategies are thought processes and behaviors used by the learner to facilitate the acquisition, which have influence in how the learner processes information. Wenden (1987a, p.6) defines strategies as “language learning behaviors learners actually engage in to learn and regulate the learning of a second language.” While Weinstein et al., Mayer and Wenden’s definition see behavior as strategies, complications arise in whether a behavior is a strategy or not. Cohen (1998) explains that when a learner’s behavior is unconscious, then the behavior would be a process and not a strategy. Similarly, Ellis (1994) points out that when behaviors have become so mechanical for a learner to use it unconsciously, then it has lost its significance as a strategy. Then, if behaviors are consciously selected to aid learning, it can be said that they are strategies.

According to a definition provided by Paris et al. (1991, p. 611), rather than “processes,” strategies are “actions selected deliberately to achieve particular goals.” Differently from resources, processes, actions, or behaviors, Alley and Deshler (1979) state that strategies are principles or rules that will facilitate the acquisition, manipulation, integration, storage, and retrieval of information across situations and settings. Alley and Deshler suggest that this manipulation of the information was intentional, which concurs with Paris’ et al. view of “deliberately selected.” There appears to be some agreement with Alexander, Graham, and Harris (1998) who claimed that strategies usually require that individuals think about the strategy they are using, therefore conscious and deliberate. This claim supports Cohen’s perception that strategies are consciously selected (1998). Thus, the learner decides when to use a strategy based on his or her belief that it will be effective for performing the task to reach a goal. Then, strategies are considered conscious processes, actions, procedures, or behaviors, which learners intentionally use to acquire, store and retrieve information.

It is important to state that a strategy requires having certain characteristics to be a strategy. Weinstein and Palmer (2002) state that the three top features of learning strategies are they are goal oriented, invoked, and effortful, which means that the learner is consciously involved in the choice for a learning strategy. Dörnyei (2005) mentions that these features are characteristics of motivation. Although there might be differences in opinion in these two views, there appears to be a degree of appropriateness in Weinstein and Palmer’s features of strategies. Learners choose strategies oriented to fulfill a goal in mind. Thus, the learner chooses (invokes) strategies from their repertoire of strategies that help him or her perform the tasks and reach their desired goal. Finally, the use of a strategy requires that learners invest effort in executing the activity, which makes them effortful. In this sense, motivation (further discussed in this chapter) plays an essential role in selecting strategies since there should be an engine that sparks the desire to use the strategy.

Another feature of learning strategies is that they have to be flexible in different tasks and that they can be transferred to new situations (Brown 1994). This flexibility makes a learning strategy potentially useful in a number of learning contexts. Unfortunately, although a significant and growing body of literature has investigated general learning strategies, this term remains poorly defined. There are relatively few studies addressing General Learning Strategies (GLS), that is, strategies that can be observed in two, or more, different contexts. Previous studies have not dealt with identifying differences between General Learning Strategies and context-specific learning strategies. However, Pressley and Woloshyn (1995) mention that general learning strategies are the strategies that can be applied across many different disciplines; in contrast, they consider that specific strategies are oriented towards a particular task. On the same line, Weinstein, Goetz, and Alexander (1988, p.327) suggest that GLS are independent of subject matter domains, whereas specific strategies are within the context of subject matter domains. Then, it can be inferred that when a strategy can be used in different contexts, it becomes a general learning strategy; a procedure that can be used for learning in general.

Very commonly, GLS are seen as study skills; for instance, taking notes, writing summaries, reviewing and revising materials, or as metacognitive strategies such as organizing, planning, monitoring, evaluating, and managing learning. The use of these strategies follows a sequential order. A learner goes through the process accomplishing any task. In this procedure, learners move from one side of the continuum to the other; for instance, planning, monitoring, then planning again, managing, organizing.

Pressley and Woloshyn (1995) identified general learning strategies that can be applied to many different disciplines and situations. They identified strategies such as analyzing and solving problems; study strategies for memorizing a series of events or a timeline for a test; writing strategies such as planning, drafting, reviewing and revising; reading strategies such as self-questioning, constructing mental representational images, activating prior knowledge, rehearsing difficult-to-understand sections of texts, predicting or summarizing a text. Such strategies seem to be independent of the subject matter (Weinstein et al. 1988). For example, self-questioning is a strategy that can be used in reading geography, history, biology or literature passages, or making notes is a strategy that a learner uses to recall information in learning mathematics, biology, music or languages; thus, they can be called a general learning strategy. Riding and Rayner (2002) suggest that learners select learning procedures over others when they perceive that a strategy is not appropriate to the way they learn. Thus, strategies will vary depending on the task.

Although extensive research conducted in the area of learning strategies were independent of subject matter domains, studies failed to address strategies as General Learning Strategies; nonetheless, they have been categorized in different ways.

It is difficult to have a consensual and exhaustive classification of strategies because classifications have been seen from varied and different perspectives and approaches. Strategies have been classified based on various aspects; for instance, how general or specific they are; or the domain of knowledge in which they are applied to, or even their goal.

Weinstein and Mayer (1986) differentiated between strategies that operate directly on information and classified learning strategies in five categories from a cognitive perspective and according to their function. Rehearsal strategies are activities that learners do for identifying and repeating important amounts of the material. Memorizing could be the most representative strategy of rehearsal strategies. However, loud reading, listing concepts, putting special marks or keynotes, underlining or highlighting, using special techniques as mnemonics, and taking personal notes can be some examples of rehearsal strategies. Elaboration strategies help learners go further than the information received and they extend content with additional information provided by the learner's prior knowledge; for instance, paraphrasing, making summaries, using analogies or metaphors, making comparisons, creating questions, or forming mental images can exemplify this type of strategies. Organization strategies help the learner review and structure the material seen. In these strategies, the learner finds the existing structure of the content, and if they do not find it useful, they produce an alternative structure; outlining, creating tables, classifying information, regrouping, creating concept or mind maps, or making lists are some examples of organization strategies. Rehearsal, elaboration and organization strategies operate directly on the information to be learned to aid acquisition and organization of the information. Moreover, comprehension strategies or metacognitive strategies involve the learner in monitoring their process of learning; setting learning goals, evaluating if goals were reached, modifying strategies for reaching their goal; evaluating their performance and improving their ways of learning. Some examples of metacognitive strategies are self-critique, taking responsibility, personal reflection, monitoring, and changing study habits are some. Affective strategies or motivational strategies help the learner in creating internal and external environments for learning for them to feel better; for instance, paying attention, controlling anxiety, managing time efficiently, monitoring internal motivation. Comprehension and affective strategies provide metacognitive and affective support for learning. Weinstein and Mayer (1986) delineated learning strategies from a cognitive approach that acknowledged strategies and methods available to learners to assist them in the selection, acquisition, construction, and integration of knowledge.

Similarly, Pozo (1990) classified strategies according to four cognitive processes and goals pursued: recirculation, elaboration, organization and recovery strategies. Recirculation strategies help the learner review information such as repeating, underlining, or copying. Elaboration strategies assist the learner to relate new information with old information such as imagery, paraphrasing, or using keywords. Organization strategies allow the learner to organize information

to be learned, to discover and to construct meaning to understand information. Strategies such as categorizing, creating semantic and conceptual maps fall into elaboration strategies. Also, Recovery strategies allow the learner to optimize the search for information stored in memory. Pozo's categorization fails to provide a complete scenery that embodies learning strategies in two primary aspects: metacognitive, and affective or motivational aspects of learning strategies. A significant number of strategies that play an essential role in choosing and regulating strategies are excluded by leaving these two aspects aside.

McKeachie, Pintrich, and Lin (1985) classified strategies in cognitive, metacognitive, and resource management strategies. The cognitive component focuses on the methods by which a learner actively processes information, encodes, and structures this information in memory. Cognitive strategies include rehearsal, elaboration, and organization strategies. The metacognitive aspect embodies the way learners plan their strategies for learning, how they monitor their learning, and how they self-regulate their learning. Metacognitive strategies include planning, monitoring and regulating strategies. The resource management component concerns the quality and quantity of the task involvement to obtain good results. Resource management strategies help the learner manage the environment and the available resources. Probably, McKeachie, Pintrich and Lin's (1985) classification is the one that had a greater influence on language learning.

Purpura (1999) categorized strategies based on an information-processing theory approach by dividing strategies into cognitive strategies and metacognitive strategies. Information processing theory explains how learning occurs, and how humans learn and remember (Slate & Charlesworth, 1988). For Purpura, cognitive strategies are used to understand and use information, and metacognitive strategies are the strategies that control cognitive strategies. Phakiti (2006, p. 56) claims that "cognitive and metacognitive strategies have been regarded as closely related postulating that metacognitive strategies have a direct impact on cognitive strategies." It is important to bear in mind that metacognitive strategies help learners become aware of how they can learn, how they use other strategies, and how they acquire new information by using strategies, therefore, how they can become independent thinkers.

Existing categorizations of the learning strategies mostly include three types of strategies: cognitive, metacognitive and resource management strategies (González & Tourón 1992; McKeachie, Pintrich, Lin & Smith 1986; Pintrich, Smith, Garcia & McKeachie 1991; Weinstein & Mayer 1986). Cognitive strategies are the procedures or actions that a learner uses to learn, code, understand, and recall information (Gonzalez & Touron 1992). The role of cognitive strategies is to aid the learners in understanding information through better interconnections with existing knowledge (McKeachie et al., 1986; Weinstein & Mayer, 1986). Similarly, Rosenshine (1997) sees cognitive strategies as strategies that help the learner develop procedures that enable the learner to

perform complex tasks. Rehearsal, elaboration, and organization of the information strategies fall into cognitive strategies. Research on cognitive strategies has tried to identify specific strategies that are effective for different kinds of tasks.

Metacognitive strategies help the learner manage, plan, control, and evaluate their cognition and learning; they assist the learner in controlling, monitoring and regulating his/her mental processes to reach learning goals (Weinstein & Mayer 1986). According to Kirby, (1984), metacognitive strategies have a high degree of transfer, and they can be used as general learning strategies in different learning contexts. Weinstein and Mayer see metacognitive strategies as comprehension control strategies; consequently, as necessary for the appropriate and effective use of strategies. Greeno et al. (1996) posit that metacognitive strategies are used for monitoring and evaluating the information that is processed; this indicates a high amount of learners' self-regulation behavior. Researchers have stressed the importance of a number of self-regulation strategies in learning (see Zimmerman, 2011). Consequently, the use of metacognitive strategies improves self-regulation by encouraging students to test their understanding (Pace 1985, as cited in Jonassen 1985).

Although resource management strategies do not have a direct relation to cognitive and metacognitive strategies, they have a high relevance to academic success (Hofer, Yu, and Pintrich, 1998) and they help the learner find the optimal learning conditions. Resource management strategies contribute to helping the learner reach goals; they aim at improving material and psychological conditions in which learning takes place. Dansereau (1985) sees resource management strategies as support strategies, and McKeachie et al. (1986) point out that they assist the learner in managing the learning environment and available resources. Resource management comprises the process of developing well-defined goals and scheduling the course to gain the best results in learning, for example, time management, the organization of the environment and effort management.

This section has established that learning strategies are seen as one of the determinants of educational achievement, and that research has repeatedly acknowledged that thoughts, behaviors, attitudes and beliefs contribute significantly to success in learning. Most studies in the field have failed to differentiate general learning strategies from specific learning strategies. Only a few authors refer to strategies as General Learning Strategies (e.g. Pressley & Woloshyn 1995; Weinstein, Goetz, & Alexander 1988). However, it is sensible to believe that there are strategies that learners will carry with them to any different learning contexts, which they face. Different classifications of strategies have been provided by research. Among these classifications, cognitive, metacognitive and resource management strategies have been the most common categories identified. It is the combination of the various types of strategies and at a frequent use that helps the

learner reach success. What is not yet clear is the impact strategies used across disciplines have on each one; that is, how effective General Learning Strategies are in a different learning context.

### **2.2.1 Empirical research conducted on general learning strategies**

Learner success is formally measured by academic performance. Many research findings suggest that the best predictor of academic performance is the use of strategies that seemed to contribute to academic success and the relationship with learning. Research conducted in cognitive psychology has also shown that successful learners have effective ways of processing information. For instance, McKeachie et al. (1985) used the Learning and Study Strategies Inventory, LASSI (Weinstein, Palmer & Schulte 1987) to identify the correlation between learning strategies and academic achievement of 193 first-year college students. They found a significant correlation ( $r=0.38$ ) between the scores on the LASSI scales and learners' academic achievement scores in subsequent semesters. Their findings suggest that the use of learning strategies helped learners in being successful academic learners; however, the evidence for this relationship is indefinite. Findings do not explain the extent to which learning strategies affect learning and which academic areas or subjects were benefited more. Larsen-Freeman (2001) claim that proficiency changes with the use of certain strategies, but not all strategies. This view suggests that not all strategies can be helpful for learners. It is necessary to conduct more longitudinal studies that can allow us to know the consistent effect of strategies and the endurance of strategies in the future.

Similarly, Dona, Lopetegui, Rossi and Neer (2010) conducted research with 364 university learners; they tried to discover the relationship between strategy use and academic averages. Findings showed that learners make more use of support for learning and studying strategies. In contrast, they found cognitive and control of learning strategies less often used. They also identified that learners with higher grades do not necessarily make use of more strategies during learning than learners with lower grades. In this situation, it would be feasible to believe that the number of strategies used might not play a significant role; effectiveness of strategies might rest on the frequency, types of strategies used differently, and how these strategies are used. Research has also reported that more successful or more proficient learners make use of different learning strategies than less proficient learners do. Much of this difference in strategy use between more and less proficient learners has to do with the way learners use and perceive strategies and the effective value they notice. Fan (2003) identified that when learners perceive that a strategy is useful, learners use it more often; consequently, when learners perceive the strategy less useful, they use it less often. In turn, the perception of usefulness is entirely related to the learning goal when using the strategy.

In a similar vein to Dona et al. (2010), Valle, Gonzalez, Nuñez, Rodríguez and Piñeiro (2001) conducted research with 614 university learners; they aimed at identifying the relationship between academic goals and the use of learning and study strategies through the LASSI (Weinstein et al. 1986). They discovered that learning goals are closer related to learning strategies than to performance goals. Their findings suggest that learners who make use of more learning strategies have less difficulty achieving learning goals. These results support the definition of learning strategies which states that learning strategies are goal oriented (Cohen 2003) and strategies are used to reach learning goals (Paris et al. 1991).

Strategy use has an effect on achievement, performance or success; however, other factors have an influence on the use of learning strategies. Sinkavich (1991) investigated a group of 45 college learners and the relationship that exists between their study strategies and their grades achieved in a course. Findings suggested a significant relationship between motivation and learners' course performances ( $r= 0.42$ ). In similar research, Haynes, Hamilton, Boger, and Joyner (1987) found that the low-achieving learners differed significantly from high-achieving peers on cognitive skills, study habits, and motivation. Findings suggested that motivation (further explained) was the most powerful factor that differentiates low-achieving learners from high-achieving learners. Haynes et al. (1987) also concur with findings by Nist, Mealey, Simpson and Krock (1990) who reported that motivation, in addition to anxiety, concentration and self-testing strategies correlated moderately with learners' academic performance.

In a similar vein to Sinkavich (1991), Yip (2007) conducted research on differences between high and low academic achieving University learners in Hong Kong regarding learning and study strategies. Yip gathered data from 180 learners, and findings suggested significant differences between groups. Results indicated that attitude and motivation were higher on high academic achieving learners than on low academic achieving learners. Perhaps the most common characteristic of an effective, proficient, or successful learner is motivation. It plays an essential role in learning and in the choice and use of learning strategies. Ellis (2004) declared that motivation has an effect on learners' perseverance in learning, the behavior they exert, and their actual achievement.

The above research has demonstrated that the use of learning strategies has a strong impact on academic performance; and factors such as motivation, anxiety, and perception of strategy usefulness play a major role in the choice of such learning strategies. However, to be successful in a learning situation, learners need to have both the 'will' and the 'skill' for learning (Pintrich & De Groot 1990). As with GLS, language learning strategies (LLS) developed a line of investigation among the academic community. The following section describes the interpretation of strategies in language learning.

### 2.3 Language Learning Strategies (LLS) and their categorization

In language learning, there have been different definitions for strategies. It is important to recall that for the purpose of this study, General Learning Strategies are the strategies that learners use in different educational contexts whereas language learning strategies are the strategies that learners use when learning a language. In this sense, the strategies that learners use in learning a language represent a particular learning context.

Early definitions described language learning strategies (LLS) as techniques that help the learner acquire knowledge in language learning (Rubin 1975). Later, Rubin (1987) also described strategies as operations, or routines that learners choose in order to retrieve information easily, to store it and to be able to use it for later. McDonough (1999 p. 3) in his definition included the notion of conscious thinking when he defined learning strategies as “articulated plans for meeting particular types of problems” in language learning. In this regard, articulating plans implies a careful thought and orchestration of steps to follow. McDonough’s definition is closer related to the early definition of strategy (see Chapter 1) which suggests a careful plan of action and which comes from a military connotation. In a more elaborate definition, Cohen (1998, p. 4) described LLS as “processes that a learner chooses to enhance learning a language through the storage, retention, recall and application of information about that language.” Cohen’s definition represents the primary purposes for using a strategy; however, it fails to include that strategies are conscious actions and behaviors and not only processes.

Despite the high number of definitions of strategies provided by researchers in the field, there is a conflict and a lack of consensus in the term that led researchers to state that the definition is unclear (see Cohen 1998; Wenden & Rubin 1987a; Ellis 1994; Macaro 2006). O’Malley et al. (1985, p.22) claim that “there is considerable confusion about definitions of specific strategies.” Similarly, Bialystok (1983, cited in Wenden & Rubin 1987a:7) points out that “there is little consensus in the literature concerning either the definition or the identification of language learning strategies.” This confusion might be due to the wide semantic range of words used to describe strategies, for instance, plans (McDonough 1995; Oxford 1990), operations (Rubin 1987) routines (Rubin 1987), steps (Oxford 1990) procedures, actions or tactics (Oxford 1990). Griffiths (2013, p. 36), in an exhaustive review of previous literature, defines strategies as “activities consciously chosen by learners for the purpose of regulating their language learning.” It can be seen that that all definitions have elements that can accurately describe what strategies are; however, some of them also lack some elements that can make a definition of a strategy complete. For example, most definitions lack that strategies can also be behaviors selected by learners as strategies to help them learn, which leads to another issue in language learning strategies here observed.

Another discussion in regards to learning strategies is the observable or unobservable aspect of the strategy. Chamot (2004, p. 15) states that “Learning strategies are for the most part unobservable, though some may be associated with an observable behavior.” Cohen’s definition concurs with Weinstein and Mayer’s (1986) who argue that learning strategies involve both behaviors and thoughts. Learning strategies are considered observable when they act as behaviors, and unobservable when they are mental activities. However, whether observable or not, a behavior or a thought, it is the degree of consciousness that makes the learning strategy helpful since strategies are goal and purpose-oriented.

Chamot (2004) argued that LLS are conscious actions. Therefore, it is a choice, a decision taken by the learner towards achieving a learning goal. It can be inferred from these definitions that choice implies learners’ awareness of the process selected. However, Griffiths (2013) suggests that deliberate might be a more useful distinction than conscious or subconscious when referring to LLS. Whether deliberately or consciously chosen, the learners’ intention in the process of selecting and using a strategy is an essential aspect of the strategy selected. Correspondingly, Cohen (1998, p. 4) argues that “the element of consciousness is what distinguishes strategies from those processes that are not strategic,” and he goes on explaining that strategic learners must be partially conscious of the use of the strategies. Furthermore, Nisbet and Shucksmith (1986) add that strategies are always purposeful and they are goal oriented. This view supports Cohen’s and Chamot’s perception; in contrast to Chamot’s (2004) view, Nisbet and Shucksmith (1986) state that strategies might not always be performed at a conscious or deliberate level. That is, strategies can be used unconsciously due to mechanical processes that learners perform without noticing; mental processes that occur without learners’ awareness of the strategies used; for example, creating mental images, or relating new information to old information. Similarly, Macaro (2006) suggests that strategies can be represented in mental activities. However, for a learning strategy to be used effectively, it is necessary that the learners be conscious about strategies in order for them to be able to identify, monitor, evaluate and modify the strategy for better results and future transfer to new situations.

A very accepted definition of learning strategies in language learning is provided by Oxford (1990, p. 8). She defined LLS as “specific actions, behaviors, steps or techniques taken by the learner to make learning easier, faster, more enjoyable, more self-directed, more effective and more transferable to new situations.” Oxford sees such conscious actions or behaviors towards the achievement of an objective. Concurrently with Oxford (1990) and Rubin (1987), Wenden (1995) considered strategies as language learning behaviors. When these behaviors become conscious, they will probably work in a similar way as those strategies that are deliberately selected; for instance, being persistent, or responsible. Consequently, learners acquire, maintain, and change these behaviors during their learning experience.

From reading through the definitions proposed by researchers in the area of learning strategies, most definitions concur that a strategy is a conscious, purposeful and goal oriented action or behavior. Then, it would be appropriate to suggest that learning strategies are individual mental or physical activities, or behaviors, performed in a conscious and intentional way to pursue a goal; to learn, retain or comprehend either new information or to retrieve, recall, practice or use old information. Thus, every single activity or behavior used regarding language learning could be considered a strategy as long as it is consciously, purposefully or intentionally performed in learning. Accordingly, choosing to sit in the front row, arriving early, taking notes, keeping silent in order to listen, creating mental images or even deciding to use a pen or a pencil might perfectly fit into the description of a strategy due to the degree of consciousness and purpose involved in the action or behavior. For example, the learning strategy of using a pencil because it would be easier to erase whenever something was incorrect could be a strategy used with a goal (having the correct information). It is important to note that LS are used in any learning context, learners make use of the different, and varied LS they have in their strategy repertoire to better handle, manage or use not only new but also old information.

Language learning strategies have also been widely classified since early stages of research (Rubin 1981; Oxford 1990; Bialystok 1990; Stern 1992). Rubin (1981) provided a broad categorization of strategies according to how they help the learner learn: directly or indirectly. Direct strategies, which contribute directly to learning, were subdivided into six subgroups, clarification/verification, monitoring, memorization, guessing/inductive differencing, deductive reasoning, and practice. Indirect strategies contribute indirectly to learning, and they were subdivided into two sub groups: creating opportunities for practice and production tricks.

Oxford (1990), in a similar vein as Rubin (1981), classified strategies in two main groups: Direct and Indirect strategies. She suggests that both major classes of strategies support each other. Oxford subdivided those major strategies into six categories and those in sub-categories. Under Direct Strategies, she classifies memory, cognitive and compensation strategies, and under Indirect Strategies, she enumerates metacognitive, affective and social strategies. Memory strategies help learners remember language; cognitive strategies help learners think about their learning; compensation strategies enable learners to make up for limited knowledge; metacognitive strategies assist learners to manage their own learning; affective strategies help learners manage their feelings, and social strategies allow learners to interact with others.

O'Malley, Chamot, Stewner-Manzanares, Kupper and Russo (1985) provided another important categorization. They divided strategies into three broad categories that are further divided into several categories: cognitive, metacognitive and socio-affective strategies. Cognitive strategies are directly related to the task and how the learner processes incoming linguistic information;

metacognitive strategies include self-awareness and self-management to plan or direct, monitor, evaluate or correct what the learner does in language learning. Socio-affective strategies have a close relationship with social-mediating activity and interacting with others; Brown (2007) states that the main socio-affective strategies comprise question for clarification and cooperation strategies. In a more practical way, and perhaps more specifically related to language learning, Cohen, Oxford and Chi (2002) classified LLS according to the skills learners use in order to attain better results in listening, reading, writing, and speaking. More recently, Cohen and Weaver (2006) categorized strategies according to the purpose involved in their use in two broad categories: learning strategies which help the learner identify the material that needs to be learned; and language use strategies which help the learner use the material learned at their current mastery level.

Researchers developed classifications of strategies according to their research findings by applying different methods of data collection (see Stern 1992; Rubin 1987; Bialystok 1981). The exact amount of strategies available and how these strategies should be classified still remain open for discussion. Most classifications of learning strategies include similar aspects, and each one was developed derived from a previous one. Nonetheless, there is insufficient research on classifications of strategies based on the purpose for using strategies. Learners use strategies differently according to the intended purpose for using the strategy. If we take into account previous definitions of learning strategies, strategies are purpose oriented, and they mainly address effort to four different purposes: understanding, retaining, retrieving and using information. Then, it would be reasonable to classify strategies based on the learners' purpose for using the strategy. This would allow a better direction for strategy instruction.

The diversity of categorizations of strategies has led researchers to try to identify the types of strategies that learners use more frequently and the type of strategies that have more impact on language learning success or achievement. However, most classifications do not explain an accurate differentiation of strategies at a single level. That is, a single strategy may reflect different goals depending on the moment in which it is deployed. Thus, a strategy such as sitting in the front row in order to pay attention (meta-cognitive strategy) or to feel more comfortable (affective strategy) could be categorized into two different categories, but it is the learner who has the answer. Consequently, knowing why students do what they do in learning should be researched more deeply.

For Macaro (2006) strategies have certain characteristics. Strategies have a clear goal or intention, a mental action, and different levels of correspondence. They are situation-specific and transferable to other situations at the various levels of automaticity in different learners. He adds that strategies have a formula that may not be deployable by all learners, and they require

appropriate levels of language knowledge to be deployed. Finally, he claims that clusters of strategies interact with cognitive processes. Although he describes features of learning strategies accurately, he does not state that all strategies need to have these features in order for a procedure, an action, or a thought to be a strategy. For example, the language learning strategy of translation does not have the potential to be used in a different context other than language learning.

Meanwhile, Griffiths (2008), in a less sophisticated way, suggests six essential common features of language learning strategies. According to Griffiths, LLS are active, conscious, chosen, purposeful, regulatory, and learning focused. As said by Oxford (1990), strategies allow learners to become more self-directed; they expand the role of the teacher; they involve many aspects of the learner, not just the cognitive; they can be taught, and they support learning both directly and indirectly. She adds that strategies are problem oriented, specific actions taken by the learner, not always observable, often conscious, flexible, and influenced by a variety of factors. It is important to note that not all strategies have all features previously described and features might be different on the type of strategies.

Among the main features of learning strategies above described and definitions previously provided by literature, a list of features of learning strategies emerges. Strategies are conscious and intentional, purposefully chosen to fulfill a learning task or goal, therefore regulated. Strategies work in clusters and hardly ever in isolation. They might be observable or unobservable, transferred to different tasks or learning contexts; consequently taught, and deployed differently according to a variety of factors.

### **2.3.1 Empirical research conducted on language learning strategies.**

Language Learning Strategies (LLS) have also been widely researched in the field of second and foreign language education. A wide amount of studies has contributed to our understanding of the importance that LLS have in the learning and acquisition of a second or foreign language. Research has indicated significant linkages between strategy use and language learning success in both ESL and EFL. For instance, Griffiths (2003) conducted research in New Zealand with 348 learners of different ages and from 21 different countries. She found that there is a significant difference in the frequency of strategy use between more proficient language learners and less proficient language learners; furthermore, learners that are more proficient use a wider repertoire of strategies. In her research, in the longitudinal section of the study, she found that those students who made the most progress were the ones who most increased the frequency of their language learning strategy use. However, she does not explore the source of this increase. Alike in much research, successful learners are experts at using strategies; however, literature has failed to explain the source of the strategies that successful learners use and the characteristics that successful, or effective learners have in contexts other than language learning. Perhaps, if learners are successful

in their general learning context, they will possibly be successful in language learning. In contrast, if learners are deficient in general learning contexts, they could find language learning more difficult. According to Rubin, good language learners take responsibility for their learning and use metacognition; they organize and plan information about language; they are creative, and they experiment with grammar and words. Successful language learners look for opportunities for practice in using the language; they use compensation strategies by continuing to talk or listen without understanding every word and learn to make intelligent guesses.

Similarly, to Griffiths (2003), Gan, Humphreys, and Hamp-Lyons (2004) tried to identify the differences in strategy use between successful and less successful EFL learners in China. They found that successful learners use more and more sophisticated strategies than less successful learners. Their findings suggest that successful language learners make use of a variety of strategies that make them successful. Their findings concur with Rubin's (1975) characteristics of "good language learners. Chamot, Barnhardt, El-Dinnary and Rubbins (1999, p. 166) point out that "Differences between more effective learners and less effective learners were found in the number and range of strategies used." In the same way, Wong and Nunan (2011) also conducted research with 110 effective and ineffective undergraduate language learners in Hong Kong. They tried to discover learners' learning styles and preference for learning strategies. Their findings indicated that more effective learners have a preference for strategies that help them in developing their communication skills. In contrast, less effective learners seemed to have an apparent dependence on the teacher and the textbook for the use of strategies. Wong and Nunan's findings suggest that learners that are more effective have reached a higher degree of language knowledge. Consequently, their learning goals might be different from less successful learners. They exert more effort in areas they need or want to improve. O'Malley et al. (1985) discovered that students that are more successful are probably able to exercise greater metacognitive control over their learning. In the same vein of research, Hitt and Veliz (2014) found that proficient learners use metacognitive and cognitive strategies more often than less proficient learners do. Hitt and Veliz (2014) conducted research with proficient learners of the language at two universities. Hitt and Veliz aimed at discovering the language learning strategies they used in the English pedagogy program. They used questionnaires, interviews, think-aloud protocols, diaries and dialogue journals.

Findings on identifying strategies very often have demonstrated that learners make use of cognitive and metacognitive strategies more often, not only with proficient learners but also with less proficient ones. However, a variable that influences the choice of certain strategies is, indeed, the skill that learners need or want to develop; or the skill that the task requires learners to perform. For instance, learners who need to develop oral skills might prefer communicative strategies while learners who need to learn vocabulary might opt for memory strategies. In a skill-oriented study on

learning strategies, Takeuchi (2003) conducted research with ESL college learners on the effect that task difficulty had in reading comprehension and the use of strategies. In the study, learners had to complete an easy reading task and a difficult reading task. They found that there was little difference in strategy use between less and more proficient readers. However, they also found that less proficient readers used more strategies when they faced the difficult reading, whereas high proficient readers used fewer strategies. The types of strategies used to approach the same task might explain the observed correlation between more proficient and less use of strategies.

Vandergrift (2003a) conducted research on learning strategies that learners of the seventh grade of French used in listening comprehension. Learners were encouraged to think aloud while they were listening to French texts. Results indicated that skilled listeners use more metacognitive strategies such as comprehension monitoring and asking for clarification. Additionally, they discovered that less skilled learners use more translation strategies while listening. Takeuchi (2003) and Vandergrift (2003a) concluded that less effective readers or listeners make use of fewer and different strategies than more proficient learners. Their findings contribute to the great body of research, which has demonstrated that proficient learners have a wider repertoire of learning strategies. It is important to consider that “Low reported strategy use is not always a sign of ineffective learning; also reportedly high-frequency use of strategies does not guarantee that the learning is successful” (Yamamori, Isoda, Hiromori & Oxford, 2003, p. 384).

Strategy use has been linked to different factors that influence the frequency of use; for instance, age. Peacock and Ho (2003) conducted research with a sample of 1,006 undergraduate learners and found that older learners used more metacognitive, memory, affective, and social strategies, as described by Oxford (1990), than younger learners did. In the same way, Magogwe and Oliver (2007) conducted a study with 480 learners enrolled in primary, secondary, and tertiary public educational institutions. They discovered that students in different age groups prefer strategies of different complexity. They discovered that while primary-level students preferred social strategies, secondary- and tertiary-level students preferred metacognitive strategies. Purdue and Oliver (1999) investigated the correlation between affective factors and the use of learning strategies on bilingual primary children. Results indicated that learners prefer cognitive strategies over social strategies. A contributing factor to strategy use is the learners’ perception of the usefulness of the strategy; when learners perceive that the strategy is useful, they use it more often. Graham (2004) researched on the attitudes that secondary English learners had towards learning French; he discovered that less successful learners did not know about the potential that learning strategies have in improving their language performance.

Research has shown that many different types of learners use various types of strategies and at a different frequency. Research has also found that several factors have an influence on the type, the

frequency of use and a number of learning strategies that learners use in different learning contexts; nonetheless, findings are not conclusive of how and when learners use learning strategies. Differences might be attributed to the specificity of the task, the information to be learned, and the individual factors that have an influence on the choice of learning strategies.

## **2.4 General Learning Strategies and Language Learning Strategies**

After having described general learning strategies and language learning strategies, it would be sensible to discuss whether we can make a differentiation between terms. General Learning Strategies and Language Learning Strategies terms used in this study are, in essence, the same.

General learning and language learning represent two learning contexts. In general learning the learner faces a wide variety of incoming pieces of information from different disciplines or subjects, for example, math, history, geography, and they will have to deal with different sorts of tasks in each and every subject. However, some subjects represent very specific learning settings. Language learning, in turn, represents a more specific learning context in which learners are required to use strategies to deal with language. Many procedures used in language learning do not differ from those used in general learning contexts.

Definitions of the term, in both language learning and general learning contexts, emphasize on the conscious or deliberate element of the action or behavior taken in order to pursue a learning goal. According to Pressley and Woloshyn (1995), GLS are not limited to one class or field. In such a way, the range of learning strategies might go from mere repetition to managing internal motivation. Strategies such as paraphrasing information, summarizing, applying analogies, generating metaphors, making comparisons, writing questions, loud-reading, listing concepts, highlighting, among others, are just some examples of strategies that can be used across disciplines. In this sense, reading aloud in studying for an exam in math might also be useful in studying for an exam in English.

For educational psychology, strategies are behaviors, mental processes, actions, techniques or plans, scripts, procedures, principles or rules. Concurrently, in the field of language learning, strategies are plans, operations, routines, processes, behaviors, steps, procedures, actions, tactics or techniques. Such a broad semantic array of words used in descriptions led to researchers to conclude that the term has not been accurately defined. Additionally, a wide variety of purposes has also been identified in both contexts. Mainly, strategies are used to store, retrieve, understand, learn, evaluate, manipulate, integrate and code information. They are also used to develop procedures or plans; to reach, achieve, and accomplish goals, and to approach, to complete and to monitor tasks. Moreover, they are used to control or facilitate acquisition; they are deliberate and intentional actions or behaviors carried out by the learner, and they are purposeful in improving

learning. Both are cognitive procedures that aid in the performance of specific cognitive tasks, and both are concerned with individual tasks and require the material to be manipulated or transformed to enhance understanding. Furthermore, they need a degree of metacognition to aid in the planning for the learning, monitoring of understanding, and evaluation of their learning.

What GLS and LLS might differ in is the degree of specificity of the activity involved to handle the material or information to be learned, acquired, retrieved or applied. LLS are used to meet particular types of problems representative of the language learning context. The specificity of the context requires that learners deploy specific learning strategies that might be useful mostly for the environment in which they are deployed. Research has shown that language learning strategies such as cover strategies and compensation strategies (Oxford 1990) are frequently used among language learners; possibly, because of the specificity, it represents. Oxford states that learners use compensation strategies to face temporary breakdowns in speaking and writing and to fill in the gap they have in the target language knowledge. She describes cover strategies as behaviors that learners use to give the impression that they can handle their learning when they cannot.

Although not necessarily unique to language learning, compensation strategies such as coining words, switching to mother tongue, using mime or gestures, using circumlocution, adjusting or approximating the message (Oxford 1990) represent strategies that would purposely be used in language learning. Strategies such as circumlocution can be found in native speakers behaviors. For instance, when speakers are not able to make themselves understood, or when they are not able to recall a specific word, they need to turn to explanations of the word they cannot remember; or very often speakers use signals to express meaning without using words.

Specific learning strategies should be addressed to a specific problematic area that needs to be approached. Vocabulary learning strategies, pronunciation strategies, or some speaking strategies might represent types of material that learners would have to deal with in language learning, and that may differ from other learning contexts. Some general strategies are used to help learners improve language learning. Skill related strategies such as the ones used in reading, writing, listening are representative of strategies that learners transfer to different learning contexts. For instance, reading a paragraph in history, biology, math or language learning might require a learner to make use of learning strategies to help them enhance what they are trying to pursue when reading. Nonetheless, it is important to note that the level of language has been the major concern when it comes to the transfer of strategies from general learning to language learning. It has been found that when the learner is faced with language tasks, they require a certain level of language knowledge (Wolfersberger 2003; Grabe 2001; Yamashimita 2002) in order for a strategy to work the same as in general learning. However, this does not prevent learners from using the strategy they know to reach their goal.

## 2.5 Learner's differences in language strategy choice

Despite a large amount of research conducted to identify the variables that affect the choice of learning strategies, it is still not clear on what basis learners choose certain strategies and why they have a preference over others (Gu 2005). Strategy use interacts with many variables that have a relation to the learners' choice (Chamot 2004; Cohen 2003; Dornyei 2005; Ellis 2004; Fillmore, Kempler & Wang 2014; Griffiths 2003; Hong-Nam & Leavell 2007; Oxford 2003; Rahimi, Riazi & Saif 2008;). Rahimi et al. (2008) propose to take into consideration all the variables to get a clearer idea of the learner's strategy use. However, "all" might sound unrealistic due to the significant amount of variables involved and the combination of those variables, simply because every individual is unique, from the way they look to the way they behave, speak, and act, they all do it differently. Horwitz (1999, p. 558) posits that "language learners are individuals approaching language learning in their own unique way." Consequently, they all have their particular methods for learning. This unique way might be the most important aspect to consider in strategy instruction, which intends to provide learners with instruments to reach success without regard to the particular characteristics of every individual. What has not been fully explored is the extent to which strategy instruction should take into account these unique and individual differences for instruction to be successful.

Learning strategies embody behaviors and actions based on learner's personalities, learning styles, motivation, goals, etc. The choice for learning strategies will be influenced, either consciously or unconsciously, by several variables including internal and external factors. Numerous aspects that affect strategy choice are commonly debated in the literature, and a challenge in the field of strategy teaching and learning is the obvious difference in language learners. Learners use a wide variety of strategies at different stages of the learning process; however, the number of combinations of the variables that can be accounted for strategy choice could be endless. Parks and Raymond (2004, p. 375) claim that success at language learning is primarily seen as "a matter of individual initiative, notably regarding strategy use and personal motivation." Tseng, Dörnyei, and Schmitt (2006) argue that learning strategies can only be defined concerning particular learners' intentions and creative efforts; in other words, every learner is different and has varying motivation, learning goals, attitudes, and interests.

Aspects such as language proficiency, ethnicity, age, gender, learning style, the motivation for studying or beliefs, among others, significantly influence learners' choice for a strategy. For instance, research has demonstrated that proficient learners and more motivated learners (Anderson 2005; Park 2005; Wharton 2000) use more strategies and more often. Peacock and Ho (2003) discovered that low strategy use was correlated to low motivation. It has also been found that proficient learners make use of cognitive and metacognitive strategies more often whereas less

proficient learners use more social and affective strategies. Griffiths (2003) found a significant difference in strategy use between learners in advanced levels and elementary levels. Oxford, Park-Oh, Ito and Sumrall (1993a) found that females use more strategies than males whereas Wharton (2000) found that men use more strategies than women. Similar findings have been revealed in studies conducted to determine the relationship between age and use of learning strategies. Findings have shown that adult learners make use of metacognitive and cognitive strategies more often than children do while children opt for social strategies. Peacock and Ho (2003) also discovered that older learners used different types of strategies than younger learners. Studies conducted in different parts of the world also suggest that the choice of strategies varies across cultures, for instance, Chinese learners use more compensation strategies and Latinos more metacognitive strategies; Egyptians use more often memory and metacognitive strategies and Koreans not only metacognitive but also compensation and memory strategies as well (Park 2005).

Many individual internal and external variables at the exact moment on which a strategy is chosen might affect the strategy selection; thus, it cannot be generalized that the use of strategies have the same effect, either good or bad, in every learner and every time the strategy is used. Individual differences and conditions for learning a language interact with each other in a complicated way (Oxford 1993); however, research concerning individual differences has failed to produce consistent research results (Lalonde & Gardner 1984; Skehan 1988).

### **2.5.1 Motivation and learning strategies**

Motivation has been widely acknowledged as a variable of considerable importance not only in the L2 learning process but also in learning in general. It is one of the most relevant factors to decide the type of strategies learners might use since it provides the reason for doing something or acting in a certain way. Ellis (1994) suggests that motivation affects the behavior learners exert, and it has a crucial role in perseverance. Similarly, Dörnyei (2005) suggests that without the right motivation, not even those skillful learners would fulfill their long-term learning goals, and persistence will likely be diminished in not motivated learners. Additionally, Pintrich and Groot (1990) suggest that unmotivated learners might not apply deeper processing strategies to improve learning. Dörnyei (2005, p. 1) defines motivation as an “abstract, hypothetical concept that we use to explain why people think and behave as they do.” According to Dörnyei (2005), motivation has three different phases. He states that in the initial phase motivation needs to be generated which leads to the choice of the goal that the learner pursues. On the second stage, the motivation that was generated on the first phase needs to be maintained and protected. On the last phase, there is a retrospective evaluation of the outcomes. This evaluation will point to the actions the learner is going to take in the future; then, motivation is the constant driving energy (Dörnyei 2005).

Motivation does not remain stable; it fluctuates all along the learning process, and it can be increased or decreased, or even lost, in the process of learning.

Language classes are very often compulsory for students in many contexts; thus, learners' motivation to learn a language might not urge learners to deploy learning strategies. Hardly ever will learners in mandatory classes be sufficiently motivated to make use of their own time in learning something they do not want or need to learn. Although Balla, Stokes, and Stafford (1991) showed that students had little incentive to undertake English learning outside their course requirements, learners in compulsory classes have little inclination to pursue their English learning beyond the classroom. Thus, the number of learning strategies an unmotivated learner may deploy differs from that of a learner who is intrinsically motivated. A motivated learner might have a desire and an attitude to adopt and adapt new procedures for his or her learning.

The motivation can also influence the preference that learners have for language tasks and the strategies they choose to do the task. Motivation can be high if the task is enjoyable, and it can be low if the task is not. The range of learning strategies deployed by motivational factors can substantially increase or decrease based on the preference learners for the language task. Oxford and Nyikos (1989) discovered that motivation was a significant factor that influenced strategy use in university learners. Similarly, Oxford, Park-Oh, Ito and Sumrall (1993) found that motivation is entirely correlated to strategy use. Motivation helps determine the type and the frequency with which learners use strategies.

The relationship there is between motivation and learning strategies is linear. A motivated learner is more likely to engage in learning, to invest more effort and more time in learning; consequently, a higher number of strategies will be deployed. In contrast, an unmotivated learner will be less engaged in learning, therefore, less interest in reaching goals and less use of strategies.

### **2.5.2 Learner autonomy and learning strategies**

The use of learning strategies has been linked to learners' motivation, and it is a concept that has been difficult to separate from other factors that influence language learning, for instance, learner autonomy (Garcia & Pintrich, 1996; Brown, 2001; Dörnyei, 2002). Motivation plays a significant role in the development of learners' autonomy; and in many cases, motivation precedes autonomy. In other words, motivation can lead the learner to take different approaches to learning and learners' autonomy is one of them. For example, Spratt, Humphreys, and Chan (2002) conducted research with 508 university learners in Hong Kong to evaluate the relationship between autonomy and motivation; their findings indicated that motivation is a precondition of autonomy. That is, learners need to be motivated to acquire or conduct an independent attitude.

Holec (1981, p. 3) defines learner autonomy as the “ability to take charge of one’s learning.” However, this ability does not represent a method in its own right (Little 1991). Encouraged by motivation, learners start being autonomous when they take a responsible attitude towards their learning (Little 1991), and eventually, they will develop strategies and skills that help them deal with learning. Thornbury (2006, p.22) explains that “Autonomy is your capacity to take responsibility for, and control of, your own learning, whether in an institutionalised context, or completely independent of a teacher or institution.”. In other words, being autonomous does not mean that the learner has to work in isolation from the teacher or peers. Autonomy is to start taking a proactive role in learning.

According to Nunan (1995), when learners are autonomous, they use a diversity of skills, have a passion for learning, enjoy their field, take a focused and active approach to learning, and they are willing to continue even if there is a high probability of failure and public disapproval. Similarly, Little (1995) suggested that autonomous learners openly accept the responsibility they have for their learning. They set learning objectives, plan and do learning activities, and monitor and evaluate the effectiveness of their learning. As Smith (2008: p.29) puts it: “learners have the power and right to learn for themselves.” Unfortunately, this power is not frequently displayed in language learning. Learners heavily rely on the class time, and the activities carried out in the classroom by the teacher, even when language learning is their own decision. They consider that what goes on the classroom is enough to learn a foreign language without noticing the importance of their learning autonomy. For language learning to occur, learners need to become proactive in their learning; they need to set their own learning goals, their contents, and progression, and consequently, they will have to select learning strategies to be used during their learning journey (Cotterall, 2000).

Strategy use and learner autonomy have a strong correlation. Learners purposefully and intentionally choose strategies to reach individual learning goals. To deploy learning strategies, learners need to adopt an independent attitude. Oxford (1990) also suggests that among other characteristics, learning strategies promote learner autonomy; however, for a learner to select a learning strategy, he or she might need to deploy an autonomous behavior. Then, whether autonomy triggers learning strategies or learning strategies trigger learner autonomy is something we know very little about.

### **2.5.3 Self-regulation and learning strategies**

Successful language learning involves high levels of motivation, autonomy, effort, concentration and persistence, and it may take several years of study and practice; therefore, for most L2 learners developing the ability to self-regulate learning is often necessary to achieve this

goal. Learners need to be responsible for developing the capacity to take control of their own learning and to recognize that success in learning depends on themselves rather than others. When learners realize what the process of learning involves and develop a responsible behavior towards their own process of learning, they start adopting a self-regulated behavior. Sinclair (2000) explains that for a learner to initiate and regulate their own learning behaviors, it is necessary for the learner to be conscious of their learning process and its outcomes, to manage their learning and to make informed decisions.

Self-regulation research started in educational psychology. Pintrich (2000) defined it as “an active, constructive process whereby learners set goals for their learning and then attempt to monitor, regulate, and control their cognition, motivation, and behavior, guided and constrained by their goals and the contextual features in the environment”. Additionally, Zimmerman (1989, p. 453) claims that self-regulation is “self-generated thoughts, feelings, and actions used to attain goals.”. In other words, an active process that comprises cognitive, motivational and contextual elements through which learners make necessary decisions and execute appropriate strategies during their learning process. Self-regulation has been seen by researchers as an extensive construct which entails different processes that include, among others, autonomy (see Benson, 2011; Cotterall, 2008), motivation (see Dörnyei & Ushioda, 2011), and learning strategies (see Griffiths, 2013; Oxford, 2011a).

Learning strategies are part of the self-regulated learning process. In this process, self-regulated learners use learning strategies for their purposes, direct their own mental processes in the direction of achievement and personal goals. According to Zimmerman and Schunk (2008, p.1) learners who are good self-regulators:

“set better learning goals, implement more effective learning strategies, monitor and assess their goal progress better, establish a more productive environment for learning, seek assistance more often when it is needed, expend effort and persist better, adjust strategies better, and set more effective new goals when the present ones are completed”.

Consequently, self-regulated learners are independent, self-initiated, and they have the ability to use a variety of learning strategies to accomplish specific learning goals and to improve their learning (Kitsantas, Winsler, & Huie, 2008). Being self-regulated is a strategy in its own right. Nonetheless, the degree to which a learner is self-regulated might deploy a higher or lower number of learning strategies because they act more efficiently when encountering academic tasks and make use of more learning strategies than learners who depend on teachers to provide knowledge.

Weinstein (1994) indicates that the use of learning strategies requires a conscious effort and the will and skill to learn to master them. Nonetheless, learners appear to lack the essential strategies necessary for this type of learning; for instance, monitoring and evaluating their own performance

(see Azevedo & Cromley, 2004; Kostons, Van Gog, & Paas, 2010), or keeping their motivation high (see Pintrich, 2004; Zimmerman, 1990); especially in effort, and perseverance when doing school work.

Zimmerman (1989) claims that self-regulation strategies are part of the process and are specific skills that can be taught to learners to put into real world practice. Zimmerman (1989) also explains that self-regulation can be acquired through the interaction of three essential features: self-observation, self-judgment, and self-reaction. That is, monitoring their actions, evaluating their own performance, and taking action to performance outcomes. Researchers have shown that self-regulation is associated with academic performance (Kornell & Metcalfe 2006; Zimmerman & Schunk 2008). Horwitz (1999, p. 558) indicates that “language learners are individuals approaching language learning in their own unique way.” Here, it is then necessary to point out that every learner’s individual variables, including self-regulation, play a significant role in the adoption of the strategies taught in strategy instruction despite the methodology, the strategies taught or the teacher. It is the learners who will decide based on their goals, interests, learning styles, or motivation, among others, whether to adopt what is instructed in strategy sessions or not.

Different models of strategy instruction (see strategy instruction section further in this chapter) should consider that the teaching of learning strategies does not only have to be with teaching a set of proven strategies that learners would benefit from. Rather than that, it should consider training learners to become more autonomous, more self-regulated and more motivated in language learning.

#### **2.5.4 Prior learning experience and learning strategies**

There is evidence that indicates that previous language learning experience has a positive effect on retaking language learning. However, relevant literature has very little to say about the effects of the prior general learning experience in the use of strategies in learning a language. Although not necessarily being successful in their prior learning experience, research has demonstrated that individuals with more previous experience and knowledge of a topic understand and remember more than those with more limited prior knowledge (Schneider & Pressley 1997). Thompson and Zamboanga (2004) suggest that learners’ prior knowledge in specific domains has a positive influence on students’ learning and achievement. That is, learners are more acquainted with the information, tasks and even with strategies; in turn, it has an effect on motivation, anxiety and eventually on achievement.

By the time a learner reaches a university level, the learner has been in contact with learning for, at least, 12 years in general education and six years of language learning (sometimes more). This experience provides the learner with strategies that widens their strategy repertoire. When learners

face tasks or information that they have encountered before, they turn to their repertoire for the strategy that best fits their needs despite the results obtained when using it. Wharton (2000) states that previous language learning experience may be an influential factor in the learners' strategy choices.

Oxford and Nyikos (1989), and Wharton (2000) conducted research regarding the effects of previous language learning experiences; results showed little relationship with learners' use of language learning strategies. Despite their findings, it is sensible to believe that their previous language learning experience provided learners with opportunities to use learning strategies whether they were explicitly taught or not.

Regardless of the amount of their previous language learning experience, very frequently learners start English language lessons anew from the beginning. They are placed on level one of the English program when they enter university English lessons. Their previous language learning experience may help in differentiating those students who are false beginners from absolute or true beginners. Absolute or true beginners have no or very little knowledge of English, and they have to be taught the basic rules and vocabulary to be able to perform in simple communicative situations (Jones 2007). In contrast, false beginners of English will often pick up information quickly as they remember past lessons; they choose strategies that they used to solve tasks.

Previous language learning experience allowed learners to experiment with procedures to learn a language. These strategies are frequently transferred to new language learning contexts. It would be reasonable to believe that such strategies were successful at the moment they were used because they helped learners succeed in obtaining passing grades, which might have been their immediate goal.

### **2.5.5 Learners' beliefs and learning strategies**

Additional to enriching learners' strategy repertoire, prior learning experience shapes learners' beliefs. Learners create expectations about how difficult learning a language might be and how they should approach it. Moreover, they create expectations about how language teaching should be and, of course, they expect that to happen. It is a well-known proposition that language learners have beliefs about their language learning even though they may not always be clear or explicitly expressed (Horwitz 1987). Victori and Lockhart (1995, p. 224) defined learners' beliefs as "general assumptions that students hold about themselves as learners, about factors influencing language learning, and about the nature of language learning and teaching." For Richardson (1996, p. 103), learners' beliefs are "psychologically held understandings, premises or propositions about the world that are felt to be true." In other words, learners' own theories of learning. Language learners have opinions about the nature and the process of the language learning; thus, their choice for

learning strategies depends on the way they perceive their learning experiences and tasks. Horwitz (1999) suggested that teachers should be conscious about learners' beliefs to include better language instruction and the inclusion of learning strategies to improve language education.

Horwitz (1988) discovered that previous language learning experience, along with cultural backgrounds, influence learners' beliefs about language learning. Research has shown that learners' perceptions, beliefs, and attitudes contribute to the learning process and the final achievement (Breen 2001). The relationship between the learners' beliefs about language learning and their choice of learning strategies has been suggested in some studies (e.g. Abraham & Vann 1987; Horwitz 1987, 1988; Chang and Shen 2005; Yang 1999). Hong (2006) suggests that researching the field of learners' beliefs and their relationship with language learning strategies can provide valuable sources of insight into the language learning process.

There is a correlation between beliefs, the use of learning strategies and proficiency; for instance, Wen and Johnson, (1997) found that learners' beliefs were a primary factor in strategy use and language learning achievement. In a similar vein, Abedini, Rahimi, and Zara-ee (2011) found a significant positive correlation between beliefs and language proficiency. Their findings suggested that learners who held more positive and reasonable beliefs had higher level language proficiency. Similarly, Samimy and Lee (1997) conducted research with EFL Chinese learners. They correlated learners' beliefs with proficiency, and they discovered that learners with higher grades had more confidence in their ability to learn foreign languages and were more willing to practice with native speakers.

Research has explained that many factors influence the choice and use of learning strategies. In this section motivation, autonomy, self-regulation, prior learning experience and learners' beliefs have been explained in regards to the selection and use of learning strategies. However, many other important factors have yet to be discussed in this regard. What is still unclear is the extent to which it is possible to set the boundaries of the most influential factors. For example, is a motivated learner always a good strategy user? Or is a good strategy user always motivated? Is a self-regulated learner a motivated learner? Is a motivated learner always self-regulated? Can an autonomous and disciplined female learner learn more successfully than a poorly motivated autonomous male learner? What is true is that all learners have their own repertoire of strategies that they have developed through time and experience and which they will use despite their own individual differences.

## **2.6 Strategy repertoire development**

It is well known that prior experience in learning provides learners with strategies they store in their repertoire for later use. Nevertheless, research has not explained where these strategies come

from, and how learners acquired and stored strategies in their repertoire. Riding and Rayner (2002) posit that learners develop strategies in response to demands of difficult material or the environment which is usually not compatible with their cognitive style. The strategy repertoire that adult language learners have was shaped by their previous learning experience. Based on the learning result, learners can see whether the strategy was or not successful. Then strategies are stored and used in future learning situations. This process can be repeatedly used by the learners and eventually some will become fixated or discarded or adapted. Different sources and many variables influence the adoption and the choice of a strategy. Internal and external variables such as motivation, learners' beliefs, prior learning experience, personality, and goals, have an effect on the choice and adoption of a strategy (see the previous section). Furthermore, Weinstein and Van Mater Stone (1993) explained that metacognition is essential in the development of the strategy repertoire.

Strategies can be acquired from different sources. For instance, direct instruction from more experienced ones such as parents, teachers, and peers. Someone who provides a strategy to perform a task is (or was) a user of the strategy, and possibly with good results. At early stages, children learn a lot from watching parents do things, and many strategies are acquired from this behavior.

Additionally, parents teach their children explicitly how to solve problems or perform tasks. For example, a father tells his daughter how to ride a bike, or a mother tells her son how to wash dishes or fold clothes; such processes are practiced and adopted for later use. Eventually, the child will perform the activity following the procedures their parents taught them. However, this procedure is likely to change during the process; consequently, it is adapted to the individual characteristics of the child, which, in turn, will increase their strategy repertoire.

At early stages of education, teachers teach a high amount of strategies directly or indirectly included in learning activities. In daily school days, teachers give tasks to learners, they explain how a problem should be solved, and the steps of a strategy a learner should follow to get good results expecting learners to complete tasks. Although not following a specific methodology of strategy instruction, teachers are able to teach strategies explicitly. For example, when teachers explain how multiplication, division, or addition work, or how to memorize the multiplication boards they are teaching learners strategies that will help them deal with future similar tasks.

In addition to the direct instruction of strategies, learners learn strategies indirectly not only from the teacher but also from their peers by the process of observing and noticing. Learners watch or listen to approaches for learning processes that help their peers in learning; they try and borrow, or discard, such approaches. Learners also learn strategies by discovering. When learners are required to perform tasks, they experience processes to complete the required task or to reach goals. The learner monitors and assesses these processes, and by trial and error, learners choose the processes

that are more useful, more efficient or the preferred ones that suit their individual differences. These strategies remain and increase the learners' strategy repertoire; nonetheless, the strategies that remain are not necessarily the ones that can lead the learner to success in learning.

Meyer and Muller (1990) suggest that there is a degree of change in learning processes, and strategies change as learners advance in learning. Although learners' approaches to learning are not likely to change, Messick (1996) indicates that strategies will probably change in the learning process. The use of learning strategies changes over time and according to the course and the task requirements. It is reasonable to believe that strategies change just as internal and external variables change during the course; for instance, motivation, attitude toward learning, and even the material, the information received, and the tasks. Learners have the capacity to value whether a strategy is good, or not, based on the results they have; therefore, they adapt strategies for the new situation. Concurrently, Entwistle (1988) posits that senior learners have the capacity to judge which strategies are more suited to the demands of particular tasks. Coertjens, Donche, De Maeyer, Vanthournout, Van Petegem (2013) conducted a longitudinal study with 245 learners in the change of learning strategies throughout higher education. They found that learners in the longitudinal group who persisted in their learning changed over time from undirected and surface-oriented learning to high-quality learning and self-regulation strategies.

Strategies stored in the learners' repertoire do not work in isolation; Oxford (2011a) stated that strategies work in "chains" and Macaro and Wingate (2004) in "clusters"; for instance, listening to songs in the target language. This strategy involves a series of activities or tactics and behaviors that a learner would need to implement in order to have an actual benefit of the strategy. For example, paying close attention, looking for unknown vocabulary, choosing vocabulary to find, guessing the meaning from context, repeating after listening, being tolerant or patient in order to carry out the task. Additionally, strategies seen as chains of activities transform along the process of using it every time the learner approaches a skill or uses a strategy consciously and purposefully. Therefore, strategies should be seen as changeable or mutable procedures to improve learning, to perform tasks or to reach goals.

Different factors that make the development of strategies possible might suggest that learners develop strategies progressively to the extent to which they are exposed to different contexts and situations where the use of learning strategies is required, even in everyday life. This exposure suggests a conscious, intentional and voluntary adoption of strategies to improve their learning processes. Every learner develops a fixed repertoire of strategies, which starts out as basic techniques or activities performed in learning, and sometimes erratic, but they quickly evolve, and after practice, they become much more planned and organized. Learners learn strategies by trial and error during their academic development, strategies that can "fit their level of ability,

background, and sophistication” McKeachie et al. (1986, p. 3). Eventually, learners become more skillful in identifying the strategies that work well on their learning style, and they are also able to identify the strategies that do not function well or do not function at all according to their goals and needs for the language they have at a given moment.

It is a fact that successful, good, or proficient learners use strategies that they have in their learning repertoire. Strategies that they gathered from experiential events direct instruction in previous learning contexts or even transmitted from peers, and adopted and adapted them to their learning context. Through time and after practice, monitoring and evaluation such strategies become more accurate, more productive, more planned and organized to suit better their individual differences (Ellis 2004, Dörnyei 2002).

## **2.7 Strategy transfer**

It has been widely reported that successful learners have a broad range of strategies that help them attain success (Cho & Ahn 2003; Paris & Myers 1981). However, research has failed to explain if such successful learners learned strategies from instruction or if somebody ever explained to them the importance of the use of learning strategies in early stages of language learning. Chi (1988) suggests that advocates for the teaching of strategic knowledge argue that learners are fully capable of displaying a sophisticated use of effective strategies in new situations, including those strategies never explicitly taught. Then, it is feasible to believe that the strategies learners use come from their previous learning experience and from their set repertoire of strategies, which they transfer to language learning.

Singhal (2000, p. 1) questioned, “whether there are processing strategies that accommodate both first and second languages.” It is no doubt that strategies are around individuals in any context and they are deployed in every setting in which an individual needs to solve a problem or achieve a goal; for example, dealing with obnoxious people, avoiding getting punished, painting a wall faster or better, not doing something wrong again. A strategy becomes a learning strategy when there are a learning goal and an intention to reach it.

Riding (2005) suggests that an individual will develop learning strategies that can help them deal with the material that is not well suited to their cognitive style. He argues that even when the individual has a fixed learning style, he can learn and modify learning strategies. According to Riding and Rayner (2002), individuals will sense that there are situations for which their cognitive style is not ideally suited, therefore, a selection of strategies that can satisfy their learning style will be chosen from their repertoire.

Oxford (1990) suggests that learning strategies are transferable to new situations. Learners transfer the strategies that have helped them learn in different learning situations. Odlin (1989, p.

27) defines transfer as “the influence resulting from similarities and differences between the target language and any other language that has been previously (and perhaps imperfectly) acquired.” To this, Detterman and Sternberg (1993 p. 4) add that transfer is “the degree to which a behavior will be repeated in a new situation.” In the same way, McKeough (1995) explains that transfer is the application of prior knowledge, which includes strategies, to new situations. In other words, the transfer is the ability to extend what one has learned in one context to new contexts, to be able to use content or conceptual knowledge, strategic or procedural knowledge, and appropriate dispositions for learning in such new contexts (Thorndike 1932). Although strategy transfer from one context to another is feasible, Weinstein and Mayer (1986) suggest that learning strategies relevant for one type of learning situation may not be suitable for another. Gu (1996) suggests that strategies learned within a language class are less likely to transfer to other tasks. However, strategies learned in other learning contexts are more reasonable to be transferred to language learning.

Cummins (1978, 1984) proposed his linguistic interdependence hypothesis; he hypothesized that L2 language and literacy skills are dependent in part on L1 literacy competence at the time of critical exposure to the L2. In his hypothesis, he speculated that if a learner’s L1 competence is low, the competence in the L2 will also be low. Cummins (1978) explains that the skills an individual has in their native language can be instruments to the development of similar abilities in learning a foreign language; such skills are the first mechanisms adult learners use in language learning as strategies. Broad (1997) adds that also skills are transferred to new situations. In research, the terms strategies and skills are used synonymously (e.g., Lu 2006); however, strategies are different from skills in that they are used consciously (Nuttall 1996). Research has demonstrated that L1 skills distinguish between strong and weak L2 learners (Holm & Dodd 1996; Service & Kohonen 1995). Learners who achieve higher levels of L2 proficiency and classroom achievement have significantly stronger L1 skills (Sparks, Ganschow & Patton 1995). There is evidence to date, which indicates that students with stronger L1 skills have a stronger L2 aptitude and higher levels of L2 proficiency and L2 classroom achievement, demonstrating the possibility of cross-linguistic transfer of L1-L2 strategies.

Evidence has proven that strategies have an impact on academic performance; Olshtain, Shohamy, Kemp and Chatow (1990) reported that L1 academic proficiency played the most important role in learning English. That is, learners who had a higher degree of academic performance in their general learning contexts showed a better performance in language learning. A possible explanation for this is that academic proficiency requires learners to have a wider and more frequent use of mechanisms that help them reach goals; additionally, a higher degree of self-regulation, autonomy, and motivation among other factors. Skehan and Ducroquet’s (1988) study provided some evidence that L1 skills before entering elementary school and L1 skills developed in

elementary school are strongly related to later L2 aptitude and L2 oral and written proficiency. Similarly, Koda (2005) found evidence that shows that aspects of L1 abilities are transferred during L2 learning; research has also found that learners who achieve higher levels of L2 proficiency and classroom achievement have significantly stronger L1 skills (Sparks, Ganschow & Patton 1995).

Even though significant research has been conducted in LLS, the transfer of general strategies to language learning and the predictive effect those strategies have in language achievement has scarcely been performed. Empirical research on transfer of learning strategies that a learner uses in their mother tongue to the learning of a second language has been conducted mostly in reading and writing. Wolfersberger (2003) found that some L2 writers faced with writing tasks do not transfer L1 strategies to the L2 writing process. He discovered that learners required an L2 proficiency level above that of the writer in order to transfer strategies from L1 to L2 writing. Similarly to Wolfersberger, Grabe (2001) found the transferability of skills from L1 to L2 writing skills can be determined by the L2 threshold level. This transferability suggests that even though the writer has a number of strategies available when completing the same task in the L1, language knowledge can be an impediment for learners to transfer their strategies.

In contrast, Sarig (1987) concluded that L1 reading processes were transferred to L2 learning. She stated that learners used the same reading procedures in both languages; however, she points out that every learner used their strategies. Her findings suggest that the transferability of strategies does not imply that strategies transferred always have a positive effect on learning. Possibly, less successful learners do not lack strategies, but probably they do not transfer strategies appropriately. Concurrently, Yashimita (2002) discovered that there is a transfer of strategies in reading from Japanese to English. In his study, findings suggest that strategies could be transferred as long as there is some level of language proficiency for the learner to be able to overcome language problems. This point is also sustained by the work of Stevenson, Schoonen and Gloppe (2003) who compared reading strategies of Dutch high school learners in their L1 and L2 (English). Results demonstrated overall similarity in the kinds of strategies used in L1 and L2. Language learners have access to their first language strategy repertoire as they encounter situations that require a learning strategy. Learners will make use of learning strategies they have in their strategy repertoire; however, it does not mean that strategies are, or not, effective in language learning. Prior research shows that even for learners that were taught strategies, the level of the foreign language could be a problem when teaching strategies.

Cummins (2005) declares that concepts, academic content, and learning strategies are transferred across languages. The transfer of learning strategies might occur in two ways. Learners transfer strategies mechanically, that is, unconsciously, as immediate tools for learning. For example, the activities that learners adopt in early stages of academic learning, and which they bring to their

academic life, are mechanically and unconsciously transferred. Doing homework, studying for exams, reviewing, revising, and memorizing information can be examples of these strategies. These strategies can be considered unconsciously transferred strategies. Unconsciously transferred strategies might not always be effective since the conscious factor of the strategy is not applied intentionally; thus, strategies used at an unconscious level might not always be applying effort to the exact purpose or goal and might result in unproductive learning. However, these strategies might also include the behaviors and attitudes that will lead learners to achieve goals, for instance, being persistent, responsible or motivated. These strategies might spark the use of other strategies.

In contrast, learners also transfer strategies at a conscious level. That is, learners are aware of their strategies, and they choose and use the strategies that best suit the task to be performed or to learn. Learners have already monitored, tested and evaluated consciously transferred strategies in prior learning contexts and they have stored them in their repertoire; for instance, making mind maps, highlighting, paraphrasing, or making questionnaires or summaries. Consequently, learners might perceive consciously transferred strategies as the tools that better suit the given task. Consciously transferred strategies can also include behaviors and attitudes that learners deliberately use in learning, and similarly to unconsciously transferred strategies, these strategies might deploy the use of more or different strategies.

Chamot (2004 p. 23) claims that “Research in first language contexts has shown that strategy transfer is often difficult,” however, it is the purpose of strategy instruction to teach learners to transfer strategies to new tasks or new learning contexts. Chamot also adds that the teaching of strategies can promote strategy transfer. For decades, there has been a public concern across study areas about the improvement of education and in particular the education of less able, less efficient or less effective learners despite the given potential for language learning strategies to improve learning that has long been researched and recognized (O’Malley et al. 1985). Strategy instruction has looked forward to developing or increasing learners’ strategy repertoire and to transferring strategies from other contexts to language learning. The next section provides a description of different teaching strategy methods used in language learning.

## **2.8 Strategy instruction**

The current interest in teaching learning strategies is to train the learner to control their cognitive processes in a successful way; including learning to learn, memorizing, retrieving and thinking. However, the teaching of strategies goes back to 1930 where plenty of courses promoted reading and study skills (McKeachie et al. 1986).

While one might expect research on teaching strategies and learning strategies to converge, both tend mainly to follow separate paths. Early work on teaching strategies followed a relatively simple

“process-product” model, under which the main goal was to improve correlations between the classroom processes and learner achievement. In the 70s decade, a number of experimental studies undertook this approach. However, research of this nature has declined in recent years; yet, learners still do not have a strategic behavior in language learning.

Ideally, strategy instruction, or strategy training, should enhance the use of current learning strategies and provide learners with a more ample repertoire of strategies from which they can choose whenever it is necessary. Chamot and O’Malley (1994) suggest that once identified, the learning strategies that good language learners use can be taught to less competent learners. They also posit that such strategies could have a considerable potential for enhancing the development of second language skills. Strategy instruction aims at raising learners’ awareness of their own strategies and the development of new ones. Chamot (1998) suggests that when learners begin to understand their learning processes and can exercise control over these processes, learners become responsible for their own learning. Thus, a goal of strategy instruction is to make learners more aware of how they learn and how they can learn more efficiently and effectively.

Early work on general learning strategies proved strategy training to be successful in teaching learners to focus on important information, to recall important information and to solve problems (El-Dinary, Brown & Van Meter, 1995; Gagne, Yekovitch & Yekovitch, 1993; Harris & Graham, 1992; Wood, Woloshyn & Willoughby, 1995). Hassan, Macaro, Mason, Nye, Smith, and Vanderplank, (2005) conducted a systematic overview of strategy training with twenty-five studies. They discovered that most of the studies reported having had positive results whereas six reported having some positive effect in some areas and negative effect in other areas. They only reported two studies with negative results in strategy instruction. Hassan et al. (2005, p. 6) concluded that the effectiveness of strategy training for language learning is positive. However, they state that a number of conditions restrict the universality and usefulness of their findings. They claim that “it is not clear whether relatively simple programs to raise awareness are any more or less effective than longer, expensive, complex interventions.” Wong and Nunan (2011) argue that there is insufficient proof to establish that teaching learners how to learn a language can have a positive impact on the learning of a language.

However, an issue in strategy instruction has led research to struggle between the ideas of teaching strategies explicitly or implicitly. There is a lack of agreement on whether strategies should be included in daily lessons or they should be taught separately. Chamot (2004, p. 19) suggests “teachers should certainly opt for explicit instruction and should probably integrate the instruction into their regular course work, rather than providing a separate learning strategies course.”

The teachability of learning strategies is by no means universally accepted (Griffiths 2015). Chamot (2004) explains that many researchers believe that strategy instruction integrated in daily practice is more beneficial because it provides learners with more authentic opportunities for using the strategy. Chamot (2004) also notes that researchers (e.g. Gu 1996) disagree with this view because learners are less likely to transfer these strategies to new contexts, and Chamot (2004, p.19) explains that it would be “easier to plan for one separate strategy course than to prepare all teachers to teach strategies”. In contrast, Rees-Miller (1993) questioned whether it might be better to spend time in teaching language rather than teaching learning strategies. Rees-Miller (1993:679) added that many individual and contextual variables have to do with the success of learning strategies and not only with integrated or explicit strategy instruction. They stated that the successful or good learners’ behaviors and characteristics might not be universal; therefore, it might affect the teaching of strategies. Rees-Miller (1993) argue that the learners’ age, educational background, life experience, cognitive styles, the mismatch between teaching and learning styles, among other factors, affect the teaching of learning strategies. Consequently, these variables might have an impact on the effectiveness of strategy instruction.

Whether integrated into daily classes or in strategy sessions, it is difficult to generalize that learners will benefit from instruction. Analysis of teacher effectiveness by Schooling, Toth, and Marzano (2010) showed that teaching research-based strategies in the classroom does not guarantee that learners’ learning will increase. There is a possibility that strategy instruction might have the same effect of those well-intentioned suggestions that teachers or peers provide to those learners in need.

### **2.8.1 Strategy instruction models**

Researchers have created different models for strategy training not only in the first but also in the second language contexts. Pearson and Dole (1987) designed a strategy training model for L1 learners which included: introduction, definition, and explanation of the strategy, guided practice of the strategy and independent practice once the strategy has been modeled and explained. In the definition and explanation stages, instructors try to raise learners’ awareness about the benefits of learning strategies and the advantages of becoming users of them. Similarly, in the Oxford’s model (1990) for teaching strategies, learners are asked to immerse into an authentic language task without instructional cues; then, the instructor demonstrates and suggests different strategies. Later, the strategy instructor explains the need for greater self-direction and the expected benefits, and he makes sure learners are aware of the reasons for using learning strategies. Then, learners are given plenty of time to practice the strategies, and they are instructed in the way learning strategies can be transferred to new situations or tasks. Finally, the instructor provides learners with tasks for practicing in order for learners to choose the strategies that would help them complete the tasks.

Finally, instructor and learners discuss the strategies they used, and they evaluate the use of strategies.

In the Cognitive Academic Language Learning Approach (CALLA) developed by Chamot and O'Malley (Chamot & O'Malley 1986; Chamot 2009; Chamot et al. 1999) they include six steps in their methodology: preparation, presentation, practice, evaluation, expansion activities and assessment. On the preparation stage, the strategy instructor identifies learners' current learning strategies for familiar tasks. In this stage, instructor and learners discuss and analyze strategies. On the presentation stage, the instructor or teacher models new strategies, gives the strategy a name, and explains the strategy; then, the teacher asks learners if they have used the strategy and how they have used it. On the practice stage, learners put into practice the new strategy; later on, the teacher decreases help to encourage independent strategy use by asking them to check their language production, develop an oral or written report or classify concepts. On the evaluation stage, learners evaluate their own strategy use immediately after practice, and then they determine if the strategy was useful or effective by summarizing or giving a self-talk, either cooperatively or individually. On the expansion stage, learners try to transfer the new strategies to new tasks; they try to combine strategies into clusters and try to create a repertoire of strategies. Finally, on the assessment stage, the teacher assesses the learners' use of strategies and impact on performance.

Cohen (1998) proposed another model for strategy instruction. Cohen proposed the Styles and Strategies-Based Instruction Model (SSBI) which tries to describe and suggest what a teacher should do in the classroom. It provides more flexibility for teachers to embed language learning strategies more explicitly and implicitly into the regular classroom program in order to make more sense in the teaching context. In this model, the strategies are included both explicitly and implicitly into the course content. Similarly to previous models explained, in the SSBI Model teachers help learners to identify their current strategies and learning styles. Then, they model their own learning experiences and thinking processes for learners to see how strategies helped. Later, they train the learners on how to use learning strategies. Then, they supervise learners' study plans and observe difficulties. Finally, they provide guidance on learners' progress.

In a similar series of steps and procedures, Grenfell and Harris (1999) developed a model of language learning strategies instruction in which instructors raise learners' awareness in order to complete tasks, and then they are asked to identify the strategies that led them to complete the task. The teacher proposes new strategies for the same task and models it; then, the learner is provided with practice to use the new strategy in different tasks. On a later stage, learners set goals and select strategies to reach those goals. At that point, the learner puts into practice the strategies selected in order for them to use strategies in an automatic way, the teacher starts fading help; finally, both teacher and learners evaluate the success of the strategies used, they set new goals, and they start

all over again. Grenfell and Harris' model is based on six steps: raising awareness, modeling, general practice, action planning, focused practice, and evaluation. For Ehrman, Leaver, and Oxford (2003) the effective strategy instruction includes a section in which the strategy is demonstrated; when a given strategy might be useful as well as how to use it, evaluate it and how to transfer it to other related tasks and situations.

In general, Cohen and Macaro (2007) suggest that strategy instruction is likely to have similar features: raising awareness of the already known strategies by explicit instruction or sharing experiences; presenting and modeling of the new strategies; providing multiple practices, and evaluating the effectiveness of the strategy for later use. In summary, most of the strategy instruction models share similar steps in their strategy instruction models. They all involve the development of learners' awareness, provide models of strategic thinking, offer practice with the new strategy, evaluate the use of the strategy and promote transferring of the strategy to new tasks.

### **2.8.2 Teachers and learners in strategy instruction**

The main objective of strategy instruction is to provide learners with the correct use of strategies, and to raise learners' awareness of the benefits learning strategies have in the learning process. Ideally, every learner would benefit from strategy instruction; however, for strategy instruction to be effective and reach the intended goals, many factors need to converge. Griffiths (2015, p. 428) states that "teachability of learning strategies is an area which has proven to be not as straightforward as originally hoped."

Among the different factors that account for learning, teachers play a significant role in language education (O'Donoghue & Calderon 2015). O'Donoghue and Calderon suggest that teachers lack two essential elements in language teaching: knowledge of the language and methodology. Additionally, the lack of motivation learners have to learn a language might hinder strategy instruction effectiveness. An essential factor in strategy instruction is the teacher. For strategy instruction to be useful, firstly, the teacher needs to be knowledgeable about strategies; they need to know how strategies work, what benefits they have in learners, and a repertoire of strategies to teach. Secondly, they need to know a methodology to teach strategies. One of the greatest challenges facing today's school leaders is the challenge of raising the expertise of their teachers concerning learning strategies because teaching staff' effectiveness in teaching is a significant part of strategy instruction. Research suggests that teachers might have a crucial part in trying to make learners more conscious about the strategies by making strategy instruction part of the foreign language classroom (Cohen 1998). Mortimore and Sammons (1987) discovered that what has more impact on learners' learning than any other cause is the class instruction. Thus, for teachers to have a significant impact on learners and for strategy instruction to be effective, it is necessary that

teachers know the strategies to be taught and to have a certain degree of expertise in teaching. Griffiths (2013) suggests that research findings conclude that teachers should encourage learners to enlarge their strategy repertoires in order to make a more frequent use of their own strategies to increase their chances of success. However, not all teachers are aware of the benefits of learning strategies. Teachers need to have a good understanding of what learning strategies are and what they imply. They should be able to identify the strategies that work well and the strategies that do not in order to suggest learners changes in their strategies used. It is equally important to acknowledge that knowing strategies does not ensure teacher effectiveness. Applying a strategy without a clear instructional outcome can hinder student learning.

Ideally, teachers should recognize and identify learners' learning strategies so that they can help learners reach success, learn the language, and encourage learners to be independent, responsible and self-reliant, or, at least, to be able to demonstrate their abilities toward refining strategies. Teachers need to be apt not only to teach the respective learning strategies but also to teach learners how to learn the subject matter. Nevertheless, strategies are usually taught as prototypes that learners can assimilate and modify in order to change or replace the strategies in their ready to use strategy repertoire that they have developed over time; yet, learners learn strategies differently.

Just as teachers, learners play an important role in the effectiveness of strategy instruction. Learners construct knowledge about strategies through time and through a complex process of interaction with the environment, including their home, peer group and school, as well as other sources of influence (see section 2.6). Language learning is an individual process in which learners adopt and adapt strategies according to their individual and unique differences at a given time of learning. Why a learner learns differently in the same group while the teacher is teaching the same to all learners was one of the questions in the early stages of strategy research. A feasible reason is the diversity of individual variables that change the course of unified teaching, in other words, what works for one learner does not necessarily imply that it will work for another. This inquiry can be posited in strategy instruction. Learning strategies are purpose-oriented actions usually tied to the needs, goals, and motivation of learners to enhance learning and based on many types of learning styles (Ekwensi, Moranski & Townsend-Sweet 2006). Weinstein and Mayer (1986) inquired whether or not learners can learn how to control their own cognitive processes during learning; if it is better to train learners in the use of general learning strategies, so that they can transfer LS to other domains; or to provide training in specific strategies within the context of subject matter domains.

Prior learning experience, prior language learning experience, learners' beliefs, motivation, self-regulation attitude, among others, have shaped learners' strategies and sometimes these strategies are fixated in learners' repertoire of strategies. They trust their proven methods for learning, and

they feel comfortable with them. Possibly, learners are reluctant to new methods that challenge their old methods. Strategy instruction can be beneficial for learners to the degree to which a learner is open to new methods. The teaching of learning strategies expects students to work independently and be responsible for their own learning. For strategy instruction to have a positive effect, learners need to adopt new behaviors as strategies that they might not be willing to change, for instance, self-regulation.

Since the learning of a foreign language at a proficient level may take several years of study and practice, the learner who endures needs to develop the ability to self-regulate their strategies in order to achieve goals. Research conducted on self-regulation suggests that proactive, self-regulated learners adopt and use more effective learning strategies, set better learning goals, manage their goal progress more efficiently, and persist longer (Zimmerman & Schunk 2008; Zimmerman 2011). The degree to which a learner is self-regulated might benefit or ease strategy instruction. That is, they are not resistant to new learning methods. The characteristics of self-regulation mentioned in section 2.5.3 can represent learning strategies in its own right; for instance, setting goals, planning how to achieve them, monitoring the learning task, using learning strategies to solve problems, evaluating their own performance or progress, or having a persistent behavior in learning are self-regulated behaviors. Eventually, they will develop new strategies or improve already known strategies.

Despite the great amount of research in strategy instruction, research has lacked longitudinal studies in which the strategies taught have proven an effect on different tasks or in different learning contexts other than the ones they were taught in, the transfer of such strategies to new tasks across disciplines, and even if such strategies have endured over time. Hassan et al. (2005) based on their findings state that it is not possible to know from their evidence whether the effect of strategy instruction is long lasting or not. In the end, it is the learner who decides whether to use or not the strategy taught according to their own and very individual characteristics and possibilities and interests; and teachers have to wait and hope that learners will adopt the strategies they were taught.

## **2.9 Learning Strategies studies conducted in México**

Research in Mexico, concerning learning strategies, is relatively new despite the almost five decades of research of LLS, and more in GLS. According to Ramirez-Romero (2007) since the mid-80s occurred the implementation of language teaching university careers and masters all over the Mexican Republic, but not until the early 90s research in many areas of teaching-learning processes was increased; however, much of this research was not or has not been published.

Much of the research on strategies has mainly been conducted with university learners, and the Mexican context is not the exception. Higher education learners more frequently use learning strategies of all kinds (Griffiths 2003; O'Malley & Chamot 1990). Del Angel and Gallardo (2014) conducted research on 1,283 learners and contrasted data of 266 academically successful learners in higher education versus data of 1,017 learners considered non-academically successful. They tried to discover if academically successful learners would have a wider range of learning strategies to help them in language learning. They used the Strategy Inventory for Language Learning (Oxford 1990). Their findings showed that academically successful learners use 11 (out of 50) metacognitive and cognitive strategies more often. Results also indicate that learners consider academic grades, time dedicated as well as commitment and responsibility as the most important duties they have to perform to improve academic grades. It is important to remember that academic success is not only associated with the use of strategies but also other factors. They discovered that personal and family complements contribute to academic success as well. Strategies in successful learners only account for a small part of their success. Del Angel and Gallardo concluded in their study that data obtained do not show a significant difference between the two groups.

Johnson (1997) conducted an experimental study with 68 university beginner EFL learners at risk of failing the EFL course. She aimed at identifying the relationship of motivation, anxiety and listening strategies that at-risk learners had, and the effect these strategies had on their academic performance. Johnson provided 16 strategy instruction sessions. Findings indicated that learners improved their scores in listening comprehension test after strategy training. However, the improvement they showed remained lower than those of the proficient learners did. That is, the teaching of strategies did not boost learners into a higher proficiency. In Johnson's study, strategy training had a positive effect; nevertheless, the study does not report a long-term effect in the use of listening strategies. Not much research has observed the long-lasting effects of strategy instruction provided in their studies.

In a similar line of skill related strategies, Méndez (2011) aimed at identifying the speaking strategies university learners in the BA in language teaching have in five different Universities of México. Results revealed that learners tend to select strategies according to their level of language proficiency. Learners at all levels of proficiency used strategies at a different frequency rate. However, results also revealed that learners use speaking strategies such as asking for repetition; use of paraphrasing or synonyms for unknown words; and asking for message clarification more frequently than other strategies. Although such speaking strategies are used in everyday life in native contexts as behavioral activities, in language learning they are seen as strategies that learners use to improve their speaking skills. She concluded that proficiency influences the type of strategies learners use.

Similarly, in a bilingual institution with high school learners, Rodríguez (2005) aimed at identifying strategies that learners use in reading English texts. Rodríguez focused on O'Malley's (1986) categorization of strategies: cognitive, metacognitive and socio-affective strategies, and concluded that learners use metacognitive strategies more often before and after reading. She also found that learners more often use cognitive strategies such as imaginary, rereading, organization of ideas and inferencing. She concluded that success in effective reading is related to knowing when and how to apply learning strategies; thus, awareness of reading strategies is crucial for adequate comprehension. Rodríguez's conclusion is one of the main objectives of strategy instruction. Strategy instruction focuses on teaching learners knowing how to apply and when to use strategies, that is, knowing the purpose for using a strategy; however, the conscious purpose for using a strategy has scarcely been researched.

In a less specific context to language learning, Kutugata and Araiza (2103) researched general learning strategies in 57 first college learners in a public university. They used the Learning and Study Strategies Inventory (Weinstein & Mayer 1986) to understand the areas where learners needed guidance. Data showed that learners reported low strategy use in most of the areas of the questionnaire: Attitude, motivation, time administration, anxiety, concentration, the process of information, selection of the main ideas, help to study, self-evaluation or control and test strategies. Their findings demonstrated that learners needed to improve the use of such strategies. Although findings suggest that learners need to improve in these areas, it would be difficult to believe that strategy instruction in these broad areas would help learners enhance their academic performance. Strategy instruction is aimed at solving specific tasks, and it would provide better effects if specific areas were addressed one at a time.

Similarly, Maytorena and Gonzalez (2008) researched study strategies and self-regulation strategies in 244 first-year university learners. They discovered that learners have weaknesses in using strategies in both study and self-regulation areas. Kutugata and Araiza (2103) and Maytorena and Gonzalez's (2008) findings suggest that the teaching of learning strategies should be emphasized in lower levels of education for learners to develop or enhance an accurate set of strategies they might use in university. Additionally, their findings also indicated a need for the teaching of learning strategies. Correspondingly, and derived from their results, Roux and Anzures (2015) suggested and that more attention should be given to the teaching of learning strategies in Mexican high schools. Roux and Anzures (2015) researched general learning strategies of 162 university learners, and the impact strategies have on academic performance. They used the University Learners' Learning Strategies Questionnaire (CEVEAPEU). They discovered that nineteen strategies out of forty-one had a positive correlation with the grades of the learners. They also found that motivational strategies and metacognitive strategies as the strategies most frequently used.

Sheorey (2008) conducted research on learners' beliefs and learning strategies of Mexican learners. Learner's beliefs has been a factor of importance in the choice of learning strategies, what learners perceive as good or bad affect the procedures they take in learning despite the real effect the strategy might have in their learning. Sheorey concluded that motivated learners believe that language learning strategies have to do with memory and repetition of the grammar and vocabulary. Although learning strategies are used for more than memorizing, many learners (and teachers) believe that the memorization of the grammar rules and vocabulary will help them learn the language globally. Language learners use many rehearsal strategies (Weinstein and Mayer 1986) in an attempt to store information. These strategies are fostered by early educational contexts, and even though they are fully functional for some learners, for some others, they might not be.

Research has been scarce in LLS or GLS despite the acknowledged importance and benefits of LS. In Mexico, most studies have aimed at identifying strategies, and yet little work has led institutions to adopt a strategy instruction approaches or learning strategy methodologies.

## **2.10 Summary**

Research has established a relationship between the use of learning strategies and success. General learning strategies and language learning strategies have demonstrated to aid learners in getting good grades, achieving learning or being successful. Categorizations of strategies in both lines of research differ mostly in the degree of specificity of the task or context in which the strategy is used, or the material to be learned. However, cognitive, metacognitive and socio-affective strategies have been identified in both learning contexts. Learners develop their learning strategy repertoire through time and life experience, sometimes explicitly taught, explained or discovered as the best way to solve learning problems. Learners' strategies are transferred to different learning contexts as a set of fixed tools, whether efficient or inefficient, to learn. Nevertheless, learners' individual variables play a major role in the selection and use of learning strategies because such differences will make learning strategies work differently on every learner.

When learners are identified as low strategy users, strategy instruction is intended to provide effective strategies, and the main purpose is to raise learners' awareness of the benefits of strategies for them to develop a strategic behavior. Nonetheless, not many teachers have the knowledge of strategies and not many learners are willing to change their learning habits or adopt methods they do not find appealing for their learning. Many learners have become good language learners even without strategy instruction; they seem to have a well-developed repertoire of strategies gained over time, and factors other than strategy instruction have helped them develop their strategy repertoire that they transfer to language learning to help them become successful.

Within the context of the literature reviewed, this study intends to discover to what extent the strategies in learners' already developed repertoire will help them attain achievement in language learning. This achievement could work as a motivational engine that leads learners to continue studying the language further than basic information that they have received over a six-year period in secondary and preparatory education in Mexico, which very usually, and for many learners, represents the end of language learning.



## Chapter 3: Methodology

### 3.1 Overview

According to Cohen and Manion (2002), the research design is defined by the purpose of the researcher and the research questions. The research design is a central piece of research since it is the systematic plan of what data the researcher should gather, from whom, how and when data will be collected and analyzed. It was determined that the nature of this research was that of the exploratory and descriptive research design. It was intended to obtain a comprehensive description of the use of learning strategies in order to gain an in-depth understanding of learner's strategy use.

The study here presented is about the use of learning strategies in language learning and in general learning; therefore, quantitative and qualitative methods are considered as the methodological approaches to be applied. Seliger and Shohamy (1990) suggest that in second language acquisition phenomena there is no preferred research approach for the study of all. Therefore, there can be a combination of approaches in order to reach the intended goals of the research.

The current study researched the general learning strategies repertoire learners have before they encounter language lessons at a university of the northern of Mexico; and the extent to which such strategies are transferred to language learning as well as the effect they have on language achievement. This study also aimed at identifying differences between high and low strategy users. Additionally, this research intended to determine the extent to which strategy training affects the adoption of learning strategies and if adopted strategies have an effect on their language achievement.

This chapter reports the research methodology for the study. It describes the educational context where the study was conducted. It also addresses the main objectives the research questions aimed at. Further, the study also describes the participants, the instruments used, data collection procedures and data analysis procedures.

### 3.2 The educational context of the study

The language center of the University offers English, French, Italian, Japanese, Chinese, Portuguese, and German classes for learners not only of the university in order to fulfill the university's exit language requirement, but also for the public in general. The language center offers courses that last 16 weeks, which represents one level, and concurrently, one semester. The complete course comprises six levels (six semesters). Although the university requires learners to

study any second language offered by the language center, university learners of different disciplines choose English to fulfill such requirement. The geographical location of this city might suggest that learners would learn English for not only fulfilling requirement purposes but also for interactional, transactional or employment purposes, and this is also the case for public in general who attend language classes. Some university disciplines require a higher language level than others to fulfill their exit requirement. Whereas some disciplines only require learners to pass the second level of the program, which is the equivalent to the A1 level of the CEFR (Common European Framework of Reference for language); some others require the third or the fourth level, which represents the A2 of the CEFR. Very commonly, when learners have fulfilled the requirements, they stop taking language lessons and hardly ever complete the sixth level.

Language classes at the language center have a communicative goal in all of the languages offered. The program of the language center has written statements of four items included in the language center's web page, <http://idiomas.tij.uabc.mx/centroidiomas.html> that expresses what students will be able to do at the end of the program, as follows (translation):

- Communicate in oral and written forms the various situations of everyday life
- Apply reading strategies to understand authentic texts of the target language
- Develop the listening comprehension
- Become knowledgeable about the culture and customs of the countries which speak the chosen target language

The Language Center offers classes three days a week in two-hour sessions; however, sessions mostly last one hour and forty minutes in average. A variety of schedules goes from 7:00 a.m. to 7:00 p.m. In some schedules, a type of learners seems to be predominant. For instance, university learners who already finished their regular daily classes mostly compose afternoon classes. They attend language classes to obtain more credits and to fulfill the university's language requirement. Learners in morning groups are composed of people who try to take advantage of their time such as high school learners who are about to start university, homemakers or people whose schedule allows them to take morning classes. The evening classes usually consist of learners from the general public who are part of the workforce of the city and university learners who finished their daily classes at their careers. Very commonly, these types of learners take language lessons because they want to improve their oral communication.

### **3.2.1 The self-access center**

The Language Center has a Self-Access Center (SAC) to learn languages where learners attend to practice study or learn the language they are studying. The center (at the time when this study

was conducted) is a certified self-access center by the norm ISO9001:2008 that certifies quality management systems. The SAC mainly gives supports to classes of all the languages offered at the language center. It looks forward to developing autonomy and responsibility in the user. Therefore, learners monitor and regulate their learning. In other words, the center promotes the development of a self-regulated attitude. Pintrich (2000) suggests that self-regulated learning is an active process where learners develop constructive behaviors towards achieving the objectives; they set, monitor, and regulate their cognition and behavior accordingly.

The center is considered a space for practice and reinforcement of knowledge acquired in the classroom, and it seeks that learners search for their strategies or methodologies to learn or practice without instruction. Consequently, it offers a broad range of materials for learning different languages that range from adapted materials such as worksheets to authentic materials such as web pages, magazines, books, and videos. The center is divided into different areas where learners can practice specific skills, for instance, the workstations where learners practice doing exercises from worksheets or textbooks; reading areas with bookcases filled with different books and where learners can find chairs and tables in a quiet space to read. In the computers area, learners can practice any language employing software and web pages specially designed for learning languages.

In the listening area, learners find a variety of audios and scripts from textbooks as well as CD players and headphones to help them practice their listening skills. The video room is well equipped with TV sets and a wide an up-to-date variety of movies, documentaries and TV series that learners mainly use to practice their listening skills in a more entertaining way. Additionally, the center offers conversation and pronunciation sessions during the day to all interested learners who want to develop oral skills. These sessions are provided to small groups in rooms designed only for the use of a few learners. Interested learners must program these sessions in advance in order for the center to designate an instructor for such meetings. Furthermore, the center offers personalized tutoring for those learners who require individual attention to guide them in their language learning; such guidance is mostly about the materials in the center. The tutor helps the learner in finding material that suits their goals and interests.

The Language Center requires learners to attend the SAC for two hours a week, minimum, additional to their class. However, learners are allowed to remain in the center the time they desire. For some learners, attending the SAC implies investing extra additional time to their daily heavy-loaded activities and tasks; therefore, they see attending the language center as an overwhelming requirement rather than a useful aid in their language learning; and very commonly, learners see the SAC with displeasure.

### 3.3 Methods

It was apparent that a single method could hardly provide with a comprehensible description of learners' strategy use; therefore, the current study used a mixed-methods approach design, which included both quantitative and qualitative data collection methods to address the research questions outlined in Chapter 1 (see Chapter 1) and to observe data from both perspectives. Anderson and Poole (1994, p. 29) state that "it is sometimes desirable to combine qualitative with quantitative research to maximize the theoretical implications of research findings." It was intended to analyze research questions from different angles and to triangulate data gathered from various methods. Greene, Caracelli, and Graham (1989) claim that triangulation seeks convergence, corroboration, and correspondence of results from the different methods. Concurrently, Bryman (2006) suggests that triangulation gives greater validity to the traditional view and that quantitative and qualitative research could be combined to triangulate findings to be mutually corroborated. A convergent point was searched where quantitative data would validate qualitative data to increase the credibility of the results.

A quasi-experimental methodology was conducted throughout the course length (sixteen weeks) with control and experimental groups. Gray (2004, p. 29) explains that "quasi-experimental design is used where the researcher, for example, has to take existing groups rather than drawing on random samples." However, he also claims "it is often not possible to conduct truly experimental research because it is difficult to find experimental and control groups that are closely matched concerning key variables (such as age, gender, income, work grade)." Consequently, the selection of the sample was made based on practical issues.

It was planned to gather a significant number of learners for the study. However, the number of learners in the class did not fulfill the desired amount of participants; consequently, classes of the same level from different schedules were grouped to define control and experimental groups. The experimental group included classes from three different schedules: 7:00 a.m. to 9:00 am, 9:00 to 11:00 a.m., and 11:00 a.m. to 13:00 p.m. The control group included classes from two different schedules: 13:00 p.m. to 15:00:p.m. and 17:00 p.m. to 19:00 p.m. There was no other aspect than the logistical factor considered for the formation of the groups. The experimental groups received classes in the same classroom, and the teacher did not have to switch classrooms from one schedule to another; the learners arrived in her classroom. For the control group, it was necessary to the teacher, and the strategy instruction instructor, to move to a different classroom; therefore, it was a need to move equipment and materials, and it indicated a considerable amount of wasted time.

### 3.4 Participants

The university through its Language Center offers language classes not only to learners of the university but also to people from the community. The participants in this study are a mixture of 118 university learners and learners from the general community. People of the community include a variety of different types of learners, from homemakers and high school learners about to enter the university to already university learners or already professionals in areas such as engineering, law, medicine. Similarly, university learners belong to different disciplines. This diversity of students allows a great variety of ages that ranges from seventeen to sixty years old, or at times, even older. Participants in the study belonged to the level 1. Level one class includes the highest number of learners; however, following levels decrease in the number of participants. Descriptive data of the participants such as age, gender, type of student will be further explained in Chapter 4.

### 3.5 Instrumentation

In this section, the instruments used to gather data and instruments to provide treatment in strategy instruction sessions are described. The questionnaires for the first (LSQ) and the second administrations (LLSQ), the criteria and the procedure for the selection of the questionnaire are described along with the adaptations for the first and the second administration of the questionnaire, twenty semi-structure interviews, the achievement test and the strategy training session are also described.

#### 3.5.1 The selection of the questionnaire

Hsiao and Oxford (2002) claim that finding a strategy inventory that covers all dimensions of strategy use, even a well-tested questionnaire, may not be able to capture the multi-dimensionality of learners' strategy use; consequently, a search for an appropriate questionnaire was necessary. Different inventories have been developed not only to measure strategy use in general learning contexts (Weinstein & Mayer 1986; Pintrich, Smith, García & Mckeachie 1993; Zimmerman & Martinez-Pons; 1988) but also in language learning (Oxford 1990; Cohen, Oxford & Chi 2002). For instance, in language strategy research, the Strategy Inventory for Language Learning SILL developed by Oxford (1990) has been acknowledged as a very practical and useful strategy survey method (McDonough 1999). The SILL has been used for many different scholarly and pragmatic purposes with Cronbach alpha that goes from .93-.98. The SILL is an adult-oriented instrument which groups LLS into six categories: memory, cognitive, compensation, metacognitive, affective and social strategies. According to Hsiao and Oxford (2002), the structural validity of the SILL is far from well established; however, it is, perhaps, the most frequently used instrument in language learning strategy research.

In order to measure the strategies that learners use in language learning, the SILL was considered to gather data for this study; however, it was not practical to use it for different reasons. Since the objective of this study is to observe the strategies learners use in general learning, and the strategies they use in language learning in order to identify a possible transfer to language learning, it was necessary to look for a questionnaire that reflected the learning strategies that learners use in general learning contexts. Some of the items used in the SILL could be considered general learning strategies because they can be employed in any learning context; for instance, item 8 “I review SL lessons often” or item 34 “I plan my schedule.” In contrast, some other items represent strategies specifically used in language learning; for example, item 11 “I try to talk like native SL speaker,” or item 15 “I watch SL language TV shows spoken in SL or go to movies spoken in SL.” These strategies represent specific actions performed in language learning and hardly ever can be used in general learning contexts such as learning Math or Physics. The elimination of these items, and others, to adjust the questionnaire, might have affected the reliability of the questionnaire.

Therefore, it was necessary to look for a questionnaire that reflected learning strategies that learners use in general learning and which they could transfer to language learning. Different instruments were sought and compared; for instance, the LASSI (Learning and Study Strategies Inventory) developed by Weinstein and Mayer (1986), which validity and reliability have been acknowledged worldwide. Ideally, the LASSI was a good option for this study since it explores general factors that contribute significantly to success in college; including language learning. It provides learners with a diagnosis of their strengths and weaknesses that can be enhanced through educational interventions such as learning and study skills courses. The LASSI provides standardized scores for ten different scales: anxiety, attitude, concentration, information processing, motivation, selecting main ideas, self-testing, test strategies, time management, and using academic resources. Unfortunately, permission for using the inventory was asked, but no answer was received.

Another questionnaire considered for the study was the ACRA scale of learning strategies (De la Fuente & Justicia 2003). The ACRA measures acquisition, modification, recovery and support strategies, and it is frequently used in Spanish-speaking countries. Nonetheless, this questionnaire was originally developed for secondary learners which makes it context-specific due to the differences in strategy use between learners of different ages and different levels.

Recent research explains that learners prefer to use different learning strategies at the various stages of their lives. Thus, strategies learners use in secondary school might differ from strategies learners use at a university level. Research has also suggested that strategy use is a dynamic process across time (Takeuchi 2003), therefore changeable. In Spain, derived from the ACRA, the learning strategy questionnaire was modified and adapted to university learners giving origin to

CEA-U (Cuestionario de Estrategias de Aprendizaje en Universitarios) developed by Martín, García, Torbay and Rodríguez (2008). The CEA-U includes the motivational, cognitive and metacognitive scales. Contextual variations have been underestimated, and questionnaires have been considered universal despite the context in which questionnaires were originally developed (LoCastro 1994). Nonetheless, research has also shown that learners of different nationalities use strategies differently (e.g., Griffiths 2003). The questionnaires above were developed for learners in countries other than México; therefore, it was necessary to move towards a more related questionnaire to the Mexican learning context.

Martinez-Guerrero's (2004) questionnaire (Cuestionario de Estrategias de Aprendizaje CEA; Martinez-Guerrero 2004) was chosen, in the first instance, as the core instrument for the current study since it could be used in its right as a means of gathering interesting insights. It was intended that the questionnaire provided a relatively extensive overview of learning strategy use in general learning contexts, the relationship between learning strategy use and achievement, as well as changes in strategy use over time. In the second instance, Martinez-Guerrero's questionnaire was purposefully developed for Mexican learners.

Although it does not ensure in its entirety that learners from Mexico City (for which the questionnaire was created) resemble learners in the city of Tijuana, both learners receive an education based on the generalized study programs developed and provided by the Secretary of Education of Mexico. This fact could be a factor of importance considering that questionnaires developed for learners in other countries might not receive the same type of information leading learners to make use of different types of strategies. The author of the questionnaire approved and granted his permission to use the survey via email.

### **3.5.1.1 The learning strategy questionnaire (LSQ)**

The questionnaire explored the strategies learners, who are about to start studying university, have in order to predict academic success in learning. For the questionnaire to be validated in Mexico, it was applied to a considerable sample of learners at the Universidad Nacional Autónoma de Mexico (UNAM). A total amount of 2,150 learners enrolled in different academic areas such as Mathematics, Physics, Engineering, Biological Sciences and Public Health, Social and Administrative Sciences, and Humanities and Arts. Their ages varied from 26 to 28. The questionnaire was based on a general model of learning and cognition and a model of strategic learning. Items included cognitive, metacognitive and affective strategies.

The questionnaire included four theoretical dimensions, which enclose the areas listed in the questionnaire. The first dimension called Behavior and Organizational strategies entails the Study

and Study Organization strategies. Study strategies (STU) are used in the process of organizing and taking in new information, retaining information, or dealing with assessments; they are approaches that learners apply to learning such as asking questions to confirm learning, making mind maps, highlighting, asking and answering questions, efficient note taking or keywords. Study Organization strategies (STO) deal with learners' ways to manage their studying habits such as organizing topics for studying, managing study time, looking for additional information, and investing time for studying.

The second dimension called Cognitive and Metacognitive strategies included the Concentration and the Cognitive categories of the questionnaire. Cognitive strategies (COG) are activities that are used by learners in order to understand the input and to get knowledge such as identifying main ideas, relating new to old information, using imagery, paraphrasing. Concentration strategies (CON) are concerned with the activities learners do in order to stay focused on tasks and eliminate distractions for the completion of tasks such as paying attention, identifying distractors, or going back to the track when distracted.

The third dimension named Motivational and Affective strategies included Achievement Motivation strategies and Affective strategies. Achievement Motivation strategies (AM) entail learners' activities and behaviors to reach goals such as being persistent; trying to do things better, verifying results to make sure it is correct, and reviewing topics until mastering it. Affective strategies (AFF) are concerned with managing emotions, both negative and positive such as lowering anxiety with relaxing methods, raising self-efficacy perception.

The fourth dimension is called Cooperative and Interactive strategies. Cooperative Learning strategies (COO) are concerned with teamwork and the completion of tasks cooperatively such as gathering with peers to study, commenting main information with peers, helping or explaining peers, working in groups. Interaction in Class strategies (IIC) imply the learners' interaction with teachers and classmates such as active participation in class, sitting in specific places to pay attention, and reading future topics.

A group of experts in the field of learning strategies validated the appropriateness of the items and classified them in dimensions by means of the Q-Sorting technique (McKeown & Thomas 1998). Cronbach test for reliability for each of the factors indicated levels from .70 to .87 and an interval consistency at a global level of (.91). The questionnaire comprises a selection of activities and tactics in learning from different methodological-theoretical approaches in learning strategies and self-regulation.

Table 3. 1 Original division of strategies in dimensions and factors

<b>Items</b>	<b>Factor</b>	<b>Dimension</b>
23, 30, 46, 47, 50, 51, 53, 54	Study strategies	Behavior and Study Organization strategies
19, 41, 37, 42, 44	Study Organization strategies	
13, 14, 15, 16, 17,20, 21, 22 52	Concentration strategies	Cognitive y Metacognitive strategies
1, 2, 3, 4, 5, 6, 8, 10, 11, 27	Cognitive strategies	
9, 12, 25, 31, 32, 33, 34, 36	Achievement Motivation strategies	Motivational and Affective strategies
38, 45, 49, 26, 24	Affective strategies	
7, 29, 35, 55	Cooperative learning strategies	Cooperative and Interactive strategies
28, 39, 40, 43, 48	Interaction in Class strategies	

The Learning Strategy Questionnaire, hereafter LSQ, (see appendix A) was originally composed of fifty-five items in Spanish, and it measured the type of strategies and the frequency of strategy use in a Likert scale; ranging from almost always to almost never. The eight different types of strategies were clustered in four dimensions (See table 3.1). An attached background questionnaire was also included in order to gather data on possible variables such as age, type of student, and gender. Answers express strategic activity in terms of first-person verbs.

For the purpose of this study, items 38 “I feel like staying at home lying even though I have slept well,” item 45 “I feel I am not worthy,” and item 49 “I feel sad” were eliminated from the original questionnaire. Such items do not represent actions or behaviors deliberately selected by the learner, which literature explains as features of learning strategies (e.g. Paris, Wasik & Turner 1991; Alexander, Graham & Harris 1998; Weinstein & Palmer 2002). Item 24 “It is difficult to solve mathematical operations” was also eliminated because it represented a very specific learning strategy in the Mathematics domain. The item does not embody an activity that a learner might be able to use and to transfer to language learning, which is one of the main objectives of this study.

Cronbach's alpha (further explained) did not show a significant difference that could have affected the reliability of the instrument.

Table 3. 2 Items remained in the questionnaire

Items	Factor	Dimension
23, 29, 43, 44, 46, 47, 49, 50	Study strategies	Behavior and Study Organization strategies
19, 39, 36, 40, 42	Study Organization strategies	
13, 14, 15, 16, 17, 18, 20, 21, 22, 48	Concentration strategies	Cognitive y metacognitive strategies
1, 2, 3, 4, 5, 6, 8, 10, 11, 26	Cognitive strategies	
9, 12, 24, 30, 31, 32, 33, 35	Achievement Motivation strategies	Motivational and affective strategies
25	Affective strategies	
7, 28, 34, 51	Cooperative learning strategies	Cooperative and interactive strategies
27, 37, 38, 41, 45	Interaction in Class strategies	

Fifty-one learning strategies were included in the questionnaire. The arrangement of the items allowed keeping eight different categories which were clustered into four dimensions (See table 3.2). The questionnaire kept the options for the answers as in the original questionnaire: Almost always, many times, a few more than half of the time, a few less than half of the time, a few times, and almost never. When the item implied a positive expression, then the highest value is given to always or almost always, and the lowest value to never or almost never; and when the item implies a negative expression, then the lowest value is given to always or almost always and the highest value is given to never or almost never. A high mark in the scale represents that there are learning strategies that favor learning.

### 3.5.1.2 The Language learning strategy questionnaire (LLSQ)

The study included a second administration of the questionnaire (henceforth Language Learning Strategy Questionnaire, LLSQ) that consisted of the same strategies listed in the LSQ. Items for the

LLSQ were essentially the same; however, it was necessary to make adaptations for the specificity of the language learning context by adding the particles: English, in the English class, or when studying English (see appendix B). This procedure allowed contextualizing general learning strategies in language learning. Additionally, data of LSQ and the LLSQ could be associated, which would enable contrasting the strategies learners have in both learning contexts. This contrast could help in identifying the transfer of general strategies to language learning. This procedure is supported by Harkness (2010, p. 7), who suggests that “substantive adaptations should only be made if they are required to ensure comparable measurement.” The LLSQ included a background questionnaire with questions that meant to discover general information about the motivation for learning the language and the amount of time learners dedicated to language learning additional to class hours.

Since learners belonged to level 1, and at this stage learners lack language knowledge, both administrations of the questionnaire were translated into Spanish for learners to fully understand all items and to ensure no items were unanswered.

### **3.5.2 Piloting the questionnaires**

The piloting stage was conducted at the faculty’s Language Center with learners of the Saturday classes. Saturday classes are very popular not only for students at the university but also for learners of the general community. University learners attend Saturday classes because it represents the best option for them to fulfill the university’s requirements to exit. Classes start at 9:00 a.m. and finish at 13:00 p.m. and the course length is 16 weeks.

After obtaining permission from the Language Center, a preliminary pilot test was conducted to evaluate administration procedures and initial collection of the items. Both questionnaires were piloted as suggested by Dörnyei (2002). The LSQ was administered to two groups of the level 1, and the sample consisted of 55 learners. The LLSQ was administered to a sample of 50 learners of levels 3 (N=28), 4 (N=12), and 5 (N=10) in the language program. Both questionnaires were administered in the Spanish version trying to allow learners to understand the questionnaires fully. The researcher asked teachers to enable learners to attend the faculty’s computers room to answer the questionnaires since the electronic version of the questionnaires was used. The number of computers in the computer room required learners to answer questionnaires in groups. Learners responded to the questionnaires at different hours, and the researcher was present at all times to help learners when needed.

The main objective of the piloting was to evaluate the learners’ understanding of the items described in the questionnaire; consequently, to observe their reliability. Cronbach test for reliability was applied to both questionnaires. Analysis at a global level indicated an alpha

coefficient of  $r = .85$  for the LSQ and  $r = .88$  for the LLSQ both results indicate that instruments are reliable. Coaley (2010) suggests that the reliability of the instrument shows the possibility to produce consistent results in different settings ensuring its repeatability or reproducibility. Learners' comments, suggestions, and observations were considered for the final questionnaire and questionnaires were improved accordingly.

### 3.5.3 Interviews

Since there is a diversity of variables that can be accounted for the use of learning strategies in different learning contexts, it is necessary to observe data from different angles. The use of different types of data collection methods might direct research to different results since every assessment method has its own advantages and disadvantages (O'Malley & Chamot 1990). Chaudron (1986) suggests using complementary qualitative data and Bryman (2004) declares that the semi-structured interview is a free and flexible method where the researcher can exert control and guidance for the interviewees. The mixed-method, which integrates quantitative and qualitative methods, is widely used today (Creswell 2014) and interviews are widely accepted as a common research method (Kvale 2007; Cousin 2009). Furthermore, interviews are conducted not only to establish opinions about issues but also to elaborate on existing information (Kvale 2007). Griffiths (2003, p. 109) states that "learners are much more than mere animated columns of statistics"; therefore, quantitative data gathered from analysis of the LSQ and the LLSQ can be sustained by qualitative data gathered from semi-structured interviews.

Semi-structured interviews added a qualitative dimension to this study. Interviews complemented and extended the quantitative findings of the questionnaires, and intended to probe and expand in detail the use of learning strategies in both the general learning and the language learning contexts. According to Creswell (2007, p. 210), this procedure focuses on "converging or triangulating different quantitative and qualitative data sources." This type of design helps in complementing both approaches to provide a much more detailed perception of the findings. McNamara (2009) provides a list of elements that the researcher should consider for creating interviews. McNamara explains that the wording of the question should be open-ended; questions should be as neutral as possible; questions should be asked one at a time; questions should be worded clearly; additionally, she suggests being careful when questioning the reasons of the interviewees. Based on these observations, questions were developed for the interviews (see appendix C).

Interviews had as the main purpose to get the learners' point of view of their own real use of strategies in general learning contexts and in English language learning from the perspective of their genuine experiences. Another objective of the interviews was to find out whether learners are aware of the procedures that they own to learn or improve their learning and whether they can

identify them. The questions in the interviews were divided into two sections. The first section elicited the learners' use of strategies in general learning. Key questions were mainly designed to figure out how learners deal with learning tasks such as daily studying, studying for exams, strategies they use to overcome difficulties, and strategies they use out of the classroom in order to improve their learning. Additionally, it was intended to ask for their perception of the behaviors of good learners. In the second section, the main objective was to elicit information about the strategies learners use in language learning. Questions sought for discovering if the strategies that learners use in general learning are similar to the strategies used in language learning. Another objective of the second section was to find out the perception of difficult areas in language learning and the strategies they use to improve in such areas. An additional objective was to seek learners' strategies they use to improve in language learning such as reading, speaking, listening, writing, and memorization, and the activities they use to improve language learning outside the classroom. Questions in interviews did not explicitly explore strategies included in the questionnaire, but they tried to allow interviews to express their thoughts. Thus, this set of qualitative data obtained from interviewees contributed to the establishment of the learners' profiles.

The interview was piloted with three learners in order to make arrangements, if necessary, but mainly to consider the time, the wording of the questions, and the possible follow-up questions that could be used to in the final version. The data obtained from the pilot sample was carefully examined in order to observe the probe questions that needed to be included in order to obtain more information from the learners and to observe the depth of the questioning. Consequently, probe questions were expanded to control the focus of the current inquiry. Probe questions were based on Patton's suggestions (1990) who claims that probe questions should be detailed oriented questions to form a bigger picture of inquiry, elaboration questions to encourage the learner to explain more deeply, and clarification questions that search for explanations for understanding and misunderstandings.

It was intended to have a sample that were as illustrative as possible of the learners' characteristics considering age, gender, type of learner, and use of strategies. Creswell (2007) discusses the importance of selecting the appropriate candidates for interviews, and the importance of acquiring participants who will be willing to share openly and honestly information of their story. Denscombe (2007, p. 184) suggests that "in particular, the sex, the age, and the ethnic origins of the interviewer have a bearing on the amount of information people are willing to divulge and their honesty about what they reveal."

The criteria considered for the selection of interviewees was made from data of the LSQ, and it was based on the results of the test scores. Learners were identified as high achievers and low achievers according to achievement test scores of the first administration. The sample also

considered low strategy users and high strategy users, and average strategy users according to the average obtained in LSQ, and by means of the frequency analysis of the quartiles. Twenty learners with these characteristics were spotted (See appendix E). Although it was intended to include a similar number of male and female learners and similar type of learners from the control and the experimental group, it was not possible.

Ethical issues were addressed by reassuring and guaranteeing learners' privacy (Schostak, 2006: p.136) not only for the interviews identities but also for data obtained from the questionnaires. Bulmer (2001, pp.49-52) suggests that the necessary ethical principles for subjects include "informed consent, respect for privacy, safeguarding the data-confidentiality, avoidance of harm, the absence of deception, and attention to publication consequences." Thus, learners were interviewed individually in Spanish. The purpose of the interview was clearly stated, and they were asked for permission to be recorded in order for the interviewer to analyze and summarize information. All of the participants agreed and granted their permission to use the information for the present study. The interviews were conducted at the end of the course in order for learners to have an opportunity to internalize the strategies they use in language learning.

It is important to note that participants did not receive any reward, and they were asked to participate in the interviews willingly. During the interview, it was intended to put interviewees at ease and to have the least intrusive procedure for gathering data. Participants were encouraged to feel comfortable and relaxed. Learners were encouraged to provide ampler and elaborated answers by providing examples and to "get them to open up and let them express themselves in their own terms and at their own pace" (Bernard 1995, p. 209). The purpose and topics of the interview were made clear, and what they sought after. Interviews lasted in average eleven to fifteen minutes, and they were conducted in a well-illuminated and well-ventilated classroom trying to create a casual and relaxed atmosphere.

Interviewees' profiles with biographical data were developed (see appendix G). Profiles consist of pseudonyms, gender, students' code for identification and the group they belong to (experimental or control); achievement test scores on the first and second administration as well as average scores obtained in the LSQ and LLSQ. Profiles also included the strategies interviewees use more and less frequently. Additionally, profiles include prior experience in learning English, type of student, main reasons for studying the language, their areas of difficulty in language learning, and strategies they reported using when learning in contexts other than language learning and the strategies they use in language learning. These results will be amplified.

### 3.5.4 The achievement test

The achievement was considered in terms of grades obtained in the achievement test. Achievement tests related to course content have been used to measure achievement in relation to strategy use (Oxford & Burry, 1995). Thus, learner's achievement test scores were used as a scale for a more meaningful comparison with strategy use.

In the regular course, teachers base their teaching on the textbook *Top Notch fundamentals 1* (Ascher & Saslow 2011), therefore, the achievement test that the textbook provided to measure achievement was used. The textbook provides teachers, through software, with tests to evaluate students' progress on a unit-by-unit basis, that is, fourteen tests. Unit tests give learners the opportunity to demonstrate their mastery of what they have studied. However, the textbook also provided two review tests that clustered information seen in units one to seven and units eight to fourteen. These two cumulative tests were joined in order to form the achievement test used for this study so that all the information seen in the course would be included.

The English achievement test consisted of 151 items with information learned during the whole course (see appendix H). Although items were weighted differently, the number of correct answers was considered for statistical analysis. The achievement test included a section that tested listening, social language, reading, writing, and subskills such as vocabulary and grammar. Items included true and false, multiple choice, and cloze sentences with word banks from which learners could choose. It also included items that required more thought and more productive responses than just choosing, for example, answering questions, completing conversations or cloze sentences in which students would not benefit from a bank of answers. The test also included items that required critical thinking such as inferential understanding of language and ideas in context from reading passages.

Achievement tests were applied at the beginning and by the end of the course. Although results of the first administration of the achievement test were only used to discard absolute beginners, they were also used to contrast data. One hour and thirty minutes were destined to answer the test.

The achievement test was piloted with eight-second course learners in order to observe difficulties with instructions, vocabulary, and to measure the time used to answer the test. Results of the test were used only for the purpose of this study, and they were not considered for the teacher's grading, which was informed to learners at the moment of applying the test.

### 3.5.5 Strategy instruction sessions

Because teachers have different teaching backgrounds, experience in teaching or even teaching beliefs, they might follow different methodologies despite the use of a textbook. Therefore, it was

arranged with the coordinator of the Language Center that only one teacher could teach the classes to be used in the study in order to have a unified teaching methodology in both the control and the experimental groups. Wright, Horn, and Sanders (1997) in a study that aimed at discovering the magnitude of teacher effects on student achievement discovered that those differences in teacher effectiveness were found to be the dominant factor affecting student academic gain; in other words, learning. Considering that different teaching methodologies could influence either positively or negatively in the choice of learning strategies, it was intended to reduce the probability that different methodologies would affect the learning or use of learning strategies. She uses English most of the time and promotes the use of English at all times in the class. The teacher of the classes is a 30-year-old teacher who has been teaching for five years. She holds a master's degree in English language teaching.

Strategy sessions were adapted to class (further explained in this section) and provided by the researcher in order to apply the strategy instruction models observed in literature; thus, the teaching of learning strategies could be conducted as expected. Three one-hour and forty minute strategy training sessions were given (each session on a different day) in order to try to raise learner's awareness of strategy use and instruct learners about the benefits of using learning strategies. Although the actual classes' length is of two hours, the teacher always provides one hour and forty minutes of class; consequently, strategy instruction sessions lasted the regular class' length.

It was decided to include three strategy instruction sessions for different reasons. Even though strategy instruction must allow plenty of time for students to fully understand how and when the strategies can be used, two main reasons for including three one-hour and forty minutes sessions were considered. The first criterion was the feasibility to include a number of sessions that would not interfere with the teacher's program and the flow of her class in order not to deviate her from her regular program or schedule. Since one of the purposes of this study was to raise learners' awareness, interventions were meant to be short to pursue possible benefits through raising awareness. Consequently, another reason was based on the belief that a rational short awareness-raising intervention could be found to be more conceivable to be included in a real teaching context rather than setting a whole learning strategy program taking into account the cost/benefit ratio of strategy instruction. Nyikos and Fan (2007) suggest that the length of the treatment may moderate the effectiveness of strategy instruction. Furthermore, Hassan et al. (2005) suggest that studies that raise learners' awareness are typically shorter than testing a program of activities. They argue that awareness raising can happen in a moment and there is, therefore, no real need to specify an absolute minimum length or duration of interventions.

Although a number of strategy instruction frameworks was reviewed (e.g. Chamot & O'Malley 1986; Cohen 1998; Grenfell & Harris 1999; Oxford 1990; Pearson & Dole 1987); and the

perception that most models include similar patterns (see chapter 2), it was intended to use a model taking into account the necessary stages for the target group. Consequently, five sections were included for each strategy to be taught: Explanation stage, Model stage, Practice stage, Evaluation stage, and Transfer to new situations stage.

Different stages were included in the instruction sessions (see appendix D). In the Explanation stage, the instructor explicitly explains what the strategy is, gives the strategy a name, and explains the importance of such strategy; the instructor explains how it helps in learning. In the Model stage, the instructor gives examples of his own experience; how it worked, and how it helped him in his learning. In the Practice stage, the instructor applies planned activities adapted to the material of their current class in which learners would use the strategy explained. In the Evaluation stage, learners discussed their experience in using the strategy and how helpful it was for the activities presented by the instructor; and finally, on the Transfer stage, learners and instructor discuss the possible uses of the strategies and the possible ways in which such strategy could be used for different tasks. Although each strategy taught served for different goals, the inclusion of prior taught strategies in every new one was emphasized.

The first strategy session was provided on the third day of the class in order to allow groups to settle and learners to answer the LSQ. Session 1 was given in Spanish as part of the introductory course that the Language Center provides for all learners of the language program. Session one explained important aspects, the value and the purpose of strategies as well as behaviors and general actions that a language learner could adopt and employ in order to be successful in language learning. This session focused on the importance learners have in the learning process, the responsibility, persistence, organization and taking advantage of opportunities for practice. On this session, the researcher provided plenty of examples that helped him in learning English and Italian. However, the proactive attitude was always highlighted and emphasized. General study strategies such as investing time, being organized, and setting good study environments were explained and highlighted. Learners discussed and explained their study strategies in order to raise awareness of their own strategies to learn.

The strategies taught in subsequent strategy training sessions were obtained from first administration of the questionnaire (LSQ) taking into account the low average of frequency use and the feasibility to adapt them as processes in the language classroom for beginner learners of English, and in order to keep track of the of the development of the strategy along the course. Eight learning strategies were included in the treatment. The selected strategies for the training sessions belong to the cognitive, study and cooperative categories. Cognitive strategies refer to the actual manipulation of the learning material; for instance, organizing, grouping and elaborating the material, and relating new knowledge to existing knowledge. Cooperative strategies promote peer

interaction, which helps the development of language and the learning of concepts and content. Cooperative learning strategies involve learners to work in small groups to complete tasks or projects. Additionally, Cooperative learning has been suggested as one possible means of reducing anxiety in classrooms (Oxford 1996b). Study strategies are approaches that learners apply to learning. They are used in the process of organizing and taking in new information, retaining information, or dealing with assessments. They are usually correlated to success in school, and they considered necessary for learning. They include mnemonics for retention of lists of information, summarizing, highlighting, asking and answering questions, effective reading, and efficient note taking.

Strategy sessions two and three were taught mostly in English so that learners could see them as an opportunity to practice their language. These strategy sessions offered further practical opportunities for strategy implementation and reinforcement. Strategies were adapted to the information provided by the teacher at the moment of instruction in order to not deviate the teacher from her program. For example, when learners saw the use of the adjectives, the strategy *Explain in your own words* was taught, or when learners saw the verbs in the past tense, the strategy *Mind and conceptual maps* was taught. Strategies were given a name so that they could be identified by the learner: Explain in your own words, Gather with friends to see what you learned, Selective highlighting, Mind and conceptual maps, Make questions before and after reading, Asking questions to verify I understand, Summarizing, and Putting into practice what you learn.

For the second and third strategy sessions, it was necessary for learners to have acquired a certain amount of information in order for the researcher to adapt strategies to the material already seen; thus, on the second and third strategy sessions four strategies were included in each session and adapted to the already seen information:

- *Explain in your own words* strategy was used to help learners in describing common vocabulary based on their current knowledge when they can't find the correct words to express meaning.
- *Mind and conceptual maps* strategy was used to help learners organize vocabulary in a logical way in order to master vocabulary items or remembering concepts.
- *Make questions before and after reading* strategy was used to help them understand when they read or listen in English. Learners were encouraged to do this even using their native language while reading English passages.
- *Ask questions to verify I understand* strategy was used to help them monitor how much they have understood when they read or listen.

For the third session, four strategies were included:

- *Gathering with friends* strategy was used to help learners monitor what they learned in order to exchange, corroborate, and obtain information with their classmates.
- *Selective highlighting* strategy was used along with making questions in order to help them organize what they have read by selecting what is important.
- *Summarizing* strategy was used to help learners take larger selections of text and reduce them to their bare essentials: the gist, the key ideas, the main points that are worth noting and remembering.
- *Put into practice what you learn* strategy was used to help learners make learning more meaningful and interesting in order to give an immediate use for the new information.

However, with the objective of raising awareness, learners were always encouraged to discover new strategies, which could help them attain goals, and to assess their procedure for learning. Raising learner's awareness of learning strategies implies providing learners with systematic practice, reinforcement, and self-monitoring of their strategy use while attending to language learning activities. Awareness of language learning strategies can be measured by procedures that help learners reflect on their strategy use. For example, think-aloud protocols, and diaries; consequently, generate strategic awareness. Nevertheless, awareness in learning strategy research has mostly been measured in terms of quantitative procedures being the questionnaire the most common used tool (Baker 2008; Brantmeier & Dragiyski 2009; Jimenez, Puente, Alvarado & Arrebillaga 2009; Mokhtari & Reichard 2002; Sheorey & Mokharti 2001). Very commonly, awareness has been measured in terms of how frequent strategies are used through questionnaires; thus, the more frequent the strategy is used, the more aware of the strategies the learners appeared to be.

On the third and final session, additionally to the strategies practiced and discussed, learners were given a list of learning strategies included in the questionnaire with a brief explanation of the benefits of using them (see appendix F). Researcher and learners discussed one by one each of the strategies in the series in order to make sure learners fully understood the purpose and the benefits.

### **3.6 Data collection procedures**

The intended experiment followed a three-phase procedure. On the first phase, all learners from the control and the experimental groups answered the LSQ in order to gather data about the repertoire of strategies they handle before facing language classes at the university; and the type and frequency of strategies they commonly use in learning. The questionnaire was administered in an electronic way. The questionnaire was provided to learners through a self-completing questionnaire in a Google form where every submission was automatically stored in a spreadsheet. Learners were taken to the computing labs of the faculty of languages where they answered the questionnaire. Learners who did not answer the questionnaire in this way, because of being absent,

were approached later personally in their classrooms where a paper-based questionnaire was administered after class, and data was later exported to SPSS. The teacher of the class helped in encouraging learners to answer the questionnaires.

Learners from both control and experimental groups sat the achievement test in order to observe the current language knowledge they had. The test was administered on the third day just before learners had answered their LSQ. Learners were instructed that the results would help the teacher identify the areas which needed to be worked more deeply in order to direct efforts and improve teaching, and that results would not affect their grades. Learners were also instructed to not answer at random in order to have a better view of their current knowledge of the language; they were also instructed to leave blanks if they did not know the answers.

On the second phase, experimental group participants received treatment by means of three strategy training sessions, as described above, by the researcher at the beginning (in the first week, right after having answered the LSQ and the achievement test), in the seventh week, and by the end of the course in the twelfth week.

On the third phase, by the end of the course length (fifteenth week), a sample of learners from experimental and control groups were individually interviewed; then, a second administration of the strategy questionnaire (LLSQ) was applied to both control and experimental groups in order to observe changes in types and frequency of strategies used. Finally, learners in both groups sat the final achievement test. The teacher informed learners that results obtained in the final achievement test would not be considered for their final grade; results were merely informative and helped the teacher identify needs in learners for a more accurate feedback for the learners and the teacher.

### **3.7 Data Analysis procedures**

This section provides a description of the different statistical procedures in Excel and SPSS used to analyze data from the LSQ, LLSQ and the achievement test of both first and second administrations, and in the experimental group, control group, and both groups together.

Data gathered from questionnaires were examined for reliability using Cronbach's alpha reliability analysis to the experimental group, control group, and both groups together. Reliability analysis was also applied to strategies computed into eight categories to all groups in order to observe the reliability of the modified questionnaire and the changes that might occur with strategies as components of the whole questionnaire and strategy types.

Frequency analysis for LSQ was used to observe the frequency of general information such as sex, age, type of student.

Average strategy use frequency reported across all learners and across all strategies in order to identify the most and the least used strategies in both administrations and to all groups.

A Pearson product-moment correlation analysis was conducted in order to observe the statistically significant correlation between achievement test scores and learning strategies to all groups and in both administrations.

T-test for two samples was used in order to identify significant differences in reported frequency of learning strategies and achievement scores in both the LSQ and the LLSQ, and to all groups.

Top and bottom quartiles were obtained in order to be able to identify and label high and low strategies used, individually and grouped by categories, high and low achievers, as well as high and low strategy users.

T-test for paired samples was used in order to observe the difference between groups in the first and the second administration; not only in the achievement test but also in the strategy questionnaire to see if there was an increase in achievement as well as in the use of learning strategies.

Regression analysis was used in order to identify strategies that possibly contribute to achievement or possible predictors for achievement. Regression was applied to both administrations and to all groups.

### **3.7.1 Coding**

All interviews were recorded and transcribed verbatim for analysis, and content analysis approach was used to examine quantitative data. Weber (1990) indicates that “Content analysis is a research method that uses a set of procedures to make valid inferences from text” (p. 9). Nvivo software was originally used to entry data; however, due to the low amount of data Nvivo was not entirely used to analyze it; the process of coding included a manual development. Excel software was used to arrange and code data. Transcriptions of the interviews were introduced to Word and later to Excel software. Each participant was given a number, and each line was numbered to ease identification. Data gathered was coded and arranged into ‘broader themes and issues’ (Maxwell, 1996), later in categories according to strategy types. Although codes were not decided prior to the analysis, from the first reading, codes were hypothesized. Each concept that emerged was coded, and each code was re-evaluated in order to find any possible overlapping of information. When data was examined again, these codes were accepted or rejected. Transcribed data was constantly compared to find similarities or differences in order to place data into the best possible themes until categories that are more abstract emerged. According to Corbin and Strauss (2008), constant comparison allows to group similar items into categories in order to organize data in a systematic

way. The themes that emerged from the process of coding allowed to link codes to research questions.

Themes were categorized from levels of sophistication, from lower to higher degrees of sophistication in order to expose new revelations and to saturate the process of coding (Charmaz, 2006). According to Charmaz (2006), saturation of data occurs when nothing new (no new ideas) is found in the data (p.113). After several cycles of this procedure, eight main codes were identified: Prior Language Learning experience (PLLE), Reasons for Learning (RFL) Areas of Difficulty (AOD), Areas of interesting language learning (AOI), Learners' beliefs (LB), Self-Efficacy Perception (SEP), General Learning Strategies (GLS), and Language Learning Strategies (LLS). Six sub-codes were used to code GLS and LLS: Allotting Time to studying (ATTTS), Able to Recognize Materials (ATRM), Able to Assess Performance (ATMP), Looking for Opportunities to Practice (LFOTP), Strategies Fostered by Teachers (SFBT), and Strategies Fostered by Family (SFBF).

Once GLS and LLS strategies were identified and coded, a third coding process was given to GLS and LLS and according to the type of strategies of the questionnaire (see LSQ section in this chapter). GLS and LLS were extracted, put in a different excel sheet and given codes to ease identification; that is, the first initials of the pseudonym, a number of the interviewee, the number of the strategy and a type of strategy. Commonalities and patterns in strategy use in general and language learning contexts were sought. For every cycle of reading, codes were put in the column next to the information they were coding, and by using the tool customs sort in Excel, it was possible to customize sort by columns, and rows and even colors. In order to analyze the frequency of the vocabulary words or expressions used in the interviews, the Excel tool "Find," subsequently "Find all" made possible identifying the information required. This process helped in organizing, coding and identifying information more easily for the analysis.

The categorization of strategies reported by interviewees according to the categories of the LSQ represented a difficulty since many of them could fit two different strategies. For instance, "I look for opportunities to practice with friends, family, or peers" may be considered an Achievement Motivation strategy or a Study Organization strategy because they both involve processes, which imply a self-regulated behavior to perform strategies. Achievement Motivation strategies deal with the learners' activities and behaviors to reach learning goals, and they belong to the motivational and affective dimension of the questionnaire used in this study (Martinez-Guerrero 2004). Similarly, Study Organization strategies deal with learners' ways to manage their studying habits, and they belong to the behavioral and organizational strategies dimension. Thus, practicing with what they have learned in class involves conscious effort to behave in a certain way, which might be considered a strategy in its own right. Equally, a Concentration strategy such as "paying

attention” also involves a conscious effort, which represents a behavior to control the learner’s own attention, thus, paying attention can also be considered an Achievement Motivation strategy.

An explanation for the difficulty of placing strategies in a category may lie with the possibility that most of the strategies reported are basically cognitive and metacognitive in essence. In other words, they all involve mental processes to learn or understand information or processes to assess or monitor learning, and since the purpose of using the strategies is not explicitly stated by learners, strategies could fit in more than one category.

Thus, in order to sort strategies into categories more accurately, strategies were analyzed and sorted in four cycles and at different times so that strategies were analyzed with new eyes every time. Finally, strategies were placed in the category that fitted more times.

Interviews were conducted in Spanish to get further information about learners’ strategy use. Interviews were recorded and transcribed verbatim for analysis. Learners’ profiles with qualitative and quantitative data were created. Profiles included test scores, strategy mean scores of LSQ and LLSQ, reasons for learning, and the most and least used strategies of both administrations. These profiles helped in analyzing data more easily and faster.



## Chapter 4: Results

This chapter is organized in accordance with five research questions, which this study intended to research. Therefore, this chapter is divided into sections that answer the five research questions. Every section will describe the procedures used and the results obtained.

In section 1, data gathered and descriptive statistics are presented. Results of the test for reliability are reported followed by the average of strategy use of the LSQ. Quartiles of the general learning strategies that categorize high strategy use and low strategy use, and the twelve most and twelve least frequently used strategies are also presented. Furthermore, analyses of strategies computed into eight categories are also reported. Additionally, the strategies that learners frequently use in general learning as reported in interviews in order to give a more in-depth understanding of the use of general learning strategies. Data in these analyses intend to answer the research question 1: To what extent do learners use general learning strategies?

In section 2, data concerning strategy use in language learning is analyzed and reported. The overall average of strategy use in language learning (LLSQ) in contrast with general learning strategies are analyzed as well as the quartiles that categorize high and low strategy use in language learning. The twelve most and least used strategies in language learning are also reported. Moreover, averages of strategy use in language learning computed into categories are compared with general learning strategies described. Additionally, T-test for paired samples results are informed. Strategies frequently used in language learning gathered from qualitative data are also reported. Furthermore, the averages of achievement test results of the second administration are reported in order to answer research question 2: To what extent are general learning strategies used in language learning?

In section 3, the relationship between strategy use and achievement test scores is analyzed, and regression analysis results of overall data that describe the predictive value of general learning strategies in language learning are reported in order to answer question 3: To what extent do general learning strategies predict language learning?

In section 4, average scores obtained from the eight strategies included in the strategy instruction sessions, and results of T-test for Paired samples of strategies taught to the experimental group are also reported; additionally, T-test for paired samples to examine the adoption and use of strategies taught. The type of strategies learners used more and less frequently will be reported to answer research question 4: To what extent does strategy instruction influence L2 strategy use?

In section 5, data of low and high strategy users, as well as low and high achievers, are examined. Averages allow categorizing types of strategy users as well as achievers, and types of strategies used. T-test for independent samples indicates the differences across all types of learners. Strategies used in general learning and language learning as reported by interviewees are also described, and a list of strategies that differentiates high achievers from low achievers is presented. These results will answer research question 5: To what extent are strategies used differently by high and low strategy users and high and low achievers?

It is important to note in this section of the chapter that since the researcher played different roles in this study, data collected might have been affected by the role being played by the investigator. Among the different roles, two are of importance here which will be further discussed in the Discussion Chapter 5. First, the researcher played the role of the strategy instructor. Although there was a reduced number of strategy instruction sessions, learners were acquainted with the instructor; therefore, they might have been more receptive to information, at least in the second and third sessions. However, this was not apparent in the adoption of strategies included in strategy instruction sessions since data showed no increase in the use of strategies taught (see section 4.4). The second role was the one of the interviewer. This might have had a positive effect on the data provided by learners of the experimental group since they were more familiar with the instructor, now interviewer. They might have felt more comfortable than the students in the control group since the interview was the first contact learners had with the interviewer. Learners in the experimental group could also have provided more data and more ample answers; therefore, data might have increased. However, this hypothesis is not analyzed in this study.

#### **4.1 The extent to which learners use general learning strategies**

Due to the length of the experiment, which took five months, the number of participants at the beginning and the end differed one from another. Therefore, only learners who had the complete set of data in both administrations were included in the analysis. For this reason, the number of participants was reduced from 143 to 118.

The study was conducted with 118 learners with a complete set of data in the sample; 67 (56.8%) learners belonged to the experimental group, and 51 (43.2%) learners belonged to the control group. There were 94 (79.7%) female learners and 24 (20.3%) male learners. Descriptive analysis indicated that 89 (74.4%) learners were in a range age of eighteen to twenty-three years old and 29 (25.6%) learners were in the range age of twenty-four or older. Concerning the type of learners, the analysis indicated that 51 (43.2%) are university learners whereas 67 (56.8%) learners belong to public in general. Table 4.1 shows the descriptive statistics of general information data.

Table 4.1 General information descriptive statistics

	Frequencies		
	Control	Experimental	Total
<b>Sex</b>	51	67	118
Female	38	56	94
Male	13	11	24
	<b>51</b>	<b>67</b>	<b>118</b>
<b>Age</b>			
18-23	33	56	89
24-29	8	4	12
30-35	3	1	4
36-41	6	1	7
42 or more	1	5	6
	<b>51</b>	<b>67</b>	<b>118</b>
<b>Type of student</b>			
University student	28	23	51
Non-University student	23	44	67
	<b>51</b>	<b>67</b>	<b>118</b>

Kolmogorov-Smirnov test of normality was applied to data for both the learning strategy questionnaire computed into categories and the achievement test, not only for the first administration but also for the second administration of the questionnaires in order to identify if it was possible to apply t-test for paired samples. Table 4.2 shows Kolmogorov-Smirnov values.

Table 4.2 One-Sample Kolmogorov-Smirnov Test

	Kolmogorov-Smirnov Z	Asymp. Sig. (2-tailed)
Achievement test Score First administration	.473	.979
Achievement test Score Second administration	.636	.813
Questionnaire First Administration (LSQ)	.808	.532
Questionnaire Second Administration (LLSQ)	1.230	.097

Results indicated a normal distribution of data in not only the questionnaires but also in the achievement tests. Significance values higher than .05 indicate that the data was normally distributed in both groups.

Data were examined for reliability over the entire LSQ and according to the eight sub-groups. The reliability test for internal consistency was applied to the complete questionnaire obtaining an alpha coefficient for reliability of  $\alpha = .89$ . No significant differences could have been obtained if any of the items had been deleted; therefore, all of the items were included. Gliem and Gliem (2003) state that the closer Cronbach's alpha coefficient is to 1.0, the greater the internal consistency of the

items in the scale. They also claim that “Cronbach’s alpha does not provide reliability estimates for single items. The reliability analysis was also applied to the data of LLSQ obtaining  $\alpha = .87$  across all items, above the standard reliability threshold of  $.70$  (de Vaus 1995).

The average frequency of strategy use was calculated across all participants for each strategy in the questionnaire to find the extent to which learners use general learning strategies. Additionally, the overall average reported the frequency of strategy use across all participants ( $N=118$ ) for the first administration. Analysis indicated an average of  $M=4.03$  ( $SD=.57$ ) across all participants. Similarly, the average frequency of strategy use was obtained from the control and experimental group data in separate ways in order to distinguish differences between groups. Thus, the LSQ data of the control group showed an average of  $M=3.90$  ( $SD=.57$ ) whereas the experimental group reported an average of strategy use of  $M=4.13$ . ( $SD=.55$ ).

In order to observe if groups were homogeneous in the use of GLS in the first administration, a T-test for independent samples between control ( $M=3.90$ ,  $SD=.57$ ) and experimental group ( $M=4.13$ ,  $SD=.55$ ) showed a  $t(116) = 2.154$ ,  $p > .033$  which indicates that there is a significant difference between samples. In other words, the experimental group has a significantly more frequent use of general learning strategies. High strategy use is on the threshold of the third quartile whereas low strategy use is on the threshold of the first quartile. Quartiles obtained indicate that for the LSQ a mean score above  $M=4.45$  was considered a high strategy use while an average score below  $M=3.75$  was considered a low strategy use. The average across all participants ( $M=4.03$ ,  $SD=.57$ ) suggests a medium low strategy use, in other words, although not high strategy users, learners are not low strategy users either.

#### 4.1.1 The most and the least frequently used strategies in general learning

As described in Chapter 2, the choice of learning strategies and the frequency of strategy use may vary according to different factors. Learners have a set repertoire of strategies that they use more or less often. Mean scores were obtained from LSQ to observe the number of strategies used at a high and low frequency rate. High frequency was defined as  $M=4.45$  or above. Table 4.3 shows the twelve strategies with the highest mean score and the categories they belonged to, representing approximately the top quartile.

Table 4.3 The twelve most frequently used strategies in the LSQ

Category	Item	Description of the item	Mean score
Achievement Motivation	30	I like my homework to be one of the best	5.24
Achievement Motivation	32	It is important for me to do things better every time when I study.	5.08

Table 4.3 The twelve most frequently used strategies in the LSQ continued

Cooperative	7	When I gather with my classmates to do a project in teams, I participate all along the project.	5.05
Interaction in Class	27	I feel I am capable of learning what my classmates achieve.	5.03
Cognitive	3	When I read, I imagine what the book describes.	5.02
Achievement Motivation	31	When I study difficult topics, I review them until I can master them.	4.86
Achievement Motivation	9	When I solve problems, first, I try to understand what it is about, and later I solve it.	4.80
Cooperative	34	When I study in a team with my classmates, we make sure that everybody in the team learns the topics well	4.70
Cognitive	1	When I read, I can identify main information of the text.	4.61
Concentration	15	I believe that there are things that distract me easily.	4.58
Achievement Motivation	33	Before I perform a task, first I try to have the academic criteria that the teacher pointed out.	4.58
Cognitive	2	When I study, I try to relate new things that I am learning with the ones I already knew.	4.53

The figures as a result of the descriptive tests shown in Table 4.3 reveal that among the GLS that learners use more frequently, Achievement Motivation strategies (AM) (items 30, 32, 31, 9, 33) can be accounted for the type of strategies learners reported using more often within the twelve most frequently used strategies. Cognitive Strategies (COG) (items 3, 1 and 2) and Cooperative strategies (COO) (items 7 and 34) were also mentioned, and to a lesser extent Interaction in Class (IIC) (item 27) and Concentration strategies (CON) (item 15). Study strategies (STU), Study Organization (STO) and Affective strategies (AFF) were not found on the list of frequently used strategies. The twelve most frequently used strategies seem to be strategies that learners use as the basis of their learning. These strategies are strategies that learners use in different contexts. Green and Oxford (1995, p.289) call these strategies “bedrock strategies” and they suggest that these strategies “contribute significantly to the learning process of the more successful students although not being in themselves sufficient to move the less successful students to higher proficiency levels” (p.289).

The inclusion of five strategies relating the ability to achieve goals (items 30, 32, 31, 9, 33) supports Achievement Motivation Theory, which explains how important it is for individuals to achieve good performance. The inclusion of these strategies among those used highly frequently by learners seems to indicate the need for achievement which Dörnyei (1994a) sees as a stable personality trait in every facet of life that affects the way people behave.

In their motivation to achieve learning, learners use the strategies they know and trust. This view is supported by qualitative findings that indicate that learners use a higher number of STU and STO

strategies (see Table 4.5) which seem to be the strategies learners use as the basis of their learning processes. Analysis indicates that learners frequently use strategies that help them review information. Mostly, learners use STU strategies such as reading and rereading books as a way of reviewing what they see in their class. They reported reviewing notes in a similar way they write things repeatedly to memorize information. Learners find strategies such as reviewing and memorizing useful, and they include them in their strategy repertoire. These strategies seem to contribute to a great extent to the learners' methods for learning.

Interviewees also reported STO strategies that allow them to look for information to clarify and complement a lack of information seen in class. When learners were asked what they did when information was not enough or unclear, they reported looking for information on books, the internet, and videos and asking teachers, or more experienced classmates. For example, Rita, an 18-year-old learner who is a high achiever and a high strategy user in general learning, stated: "first, I ask my friends, and if they cannot help me, I search on the Internet; I always find everything!" Rita's ability to surf the web helped her find what she needed. In contrast, Milagros does the opposite. Milagros, who is an 18-year-old high strategy user in general learning, stated: "first, I try to look for information on the Internet, and if I still do not understand, I ask somebody who can explain me." She also added that "and sometimes teachers." Although Rita's and Milagros's strategies are different in procedures, they both pursue the clarifying of the information. Both approaches show an interest to achieve understanding and a set of strategies in a chain that lead them to achieve their goal.

Cognitive strategies reported by interviewees support strategies reported in quantitative findings. Strategies such as making summaries, analyzing patterns, identifying relevant information, relating new information to old information, and using imagery to understand are also described as frequently used by learners. For example, Cynthia an 18-year-old low achiever and low strategy user in general learning, and Karla and 18-year-old high strategy user in general learning reported the strategy of relating new information to information they already know. Although Cynthia and Karla are on opposite sides of the continuum of strategy use, both use the very same strategy but possibly with different results. This finding supports the idea that learning strategies work differently in learners. Another example is Ofelia who uses cognitive strategies. Ofelia is a female learner in her mid-forties and a high strategy user in general learning. When she was asked what reviewing meant to her, she interestingly stated: "When I review, I summarize what I read, but I have to write." For Ofelia, far from just reviewing, reading, or rereading, she can elaborate on her strategies by amplifying the activities of a single process into a chain of activities that includes cognitive strategies. General strategies gathered from qualitative data will be further described in this section.

In a similar vein, the number of strategies used at low rate frequency was also analyzed to know the type of strategies that learners do not frequently use or they have less preference for. For GLS, the low frequency was defined as a mean score of  $M=3.75$  or below. Table 4.4 shows the twelve strategies with the lowest average score for the LSQ, representing approximately the first quartile.

Table 4.4 The twelve least frequently used strategies in the LSQ

<b>Category</b>	<b>Item</b>	<b>Description of the ítem</b>	<b>Mean score</b>
Interaction in Class	45	I actively participate in classes.	3.32
Study organization	39	When I study a topic, in addition to the material of the program, I look for other books to complement it.	3.24
Cognitive	26	When I solve problems, I like to develop new ideas and different hypothesis.	3.16
Study	23	When I finish studying, I ask myself questions to confirm what I learned.	3.15
Study	44	When I study, I make mind maps or conceptual maps in order to relate the most important concepts.	3.12
Study	47	When I read while I am studying, I write some questions that later I answer in a second reading.	3.11
Cooperative	28	After reading what I am studying, I gather with my classmates to comment on important points.	2.86
Interaction in Class	37	I read in advance the topics that we will see in future classes	2.62
Interaction in Class	38	I study more than what teachers demand	2.61
Cooperative	51	When I prepare for an exam, I ask my classmates to gather with me in order to study together.	2.57
Study Organization	36	I have an agenda of studying activities for each day of the week	2.51
Achievement Motivation	24	After solving a problem, I make sure that the result is correct and logical.	2.02

The figures as the results of the descriptive tests shown in Table 4.4 expose the twelve least frequently used strategies are strategies that learners do not seem to use as their basis for their learning. To illustrate, Among the GLS that learners reported not using very frequently, Study strategies (items 23, 44, and 47) seemed to have a strong presence; followed by Interaction in Class strategies (items 45, 37, and 38). Cooperative (items 28, 51) and Study Organization strategies (items 36, 39) are used to a lesser degree and Cognitive (item 26), and Achievement Motivation strategies (item 24) seem not to be quite popular among learners.

In contrast, learners in interviews did not report AM, IIC, and Affective strategies (see Table 4.5), which suggests that learners make little or no use of such type of strategies. Nonetheless, Escarlet, an-18-year-old female learner who is studying the language to take advantage of her idle time, reported only one AFF strategy. She stated that she did not study for exams in order not to feel confused. Learners did not report achievement motivation strategies possibly because they represent behaviors and attitudes that learners have in learning, and they are not concrete activities that learners could perceive as an aid for their learning.

The number and the type of learning strategies used at a low-frequency rate suggest that learners are not aware of strategies or they do not find them useful enough. Learners might have different strategies to pursue and achieve their goals; however, this does not indicate that strategies are not useful or productive for learners.

#### 4.1.2 Analysis of strategies in the LSQ computed into eight categories

Strategies were computed into categories, and mean scores were obtained to observe differences in categories of strategies. This procedure intended to find out if the categories of strategies match strategies used at a single level. Analysis indicates that the frequently used strategies used at a single level (above described) match the strategies computed into categories. To illustrate, among the twelve strategies observed at a single level, five belong to the Achievement Motivation category and three to the Cognitive category. However, only one Concentration strategy was found as frequently used at a single level while in strategies computed into categories Concentration strategies appear to be frequently used. Similarly, the less frequently used strategies concur with strategies computed into categories. For example, the strategies less frequently used at a single level belong to the Study, Interaction in class, and Study Organization categories.

Table 4.5 Averages of strategy categories General Learning Strategies

	<b>LSQ mean scores</b>	<b>Standard deviation</b>
Achievement Motivation strategies	4.41	.67
Cognitive strategies	4.32	.77
Concentration strategies	4.19	.87
Affective strategies	4.07	1.59
Cooperative strategies	3.79	.88
Study strategies	3.76	.88
Interaction in Class strategies	3.59	.89
Study Organization strategies	3.58	.85

Table 4.5 above summarizes the mean scores of the strategies computed into categories and arranged by rank order. The figures reveal that Achievement Motivation and Cognitive strategies, and Concentration strategies are more frequently used in General learning contexts whereas Study, Interaction in class and Study Organization strategies are less frequently used. In contrast to

quantitative data, interviewees reported using STU strategies that accounted for the 61% of strategies reported, STO strategies for 20% and COG strategies for 8%. CON, COO and IIC strategies account for 11% of the strategies reported. Qualitative data findings indicate that learners in general learning contexts reported using a greater number of Study, Study Organization, and to a lesser extent, Cognitive, Concentration and Cooperative strategies (see Table 4.5). These findings suggest that the type of strategies reported by interviewees complements the strategies reported as frequently used in the questionnaire.

It can be observed in Table 4.5 that STU ( $M=3.76$ ) and STO ( $M=3.58$ ) strategies show a low rate of frequency use. In contrast, strategies reported by interviewees for general learning contexts show a higher number of STU and STO strategies (see Table 4.6). Sometimes, learners do not perceive learning strategies as activities used for learning. Therefore, such strategies are not accurately reported by learners; especially if learning took place a long time ago such as in the case of Celia, Sonia, Ofelia or Lilia who are in their late thirties and early forties. Qualitative data findings suggest that the types of strategies that learners frequently use complement and expand the strategies learners reported as frequently used in the questionnaire. That is, whereas in quantitative findings the most common types of strategies reported by learners in general learning were Achievement Motivation, Cognitive and Concentration strategies, qualitative findings indicate that Study, Study organization strategies are the frequently used strategies. For example, results obtained from analysis of the questionnaires indicate a low use of strategies such as looking for information to complement the material of the program ( $M=3.24$ ). However, interviewees reported a frequent use of this strategy.

Table 4.6 General learning strategies reported by interviewees

Behavioral and organizational strategies		Cognitive and metacognitive strategies	
<p><b>Study Organization strategies</b></p> <p>Allotting time to studying (2)</p> <p>Asking a more knowledgeable one for clarification such as teachers and classmates (12) vocabulary, meaning, examples, etc.</p> <p>Asking classmates for notes to complete his notes (2)</p> <p>Looking for information (14) in books, the internet, videos, etc.</p> <p>Looking for opportunities to be tested</p> <p>Planning for the future</p> <p>Putting into practice information learned (2)</p> <p>Setting challenges</p> <p>Transcribing notes to understand information (CLEAN)</p> <p>Trying to read a lot related to topic</p>	<p><b>Study strategies</b></p> <p>Copying notes or information from the board (2)</p> <p>Creating acronyms to remember</p> <p>Creating games to memorize information</p> <p>Creating own exercises to answer</p> <p>Doing exercises on the internet (2)</p> <p>Doing homework (5)</p> <p>Learning formulas</p> <p>Listening to herself repeating to memorize</p> <p>Making mind maps (2)</p> <p>Making notes (10)</p> <p>Making questionnaires (9)</p> <p>Making summaries (8)</p> <p>Reading (2)</p> <p>Highlighting important information (2)</p> <p>Reading and making notes (2)</p> <p>Reading and rereading notes or books to understand, memorize, recall information (18)</p> <p>Reading books for exams (3)</p> <p>Reading deeply to until understanding and being able to explain it</p> <p>Reading notes (6)</p> <p>Reading out loud (2)</p> <p>Recalling info with close eyes</p> <p>Redoing exercises</p> <p>Repeating many times to memorize (7)</p> <p>Reviewing (textbooks, notes, summaries, etc.) (18)</p> <p>Roleplaying real situations such as presentations for oral exams or presentations</p> <p>Studying (reviewing, reading) (6)</p> <p>Transcribing notes to recall information</p> <p>Writing a repeatedly to memorize (11)</p>	<p><b>Cognitive strategies</b></p> <p>Analyzing patterns to understand</p> <p>Comparing exercises to understand better</p> <p>Guessing vocabulary from context</p> <p>Identifying important information (2)</p> <p>Imagining images to memorize</p> <p>Imagining to understand reading (3)</p> <p>Observing differences in examples</p> <p>Relating new information to already known information (3)</p> <p>Highlighting important info and copying to notebook</p>	<p><b>Concentration strategies</b></p> <p>Concentrating on studying</p> <p>Concentrating on the topic to understand</p> <p>Eliminating distractions to study</p> <p>Looking for the appropriate environment for studying (3)</p> <p>Paying attention to class if interesting</p> <p>Paying attention to understand (2)</p> <p>Trying to concentrate</p> <p>Trying to concentrate on recalling information</p>
<b>Achievement Motivation and affective strategies</b>		<b>Cooperative learning and Interaction in Class strategies</b>	
<p><b>Affective strategies</b></p> <p>No studying to feel less confused</p>	<p><b>Achievement motivation</b></p>	<p><b>Cooperative learning strategies</b></p> <p>Exchanging information with friends to assess learning</p> <p>Exchanging notes and questions for exams (4)</p> <p>Gathering with friends to review notes (4)</p> <p>Gathering with friends to study</p> <p>Asking and answering questions with classmates (2)</p> <p>Talking about class topics</p>	<p><b>Interaction in Class strategies</b></p>

Note. The number in parenthesis indicates the number of times the strategy was reported.

Table 4.6 shows that interviewees also reported the use of COO strategies in general learning. They gather with friends to do more than projects; they mainly interact with friends to study for exams. When learners gather with friends, they exchange notes, ask and answer questions to each other. They also assess their knowledge by talking about what they know, and they role-play audience-presenter to rehearse for presentations. Therefore, gathering with friends deploys a number of strategies that learners use. An example of this is Susana who is a female learner in her late thirties. According to her average of strategy use in general learning, she is a low strategy user in general learning; however, she was able to report a substantial number of strategies she uses in general learning. When she was asked what she did to learn, in addition to what the teacher taught her in class, she said that she gathered with friends. When she gathers with friends a number of strategies she uses can be identified; for example, making questionnaires, asking questions from the questionnaires, memorizing answers, sharing notes and asking classmates when necessary, and expanding and complementing her notes. Thus, Susana probably was not able to identify strategies used in questionnaires as processes she uses to learn in general learning; however, she was able to report a number of strategies that were not included in the questionnaire.

As listed in Table 4.6, strategies reported by learners in general learning show a considerable number of strategies on the Study and Study Organization categories. Study and Study organization strategies suggest a base of strategies that learners use to approach learning and to solve tasks. The frequent use of strategies such as reviewing, rereading, making notes, writing things repeatedly to memorize, looking for information, asking for clarification to a more knowledgeable one seem to work along with achievement motivation, cognitive and concentration strategies towards a higher level of understanding.

In this section, the general learning strategies reported by learners in quantitative and qualitative methods have been reported. Data gathered from interviews come from questions that allowed learners to express openly the way they learn and interact with tasks in learning and very few strategies reported by interviewees are found in the questionnaire. It is possible to suggest that the strategies reported in the interviews complement and broaden strategies in the questionnaire. The number of strategies that learners are able to identify proposes that learners consciously use strategies with a purpose in mind; however, there are strategies that learners do not identify and which they need to deploy other strategies. Table 4.6 shows strategies gathered in interviews and the classification they belong to. As it can be observed, the number of strategies on the Study and Study organization strategies is higher than strategies in other categories. STU and STO strategies are the strategies that learners were able to consciously report the activities that help them learn, study and overcome difficulties. Some of the strategies were mentioned more than one time and by

different learners. The number in the parenthesis indicates the number of times that learners reported using it. Additionally, although some strategies, in essence, are used for the same purposes by the learners, they are reported as different strategies; for instance, reading, re-reading, reviewing, revising.

## **4.2 The extent to which general learning strategies are used in language learning**

Research question 2 aimed at discovering the extent to which general learning strategies are used in language learning. For this purpose, data of the LLSQ are examined. For the purpose of this study, activities, and behaviors learners do or have in general learning contexts and then used in language learning are considered strategies that learners transfer to language learning. As explained in chapter 2, according to Cummins (1978) the skills that a learner has in one context can be tools to help them learn in other learning contexts; thus, the extent to which a learner reports using strategies in language learning, in contrast to the general learning strategies they report using, represent the transfer of strategies.

To test the hypothesis that the use of general learning strategies in the LSQ ( $M=4.03$ ,  $SD=.57$ ) and the use of language learning strategies in the LLSQ ( $M=4.07$ ,  $SD=.52$ ) were equal, a t-test for paired samples was performed. The assumption of normally distributed differences scores was considered satisfied. T-test for paired samples across all learners did not show a significant difference  $t(117) = -.634$ ,  $p > .527$ . That is, learners did not increase or decrease significantly the use of general learning strategies in language learning, which indicates that the use of strategies was similar in both learning contexts.

### **4.2.1 The most and the least used general learning strategies in language learning**

The average frequency of strategy use was calculated across all participants ( $N=118$ ) for each strategy in the questionnaire ( $M=4.07$ ,  $SD=.52$ ); results indicate a medium use of strategy use. Quartiles of the LLSQ were obtained with the purpose of identifying learning strategies used at a high and a low-frequency rate. Mean scores lower than  $M=3.69$  are found on the first quartile, which suggests a low strategy use whereas mean scores of  $M=4.64$ , or above, are found on the top quartile indicating a high frequency of strategy use. The twelve strategies with the highest mean scores of the LLSQ represents approximately the top quartile, and it falls into the high-frequency category. Table 4.7 shows the list of twelve most frequently used strategies in language learning.

As it can be observed in Table 4.7, Cognitive strategies can be found more often on the list (items 6, 2, 3, 1) of the strategies that learners use in language learning. However, AM strategies

remain also frequently used (items 32, 30 and 9), and to a lesser degree CON (items 16 and 22), IIC (item 27), COO (item 7), and Study (item 29) strategies were found. The inclusion of four Cognitive strategies among those used highly frequently by more learners would suggest that learners choose strategies that help them understand and deal with the new information and new tasks in language learning.

Table 4.7 The twelve most frequently used strategies in Language Learning (LLSQ)

Category	Item	Description of the item	Mean
Achievement Motivation	32	It is important for me to do things better every time when I study English.	5.15
Interaction in Class	27	I feel I am capable of learning what my classmates achieve in the English class.	5.15
Cognitive	6	When I am in the English class, I think of every topic that the teacher explains to make sure I understand it.	4.98
Cooperative	7	When I gather with my classmates to do an English project in teams, I participate all along the project.	4.92
Cognitive	2	When I study English, I try to relate new things that I am learning with the ones I already knew.	4.87
Cognitive	3	When I read in English, I imagine what the book describes.	4.82
Achievement motivation	30	I like my English homework to be one of the best.	4.81
Cognitive	1	When I read English, I can identify main information of the text.	4.77
Concentration	16	When I start studying English , I feel I tired or makes me sleepy	4.76
Study	29	When I finish studying a topic in English, I take down keywords that help me remind it.	4.66
Achievement Motivation	9	When I solve problems, first I try to understand what it is about, and later I solve it.	4.64
Concentration	22	When I read while I am studying, I get distracted thinking about other things.	4.59

The number of learning strategies reported by interviewees in language learning was greater than the one reported in general learning contexts. Strategies were sorted out and classified into the eight categories that the questionnaire includes (see Categorization of strategies on Chapter 3, section 3.7.1). From the strategies reported, STU strategies accounted for the 43%, STO for 41%, COG for 11%, and CON for the 5% of the strategies reported (see Table 4.9).

Qualitative data analyzed indicates that learners reported using very frequently STU strategies such as doing exercises on the book's webpage platform (13 times), making notes (17x), and reviewing notes, textbooks, exercises, or grammar (36x). Learners also use STO strategies such as listening to songs, conversations, news, or Radio (25x); watching TV, TV series, News, or Movies (13x); practicing speaking with friends, family, or native speakers (16x); attending the self-access center (8x), looking for vocabulary to understand reading and asking a more knowledgeable one for clarification (6x).

Learners also reported using COG strategies in language learning. Strategies such as relating new information to already known information were frequently mentioned by learners (5x). Relating new information to already known information is a strategy used by not only high strategy users but also low strategy users. For example, Alma is a female learner in her early thirties, and her average of strategy use in language learning was considered low; in contrast, Rita, who is an 18-year-old female learner, showed average of strategy use in the top quartile, which indicates a high strategy use, also reported the same strategy. However, the beneficial effect could not be observed.

Additionally, learners reported strategies such as creating their own examples to understand meaning (5 x). For instance, when Milagros, whose average of strategy use is in the top quartile, was asked what she did to improve in grammar, her area of difficulty, she convincingly said, "I create examples similar to the ones on my notes in order to learn the structure." Milagros seems to use strategies with a focus and addresses effort to her area of difficulty. Similarly, Susana creates her own examples of the structures she finds more difficult to understand. Both learners seem to use goal oriented cognitive strategies. Cognitive strategies are part of the learners' repertoire that they use to understand new information of a new language.

Learners also reported CON strategies; for instance, paying attention to pronunciation, listening or reading activities. Jacobo, an 18-year-old male high strategy user, reported paying attention in order to recall information and Sonia stated, "I try to pay attention," however; she did not clarify if this intention was always successful. In the same way, Aleli, a female in her late-twenties and whose reason for learning English was the need to improve better job opportunities, reported paying attention when she said, "I try to pay attention how the speaker pronounces the word, and I try to say it." Paying attention and concentrating in class, or on what they read or listen, are strategies that learners reported as characteristics of good learners. For instance, Lucy, a female learner, who is both a low strategy user in language learning and a high achiever, said, "A good learner should pay attention, ask questions and participate in class", her achievement test score (134) and the strategies reported in language learning suggest that she uses the strategies she reported.

Similarly, strategies with the lowest mean scores were obtained. Low frequently used strategies have a mean score lower than  $M=3.69$ . Table 4.8 shows the list of the twelve strategies with the lowest mean score of the LLSQ. The twelve strategies with the lowest mean scores of the LLSQ represents approximately the bottom quartile, and it falls into the low frequency category. Table 4.8 displays the list of twelve least frequently used strategies in language learning.

Table 4.8 The twelve least frequently used strategies in Language Learning LLSQ

Category	Item	Description of the item	Mean
Cognitive	26	When I solve problems, I like to develop new ideas and different hypothesis.	3.51
Study	23	When I finish studying I ask myself questions to confirm what I learned or what I lack.	3.42
Study Organization	42	When I study English, the effective time of study is...	3.07
Study	47	When I read while I am studying English, I write some questions that later I answer in a second reading.	3.07
Cooperative	28	After reading what I am studying in English, I gather with my classmates to comment on important points.	3.00
Study Organization	39	In the English class, I sit on the front chairs in order to pay more attention.	2.99
Interaction in class	38	I study more than what teacher demands on the English class.	2.87
Interaction in class	37	I read in advance the English topics that we will see in future classes.	2.71
Study	44	When I study English, I make mind maps or conceptual maps in order to relate the most important concepts.	2.46
Study Organization	36	I have an agenda of studying activities for each day of the week.	2.34
Cooperative	51	When I prepare for an English exam, I ask my classmates to gather with me in order to study together.	2.32
Achievement Motivation	24	After solving a problem in the English class, I make sure that the result is correct and logical.	2.21

Table 4.8 reveals that among the twelve strategies that learners do not use very frequently, STO strategies (42, 39, and 36) and STU strategies (items 23, 47, and 44) were mentioned more often. They were followed by IIC strategies (items 38, 37), COO strategies (items 28, 51), AM strategy (item 24), and COG strategy (item 26). The non-frequent use of these strategies does not necessarily mean that learners do not use these strategies but, probably, they use different types of strategies that help them in language learning. This is supported by the strategies reported by

interviews, which indicates that learners reported a higher use of STO, STU and COG strategies. In language learning, no AM, COO, and IIC strategies were gathered from interviews (see table 4.9).

When comparing strategies used in General learning and in Language learning, it could be observed that eight out of the twelve most frequently used strategies were found on the top quartile in both questionnaires ( items 30, 32, 7, 27, 3, 9, 1, 2). In a similar way, eleven of the twelve least frequently used strategies, which appear on the first quartile (items 26, 23, 47, 28, 39, 38, 37, 44, 36, 51, 24) appear on both questionnaires, this might suggest that learners generalize the use of learning strategies across learning contexts.

By contrasting the learning strategies that interviewees use in general learning contexts and the strategies they use in language learning, the type of strategies and a number of strategies learners transfer to language learning can be observed.

#### 4.2.2 Analysis of strategies in LLSQ computed into categories

Strategies of the LLSQ were also computed into categories, and average scores were obtained in order to observe rates of strategy use. As it can be observed in table 4.9, the frequency of use of STU, CON, COG and IIC strategies showed an increase in average from the first to the second administration; that is, from general learning to language learning. In contrast, STO, AM, AFF and COO strategies showed a decrease in average scores. Table 4.09 shows mean scores and standard deviations of strategies computed into categories for the LSQ and the LLSQ for contrast.

Table 4.9 Averages of strategy categories of LSQ and LLSQ

	LSQ (mean)	SD	LLSQ (mean)	SD
Cognitive strategies	4.32	.766	4.50	.699
Concentration strategies	4.19	.866	4.37	.894
Achievement Motivation strategies	4.41	.673	4.19	.615
Interaction in Class strategies	3.59	.892	3.95	.726
Affective strategies	4.07	1.589	3.81	1.706
Study strategies	3.76	.879	3.80	.892
Cooperative strategies	3.79	.883	3.68	.729
Study Organization strategies	3.58	.848	3.34	.862

Figures in Table 4.9 demonstrate the mean scores of strategies computed into categories of the first and second administration of the questionnaire. Results reveal that the types of strategies used in both contexts remain similar but with slight changes in frequency use. That is to say; learners increased the use of some strategies whereas decreased in the use of others. However, in order to

know if such differences represent a significant increase or decrease more analysis needed to be conducted to data.

T-test for paired samples was also used to evaluate if there was a significant difference between strategies computed into eight categories for both the LSQ and the LLSQ. Results indicated no significant difference in Study strategies  $t(117) = -.403, p < .688$ ; Concentration strategies  $t(117) = -1.669, p < .098$ ; Affective strategies  $t(117) = 1.297, p < .197$ ; and Cooperative strategies  $t(117) = 1.224, p < .223$ . Table 4.10 shows mean scores of both administrations and t-test for paired samples values.

Table 4.10 Averages scores of strategies computed into categories and t-test values for paired samples

	<b>Mean</b>	<b>Mean</b>	<b>t</b>	<b>df</b>	<b>Sig.</b>
	<b>LSQ</b>	<b>LLSQ</b>			
Achievement Motivation strategies	4.41	4.19	2.75	117	.007
Cognitive strategies	4.32	4.50	-2.12	117	.036
Concentration strategies	4.19	4.37	-1.67	117	.098
Affective strategies	4.07	3.81	1.29	117	.197
Cooperative strategies	3.79	3.68	1.22	117	.223
Study strategies	3.76	3.80	-.40	117	.688
Interaction in Class strategies	3.59	3.95	-3.70	117	.000
Study Organization strategies	3.58	3.34	2.40	117	.018

In contrast to the strategies that showed no significant difference, results indicated a statistically significant decrease in the use of AM strategies  $t(117) = -.403, p = .007$ , and STO strategies  $t(117) = 2.403, p > .018$ . Results also indicated an increase in the use of COG strategies  $t(117) = -2.117, p > .036$  and IIC strategies  $t(117) = -3.705, p = .000$ .

The learning strategies that learners use in language learning seem to be influenced, to some extent, by the strategies learners have in their strategy repertoire; not only the frequently used strategies but also the not frequently used strategies. Results in this section have shown that learners use strategies they have in their strategy repertoire as the first tools to deal with language learning tasks. It would be naive to believe that the strategies that adult learners use in new contexts are developed in that new learning context. Adult language learners are not clean slates that need to

develop a new repertoire of learning strategies; instead, they need to adapt their strategies to new tasks, and then, they need to adopt new ones. However, this adoption, or adaptation, does not explain the effect they have on language achievement. The predictive value that general learning strategies have in language learning will be further reported.

Table 4.11 presents the strategies gathered from interviews that learners use in language learning. Such strategies belong mainly to four categories which account for most of the strategies reported: Study, Study Organization, Cognitive, and Concentration strategies. The number in the parenthesis indicates the number of times the strategy was mentioned in the interviews. Language learning represents a specific learning context; however, learners use learning strategies that they usually use for learning in other learning contexts. For example, learners reported using reviewing as the base of their studying habits just as they use them in general learning.

The strategies in table 4.11 allow observing a number of strategies that were not included in the questionnaires; however, learners managed to report them in the interviews. This suggests that learners have a wide range of procedures that complement data gathered from quantitative methods. That is to say, learners use to a great extent Study strategies such as making notes, summaries, and questionnaires, reviewing notes, textbooks, homework or exercises already done, repeating aloud or in silence, and writing many times to memorize information are strategies that learners reported using in both contexts. These strategies serve for different purposes and learners transfer to different contexts in an attempt to store information. For example, Lilia, a female learner in her late-thirties, and who is in the high strategy user category, reported that reading helped her learn because she could retain information, which later she could remember. She stated that she also does that in her profession as a lawyer and she acknowledged that reading aloud or in silence has always helped her learn. A more scrutinized comparison of general learning strategies and Language learning strategies will be further discussed in chapter 5.

Additionally to Study strategies, learners also reported employing to a great extent Study Organization Strategies. Strategies that help them manage their studying habits such as asking for clarification, allotting time to studying, and strategies that help them practice their language. For instance, learners reported looking for opportunities to practice speaking; listening to input in English, and watching TV were the main strategies reported by interviewees. As described in Chapter 2, learners have a strategy repertoire that they have developed through years and experience. The strategies learners stored in their repertoire proved good results; consequently, they use them to deal with any learning tasks in the first instance.

Interviews allowed learners to explain and elaborate on the use of strategies for learning English; however, Table 4.11 reveals that learners did not report strategies on the Affective, Achievement motivation, Cooperative learning, and Interaction in Class strategies. It can only be

hypothesized that learners were able to report strategies they recall using, and they are not able to identify strategies that they unconsciously use such as in the case of Achievement motivation strategies or affective strategies. Additionally, there might be strategies that they do not choose to use due to different variables such as personality type. For example, learners with an introverted personality might not use cooperative strategies or interaction in class strategies. However, the factors that influenced learners' strategy choice are not addressed in this study.

Table 4.11 Language learning strategies reported by interviewees

Behavioral and organizational strategies		Cognitive and metacognitive strategies	
<b>Study Organization strategies</b> Allotting time to studying (2) Asking a more knowledgeable one for clarification or vocabulary (6) Attending SAC (8) Getting corrected by more knowledgeable ones (2) Listening to English, songs, conversations, news, Radio (25) Listening to English to improve pronunciation (2) Listening, guessing meaning and looking for transcripts and confirming information Looking for additional information (3) Looking for opportunities to practice (4) Looking for songs, (2) the lyrics and sing along Looking for suitable materials (interesting) Looking for translations of songs Looking for vocabulary (dictionary) to understand reading (7) Practice Speaking Saying small phrases to practice Practice Speaking Telling phrases to someone who knows Practicing Applying information Practicing speaking with friends, family or native speakers (16) Practicing writing with friends, family, native speakers (3) Taking an extra course online and doing exercises (2) Transcribing exercises from book to notebook (3) Trying to look for suitable material Trying to practice with different people to understand Trying to read a book in English (2) Trying to understand as much as possible Watching movies (13) Watching movies and observing grammar and pronunciation Writing new vocabulary on the notebook to study (2) Writing what she listens	<b>Study strategies</b> Answering exercises a second time Answering questions from reading Asking questions of prior information (2) Confirming answers with teacher Correcting notes Creating games to learn vocabulary (2) Doing exercises on the book's website (13) Doing exercises on the textbook (4) Doing homework (3) Focus on keynotes for studying Making games to memorize (3) Making lists of vocabulary (2) Making new notes of notes Making notes from the board (7) Making notes form listening Pronouncing to recognize sounds and memorize Making study guides/ summaries (2) Reading, recalling and understanding Reading and repeating to memorize (2) Reading and rereading notes Reading and rereading to understand (3) Reading for learning Reading for the gist Reading in English (2) Reading list of vocabulary to memorize Reading the onomatopoeic sound for pronunciation Reading to complete the first read Recalling information by listening Recalling information by writing Repeating in silence to memorize (4) Repeating many times orally and writing Repeating words to improve pronunciation (2) Reviewing –Studying, read notes, books, exercises, grammar, for exams (36) Thinking of possible answers to a question and choosing the best one Trying to memorize grammar rules Watching YouTube videos and repeating Working with computer software Writing everything to improve grammar Writing repeatedly to memorize Writing vocabulary many times to memorize Looking at examples in textbooks	<b>Cognitive strategies</b> Creating new examples (5) Creating study guides from textbooks Identifying phrases or information from listening (2) Learning from being corrected (2) Miming lip position to pronounce correctly Translating Spanish to English (2) Trying to construct more complex sentences Using dictionary to translate (4) Using translator to help convey messages (2) Writing the onomatopoeic sound of words Relating new information to old information to memorize (5)	<b>Concentration strategies</b> Making an effort to recall where she saw it Paying attention (2) Paying attention to teachers' examples, copying Paying attention to what the teacher wrote Paying attention to others' mistakes to learn Paying attention to pronunciation Paying attention to understand listening (4) Trying to concentrate to recall
<b>Achievement Motivation and affective strategies</b>		<b>Cooperative learning and Interaction in Class strategies</b>	
<b>Affective strategies</b>	<b>Achievement motivation</b>	<b>Cooperative learning strategies</b>	<b>Interaction in Class strategies</b>

### **4.3 The extent to which general learning strategies predict language achievement**

For the purpose of this study, the number of correct answers in the achievement test represents Language achievement. The overall average reported in correct answers in the achievement test for the second administration was  $M=103$ . A score of 89 correct answers or below is considered a low achiever whereas a score of 118 correct answers or above is regarded as a high achiever. Thus, the overall average of the whole population of the study can be considered in the medium-high achiever category.

A t-test for independent variables was applied to the achievement test scores for the first administration between experimental group and control group to identify if learners of the control or the experimental groups would possibly have more language knowledge than the other. Levene's test ( $p=.183$ ) indicated that equal variances could be assumed. The significance  $t(116) = -1.704$ ,  $p < .91$  showed that the scores in the achievement test are similar and that scores are homogeneous between the experimental and the control groups.

Similarly, for the second administration of the achievement test, Levene's test  $p < .388$  indicate that equal variances can be assumed. The significance  $t(116) = .202$ ,  $p < .840$  indicated that there was not a significant difference in the achievement test scores between experimental and control groups for the second administration of the test.

#### **4.3.1 The relationship of frequency of strategy use and achievement test scores**

A Pearson correlation test was conducted for the LLSQ and achievement test scores of the second administration to investigate the possibility of a statistically significant association between achievement test scores and frequency of strategy use. Pearson correlations were used to identify the strength, the direction, and provide an idea of the relationship between any two continuous variables. Results indicated a significant relationship P value of  $p > .001$ ,  $r = .312$ . It appears that the use of learning strategies has an effect on language achievement.

Strategies computed into categories were correlated to data of the second achievement test scores. Results indicate relationships in most of the categories. Achievement Motivation strategies showed a moderate relationship  $p > .01$ ,  $r = .303$ ; however, Study, Concentration, Cognitive, Affective and Interaction in Class strategies exhibited a weak correlation. Study Organization strategies ( $r = .047$ ) and Cooperative strategies ( $r = .021$ ) did not show significant correlation with test scores. Table 4.12 below shows correlation values of achievement test scores and strategies computed into categories.

Table 4.12 Correlations: achievement tests and strategy categories.

	<b>Pearson r</b>	<b>Sig</b>
Study strategies	.225*	.014
Study Organization strategies	.047	<b>.612</b>
Concentration strategies	.221*	.016
Cognitive strategies	.228*	.013
Achievement Motivation strategies	.303**	.001
Affective strategies	.238**	.010
Cooperative strategies	.021	<b>.824</b>
Interaction in Class strategies	.243**	.008

Note: \*Moderate correlation

Concurrently, these findings show consistency with strategies examined at the individual level. Correlation analysis results demonstrated that AM strategies were also found as frequently used strategies both in the overall analysis and as strategies computed into categories. Furthermore, STO strategies, which were identified as not frequently used at a strategy level and in categories of strategies showed no correlation with achievement test scores. Additionally, results of the correlation analysis concur with the predictive values of the beta coefficients in the regression model further explained. Moreover, STU and STO strategies identified from interviews complement the set of strategies reported using in questionnaires.

### 4.3.2 The predictive value of general learning strategies

It has been reported that AM and COG strategies have a significant relationship with achievement test scores. It has also been reported that within the twelve most frequently used strategies, AM, and COG strategies appear quite often. In this section, the predictive value of strategies is reported.

Regression analysis was used in this study to explore and find a proper model to quantify and describe the relationship between general learning strategies and achievement language test scores. It was also intended to predict the value of the test scores based upon the use of learning strategies computed into eight different categories: Study, Study Organization, Concentration, Cognitive, Achievement Motivation, Affective, Cooperative and Interaction in Class strategies. According to Newton and Rudestam (1999 p. 248) multiple regression analysis is used for analyzing data to explore “the relationship between multiple continuously distributed independent variables and a single dependent variable.” Thus, the main objective of performing a multiple linear regression analysis was to analyze a model that might explain, to some extent, the behavior of learner’s test scores when using general learning strategies in learning English.

Tolerance showed values higher than .10 and variance inflation factors (VIF) coefficients indicated values lower than 10; ANOVA significance ( $p=.002$ ) supports tolerance and VIF values which indicate no multicollinearity in the regression model.

Standardized regression coefficients, such as beta weights, were used because the eight independent variables reply on different measurement scales. The interpretation of beta weights refers to the “expected change in the dependent variable, expressed in standardized scores, associated with a change of one standard deviation in an independent variable while holding the remaining independent variables constant.” (Newton & Rudestam, 1999, p. 68).

A multiple linear regression analysis model using the Enter method was calculated to predict achievement test scores based upon the use of learning strategies computed into eight predictors. Preliminary analyses were performed to ensure that there was no violation of the assumption of normality, linearity, and multicollinearity. A significant regression equation was found ( $F(8,109) = 3.287, p < .002$ ) with a  $R^2$  of .194, and an adjusted  $R^2 = 13.5$  explains 13.5% of the variance of test scores. Bearing in mind the diversity of possible variables that can be accounted for language achievement represented in achievement test scores, the use of learning strategies accounts for almost fourteen percent of the variance in achievement test scores; this might be of interest when analyzing possible implications in effective learning. The raw and standardized regression coefficients of the predictors’ coefficients are shown in Table 4.13.

Table 4.13 Regression analysis coefficients summary of strategies computed into categories.

<b>Variable</b>	<b>B</b>	<b>SE-b</b>	
Study	1.675	2.445	.077
Study Organization	-4.235	2.389	-.188
Concentration	-.179	2.539	-.008
Cognitive	-.611	3.397	-.022
Achievement Motivation	9.618	3.819	.304
Affective	1.920	1.214	.169
Cooperative	-4.164	2.719	-.156
Interaction in Class	7.027	2.985	.262

Note:  $R^2 = .194$ , adjusted  $R^2 = 13.5$ ;  $F(8, 109) = 3.287, p < .002$ .

The figures in table 4.13 reveal that achievement test scores were primarily predicted by the use of AM and IIC strategies, and to a lesser extent by AFF and STU strategies. AM and IIC strategies had significant positive regression weights, indicating learners with higher scores on these scales were expected to have higher test scores after controlling for the other variables in the model. STO strategies and COO strategies have a significant negative weight (opposite in sign from its correlation with the criterion), this indicates that those learners with higher use of STO strategies

and COO strategies were expected to have lower test scores. To a less significant extent, COG and CON strategies also show a negative weight. Nonetheless, this might be explained by the fact that higher language achievers make use of different strategies to achieve higher achievement scores, which is supported by findings in the qualitative data. The number of STO, STU and COG strategies gathered from interviews surpassed in a large degree the AM and IIC reported by learners (see Table 4.11). Quantitative data collected from questionnaires shows that language learners use more frequently AM, COG and CON strategies and qualitative data gathered from interviews indicate that learners use more frequently STU, STO and COG strategies. From this perspective, language learners use a wide variety of strategies that help them in language learning.

Qualitative data gathered might suggest that there is a correlation between high strategy use in general learning and high achievement in language learning. For instance, Luisa, Lilia, Rita, and Evelyn reported a high strategy use in general learning and language learning; they obtained high scores in the achievement test. Similarly, Aleli, Milagros, and Karla show a high strategy use in both learning contexts. However, their achievement test scores were not found in the high achieving category, but their scores are not in the low achieving category either. That is, their strategies did not boost them to reach higher levels of language achievement. In contrast, Celia, Sonia, Escarlet, and Ofelia showed a high strategy use in general learning although their achievement test scores fall into the low language achievers category.

Another exception is Jacobo. Jacobo is an 18-year old male learner whose learning experience in language learning is of 12 years. He received language lessons in primary school, secondary and preparatory school; nonetheless, he was placed on level one according to results of the placement test that the Language Center applies. Jacobo is in the low strategy user category in general learning but a high strategy user in language learning. Jacobo obtained a high score (99) on the first administration of the achievement test, even higher than the average considered for high achievers on the second administration (89). Thus, his high score might be attributed to his previous language learning knowledge. Similarly to Jacobo, Lucy was a high achiever not only in the first administration of the achievement test (94) but also in the second (134), which shows that she might have a vast language knowledge. Differently, from Jacobo, Lucy is a low strategy user in general learning and language learning. Different reasons for her high-achieving scores and her low strategy use in both learning contexts will be discussed in Chapter 5.

A factor analysis performed to data of the LLSQ failed to produce new alternatives for sub-groups. Analysis showed sixteen sub-groups, and the Principal component of the analysis revealed that most of the items in the LLSQ belonged to one large group. Therefore, items could not be divided and labeled differently.

## 4.4 The extent to which strategy instruction of GLS influences L2 strategy use

The ultimate goal for strategy instruction is to raise learners' awareness of strategies and provide learners with strategies that they can use to improve their learning, consequently, learn more, better and more efficiently and which later they can transfer to new learning situations.

From the overall data of the LSQ, eight not frequently used strategies were included in the strategy sessions: five study strategies (items 23, 43, 44, 46 and 47), two cognitive strategies (items 4 and 8) and one cooperative strategy (item 28) (see Methodology Chapter 3 for the rationale behind the choice of the strategies). Table 4.14 provides the averages of strategies included in strategy training sessions.

Although the eight strategies selected for strategy instructions were found to be not frequently used, strategies 23, 28, 44 and 47 appear on the list of the twelve least used strategies observed in the LSQ reported by overall analysis. Thus, it was expected to have an increase in the frequency of use of such strategies.

Strategies were named and adapted for strategy training sessions (see Methodology Chapter 3). Lesson plans were developed (see appendix D). To determine the effectiveness of strategy instruction, mean scores of the LSQ and LLSQ were obtained in order to observe an increase (or decrease) in average; and a t-test for paired samples was conducted to the eight strategies in order to analyze the effect of strategy instruction had in the strategies taught. Table 4.14 presents averages of LSQ and LLSQ and p values of the t- test for paired samples.

Analyses show that the use of strategies 46, 47, 4, 8, and 28 apparently increased in average from the first to the second administration of the questionnaire. However, the analysis also indicates that such increase does not represent a statistically significant increase. In contrast, strategy 23 "Making questions to verify I understand" decreased significantly from the first to the second administration; this decrease suggests that learners use this strategy more frequently in general learning than in language learning. Although in the strategy session learners were encouraged to make questions even in their own language, it seemed that this strategy requires more language knowledge in order to be used in language learning tasks; consequently, they decrease their use of such strategy.

Table 4.14 shows the strategies used in the strategy sessions. Five strategies belong to the Study Category, two to the Cognitive and one to the Cooperative categories. Table 4.14 also shows the figures of the t-test for paired samples of the first and the second administrations of the questionnaire.

Table 4.14 T-test for paired samples of strategies used in strategy instruction.

Item in Questionnaire	Strategy type	Name of the strategy	Mean LSQ	Mean LLSQ	Sig. t-test
23	Study	Making questions to verify I understand	3.46	3.30	.516
44	Study	Mind and conceptual maps	2.61	3.57	.000
46	Study	Summarizing	4.24	4.28	.837
47	Study	Making questions before and after reading or listening	3.12	3.33	.351
43	Study	Selective highlighting	4.09	4.73	.009
4	Cognitive	Explaining in your own words	4.28	4.40	.632
8	Cognitive	Putting into practice what you learn	4.27	4.27	1.000
28	Cooperative	Gathering with classmates to see what you learned	2.82	2.91	.719

The figures in Table 4.14 demonstrate that a significant increase in average scores was found on strategy 43 “selective highlighting,” and strategy 44 “using mind and conceptual maps.” Such strategies represent general learning strategies that learners use across learning contexts since such strategies are very commonly instructed in secondary education. Despite the increase in averages “Selective highlighting”; “using mind and conceptual maps”; “making questions to verify I understand”; “Gathering with classmates to see what you learned” and “making questions before and after reading or listening” remained in the list of ten least frequently used strategies in the LLSQ. That is, learners use other strategies that help them in language learning.

Although strategies selected for the strategy instruction sessions had been reported as not frequently used by learners in contexts other than language learning, the choice of strategies from the least used strategies for strategy instruction intended to include the most relevant and most effective strategies for improving language learning. However, the strategies selected had no effect on the acquisition of the strategies, nor in the raising of the awareness, therefore, averages did not increase significantly. The adaptation of these strategies to meaningful language tasks in order for them to learn a language represented a new opportunity for them to use strategies that they know but which they do not frequently use.

As it can be observed, strategy instruction provided to the experimental group did not seem to have a significant effect on the adoption of strategies, and the increase in the frequency of use of the strategies included in the instruction sessions; and consequently, in language achievement. It was expected that learners would increase, in the first instance, the use of the strategies taught.

Although questions in the interviews did not explicitly ask for strategies used in strategy instruction, it was expected that learners adopted strategies taught. There was a significant increase in the frequency of use on items 43 and 44; however, interviewees did not overtly report using them. No significant increase in average was found on item 8 (putting into practice what you learn). However, qualitative data showed that participants reported “practicing” as a common strategy in a variety of forms; for example, listening to music, watching TV, repeating to improve pronunciation, practicing speaking and writing with family, friends and native speakers. For instance, when Rita was asked what she did to practice out of the language classroom, she said, “I try to be listening to music all day long,” she also added: “I ask the people who I know they know English to speak to me in English to practice.” Learners reported mostly looking for opportunities to practice their speaking skills. Monica acknowledged, “I learn better by practicing,” but she stated that she barely has time to practice outside the classroom. However, she reported that she practices by singing. Celia tries to gather with native speakers and practice her speaking skills, and Jacobo practices by saying phrases to his mom. Similarly, learners reported strategies that allowed them to rehearse. For example, Sonia said, “I watch videos on YouTube, I repeat what they say” and repeating aloud helps her improve her pronunciation. Thus, learners use different ways to practice their language learning. However, this cannot be fully attributed to the language instruction since practice might be a necessary characteristic of language learning.

#### **4.5 The use of learning strategies by high and low achievers and high and low strategy users**

By analyzing the frequency of strategies used by High Achievers (HA) and Low Achievers (LA), as well as High Strategy Users (HSU) and Low Strategy Users (LSU), it was intended to identify the types of strategies learners use in language learning.

Frequency analysis utilizing percentiles and quartiles was performed to data of the second administration of the achievement test and the strategy questionnaire to categorize learners. HA (N=27) were classified as learners who obtained 118 correct answers or above on the second administration of the achievement test. In contrast, LA (N=30) were learners who obtained 89 correct answers or below in the achievement test. In a similar way, HSU (N=29) are learners whose mean score of strategy use was over  $M=4.63$  whereas learners who obtained less than  $M=3.70$  in

strategy use were considered LSU (N= 30). Table 4.15 shows percentiles of both strategy use and achievement test scores of the second administration.

Table 4.15 Percentiles of achievement test scores and the LLSQ mean scores

	Achievement test 2 <sup>nd</sup> administration		LLSQ
Percentiles	25	89	3.69
	50	104	4.06
	75	118	4.64

Thirty LA are found on the first quartile and twenty-seven HA on the fourth quartile. Similarly, the questionnaire indicates that thirty LSU are in the first quartile whereas twenty-nine HSU on the fourth quartile. Table 4.16 shows the frequencies of low and high achievers and strategy users.

Table 4.16 Frequencies of low and high achievers and low and high strategy users

	Achievers		Strategy user	
	Low (N=30)	High (N=27)	Low (N=30)	High (N=29)
Experimental	16	14	19	11
Control	14	13	11	18
Female	22	23	23	24
Male	8	4	7	5
18 to 23	20	19	23	19
24-up	10	8	7	10
University student	16	11	17	9
Non-University Student	14	16	13	20

### 4.5.1 Achievers

The HA group (N=27) was associated with a more frequent use of strategies  $M=4.33$  ( $SD=.45$ ). By comparison, the LA group (N=30) was associated with a less frequent use of strategy use  $M=3.86$  ( $SD=.59$ ). To test the hypothesis that HA and LA were associated with statistically significantly with different mean strategy use, an independent sample t-test was performed. The HA and LA distribution were sufficiently normal for conducting a t-test. Additionally, the assumption of homogeneity of variances was tested and satisfied via Levene's F-test,  $F(.55) = .718$ ,  $p=.400$ . The independent samples t-test was associated with a statistically significant effect,  $t$

(55) = -3.32,  $p=.002$ . Thus, HA were associated with a statistically significantly larger mean of strategy use than LA.

Additionally, t-test for independent samples was also used with strategy categories to observe if certain kinds of strategies HA and LA use would show any similarities. Table 4.17 shows t-test for independent samples values of HA and LA.

Table 4.17 T-test for independent samples, high achievers, and low achievers

	<b>t</b>	<b>Mean difference</b>	<b>Std. Error difference</b>	<b>Sig.</b>
Study Strategies	-2.09	-.478	.230	.041
Study Organization	-.113	-.027	.243	<b>.911</b>
Concentration Strategies	-3.14	-.648	.207	.003
Cognitive Strategies	-2.73	-.509	.1847	.008
Achievement Motivation strategies	-3.54	-.526	.147	.001
Affective Strategies	-2.97	-1.31	.444	.004
Cooperative learning strategies	.005	.000	.180	<b>.996</b>
Interaction in Class strategies	-2.77	-.551	.198	.008

As it can be seen in Table 4.17, STU, CON, COG, AM, AFF and IIC strategies computed in categories indicated a significant difference in strategy use between high and low achievers. Nonetheless, Study Organization ( $p=.911$ ) and Cooperative learning strategies ( $p=.996$ ) do not show significant differences. This result suggests that LA and HA use STO and COO strategies at a similar frequency rate. Since mean scores of COO and STO strategies were low for HA and LA, it can be inferred that both use these strategies at low-frequency use.

#### 4.5.2 Strategies used by high achievers

Because this study consisted of two administrations of the questionnaire (LSQ and LLSQ), data were first analyzed by using a t-test for paired samples to observe if there was an increase or decrease between the LSQ and the LLSQ and to know the type of strategies learners use.

A paired samples t-test was performed to test the hypothesis that the LSQ ( $M=4.09$ ,  $SD=.57$ ) and the LLSQ means ( $M= 4.33$ ,  $SD=.45$ ) were equal for HA ( $N=27$ ). Before conducting the analysis, the assumption of normally distributed difference scores was examined. It is noted that correlation between the two conditions was estimated at  $r=.224$   $p<.262$ , suggesting that the paired samples t-test is appropriate in this case. The null hypothesis of equal means was rejected,  $t(26) = -1.88$ ,  $p<.071$ . Thus, mean of LLSQ was statistically significantly higher than the LSQ mean. That is, HA increased the frequency of use of strategies in language learning.

Although most strategy categories show an increase in mean scores from the first to the second administration, t-test for paired samples analysis indicates that differences are not significant. Results indicated a statistically significant increase in the use of Concentration ( $p=.022$ ) and Interaction in Class strategies ( $p=.008$ ). This result suggests that learners found these strategies useful and worth using more often in language learning than in general learning contexts. Nonetheless, STO strategies showed a significant decrease. That is, HA reported using less often strategies such as organizing topics for studying, looking for additional information, or managing their study time. Table 4.17 shows the averages of strategy use of LSQ of low and high achievers; it also describes the t-test for paired samples values.

In general learning contexts, HA use more frequently AM, COG and CON strategies; and less frequently IIC, COO, and STO strategies. Concurrently, in language learning, HA use more frequently COG, CON, and IIC whereas STU, COO and STO strategies less frequently. These results suggest a similar use of COG and CON strategies in both general learning contexts and language learning. HA might find these strategies useful enough to help them deal with language learning tasks.

Qualitative data indicates that out of the twenty participants in the interviews, six belonged to the HA category. HA reported a higher number of STU and STO strategies and COG and CON strategies to a lesser extent. The number of strategies reported by HA in general learning increased in language learning. The types of strategies gathered from qualitative data seem to complement the COG, CON and IIC strategies reported in the LLSQ.

Luisa, Rita, Lilia, and Evelyn, are high achievers who are also high strategy users not only in general learning but also in language learning. In contrast, Lucy is a low strategy user in both learning contexts, and Jacobo is a low strategy user in general learning but a high strategy user in language learning. They all are high achievers in language learning. HA frequently use STU strategies which are brought to language learning from their general learning contexts. The STU strategies that high achievers use in language learning principally aid learners in reviewing information in the ways of reading and rereading to understand what they review or read. Interestingly, Evelyn, a 17-year-old high school learner attributed the reviewing strategy to a characteristic of good learners. When she was asked what she did to study, she stated, “Since I am a student, what I do is I take my book and review.” Probably, Evelyn’s view might be similar to that of not only high achievers but also low achievers.

Another learning strategy that HA also frequently use is making notes as a mean to capture information that they later review. However, making notes is not only storing information on a notebook, and it can be further developed. An example of this is Luisa. Luisa is a female learner in her mid-thirties who is currently working, and whose goal in learning English is speaking. Luisa

holds a BA in Economy, and she stated that she makes notes out of her notes because very frequently what she has on her notebooks are the summaries she copied from the board. That is, it is the teachers' examples; therefore, she makes her notes to assimilate and understand information. Like Luisa, Evelyn makes key notes on her notes when the teacher tells them something important, she writes it next to her notes, and when she is studying, she recollects what the teacher said about that.

High achievers also reported using a larger number of STO strategies; for instance, looking for unknown information, which they use to clarify meaning with someone more knowledgeable such as teachers or more experienced learners. They also reported looking for opportunities to practice speaking with native speakers, family or friends, or even by themselves. For example, Jacobo practices saying small phrases to his mom. Evelyn reported saying phrases to someone who knows so that she can be corrected. Luisa stated that she tries to speak with classmates, or she tries to attend conversation classes in the Self-Access Center (SAC). Similarly, HA also reported strategies that allow them to practice other skills such as listening; for instance, watching TV and listening to music, radio or native speakers.

### 4.5.3 Strategies used by low achievers

A paired samples t-test was performed to test the hypothesis that strategy mean scores of low achievers for the LSQ ( $M=4.06$ ,  $SD=.57$ ) and the LLSQ means ( $M= 3.86$ ,  $SD.59$ ) were equal. Before conducting the analysis, the assumption of normally distributed difference scores was examined. The assumption was considered satisfied. It is noted that correlation between the two conditions was estimated at  $r=-.279$ ,  $p<.136$ , suggesting that the paired samples t-test is appropriate in this case. The null hypothesis of equal means was rejected,  $t(29)=1.13$ ,  $p<.266$ . Thus, means of the LLSQ was not statistically significantly higher than the LSQ mean. That is, LA did not increase the use of strategies. In other words, LA decreased strategy use from GL to LL.

When strategies were analyzed by categories, mean scores showed a decrease in most strategy categories from LSQ to LLSQ. However, only Achievement Motivation strategies showed a statistically significant reduction in use from  $M=4.42$  in GLS to  $M=3.99$  in LLSQ ( $p=026$ ). It might suggest that low achievers lost interest and motivation in language learning. The loss of interest and motivation is frequently experienced by learners who find tasks difficult, and they hardly ever find the mechanisms that can allow them to ease learning.

In general learning contexts, LA use more frequently AM, COG, and CON strategies; and less often STU, STO and COO strategies. Similarly, in language learning, LA use COG, CON, and AM strategies more frequently and STU, STO, and AFF strategies less often (See Table 4.17). Low

achievers use the same type of strategies and in both contexts. This finding suggests that LA do not use strategies to help them organize their study habits, which is the purpose of STO strategies.

These findings suggest that LA make use of similar types of strategies in both general learning contexts and language learning. Nonetheless, LA reported using strategies less often in language learning; perhaps, language learning represented a new learning context and learners did not find the correct strategies to deal with.

Table 4.18 shows data of LSQ and LLSQ of low achievers and high achievers across strategies computed into categories.

Table 4.18 Low and high achievers strategy mean scores and t-test for paired samples values

	Low achievers (N=30)				High achievers (N=27)				
	LS Q	LLSQ	t	Sig.	LSQ	LLSQ	t	Sig	
<b>Strategy Questionnaire</b>	4.05	3.86	1.13	.266	<b>Strategy Questionnaire</b>	4.10	4.33	-1.88	.071
COG	4.37	4.25	.589	.560	COG	4.53	4.76	-1.30	.205
CON	4.25	4.04	.969	.340	CON	4.29	4.69	-2.43	<b>.022</b>
AM	4.42	3.99	2.34	<b>.026</b>	AM	4.53	4.51	.168	.868
IIC	3.75	3.70	.237	.814	AFF	4.26	4.48	-.58	.566
COO	3.60	3.66	-.343	.734	STU	3.77	4.09	-1.37	1.80
STU	3.71	3.61	.427	.673	IIC	3.61	4.54	-2.84	<b>.008</b>
STO	3.69	3.45	1.07	.294	COO	3.59	3.66	-.339	.738
AFF	3.97	3.17	1.87	.071	STO	3.53	3.47	.218	.829

Results of the t-test in Table 4.18 show that both HA and LA use AM, COG and CON strategies at a higher rate and COO and STO at a lower rate. There was no difference identified in the type of strategies used at a high or low rate; nevertheless, the difference between these two types of learners is found on the frequency of use of strategies.

Among the twenty interviewees, seven learners belong to the LA category in language learning. Celia, Sonia, and Escarlet have a high strategy use in general learning; however, they have a low strategy use in language learning. The low strategy use in language learning might be attributed to the difficulty of language tasks that learners cannot perform. Eduardo, Cynthia, and Susana are low strategy users in both general learning and language learning. In contrast, Ofelia is a high strategy user in both general learning and language learning.

In language learning, LA mostly reported using more often STU, STO and COG strategies; and to a lesser extent, CON strategies. Similar to high achievers, LA frequently reported using STU

strategies such as reviewing and reading or rereading strategies as a way to study. The use of these study strategies seems to be a common process they use to approach learning in any context. For example, Eduardo, an 18-year-old male learner who is studying English to take advantage of his idle time before starting the university, when he studies he said, “If I have notes of something I did not understand, I read and read again what I did not understand.” Cynthia also stated that to study, she reviews the exercises on the textbooks, and whatever she did not understand. When she was asked what “reviewing” was, she acknowledged “reading, understanding and recalling.” Interestingly, when she was asked if she did additional activities to reading when reviewing, she answered that she did not do anything. Perhaps, the activities around the strategy of reviewing might be the differential factor between high achievers and low achievers. Additional to reviewing, LA reported frequently using STU strategies such as doing exercises on the web pages’ platform, making lists to memorize, repeating to memorize, listening to music and watching TV. Low Achievers seem to invest time in STU strategies that help them rehearse information they see in language classes. However, the strategies that emerge around each of the strategies reported by learners might be of great difference between a helpful use or not.

Low Achievers interviewees also mentioned STO strategies such as allotting time to studying, and within this time they reported attending the SAC and looking for opportunities to practice, mostly speaking with friends, native speakers of the language, and classmates; listening to music, radio, or the news; and watching TV or movies. They also reported looking for clarification when the information was not clear. As it can be noted, the evidence presented in this section suggests that LA use similar strategies to HA; nonetheless, the additional activities performed around the strategies might be the differentiating factor between high achievement and low achievement. Furthermore, metacognitive thinking is a factor that contributes to the successful use of strategies. LA might not be able to monitor and evaluate the processes they use to learn; consequently, they do not change the processes that do not work for them, and they might not realize that they are using strategies that do not help them learn.

#### **4.5.4 Strategy users**

The HSU group (N=29) was associated with a more frequent use of strategies  $M=4.72$  ( $SD=.06$ ). By comparison, the LSU group (N=30) was associated with a less frequent use of strategy use  $M= 3.42$  ( $SD=.31$ ). To test the hypothesis that HSU and LSU were associated with statistically significantly with different mean strategy use, an independent sample t-test was performed. The HSU and LSU distribution were sufficiently normal to conduct a t-test. Additionally, the assumption of homogeneity of variances was tested and satisfied via Levene’s F-test,  $F (.57) = .25.3$ ,  $p=.000$ . The independent samples t-test was associated with a statistically significant effect,  $t (57) = -21.50$ ,  $p=.000$ . Thus, HSU were associated with a statistically

significantly larger mean of strategy use than LSU. Table 4.19 shows the figures obtained from t-test for paired samples between HSU and LSU.

Table 4.19 T-test for independent samples, high and low strategy users' strategy categories

	<b>t</b>	<b>Mean difference</b>	<b>Std. Error difference</b>	<b>Sig.</b>
Study Strategies	-9.99	-1.52	.152	.000
Study Organization	-6.94	-1.38	.199	.000
Concentration Strategies	-6.47	-1.34	.209	.000
Cognitive Strategies	-10.87	-1.35	.125	.000
Achievement Motivation strategies	-12.52	-1.21	.096	.000
Affective Strategies	-5.08	-1.88	.371	.000
Cooperative learning strategies	-4.34	-.962	.159	.000
Interaction in Class strategies	-.639	-1.08	.170	.000

The figures in table 4.19 reveal that T-test for independent samples between HSU and LSU suggest that both sets of data are statistically significantly different in all categories of strategies. That is, HSU use all types of strategies more frequently than LSU. This finding suggests that the frequency of use is a factor of consideration when analyzing strategy use.

#### 4.5.5 Strategies used by high strategy users

A t-test for paired samples was performed to examine if high strategy users' mean scores of the LSQ ( $M=4.10$ ,  $SD=.65$ ) and the LLSQ ( $M= 4.72$ ,  $SD=.06$ ) were equal. Correlation between the two conditions was estimated at  $r=-.069$ ,  $p<.721$ . The null hypothesis of equal means was rejected,  $t(28)=-5.02$ ,  $p>.000$ . Thus, the average of the LLSQ was statistically significantly higher than the LSQ mean. Seemingly, HSU increased the use of strategies in language learning.

When strategies computed into categories were analyzed by means of a t-test for paired samples, COG, CON, IIC, STU, COO, and STO strategies showed statistically significant increase from the LSQ to the LLSQ; in contrast, AM strategies ( $p<.075$ ) and AFF strategies ( $p<.342$ ) increase in strategy use does not represent a significant difference.

HSU use more frequently AM, COG and CON strategies in general learning contexts; however, they use COO, STO, and IIC strategies less frequently. Similarly, in language learning, HSU also use COG, CON, and AM strategies at a higher frequency rate whereas STU, STO, and COO less frequently. This finding suggests that HSU make use of similar types of strategies in language learning and in general learning contexts. HSU seem to make use of the strategies they already have in their strategy repertoire to deal with language learning tasks; they even increased the frequency of strategy use in language learning. Perhaps, they found strategies to challenge the new learning contexts. Table 4.20 shows the averages of strategy use of LSQ and the LLSQ of low and high strategy users; it also describes the t-test for paired samples values.

Seven interviewees are on the High Strategy User category. Interestingly, High strategy users in language learning are also high strategy users in general learning. By contrast, Jacobo is a low strategy user in general learning but a high strategy user in language learning. Evelyn, Rita, Lilia, Luisa, and Jacobo are found on the HA categories. Although Aleli, Milagros, and Karla, who are HSU in both learning contexts, did not get a high achievement test score, they are not considered low strategy users either. Strategies gathered from qualitative data showed that HSU increased the number of strategies from General learning (66) to Language learning (117) which represents 77% of increment.

Since most HSU in language learning are also HA, the strategies gathered in this category are the same as the ones reported in the HA section (see section 4.5.2 in this chapter). However, for Aleli, Milagros, and Karla the high strategy use of learning strategies in language learning did not have the boosting effect that they had on the learners above described. Aleli obtained 100 correct answers on the achievement test score, Milagros and Karla 107.

Similar to HA, HSU reported using STU, STO, COG and CON strategies in language learning. The number of STU strategies surpassed the number of all of the categories. Mostly, STU strategies reported by learners showed the learners' interest to store information in memory. For instance, reviewing notes, books, textbooks; making notes to study; doing exercises on the textbook, books' webpage, or the internet; activities to memorize information such as repeating aloud or writing many times. An example of this is Aleli. Aleli is a female learner in her mid-twenties who is studying to improve her job conditions. When she declared that her major problem in language learning was the pronunciation, she stated that she tried to repeat the words many times in order to memorize them. She also mentioned reviewing lessons completely and trying to answer the exercises on the book again. It seems possible that she is using strategies inadequately and they might need to be redirected with a focus in order for her to improve her achievement. Interestingly, she stated that she knew how she learned better and she expressed that she needed to review and to invest time in learning. However, she acknowledged that she was not doing it and that she needed to invest more time in learning to learn it better.

The relationship of high strategy use- high achievement seems to have exceptions such as in the case of Aleli, Milagros and Karla, They all reported a high strategy use, but they were not able to reach a high score on the achievement test. It can only be speculated that learners are using strategies that are not having any beneficial effect on their achievement and that they might be wasting effort in using them.

### 4.5.6 Strategies used by low strategy users

To examine the hypothesis that mean scores of LSU for the LSQ ( $M=3.91$ ,  $SD=.53$ ) and the LLSQ ( $M=3.42$ ,  $SD=.31$ ) were identical, a t-test for paired samples was performed. The null hypothesis of equal means was rejected,  $t(29)=4.29$ ,  $p>.000$ . Thus, means of the LLSQ are statistically lower than the LSQ. That is, LSU reduced their use of strategies in language learning. Many variables can be accounted for a low strategy use; nonetheless, the reduction of strategy use suggests that learners were not able to find, in their repertoire of strategies, the strategies that helped them deal with language learning tasks.

Concerning strategies computed into categories, LSU's data indicate a significant decrease of strategy use from the LSQ to the LLSQ in most of the categories except for CON strategies ( $p<.261$ ) which difference is not statistically significant. IIC strategies ( $p<.874$ ) indicate an increase in strategy use from GL to LL. These findings suggest that such strategies remained identical from their general learning context to the language learning.

Table 4.20 shows a comparison chart between low and high strategy users mean scores and figures of the t-test for paired samples of strategies computed into categories.

Table 4.20 Low and high strategy users mean scores and t-test for paired samples values of strategy categories

	Low strategy users (N=30)				High strategy users (N=29)				
	LSQ	LLSQ	t	Sig	LSQ	LLSQ	t	Sig	
<b>Strategy Questionnaire</b>	3.91	3.42	4.29	.000	<b>Strategy Questionnaire</b>	4.10	4.72	-5.02	.000
COG	4.25	3.83	3.01	.005	COG	4.35	5.19	-5.98	.000
CON	3.91	3.68	1.15	.261	CON	4.26	5.02	-3.21	.003
AM	4.32	3.53	5.69	.000	AM	4.49	4.74	-1.85	.075
IIC	3.48	3.51	-.160	.874	AFF	4.24	4.65	-.966	.342
COO	3.75	3.32	2.56	.016	IIC	3.60	4.60	-5.13	.000
STU	3.73	3.03	3.60	.001	STU	3.97	4.56	-2.99	.006
STO	3.46	2.71	4.01	.000	COO	3.71	4.01	-2.07	.048
AFF	3.57	2.77	2.26	.031	STO	3.68	4.09	-2.15	.040

In language learning, LSU seemed to use more frequently COG, CON, and AM strategies; and less often COO, STU, STO, and AFF strategies. Similarly, in general learning contexts, they appear to use AM, COG, and CON strategies more frequently and STU, AFF, IIC and STO strategies less often. LSU reported using similar types of strategies not only the frequently used strategies but also the not frequently used strategies. These findings suggest that LSU make use of very similar

patterns in general learning contexts and language learning. The type of strategies LSU use also concurs with the strategies employed by LA.

Eight interviewees were identified as low strategy users in language learning. Manuel, Alma, Eduardo, Monica and Lucy also reported low strategy use in general learning. In contrast, Celia, Sonia, and Escarlet showed a high strategy use in general learning, but low strategy use in language learning. That is, they decreased the use of strategies from general learning to language learning. LSU such as Eduardo, Celia, Sonia, and Escarlet also showed low achievement test scores, and Monica was on the threshold of the low achievers category.

Qualitative data indicates that the number of strategies used by LSU interviewees remained almost stable in GL (86) and LL (83). Similarly to HSU, LSU look for ways to put into practice their knowledge and skills learned in LL. For example, for Celia, practice defines her style of learning when she claimed “I learn from a lot of practice” although she gives the practice a negative connotation when she explained that she needed practice because she is “bad at learning.” Therefore, lots of practice would help her learn. Like Celia, most LSU reported looking for opportunities to practice their speaking with friends, family or native speakers of the language. They also reported watching TV and listening to radio, songs, and YouTube videos very frequently. LSU’s effort to learn pushes them to allot time to studying; consequently, to use more strategies. For example, Escarlet reported investing one hour a day to studying although she did not specify what she does in that time. In a similar way, Sonia allots plenty of time to study, and she stated that she takes extra courses online additional to her class in order to improve her skills. This implies a number of strategies that she was not able to report in the interview; for instance, what she does when she takes the extra course. Lucy also reported attending the SAC, which inevitably makes her practice the language. LSU reported using a number of strategies that HSU also use; however, these strategies do not seem to have an effect on their language learning.

LSU decreased STU strategies from 53 in GL to 36 in LL; this embodies 32% loss in strategies reported. Possibly, learners’ motivation decreased in language learning, and their STU strategies decrease with it. Most of the young interviewees reported studying English in order to take advantage of the idle time rather than an intrinsic desire to learn the language. This might have led them to invest a little effort in looking for strategies to improve learning. For instance, when Eduardo, an 18-year-old male learner, was asked why he was studying English, he said, “I lost my pass to the university, and I want to take advantage of the time.” That is, he applied for the university, but he had to wait one semester in order to start classes. Similarly, Monica, an 18-year-old female learner, stated that she was studying English because she had to wait for a semester to start university. Another example is Escarlet who openly said, “I just finished the preparatory school, and I do not have anything else to study.” Although a low motivation in language learning

is not conclusive to low strategy use, it might influence the learners' behavior and interest in using strategies.

Despite the decreasing number of strategies, LSU reported using frequently STU strategies; for instance, reading, rereading and reviewing notes, books, or exercises; repeating aloud or in silence in order to memorize information. Seemingly, these strategies are found in their strategy repertoire, which they transfer to different learning contexts. An example of this is the strategy of writing many times to memorize information. For instance, Celia clearly stated that she learned by repeating aloud and writing many times because it has always been the way she learns and that this was a proven strategy that helped her; consequently, she uses this strategy in language learning. In Celia's case, repeating aloud and in writing is a strategy that could be triggered by her learning beliefs. Celia implied that her age was a factor that hindered her learning when she said, "nowadays it is more difficult to learn." Consequently, LSU seemingly transfer strategies they find useful in general learning such as memorizing, writing repeatedly. However, they are also able to find methods to approach the new learning tasks that language learning represents.

From the quantitative analysis, it can be observed that LA and LSU decreased in the frequency of strategy use from the first administration (LSQ) to the second administration of the strategy questionnaire (LLSQ). Additionally, LSU ( $M=3.42$ ) reported lower strategy use than LA ( $M=3.86$ ). Qualitative analysis also indicates that LSU decreased in strategy use from GL (86) to LL (83). In contrast, an increase was found in the number of strategies reported by LA, from seventy-three to ninety-one. The highest increase was observed in STO strategies from 13 to 40 in LL. This suggests that low achievement does not necessarily represent low strategy use; it might be attributed to different factors such as previous learning experience, their reasons for learning, or learners' beliefs.

On the other hand, qualitative findings suggest that HA and HSU increased in the use of strategies from the LSQ to the LLSQ. That is to say, both types of learners found additional ways, to the already known strategies, to deal with language tasks. It can only be speculated that HA and HSU are more proactive learners and that they allot more time to learning due to higher motivation. For instance, Evelyn who was able to report a well-developed plan to learn English before she starts university in 3 semesters following the interview; or Luisa who is studying English because she needs it for her job because she felt she was falling behind of her co-worker who already knew English.

Another finding of quantitative data is that HA and HSU use similar types of strategies. Both types of students make use of COG, CON, and AM strategies more often whereas STO, COO and STU strategies less often. This might be explained by findings in the literature, which explained that the use of learning strategy leads to higher achievement. Similarly, it was also found that both

LSU and HSU use AM, COG and CON strategies at a higher rate, and STU, and IIC strategies at a lower rate. Thus, quantitative data findings could suggest that a difference between HSU and LSU is located in the frequency of use and not on the types of strategies used.

#### 4.5.7 Patterns of strategy use

A large and growing body of literature has explained the relationship between the use of learning strategies and proficiency (Green & Oxford 1995). Apparently, this relationship helped Jacobo, Evelyn, Rita, Luisa and Lilia to be HA; they showed a high average of strategy use. In a similar way, Karla and Milagros are high strategy users with an achievement test score which suggests that although not high achievers, they are not low achievers. The possibility that a pattern of strategy use may contribute to a higher level of language achievement is suggested by a high strategy use.

Although, in general, high achievement is correlated to high strategy use (Griffiths, 2003, Oxford, 1990) there are cases where this relationship is not present. Lucy, for example, is an exception to this relationship. Lucy reported a low strategy use ( $M=3.37$ ), but her achievement scores indicate that she is a HA (134). The number of strategies reported in the questionnaire seems to contradict the strategies she reported in the interviews. This might be attributed to different possible explanations. Lucy could have answered the questionnaire without being fully aware of the strategies in it. Very commonly, although learners agree on participating, they do not want to invest effort in answering the questionnaire. Due to the number of items in the questionnaire, she might have considered the questionnaire long; therefore, she might have answered the questions at random. She reported a low strategy use in both the LSQ ( $m=2.57$ ) and the LLSQ ( $m=3.37$ ), however, Lucy was able to report a considerable number of strategies in the interview.

Another explanation for her low average of strategy use is that she is not aware of the strategies she uses to learn. When she was asked what she does to learn in language learning, she reported that she “only” does the homework and attends the SAC. She stated that in the SAC, she “only” watches movies in Spanish, and she did not do any other activity while watching it. Additionally, she reported that she pays attention to class only when the class was interesting; otherwise, she loses concentration. Although she reported not studying for exams when she was in preparatory school (her prior learning context), she was able to report strategies such as reviewing, making notes, making questionnaires, and occasionally summaries in both learning contexts. She reported a number of strategies that she might not perceive as strategies that help her learn. A third plausible explanation is that she uses different strategies at a higher frequency rate than the strategies included in the questionnaire. This can be implied from strategies reported in the interview, which indicate that she uses strategies without being fully aware. The possibility that many of the

strategies that she reported are all basically cognitive, and that they all involve mental processes might be a plausible explanation.

Another exception to the relationship high-strategy use-high achievement is Ofelia. Ofelia is a learner in her mid-forties who stated that she needed to study the language as a future exit requirement for her career although she was not a current study of the university. On the first administration of the achievement test, Ofelia scored 34 correct answers; which shows that she already had a certain amount of language knowledge before starting the first level of English. In the LSQ, her average was found in the high strategy user category ( $M=4.90$ ). She reported using 18 strategies at a high-frequency rate. However, for the LLSQ, Ofelia reduced to 14 the number of strategies frequently used in language learning and her average of strategy use slightly reduced to  $M=4.43$ . Even though her average of strategy use is not in the HSU category ( $m=4.64$  or above), it is certainly not in the LSU category either. However, her achievement test score of the second administration (70) indicates that she remained a low achiever. Thus, the high use of strategies in general learning which she transferred to language learning did not boost her language achievement. Thus, in Ofelia's case, the high strategy use-high achievement relationship does not seem to indicate a pattern.

A possible explanation for Ofelia's lack of success of her high strategy use is that she might be misdirecting effort to strategies that do not aid her in learning. For example, Ofelia stated that her area of difficulty in learning English was "all about grammar." When she was asked what she did to improve in this area, she answered, "I write everything," when she was asked what "everything" meant she replied "everything that the teacher writes on the board," "what is important for me," and she added "vocabulary." Another example of misdirected strategies is when she was asked what she considered more important in learning English. For Ofelia, speaking was the most important skill to learn. She was asked to explain what she did in order to learn or improve in speaking, and she answered, "I watch TV, I watch cartoons with my daughters, I watch movies, and we also listen to music in English." Although she did not explicitly explain how these strategies might help her in speaking, the strategies Ofelia reported seem to help her improve listening rather than speaking. Similarly, the strategies she uses to improve grammar might not be the adequate ones since just copying everything might not give her the necessary tools to understand "all about grammar."

The possible relationship between learning strategies and achievement is complicated, and it is feasible to believe that the strategies that are good for some learners might not be good for others. In many cases, the high strategy use suggested a high achievement; nonetheless, there might not be an apparent pattern of strategy use because there might be a variety of factors that influence strategy choice (see Chapter 2).

### 4.5.8 Patterns of strategy used by High achievers and Low achievers

Literature has established that an important difference between HA and LA is the frequency of strategy use. Green and Oxford (1995) discovered that learners that are more proficient reported a more frequent use of language learning strategies.

It was no surprise to find that high achievers make use of a great number of strategies at a high frequency rate. High achievers use 29 strategies at a high frequency; that is, 57 % of the strategies included in the questionnaire. In contrast, they use nine strategies at a low frequency rate, which represents 18% of the strategies included in the questionnaire. As expected, low achievers only use five strategies at a high frequency rate whereas 25 strategies at a low frequency rate, that is, almost 50% of the strategies included in the questionnaire.

These results appear to support the belief that, in general, high achiever learners report using more language learning strategies and more frequently than low achievers or less proficient learners. However, High Achievers and Low Achievers concur in the use of some strategies. For example, AM strategy 9 “When I solve problems in English, first I try to understand what it is about, and later I solve it”; COG strategy 2 “When I study English, I try to relate new things that I am learning with the ones I already knew”; COO strategy 34 “When I study English in a team with my classmates, we make sure that everybody in the team learns the topics well”; and STO strategy 19 “When I study English, I organize the material by topics to analyze them one by one”. According to Green and Oxford (1995, p.289), these strategies reportedly used at similar rates of frequency across all levels are called “bedrock strategies.” As said by Green and Oxford these strategies “contribute significantly to the learning process of the more successful students although not being in themselves sufficient to move the less successful students to higher proficiency levels” (p.289). Qualitative data also provide strategies that both HA and LA use. The following list emerges:

Type	Strategy
STO	Attending the SAC
COG	Creating own examples
STU	Doing exercises on the book’s website
STU	Doing exercises on the textbooks
STU	Doing homework
STO	Listening to music at all times
STO	Listening to the radio in English
STO	Looking for unknown information to clarify
STO	Looking for vocabulary to understand reading

STU	Making lists of vocabulary
CON	Paying attention to listening
STO	Practicing speaking
STU	Repeating many times to memorize
STU	Repeating out loud
STU	Reviewing books, note for exams
STO	Taking an extra online course
STO	Watching movies

Apparently, the list of strategies that both HA and LA similarly use suggests that such strategies are strategies that learners use in their general learning context and which they seem to transfer to language learning. Possibly, the difference in strategy use between HA and LA might reside in the process and the activities around the strategy used as well as the purposes for using it; consequently, learners get different outcomes. For example, Eduardo, Celia, Sonia and Cynthia, all low achievers, reported watching TV as a common strategy in language learning, however, Jacobo who is a high achiever reported watching TV in order to observe grammar and pronunciation. That is to say, Jacobo clearly stated the purpose of the strategy (observe grammar and pronunciation), and obviously, his goal was improving in that area. Similarly, Susana, a low strategy user, watches TV with subtitles in order to understand; however, Lilia, a high strategy user, watches TV without subtitles to force herself to understand. Another example is Lilia who is a HA and who reported using the strategy of trying to identify phrases or vocabulary when listening. Lilia has a purpose of using the listening to the radio strategy (identifying phrases or vocabulary) which might contribute to developing her listening skill. In contrast, most of the LA who reported listening to music did not state the purpose in using it.

Several strategies seem to be inherent to language learning, and most learners use whether aware or unaware of their use and their benefits. There may be a possibility that many strategies are all basically cognitive, that is that they all involve mental processes. Therefore, learners are not aware of them and not reported by learners.

#### **4.5.9 Strategies used by High Achievers**

There is a number of strategies used in language learning that HA use and that LA do not; perhaps, here is where the difference in strategy use resides. High Achievers reported using a large number of strategies frequently used other than the ones above listed. As described above, HA use 29 strategies at a high-frequency rate; these strategies would seem to suggest that such strategies differentiate HA from LA. AM strategies 30, 31, 32, 33; COG strategies 1, 4, 5, 6, 10, 11; CON 14, 15, 16, 18, 20, 21, 22, 48; IIC strategies 27, 41, 45; STU strategies 29, 43, 46, and 42 (see appendix

B for the description of the items). It is interesting to note that high achievers use a higher number of cognitive and concentration strategies, which belong to the cognitive and metacognitive dimension of the strategy questionnaire (see Methodology Chapter 3). Concentration strategies help the learners stay focused on tasks and eliminate distractions, and Cognitive strategies help the learner understand input and get knowledge. Metacognitive strategies help learners plan, control, and evaluate their cognition and the frequent use of these strategies seems to characterize high achievers. These highly frequently used strategies appear to be the ones that set the high achievers apart from low achievers. The inclusion of an important number of strategies found on the cognitive and metacognitive dimension support the idea that metacognition is essential in language learning proficiency.

The examination of the interview data relating the strategies interviewees use in language learning would indicate a growth in strategies used and general support for findings in the questionnaire that HA reported. Additionally to the variation between using a strategy purposefully, or not, by HA and LA, above described, a number of strategies that HA use differently from LA emerges.

<b>Type</b>	<b>Strategy</b>
COG	Identifying phrases from listening
COG	Learning from correction
COG	Relating new information with old information to memorize and recall easier
COG	Translating Spanish to English
COG	Trying to construct more complex sentences
COG	Trying to make sentences using new words to learn them
CON	Paying attention
CON	Trying to concentrate to recall
CON	Paying attention to teachers' examples, copying and searching for more information
STO	Asking for vocabulary and phrases to someone who knows
STO	Asking teachers for examples to understand information
STO	Asking teachers for vocabulary when reading
STO	Looking at examples in textbooks
STO	Looking for opportunities to practice (Speaking, Writing, etc.)
STO	Looking for opportunities to read subtitles
STO	Practice speaking saying small phrases to practice
STO	Taking conversation class in the SAC
STU	Answering questions from reading
STU	Confirming answers with teacher
STU	Focus on keynotes for studying
STU	Making keynotes
STU	Making notes from listening
STU	Pronouncing to recognize sounds and memorize
STU	Reading for learning
STU	Reading for the gist

- STU Reading and rereading to understand
- STU Recalling information by listening
- STU Reviewing new topics
- STU Reviewing textbooks and notes to clarify
- STU Thinking of possible answers to a question and choosing the best one

Among the strategies gathered, Study, Study Organization, and Cognitive strategies are found more frequently. It would be sensible to believe that the strategies that HA used, above listed, seem to contribute directly to the learners' higher language achievement. The inclusion of these strategies as a mean of managing learning indicates the importance of using strategies to process new information, rehearsing and retaining new information as well as strategies that allow learners to manage studying habits such as looking for opportunities to practice or managing their study time.

The finding that the strategies listed are used by HA suggests the possibility that not all learners use them. By contrast, the finding that there are strategies used at a high frequency by not only HA but also LA suggests the possibility that learners might be using strategies inadequately; consequently, LA do not reach higher achievement test scores. The discovery that HA and LA of used strategies in a similar way raises questions regarding pedagogical practice. Do learners purposefully use strategies? Or do they mechanically use strategies without a purpose in mind? Further research needs to be conducted to clarify the extent to which learners use strategies with a purpose in mind. Although the purpose for using a strategy could lead the path to use a strategy successfully, the purpose was not explored in this study. Perhaps, the success in using a strategy is being aware of the purpose to reach a goal to learn or improve; thus, watching TV to improve pronunciation, to identify grammar, to learn vocabulary, to practice listening comprehension, or to assess comprehension would considerably change the course of strategy use.

It would be reasonable to believe that the strategies that HA use might have led the way to proficiency, achievement, or success; and it is also possible to believe that more frequency of strategy use is indeed better; however, it is not feasible to generalize this finding. When strategies are not used appropriately, and without a goal or purpose in mind, they might deviate learners' effort from the improving effect in learning. That is, a high number of strategies might not always imply a benefit in learning. An example of this is Ofelia whose average of strategy use was close to being a HSU. Unfortunately, her high strategy use did not push her to obtain a higher test score. In a similar way, Aleli, Milagros, and Karla were not able to reach high achievement scores despite their high strategy use in language learning.

### 4.5.10 Conclusion

The fact that no significant difference was discovered in average reported strategy use in general learning and language learning (see Section 4.2 in this chapter) would seem to suggest the potential usefulness of general learning strategies in language learning, which proposes a transfer of strategies from general learning to language learning. These strategies appear to be the base for the learners' strategy repertoire. Learners use these strategies in their early stages of language learning, and it expands and evolves around the practice into strategies that help learners to become less dependent as they reach higher levels of language learning.

The inclusion of practice strategies may well reflect the reality that many learners need to rehearse and evaluate their learning; however, learners would need more than practice to be proficient language users; they might need strategies appropriately directed to their needs and lacks. Thus, it is necessary to acknowledge that learners learn differently depending on different factors; consequently, they choose various learning strategies. Then, it is required to encourage learners to identify the purpose of doing what they are doing and assessing their methods for learning to address effort accurately or to look for new strategies that can help them improve in learning.



## **Chapter 5: Discussion**

This chapter recapitulates this dissertation by understanding the main findings and contributions of the present study. The discussion is presented in agreement with the results of the research questions previously observed in Chapter 4.

Data were collected from a mixture of a sample of 118 university learners and general community learners employing questionnaires in two stages, before and after treatment; and stimulated recall individual interviews. The questionnaire that was used to gather data in the first stage (LSQ) reported the learning strategies learners use in their daily learning, and they are referred to as General Learning Strategies (GLS). The strategies applied in the adapted version of the questionnaire (LLSQ) are known as Language Learning Strategies (LLS). The treatment for this study included three one-hour-forty-minutes strategy training sessions that were administered to students during the semester.

The primary goals of the current study were to identify the learning strategies learners have in their strategy repertoire, that is, General Learning Strategies (GLS) before they start Language Learning (LL). It was also intended to find the extent to which GLS are used in language learning, and the impact they have on language achievement. Another purpose of this study was to identify the influence of strategy instruction in achievement and on the adoption of strategies taught. Part of the aim of this project was to find how different High and Low strategy users and High and Low Achievers use strategies.

### **5.1 General learning strategies of beginner English language learners**

The first goal of this study intends to determine the extent to which English language learners use strategies in their general learning experience. The current study found that the extent to which learners use learning strategies in general learning is a medium low strategy use. That is, learners, although not necessarily poor strategy users, do not report a frequent high use of learning strategies in their general learning contexts. Medium use of strategy use by learners in this study concurs with studies that have reported having found a medium use of strategy in their results (e.g. Wharton 2000; Peacock & Ho 2003; Shamis 2003). A possible explanation for this is the diversity of learners and their different individual characteristics: University discipline, occupation, learning experience, age, motivation, or their areas of expertise. For instance, Peacock and Ho (2003) found differences in strategy use in learners of different disciplines; they discovered that English students used the most strategies and computing students the fewest. Similarly, they found differences in strategy use by older and younger learners. Tragant and Victory (2012) also discovered that older

and younger learners have a different use of strategies. In the same vein, Griffiths (2003) also found differences in strategy use in female and male learners. The diversity of individual characteristics of learners might have had an effect on the choice of learning strategies included in the questionnaire. Medium average strategy use does not necessarily imply that learners do not use strategies accurately; it might indicate that learners use strategies according to their interests and motivations in learning and their area of specialization or disciplines of study.

Regarding the type of strategies that learners use in general learning contexts, the list of the twelve most frequently used strategies reflects, to some extent, the type of strategies learners use more frequently and have in their repertoire of strategies for general learning contexts. Achievement Motivation strategies can be accounted for the type of strategies learners reported using more often, not only concerning individual strategies but also in strategies computed into categories; followed by Cognitive and Concentration strategies respectively. Achievement Motivation strategies involve learners' activities and behaviors which learners carry out to reach goals; behaviors dedicated to developing and demonstrating higher abilities.

There are many reasons for a learner to use learning strategies and many reasons to apply effort to learning. Probably, learners choose strategies that contribute to achieving better grades even though getting better grades does not necessarily mean learning. For instance, learners in the educational system want to obtain passing grades without interest to achieve learning, just with the only interest in passing such as the case of secondary and preparatory educational levels. Achievement Motivation Theory explains the importance of individuals' experiences and their struggles to achieve a good performance. According to Atkinson's early theory (1957), Achievement Motivation is partly conceptualized as an unconscious characteristic (the motive to achieve success) that is developed early in life; primarily as a consequence of parenting practices and early educational stages. The repeated events of these practices at the beginning of their education become learners' responses to achievement situations in later stages of their learning such as language learning. Dörnyei (1994a, p. 6) emphasizes that the "need for achievement is a relatively stable personality trait that is considered to affect a person's behavior in every facet of life, including language learning." Thus, the use of Achievement Motivation strategies explains the need for success, the need to achieve learning goals, or the need to attain excellence. In everyday school life, learners try to be competent in what they do. Their needs and motivation influence the course of their behavior in their learning, and consequently, their strategy choice and use. Learners try to fulfill their needs, to reach success, and to avoid failure in different ways.

Qualitative findings indicate that learners use more frequently Study and Study organization strategies. Since the types of strategies highly used reported in quantitative findings are different from the types of strategies highly used in qualitative findings, it is possible to believe that both

types of strategies gathered complement and expand each other. Achievement motivation strategies used in the questionnaire entail behaviors that learners did not seem to be aware of when they reported the strategies. Questions in the interview allowed learners to explain themselves in an unrestricted way what they do when they learn. Learners openly reported a wide variety of strategies that they are aware of when they learn. It was possible to infer from interviews that learners do not seem to recognize strategies that are necessary for their learning; for example, the attitude of persistence that learners have when they invest time in studying or when they look for opportunities to practice. An example of this is Lucy who stated that she did not do anything to learn and which later she explained, "I only do the homework and attend the SAC"; nonetheless, she stated a considerable number of strategies and which implied a need to achieve goals. It can be said that qualitative data enriched the repertoire of strategies learners use in learning.

At times, learners are not able to identify the behaviors they have to reach their goals, and they only perceive the actions they perform. Literature has explained that there is a lack of consensus on whether strategies are conscious or unconscious for them to be considered strategies (Cohen, 1994). According to Schmidt (2010), if a learner's behavior is unconscious, then it is a process, not a strategy. Then if the behavior is conscious, then it is a strategy. Based on this view, most of the strategies reported by learners would be conscious strategies since they deliberately use the strategy although not purposefully used. However, Atkinson explains that Achievement Motivation strategies can be seen as an unconscious desire to be successful in their learning. It can thus be suggested that learners' behaviors, although not explicitly stated, show their need to be successful in language learning. Consequently, it can be argued that data reported by interviewees match quantitative data gathered from questionnaires. The highly frequent use of Achievement Motivation strategies reported by quantitative data can explain the use of Study and Study Organization strategies reported in qualitative data. Learners engage in a series of unconscious behaviors that deploy conscious actions taken by the learners to reach a goal: language learning. The conscious use of Study Organization, Study, Cooperative and Interaction in class strategies play a major role in the acquisition of new knowledge; however, the unconscious use of achievement motivation strategies have an important role in the interest, persistence and positive attitude, effort in study, and dedication toward learning.

In summary, in schools, the use of learning strategies is developed in early stages and encouraged during learning. It could probably be suggested that the more education a language learner has received, the more use of learning strategies he or she has been exposed to. Achievement Motivation strategies seem to be the engine that pushes learners to use strategies in order to help their desire to succeed in their learning. Beginner language learners are strategic in their general learning contexts according to a variety of variables; such variables have contributed to enriching their own repertoire of strategies that they apply according to tasks, learning contexts,

or their motivation to perform or succeed. Consequently, when they start a new learning journey such as language learning, they mainly use the strategies they have in their strategy repertoire to help them perform new tasks. Rubin and Thompson (1982) suggest that individuals might apply their learning approaches to different learning situations. Some strategies are deployed naturally in everyday life, and they are transferred to language learning. For instance, using imagery to recall information, repeating to memorize information for later retrieval, taking notes, asking for clarification, and using deep breathing for lowering anxiety are some of the strategies that non-language learners might use in daily life in order to find the solution to problems or to solve tasks.

## **5.2 General learning strategies used in language learning**

The previous section has explained that learners use a variety of strategies, which at times, they are not aware. Such is the case of scarcely reported Achievement Motivation strategies in the interviews. Learners reported strategies that they are conscious about; however, non-observable or unconsciously used strategies are also in operation in language learning. It has been explained in the literature review chapter that learners develop their strategy repertoire through time and learning experience, and the variety of learners' individual characteristics shapes their strategy repertoire.

Another primary goal of the study was to observe the extent to which learners use general learning strategies in language learning; therefore, transfer to language learning as the mechanisms that would help beginner English language learners achieve language.

The current study found that overall data of general learning strategies and language learning strategies do not show a significant difference in the types and the frequency of use. That is, averages of strategy use indicate that learners have medium low strategy use in language learning as well, therefore, a medium low strategic behavior in both contexts. Additionally, it was observed that they use similar types of strategies. A possible explanation for these results may be the lack of new strategies to learn in a new learning context. Hence, learners need to turn to the strategies they have in their strategy repertoire and which has been developed through their learning experience.

It is, therefore, likely to suggest that there is a transfer of GLS to language learning that learners use to solve tasks in language learning. A possible reason is that at beginning stages of language learning, learners have not fully developed language learning strategies and possibly language tasks do not require learners to use different types of strategies. Nonetheless, with the development of language knowledge and the complexity of language tasks, learners will require using different strategies at the various stages of language learning. Research has found that learners in higher levels of language learning use a larger number of strategies and at a more frequent rate than learners in a less advanced level (Griffiths 2003). Consequently, it is feasible to believe that

beginner learners transfer strategies from their repertoire because language tasks have not required learners to deal with different strategies that more advanced language tasks require.

However, there might be strategies closely related to foreign or second language learning that can be said to be context specific; for instance, translating or strategies to improve pronunciation. Research indicates that learners usually limit a strategy to the learning context where they learned to use the strategy (Davidson & Stenberg 1998; Gu 1996). According to Davidson and Stenberg (1998) learners do not mechanically transfer strategies they use in one learning situation to a different one. However, it would be naive to believe that all strategies used in language learning are limited to language learning and that learners are clean slates that need to develop new strategies every time they face a new learning context.

A possible interpretation of the findings suggests that when learners perceive strategies as useful, despite the real usefulness, they tend to keep them in their strategy repertoire. In the learners' perception, many of the strategies they have adopted through years and experience have demonstrated success in their learning despite the real usefulness of the strategy; thus, they have earned a place in their repertoire.

Another possible explanation for this is that for many adult learners language learning is not new. They have experienced language learning before; consequently, they have gathered a series of strategies in their prior language learning experience. Prior language learning experience implies a different perspective of what the current language learning is for learners. It shows the learner a way to approach language learning in the first instance. This finding concurs with Rubin (1981) who suggests that previous language learning experiences that a learner has had in the past might influence learners' attempt to study a language in the future. Interestingly, their previous language learning experience seems to enlarge the learners' repertoire of strategies they use in their current language learning experience. Learners, who reported having had more language instruction than the mandatory six years that the Mexican Educational system requires; for example, Rita, Evelyn, Jacobo, Karla, and Lilia, also reported a higher number of strategies in their current language learning. It is feasible to believe that the strategies, which learners use in language learning, have already been proved to be useful for them. Consequently, they were adopted and stored in their repertoire for later use; for instance, the repetition of the verbs to improve pronunciation. It is possible that many strategies are selected or rejected based on the previous results obtained; this, in turn, creates learners' beliefs about the good or bad procedures that might have an effect in the future.

The current study found that learners transfer strategies consciously and unconsciously to language learning. The conscious transfer of strategies from one learning context to another implies using previous methods in new learning contexts, and it requires that the learner be aware of his or

her repertoire of strategies as well as knowledge of how the strategy works and the benefits of using the strategies. Learners transfer strategies as a way to aid their learning. That is, they deliberately select the strategies that they have perceived as useful for their learning, for instance, reviewing, rereading, and revising, memorizing information, making notes, or repeating in silence despite the real usefulness for their learning. An example of this is Ofelia who writes everything she wants to learn because she believes it is useful and which she used in early stages of her learning; therefore, she uses it in every learning context she faces. Attitudes and behaviors such as being responsible for their learning, being persistent or being motivated represent the unconscious strategies. These behaviors deploy the use of conscious strategies that aid learners in learning, for example, reviewing strategies. Learners perceive reviewing strategies as a helpful way to store or recall information, or in preparation for exams, and they are aware of the strategy. When Karla was asked if she knew how the reviewing worked for her, she convincingly stated that it helped her memorize information. Rita also perceives reviewing as a way to help her memorize information.

Reviewing is interchangeably used as revising, reading, rereading or, looking at notes, revising textbooks and notebooks or even studying. However, at times, it was necessary to ask for clarification. Pozo (1990) defines reviewing and revising as recirculation strategies; that is, strategies that help learners recall, and eventually, acquire information; and which learners use across learning contexts. Similarly, Weinstein and Mayer (1986) see reviewing as a rehearsal strategy that operates directly on the information to be learned to aid acquisition of the information. These interpretations contrast with that of Himsel (2010) who sees reviewing (as reading) as a rote strategy. He argues that such strategy does not have an adequate effect on learning. Rote methods include memorizing concepts, or words for later use. He suggests that such strategies have a better effect when they encode information for a better acquisition of knowledge. For Himsel, rote methods involve shallow processing because such methods result in very limited brain change; that is, methods that do not generate enough raw materials to construct an accurate memory. Instead, he suggests cognitive processes used to learn such as encoding information; however, he warns that not all of the encoding processes are equally helpful.

Reviewing or revising has memorization and storing information as an end. Although it might be considered an old-fashioned method of learning, it is a very frequently used strategy. It comes from the idea that if a learner says or writes something many times, this information will be retained in memory for a later retrieval to produce language. Rote learning is often seen as memorization by repetition without understanding the reasoning or relationships involved in the material that is learned, and often it is considered as an indicator of intelligence or cognitive ability.

According to Himsel (2010), rote learning deters comprehension. Rote learning is regarded as an ineffective tool because it is based on repetition, it is a time-consuming process, and it lacks

structure and organization. Language learners often consciously choose memorization because it is a well-known memory strategy in their repertoire. Recently, rote learning is being replaced by newer techniques such as associative learning strategies, elaboration strategies and critical thinking instead of being used for a higher level of learning. When memorization becomes the final goal of learning, the foundation for learning becomes unstable. Ideally, the use of memorization as a strategy should move learners into the application of the information stored in memory.

Language teachers, at times, foster the strategy of memorization in an attempt to provide learners with vocabulary and pronunciation; and memorization plays a major role in the acquisition of vocabulary (Li 2005). That is the case of some Asian countries, which use memorization as a traditional learning style, especially in vocabulary learning (Li 2005).

It can be said that there have been conflicting opinions on the effectiveness of using rote learning in many reviews. Research evidence from studies strongly suggests negative assumptions among researchers about the role of rote learning (e.g. Liu 2001; Gu & Johnson 1996; Cheung 2000). Although rote learning has been seen negatively, language learners see revising and memorization strategies as a useful practice in their study methods, and very often, they perceive, and acknowledge, good results when using them. For Instance, Celia states that repeating many times is the part of her style of learning and that it worked well for her because she could see good results. Monica and Milagros also use the strategy of memorizing information by repeating and they were able to perceive its benefits when they were able to recall what they had tried to memorize by repeating.

Thompson (1987) indicated that memorization in language learning might be utilized as a cultural element. Learners often use their strategies, and they are reluctant to use new learning strategies. However, this does not imply that memorization by repetition is wrong as long as learners benefit from its use. Language learners still hold the positive view on rote learning and still use it in their language learning as an effective strategy. Milagros, Aleli, Susana, Manuel, Lucy, Jacobo, and Alma also reported memorizing vocabulary or phrases by repeating aloud or in silence, or in writing. Nation (2001) claims that learning words in a list is an effective means for learning a large number of words in a short time. Nation also declares (2001) that vocabulary words can be learned by methods such as rote learning both efficiently and quickly.

Rote learning does not necessarily have to be a meaningless repetition; it could aid in reinforcing knowledge, accuracy, and understanding of the information. This claim is supported by Nation (2001, p. 74, 76) who stated that “Repetition is essential for vocabulary learning because there is so much to know about each word that one meeting with it is not sufficient to gain this information.” Similarly, Skehan (1998, p.204) acknowledges the importance of memorization when he states that “memory, although traditionally associated with the acquisition of new

information, is also concerned with retrieval, and with the way elements are stored... Fast-access memory systems... are what allow output to be orchestrated into fluent performance”.

The use of rote learning strategies in this study does not necessarily imply memorizing vocabulary, but also phrases, collocations grammar, or pronunciation, which concurs with Ding's findings (2007). He found that proficient English learners reported memorizing lines of movies, which later they use in a natural way when using the language, and that reciting lessons aided them in mastering collocations, phrases and grammar patterns. Thus, memorizing can be useful even at proficient levels, and it does not necessarily have to be regarded as a basic learning strategy.

Another interesting finding in this set of data is the frequent use of Study Organization strategies; strategies such as looking for additional information or looking for alternative ways to class to learn what is unclear, setting goals, and managing time. Apparently, learners are able to monitor, therefore, to evaluate what they know and what they need to improve. Looking for additional information requires that learners evaluate what they need to improve, thus, they invest time additional to class hours, which suggests a degree of metacognitive and self-regulated behavior. This finding is supported by research that has shown that language learners make use of metacognitive strategies more often than other types of strategies (Green 1991; Park 1997; Shamis, 2003). For instance, Devlin (1996) discovered that older learners reported themselves employing metacognitive strategies more efficiently than their younger counterparts did. Metacognitive skills incorporate the ability to predict, plan, evaluate and monitor knowledge efficiently and accurately; and they can facilitate, and accelerate, the whole process of transfer of strategies from one language (L1, L2) to the other (Wenden 1999). Additionally, it enables learners to be successful (Paris & Winograd 1990). Learners are able to retrieve their metacognitive knowledge from their previous learning experience, which is stored in the long-term memory (Phakiti 2006). Research has shown that metacognitive strategies are correlated with proficiency and high frequency of strategy use (Griffiths 2003). This metacognitive behavior, possibly, is supported by the Achievement Motivation strategies which are the spark for the use of more and different strategies, and which learners have transferred from previous learning. Then, learners' prior language learning experience influences the choice of strategies in the present.

Interestingly, it has also been observed that despite the strategies learners transfer to language learning, learners deploy a number of strategies that allow them to deal with language learning; for example, strategies that learners use to practice the language. Looking for opportunities to practice has been considered as a characteristic of good language learners; according to Rubin (1975), good language learners take advantage of all practice opportunities. Spolsky (1989) suggests that the opportunity to practice the target language is essential for language learning. Many of the strategies gathered from interviewees reported in language learning relate to the practice of the language and

the use of resources (songs, TV, Radio, web pages, YouTube, the teacher). This practice could be explained as an immediate need for learners to seek for opportunities to practice what they are learning, opportunities to practice with more experienced ones, with family, friends or native speakers. That is, learners appear to be very aware of the need to use available resources as a strategy to learn more efficiently. It can only be assumed that class time is not always enough for learning to take place. Formal classroom teaching may not provide enough practice and exposure for language learning to occur. As a result, it represents a poor scenario for practice. When learners look for opportunities to practice, they display a degree of independence in learning.

It is feasible to believe that practice strategies seem to be inherent to language learning. Learners look for opportunities to use the language not only in their productive skills (speaking and writing) but also in their receptive skills (listening and reading). For example, learners reported looking for opportunities to talk or write (WhatsApp, Facebook or messages) to friends, family or native speakers in English; however, they also reported listening to the radio, songs, news; watching TV, and reading as a way to use English. Similarly, learners reported strategies to practice pronunciation (silently or aloud). This result concurs with Cohen's (2011) categorization of language use strategies. Cohen (2011) makes a differentiation between language learning strategies and language use strategies. He explains that language use strategies allow learners to use the language that they have in their current interlanguage. In a deeper categorization, Cohen divides language use strategies into retrieval, rehearsal, cover and communication strategies. The main intention in using rehearsal strategies is to practice new material to learn it. In addition, the main goal of communication strategies is to conveying meaningful information that is new to the recipient. Consequently, practice strategies would fit into both categories.

It is also possible to believe that the strategies that learners use to practice the language might be a tool to assess their knowledge and progress in learning. According to this, practice strategies would fit into the metacognitive category as described by Oxford (1990). On the other hand, practice strategies, which learners use for speaking, would also be appropriate for the social strategies category. Oxford explains that social strategies are the actions that learners use to interact with other learners and with native speakers of the language (e.g., asking questions for clarification and cooperating with others). Based on the different categorizations as mentioned earlier, it would be possible to believe that practice strategies might fit in more than one description. Nonetheless, Cohen's description of language use strategies would provide a complete categorization. It is important to bear in mind a possible bias in learners' reported strategies since the purpose for using strategies was not addressed in this study. Thus, further work is required to establish a categorization based on the purpose for using a strategy.

Another finding in this set of data shows an increase of strategy use not only in data gathered from quantitative methods but also from qualitative methods. A possible explanation for this increase in strategies used is that as language ability improves, it causes a continuous, but relative, change in learners' behaviors; simultaneously, the language skills also improve, and their learning strategies change. Seemingly, strategy use becomes increasingly focused when learners switch tasks from general goals to specific goals. Since language learning strategies are deliberate actions selected to achieve goals (Paris et al. 1991) and goals change during the learning process, it is understandable that the use of strategies also changes, thus, learners could have found other types of strategies that helped them deal with language learning tasks. Donato and McCormick (1994) claim that strategies evolve into specific actions (focused strategies) from "unfocused goal" to "focused goal"; moreover, the type of material and tasks required in language learning needs specific strategies to be implemented or performed. These findings concur with Griffiths' (2003) who found evidence that learners of different levels use various types of strategies and at different frequency rates.

At beginning stages of language learning, learners have not fully developed language learning strategies, and possibly language tasks do not require learners to use different types of strategies. With the development of language knowledge and the complexity of language tasks, learners will require using different strategies at different stages of language learning. Research has found that learners in higher levels of language learning use a larger number of strategies and at a more frequent rate than learners in a less advanced level (Griffiths 2003). Possibly, beginner learners transfer the strategies from their repertoire because language tasks have not required learners to deal with different strategies that more advanced language tasks require.

Alternatively, it might be the case that previous language learning experience has developed beliefs in learners. Such beliefs can influence their motivation, attitudes, or the strategies they will choose to solve tasks. Research (e.g., Wenden, 1987a) has explained that learners' beliefs about how they should learn a language influence their strategy choice. For instance, in this study, older interviewees believe that learning a language was difficult; consequently, they choose strategies to overcome that difficulty; or the belief that some aspects of language are more important than others; for example, pronunciation, grammar or speaking.

Although time did not allow, a more detailed examination of the purpose of use of these strategies in the context would be of interest. It is surprising that "listening to songs and watching TV" are frequently used by most of the interviewees. This finding might lead to the belief that learners expose themselves to the target language with the confidence that they will learn by such exposure. Listening to songs or the radio and watching TV do not explicitly inform the learning goal in the use of such strategies, or if learners know what they are using such strategy for. Many

different tasks could be performed when listening to a song; nonetheless, such goal, task or purpose was not observed in this study. The perceived goal or purpose for using specific strategies, such as listening or watching TV, could be worth as useful areas for future research. It is necessary to observe if the effort is well spent. Being acutely aware of the purpose for using a specific strategy might lead learners to have better results in the use of strategies such as the above mentioned.

In summary, although not necessarily right or wrong strategies learners use strategies that they use to learn in different subjects and different learning contexts, for instance, preparatory, or university. Very commonly in early stages of language learning, learners turn to the strategies they already know and use to learn new information. Language learning might represent a specific learning context that requires its type of strategies that cannot be generalized due to the specificity it represents. It was suggested that learners transfer strategies because they are unaware of new methods for learning a language; however, they are able to deploy strategies that help them deal with language learning, for example, translating, watching TV, listening to the radio and looking for opportunities to practice. Therefore, there is an increase in the use of some strategies and a decrease in others. Findings suggested that strategies learners use are transferred consciously (e.g. reviewing, making notes, repeating, memorizing) or unconsciously (e.g. being persistent, allotting time to studying). It has also been suggested that the strategies that learners use in language learning might come from their previous language learning experience. Although some of the strategies that learners use might be considered rote learning methods (e.g. memorization, repeating aloud and in writing), learners have acknowledged the beneficial effect in their learning. Thus, such strategies have become an essential strategy in their repertoire.

Manchon (2008, p. 233) states that “it has never been crystal clear how strategies contribute to language development, and even less clear whether any possible beneficial effects are long lasting.” Conducting longitudinal studies to observe the transformation, the adoption and the elimination of strategies in learners across language levels would provide a better sight of the development of the strategic behavior in language learners.

### **5.3 The impact of general learning strategies in language learning**

It has been discussed in the previous section that learners, in the first instance, use strategies they have in their strategy repertoire. The use of their strategy repertoire suggests a transfer of general learning strategies to language learning, at a conscious or unconscious level, as an attempt to deal with language learning, and as the primary tools to deal with language learning tasks. It was necessary to observe the extent to which such strategies help them attain language achievement.

A third research objective was to explore the extent to which learning strategies predict language achievement. Findings in this study showed that general learning strategies that learners used in

language learning can predict language achievement on 13.5 %. This percentage means that even though it might not be considered by many researchers as a high predictive value, it does represent a substantial predictive effect if we take into account the many variables that can influence language learning.

Research has demonstrated that a frequent high use of strategies has an impact on language learning. Many factors contribute to a frequent high use of strategies, for example, the type of strategies, and it cannot be attributed to a single factor. Results of this study indicated that Achievement Motivation strategies have the highest correlation with test scores. Along with this, Achievement Motivation strategies were also found as the strategies most frequently reported in not only the list of the twelve most frequently used strategies but also in strategies computed into categories in general learning and language learning contexts. That is, the Achievement Motivation strategies that learners use help them in being persistent and reaching their goals. They use cognitive strategies that assist them to deal with new information in both learning contexts.

Despite numerous research studies that have been conducted in identifying factors that cause, predict, or contribute to academic success in language learning, achievement motivation in language learning has scarcely been touched upon.

It is well acknowledged that motivation plays a significant role in learning a language. According to Pintrich and Schunk (1996), motivation provides the basis to complete cognitive behavior. Moreover, motivation deploys a number of variables that aid learning, for instance, metacognitive and self-regulated behaviors which are important factors that are necessary for language learning. Research on motivation in learning a language has directed attention to internal and external factors that develop the interest in learning, supports it and gives direction to achieve their goals in learning. Motivation to achieve is an important variable that influences language learning. However, it is the combination of different factors what allows people to achieve their goals.

Research has found that some learners have a strong motivation to achieve goals, whereas other learners do not seem that troubled about their achievements. Atkinson and Feather (1966) claim that achievement motivation is a mixture of two variables that deal with personality: the tendency to approach success and to avoid failure. Perhaps it is the latter that impulses learners to reach the end of the language course and not the desire to actually learn. Although for many learners, the tendency to avoid failure is in its own right their success. Atkinson (1964) stated that achievement motivation is the comparing of performances with others and against certain standard activities; in other words, a mentality to compare with others. Learners' Achievement motivation pushes them to accomplish goals not because of the learners' satisfaction of learning but because of their satisfaction of passing or not failing. Then, it is possible that the higher use of Achievement

Motivation strategies is due to the motivation to pass the course rather than to achieve learning. This can be inferred from findings of the qualitative data. For instance, 76% of the sample of interviewees reported studying English because they needed to take advantage of the idle time, they needed to fulfill school requirements, or their parents require them to study. Possibly, this type of learners was more motivated to pass and complete the course rather than to learn. Thus, their use of achievement motivation strategies helped them deal with the language learning.

It can be said that Achievement Motivation strategies enable learners to take attitudes towards learning and to do work they identify to be valuable. Smith (2011) supported the view that learners with a high level of Achievement Motivation seek out moderately difficult tasks because they would like to improve themselves. They prefer to work on a problem rather than leaving the outcome to chance; they are more concerned with their achievement rather than the rewards of success. They are more likely to have better attitudes to challenging tasks, grading, corrective feedback, and the chance to try again, they persist longer on challenging tasks, and they try to avoid failure.

Another possible explanation for the frequent use of Achievement Motivation strategies is that at early stages of language learning, in the novelty of a learning situation, learners seem to be highly motivated to persist longer in learning. They invest effort in trying to avoid failure, they try to improve in what they are learning, and they try to master topics. This effort lasts until their motivation to persist fades away or mutates into a different type of motivation. In prior language learning contexts, learners are required to fulfill mandatory language requirements; consequently, they adopt strategies that help them fulfill such requirements and hardly ever to achieve learning. Nonetheless, these strategies and behaviors are brought to language learning from their previous learning experience and perhaps from their personalities and attitude towards life; behaviors developed early in life primarily as a consequence of parenting practices (Atkinson 1964).

Findings suggest that scores of the language achievement test were primarily predicted by the use of Achievement Motivation and Interaction in Class strategies, and to a lesser extent by affective and Study strategies. This finding suggests that learners with higher scores on these strategies were expected to have higher test scores after controlling for the other variables in the model. Although some psychometricians might not consider 13.5 percent of the variance in achievement test scores a significant contribution, this contribution could be regarded important due to the number of potential factors than can be accounted for the language achievement such as attitude, learning styles, motivation, goals, tasks, or prior learning experience. Perhaps, a comparative study in identifying the most important factors that literature has identified as high contributors for achievement in the choice for learning strategies can be worth of research.

Interestingly, Interaction in Class strategies appears to be relevant in predicting language achievement. Interaction in Class strategies are the strategies that imply the interaction of learners with teachers and peers and an active participation in class. Learning occurs through interaction with other people, creating a “powerful relationship between social interaction, social context, and language” (Donato 2000, p. 47). Interaction in class assists in establishing a learning community, stimulate interest, engage learners in communication, and allow learners to interact with the information. Interaction is entirely related to a large variety of activities frequently found in language learning, which necessarily requires learners’ interaction with their peers, teachers and the class. At adult age, language is learned in social contexts that require interaction with classmates. This interaction between classmates importantly defines a communicative intention where language is put into practice; it can also facilitate learners’ language development and communicative competence. In language teaching, teachers try to provide meaningful interaction to expose learners to situations where they can develop the command of a second or foreign language. Very often, this type of interaction goes further than the completion of the activities; it creates bonds between learners and teachers.

The importance of social interaction has significantly been underestimated, especially in studies on language learning strategies. According to Allright (1984), classroom interaction is the process whereby classroom language learning is managed. Presumably, Interaction in Class strategies are inherent to language learning contexts where the practice of the language and communicative competence is sought. In a communicative classroom, a great number of activities included in daily lessons require a considerable amount of interaction between learners, for instance, pair work and group work. Seemingly, learners look for interaction with peers to put into practice their language skills.

From the qualitative point of view, Study and Study Organization strategies seem to contribute to language learning as well. Learners frequently use Study strategies (see results Chapter 4) such as reviewing and the different ways to review (see section 5.2). The use of these conscious strategies exposes learners to information; they rehearse and practice this information. Eventually, this is stored in their memory for a later retrieval. Answering tests will require that learners retrieve this information, which could translate into higher achievement test scores.

Findings of the quantitative data showed a significant relationship between achievement test scores of the second administration and the LSQ mean scores. That is to say; general learning strategies have a positive effect on language achievement. Nonetheless, qualitative data suggests that this finding cannot be generalized. There were exceptions to this general finding. Celia, Sonia, and Ofelia, for example, reported a high strategy use in general learning; however, their strategy use decreased in language learning, and they failed to make particularly good progress in language

learning since their strategic behavior did not help them attain success in language learning. Similarly, Milagros, Karla, and Aleli showed a high strategy use in general learning, and they also reported a high strategy use in language learning; however, they did not reach the high achiever category. That is, their high use of strategies seemed not to have had the boosting effect in learning. Although it cannot be concluded for interviewees that a high strategy use in general learning would always influence positively in their language learning, it was observed that a high strategy use in general learning contexts suggests a high strategy use in language learning. It can only be speculated that learners might be using strategies inadequately, and they might be applying effort on strategies that do not help them in their language learning. Therefore, learners need to be taught strategies that can assist them specifically in learning English, or they can be taught how to adapt the strategies they know and use to language learning.

In summary, the strategies which learners have in their general learning repertoire, and which they transfer to language learning, can have an effect on language achievement. They can be a factor that contributes to language learning. However, it is also necessary to consider that general learning strategies need to be redirected to reach language learning goals. Achievement Motivation strategies are mechanisms and behaviors that learners have acquired and developed through their learning experience in life and help learners deal with new learning situations such as language learning. This achievement motivation, in turn, will aid learners in using strategies and eventually in language achievement. Additionally, Interaction in Class strategies also account for a significant predictive value in language achievement not so in general learning contexts that suggest that language learning requires a wider interaction between learners, teachers, and others. Furthermore, Study and Study organization strategies expose learners to the language, which helps them in storing information for tests. Thus, the factors mentioned above can be said to have an impact on language learning.

#### **5.4 The impact of strategy instruction in beginner language learners**

To discuss the extent to which strategy instruction influenced the use of language learning strategies, it is necessary, first, to discuss findings between groups to clarify possible differences since several issues are of interest here.

Although not necessarily high strategy users in their general learning context, data analysis indicated that learners had a medium-low use of strategies, which learners had in their already developed strategy repertoire. Data of the experimental and the control groups' findings showed that the experimental group had a significantly higher level of strategy use than the control group even before they were instructed in the use of learning strategies. The current study revealed that differences in achievement test scores between control and experimental groups were not

statistically significant; scores were homogeneous in the first and the second administration of the achievement test. Similarly, mean scores of strategy use in LLSQ between groups were similar. This finding answers research question 4, which intends to identify the extent to which strategy instruction influences strategy use in language learning. To be precise, the experimental group that received strategy instruction did not show any significant higher scores in the achievement test or the increase of the frequency of strategy use despite strategy instruction sessions provided in the treatment. The findings in this set of data concur with Jurkovič's (2010) findings who reported no significant effect of explicit strategy instruction on the development of language knowledge for neither high-level nor low-level learners. Similarly, Bimmel, Van den Bergh and Oostdam (2001) taught learning strategies to use in their mother tongue; nonetheless, when these strategies were meant to be used in language learning such strategies were not used. Apparently, this adverse effect can be attributed to the perception learners have for the strategy instruction or the learning strategies. Learners might be reluctant to accept new ways to learn, especially if they are not needed at the moment of the instruction. Learners use strategies according to needs and goals to solve tasks. When there is no intention to solve a task, learners may not have the necessity to adopt a new procedure.

Surprisingly, the experimental group decreased the use of GLS in language learning after instruction. That is, they reported using less frequently GLS in the language learning. Apparently, this could be attributed to the specificity of tasks that language learning requires. Probably, the strategies that learners transferred from their strategy repertoire do not seem to be suitable for language learning; therefore, they chose different types of strategies to deal with language learning. Qualitative findings support this claim. Interviews data suggest that learners use various types of strategies to deal with language learning, for example, practicing speaking, listening to the radio, or watching TV. Possibly, when learners encounter new learning contexts, they deal with tasks with their available mechanisms in their repertoire. However, every learner, according to their previous learning experiences, adapts the use of their strategies to deal with new tasks; Peacock and Ho's (2003) findings support this claim. They discovered that learners from different disciplines tend to use strategies at a different range. They found that language learners make use of more strategies than other disciplines. Similarly, Politzer and McGroarty (1985) found that engineering and science learners outperformed social science and humanities learners in the use of strategies. Language learning holistically deals with reading, writing, listening and speaking, additionally with grammar, vocabulary, and pronunciation, and language learners need to make use of strategies to deal with each of the skills, and sub-skills. Hence, the number of strategies learners use to develop these skills might increase.

Dörnyei (2003, p. 3) states that "learning an L2 is different in many ways from learning other subjects at school"; nonetheless, a number of the strategies learners use in language learning are

transferred to language learning from other disciplines, and they cannot be regarded as specific language learning strategies. Furthermore, the specificity of language learning will require learners to look for new strategies that aid learners to deal with language tasks such as translating, pronunciation strategies or speaking strategies.

The ultimate goal of strategy instruction is to raise learners' awareness of the benefits of strategies. A significant finding shows that strategy instruction seemed not to have had any effect in the increment of the frequency of strategy use in the experimental group. A possible explanation for the null adoption of the strategies taught in strategy sessions might be the motivation for learning the language. Seventy-six percent of the learners in the control group reported studying the language because they were trying to fulfill school requirements rather than having an intrinsic desire to learn English. Learners also reported learning English because they wanted to do something with their idle time before starting university classes. Models of learning strategy instruction frequently address two related topics, namely motivation and metacognitive knowledge. These elements could be considered as essential conditions for strategy instruction since the motivation for using, or not, learning strategies will affect learners' decision to use a strategy or not willingly. Thus, learners' motivation for learning English helps us understand why strategy instruction might not have had the desired effect.

Surprisingly, learners in the experimental group not only did not increase but also decreased the frequency of use. In this sense, it would have been expected that after having received training in strategy use, learners in the experimental group would increase their frequency of use of strategies in language learning or even in the adoption of the new strategies taught for their strategy repertoire. On the positive view of this finding, it could be discussed that strategy instruction had a positive effect on raising learners' awareness of the benefits of the use of strategies. The awareness sparked in learners the desire to look for their strategies to deal with language learning other than the strategies instructed in the strategy instruction sessions. In contrast, on the negative view of this finding, it could be discussed that learners did not find strategies taught useful enough to be used in language learning. Hassan et al. (2005) explain that even though strategy training can be effective, a number of conditions restrict the universality and usefulness. Similarly, Jurkovic (2010) suggests that strategy instruction would be more beneficial under optimal circumstances; for instance, time and homogeneity between participants. The teaching of learning strategies may not necessarily guarantee that learners can become strategy executors, for that reason, learners need to be willing to put their effort into action to enhance learning so that strategies can be deployed. Research has shown that strategy instruction is effective in helping learners; nonetheless, it has not proved whether strategies taught are significant enough for learners to adopt them for later use such as general learning strategies that learners adopt and embed in their strategy repertoire.

Other contributors to the results in this section of the study might be the strategy instructor, the methodology and the learner. Although the researcher, whose experience in language teaching is of 25 years, provided the strategy instruction, there might be a possibility that learners did not feel a rapport with the instructor since he was not the current teacher. Strategy sessions provided by an external source other than the learners' current teacher in addition to the infrequent contact, therefore, a lack of rapport, with learners might have diminished the importance of strategy instruction. A good relationship between teachers and learners is built through constant interaction that leads to trust and a positive correlation between teachers and learners. Thus, no relationship could have been developed between learners and instructor in three sporadic sessions through the course. Research indicates that learners consider rapport between teachers and learners an important characteristic of a good instructor (Catt, Miller, & Schallenkamp, 2007; Faranda & Clarke, 2004). The teacher in strategy instruction sessions needs to be not only knowledgeable of learning strategies but also knowledgeable about teaching strategies that might help learners build trust in the teacher; consequently, to be more receptive to new information.

Additional to the teacher as a contributor to the results in this set of data, the methodology could have been another issue in strategy instruction. Classes were planned and conducted by using a model that included five sections, which most models of strategy instruction suggested (see Chapter 3): Explanation stage, Model stage, Practice stage, Evaluation stage, and Transfer to new situations stage. Chamot (2008) points out that all current strategy instruction models focus on the development of students' knowledge about their learning processes and encourage them to adopt strategies that will make their learning more efficient. Since strategies were adapted to the new information currently seen at the moment of instruction, learners might have gotten lost in the process and paid more attention to the language rather than the process they used to learn such information even though learners were encouraged to think about the process. The new information itself might have overshadowed the procedure to learn new information.

The number of sessions could also have had an influence on the effectiveness of strategy instruction. Although the treatment for the experimental group included three one-hour-and-forty-minute sessions, a higher number of sessions might have given better results. Hassan et al. (2005) suggest that since there have been no direct comparisons; it is not clear whether relatively simple programs to raise awareness are any more or less effective than longer and complex interventions. It may be possible to make a positive impact on the learner with one or two sessions that raise their awareness of the benefits of using strategies.

Findings show that out of the eight strategies included in the strategy sessions, only two strategies (see Chapter 4) had a significant increase in the use of such strategies: Using Selective highlighting and Making Mind and conceptual maps. Six strategies had no statistically significant

increase. A reason for the unexpected effect of strategy instruction might be due to the interest in the novelty of the strategies taught. Even though the teaching of the eight strategies in an explicit way was intended to represent a new way of solving tasks in language learning, strategies used were taken and adapted from their GLS repertoire. Learners knew the strategies; however, they did not use them on a regular basis in their general learning contexts. That is, possibly because they did not find the strategies new or appealing for their learning. This finding might suggest that some strategies might not be useful or necessary to be taught at a certain stage of language learning. Krashen (2011, p. 388) states that strategies such as predicting and inferencing are probably “innate” and therefore, “don’t need to be taught.” On the one hand, creating mental images, relating new information to old information and identifying important ideas are strategies that could be considered automatically deployed. On the other hand, strategies such as summarizing, underlining, highlighting, creating mind maps have usually been included in early educational contexts; hence, learners might not consider these strategies useful.

The learner makes the final decision on what to do or not for learning. Even on procedures or activities requested by the teacher. Learners decide whether to invest effort or perform the activity. Learners might see the strategies as nothing useful or new for them because such strategies are already in their strategy repertoire even if they are not commonly used. In her study, Griffiths (2003) reported that learners had “mixed feelings” (quotations added) regarding the effectiveness of language learning strategy instruction. Although learners in her study reported being interested in attending a study skills class, in the end, learners informally reported not perceiving the class as useful because they informed not seeing anything new in the class. Strategy use requires learners to observe good results in learning. If learners are able to monitor the effects of a strategy, it is likely that learner might adopt or discard strategies from their repertoire.

Wenden and Rubin (1987) suggest that the success in the teaching of strategies may well be entirely dependent on the learning and cognitive style preferences of the individual. Jurkovič's (2010) suggests that strategy instruction would be more beneficial under optimal circumstances. In other words, strategy instruction does not have the same effect on all learners. Learners might have found their methods or strategies more interesting, productive or pleasant to solve learning tasks than the ones included in the strategy sessions. When students begin to understand their learning processes and can control these processes, they tend to take more responsibility for their learning. Put it in another way. Learners may form their learner values for choosing, evaluating and using learning strategies. Hassan et al. (2005) reported that there is sufficient research evidence to support claims that training language learners to use strategies is effective. Nevertheless, they also posit that it is not possible to say from this evidence whether the effect of training is long lasting or not. It is also feasible to believe that learners may not want to learn the learning strategies taught, as they may have acquired and used these strategies in their first language with poor results.

In conclusion, it is a goal of strategy instruction to equip learners with new strategies and to raise learners' awareness of the strategies they already know. This would eventually allow learners to adopt and use new strategies to their own learning. Nevertheless, when learners do not perceive strategies taught likable, interesting or useful, hardly ever will they use them despite the type of strategy taught, the teacher or the methodology of instruction.

### **5.5 Strategy use in high and low strategy users and high and low achievers**

A number of learners with different characteristics can be found in the same group. For the purpose of this study, high achievers (HA) and low achievers (LA) were defined according to their scores on the achievement test; and high strategy users (HSU) and low strategy users (LSU) were defined according to the average scores of the questionnaire (see Chapter 4). Both high achievers and high strategy users were associated with a statistically significant larger mean than their counterparts were.

Most of the time, researchers have conducted studies with learners of different levels, but not with learners of the same level. Many learners within a group might have a higher level of language, even when they are placed at the same level by a placement test; this is the case of this study. Prior language learning experience has provided learners with a degree of language knowledge causing learners to be more or less advanced. Although all learners of the study are in level one (out of six of the program), there are more advanced, and less advanced learners within the same class. Consequently, they use strategies at a different frequency rate.

A final research objective was to identify the extent to which high and low achievers and high and low strategy users use strategies differently. The main difference found in strategy use is the frequency in which learners use strategies. However, the purpose in using the strategy and the procedures used in the strategy are the differentiating factor not only in high and low achievers but also in high and low strategy users. Findings of this study suggest that both HA and LA use similar types of strategies although at a different frequency rate. Both groups use Achievement motivation, Interaction in class, Cognitive, and Concentration strategies, at a higher rate than the other types of strategies. As discussed in section 5.2, learners possibly unconsciously use Achievement Motivation strategies as the engine to consciously deploy the use of Study and Study Organization strategies which interviewees reported as frequently used in their learning, not only the language but in general learning as well. Research has demonstrated that learners of different levels use different types of strategies; nonetheless, the frequency of use is a factor that distinguishes them. Oxford and Nyikos' (1989) findings explain that advanced learners use strategies far more

frequently than beginning learners. Findings in this study contribute to the existing knowledge by indicating that HA and LA of the same level use strategies at a different frequency rate.

Alternatively, findings also suggest that HSU and LSU use similar types of strategies although at a different frequency rate not only in general learning but also in language learning. Both HSU and LSU use Cognitive, Concentration, and Achievement Motivation strategies more often. Nonetheless, both groups use other mechanisms that help them deal with language tasks. Findings in the qualitative data indicated that both HSU and LSU use a broad range of strategies in language learning that helps them practice the language in different ways, and which seems to be an inherent characteristic of language learning (see section 5.2).

Several factors, internal and external, come together and cause learners to use strategies. More motivated learners use a greater number of strategies and more frequently (Wharton 2000); more proficient learners use different and more, different and better strategies than less efficient learners (Griffiths 2003; im ek, & Balaban, 2010). Research has shown that motivation, metacognition, and self-regulation are important characteristics in differentiating low from high achievers and low from high strategy users. On the one hand, Bandura (1991) explains that self-regulation implies an ability to have control over one's thought, feelings, actions, and motivations. On the other hand, motivation plays a significant role in initiating, guiding and sustaining the process of strategy development; and it frequently varies along the language learning journey. Motivation has been found responsible for self-regulatory decision-making (Corno 2001); in consequence, numerous studies have revealed a significant relationship between motivation and language learning strategy use (Oxford 1996b). Motivation is the platform where all actions and behaviors are intentionally taken in learning and many aspects of life. The lack of the adequate motivation might interfere with an effective adoption of strategies and behaviors necessary for language learning; consequently, with success.

It is somewhat surprising that both HA and HSU increased the use of strategies from the first to the second administration of the questionnaire. In contrast, LA and LSU decreased in the frequency of strategy use. Surprisingly, LSU reported lower frequency of strategy use than LA. These findings support the idea that low achievement does not necessarily represent low strategy use. It is possible that LA are not be investing any effort in using strategies at all due to factors such as motivation. They might also be incorrectly addressing effort to unneeded areas without having a positive or significant effect in their learning. Green and Oxford (1995, p. 289) suggest that strategies that poor learners use are not necessarily unproductive, but that they may "contribute significantly to the learning process of the more successful students; although not being in themselves sufficient to move the less successful students to higher proficiency levels." The strategies used by LA and LSU do not necessarily suggest that the strategies are bad or wrong.

Instead, it possibly reflects low achievers would need to include more, and more frequently, strategies used by high achievers to improve their success without the necessity to change their repertoire or discard the strategies they use.

There are several possible explanations for this result; for example, learners' level of motivation for language classes, their self-efficacy perception, and their self-regulation behavior. These results match those results observed in earlier studies. For instance, Vann and Abraham (1990) found that unsuccessful learners used strategies considered as useful, and often they used the same strategies as successful learners. Nonetheless, a difference could be observed in the frequency and appropriateness of use. HSU and LSU converge in the use of some strategies (see Chapter 4); for instance, strategies to practice the language such as looking for opportunities to speak, listening to the radio and watching TV, or study strategies such as reviewing, and reading notes. An important distinction is the way they use the strategy. An example of this is watching TV. Low strategy users reported watching TV with subtitles to help themselves understand what they are listening to. In contrast, high strategy users reported watching TV without subtitles in an attempt to test their comprehension without aid.

The goal in using the strategy might be a differentiating factor between the effective or ineffective use of strategies. For example, if watching TV to improve listening comprehension were the case for LSU, the subtitles might be of much help in understanding. However, much of the information understood in the TV program could come from reading subtitles and not from listening. Therefore, if learners assess the use of the strategy based on the obtained results, they might be misdirecting effort in a skill (reading) with the intention of improving another (listening).

Additionally, HSU did not report what they do after watching TV with subtitles. The strategies around the strategy used could also have an effect on the effectiveness of the strategy. That is, if a learner consciously assesses his comprehension after watching TV, then he or she would probably acknowledge the effectiveness of the strategy. For example, LSU watch videos on YouTube while HSU watch TV and repeat to improve pronunciation. LSU reported watching movies; in contrast, HSU reported watching movies and paying attention to grammar and pronunciation. Apparently, high strategy users purposefully use strategies to pursue a goal in mind. Possibly, HSU have more metacognitive knowledge that allows them to identify, monitor and assess the outcomes of the processes they use to learn. What makes learning strategies contributive to the learner's language learning processes lies in the strategic adaptation to tasks directed by their goals, and the frequent use of strategies; the larger the variety of strategies is the higher the possibility to direct effort accurately to learning.

Qualitative data suggests that HA use more strategies, additional to the ones reported in the questionnaire. Research has explained that students that are more successful use more and different types of language learning strategies (see Ehrman & Oxford 1995; Green & Oxford 1995; O'Malley et al. 1985). Possibly, learners' repertoire of general strategies is not well equipped with strategies according to their language learning level that help them deal with new language tasks; consequently, learners seek for new strategies. However, quantitative findings also suggest similar types of strategies used between HA and LA and a list of strategies that they both use emerged (see Results Chapter 4). Among the strategies that both LA and HA frequently use, strategies that allow them to practice the language are present. Further practice is necessary out of the language classroom, and learners are able to exert a self-regulated behavior that allows them to identify needs in their learning.

As discussed before, and since both learners use the same strategy, the type of strategy might not be the differentiating factor. The intended goal and the strategies that learners use in the process to reach that goal might be of interest in the success of the strategy; for example, in making lists of vocabulary, the intended goal might be to acquire new vocabulary. Conversely, the process to acquire this vocabulary would highly influence the success of a strategy. The path from deciding to make a vocabulary list actually to learn the vocabulary might enrich the process. A low Achiever may look for a vocabulary list on the Internet, copy and paste it, print it, listen to the pronunciation (if provided) and keep it. However, High Achievers might follow a different path. Learners might need to identify the type of vocabulary based on the need for it; that is, they need it for their area of expertise, or they need to improve in their language lessons. Then, they decide where to look for the vocabulary: a web translator, a dictionary in their language or English, or a web page. Then, they write it on their notebook, which makes them aware of the spelling. If pronunciation is not provided, they look for it and write the onomatopoeic sound next to the new word. Later, they consider the length of the list and the arrangement of the items. They decide if a translation is necessary, if they want to draw images, or if they want to make sentences with the new vocabulary. Finally, they write sentences using the new word. Very likely, a process to learn in which more effort is invested and the learner displays a greater number of steps in reaching the intended goal can have a higher probability to be learned. Although neither the process nor the goal for using the strategy was explored in this research, it can be suggested that the effort invested in learning is another differentiating factor in the success of using a learning strategy.

It would be necessary to encourage low achievers to think of the process and the intended goal they have for the use of strategies and to make them aware of such process. However, future research needs to be conducted to observe whether these strategies will expand with practice and will be part of a repertoire of strategies more typical of a high achiever.

Given these points, the frequency of use is a distinguishing factor between a high and a low achiever. Another differentiating factor is the goal learners have in mind and the process they take when using the strategies. Thus, it is important to acknowledge the reasons why (and how) a strategy can be useful. Although different types of learners use the same type of strategies, they work differently on every learner; consequently, they obtain different results. This finding might be of importance when trying to generalize strategy instruction of a set of strategies for a number of learners with varied characteristics, needs, and interest in the same language classroom.

## Chapter 6: Conclusions

This conclusions chapter presents an overall view of this study, and the major findings of this study are briefly reported concerning the research questions. Later, the contributions of this study are outlined. After that, some limitations in the theoretical framework and research methods employed in this study are listed. A few pedagogical implications derived from this study are addressed, and finally, some constructive suggestions for future research are made from the perspective of this study.

### 6.1 Summary of the main study

The aim of this study focused firstly on setting out to establish a global picture of how strategic learners are in their general learning contexts, and to identify the strategies that learners use across different learning contexts. Secondly, it was intended to discover the type and the amount of strategies that learners use to deal with language learning tasks; thirdly, to observe the impact they have on their language achievement; fourthly, to explore the impact strategy instruction has on learners' increase of the frequency of strategy use. Finally, it was intended to observe strategy use in high and low beginner language achievers, as well as high and low strategy users.

The study involved three phases. On the first phase, the general strategy questionnaire and the achievement test were administered to the whole sample of participants. This procedure allowed the researcher to identify the type and the amount of strategies that learners would use at early stages of language learning. On the second phase of the study, a selection of eight not-frequently-used general learning strategies obtained from the first set of data was adapted to language learning tasks and taught to the experimental group by using a five-step methodology so as to raise learners' awareness of strategy use. This procedure would allow observing the increase of the frequency of strategy use. Three one-hour-and-forty-minutes strategy instructions sessions were provided to learners. This procedure provided treatment to the experimental group to observe the effect on learners' adoption of the strategies taught and the inclusion in their current repertoire. This process also permitted to provide learners with a new perspective of strategies from their general strategy repertoire that they do not frequently use. Strategies taught were adapted to a meaningful use in language learning always having in mind to raise learners' awareness. On the final phase, twenty semi-structured interviews were conducted with a sample of selected learners; additionally, the language learning strategy questionnaire and the achievement test were administered for the second time.

These steps allowed gathering a wider range of information. First, the extent to which learners use learning strategies in general learning contexts and the transfer of GLS to language learning; second, the impact that GLS have in LL achievement. Third, it also allowed analyzing the impact strategy instruction has in beginner language learners concerning the adoption of strategies for a later use and the possible increase in strategy use in language learning. Finally, it provided the learners' insights of strategy use, not only about the strategies they use in general learning contexts but also the strategies they use in language learning.

To this end, different instruments were used. The study followed a quantitative research methodology by collecting numerical data through a 51-general-learning-strategy questionnaire in two administrations, the achievement test was used to measure language achievement, and semi-structured interviews provided the study with the qualitative data for the study.

## **6.2 Summary of major findings**

This study has provided interesting findings that concern learning strategies in both language learning and general learning contexts. To sum up, the major findings of the study at the three research stages are outlined as follows:

Firstly, quantitative data analyzed indicated that learners have a medium frequent use of strategies in general learning contexts. This medium frequent use of strategies could be attributed to the diversity of disciplines, motivation for learning and prior learning experience of the participants.

Among the main types of strategies used by learners in general learning contexts, qualitative data indicated that Achievement Motivation strategies account for a higher rate of frequency of use than other types of strategies not only in strategies observed in isolation but also when strategies were computed into categories. Learners also use Cognitive and Concentration strategies at a higher frequency rate; in contrast, they use Study, Study Organization, and Interaction in Class strategies less often. Qualitative data provided by interviewees indicated a greater number of Study and Study Organization strategies, which suggests that strategies reported by interviewees complement strategies gathered from questionnaires. That is, although numerical data indicates a medium use of strategies, qualitative data provided broadens the number of strategies used.

Findings in quantitative data of the second administration of the questionnaire also revealed that learners use strategies at a similar frequency rate in general learning and language learning contexts. In language learning, learners use more frequently Cognitive Strategies followed by Concentration and Achievement Motivation strategies. In contrast, they use Cooperative, Study, and Study Organization strategies less frequently; this concurs with the type of strategies employed in GL. Although used at a slightly different frequency rate, the types of strategies used are similar in both contexts. That is, no significant differences were identified in the use of strategies in the

first and the second administration of the questionnaire (LSQ and LLSQ). Learners could also be considered medium strategy users in language learning. Nevertheless, correspondingly to the data gathered during the first phase of the study, qualitative data increased the number of strategies, and the types of strategies learners use in language learning. Qualitative data indicated a greater number of Study, Study Organization, and Concentration strategies, which allows learners to complement the strategies they reported as frequently used in the questionnaires. These similarities of strategy use in both contexts suggest that learners transfer the strategies they have in their strategy repertoire of general learning strategies to language learning as the tools to deal with language learning tasks.

Language learning deploys a set of strategies that seem to be inherent to language learning. These strategies are deployed by the need to deal with language learning tasks and the need to practice what is learned in the language classroom. The adoption and development of new strategies increase learners' repertoire. Nonetheless, the strategies that learners reported do not seem to match accurately with the goal and their intentions in using strategies.

Qualitative and Quantitative data concur in that the more strategies are used in language learning, the higher the language achievement. Similarly, they both concur in that the fewer strategies are used in language learning, the less language achievement. Nonetheless, there might be exceptions to this rule, for instance, Lucy whose low strategy used did not hinder to obtain a high achievement test score or Ofelia whose high strategy use did not boost her to get a high achievement test score.

Qualitative and quantitative data differ in the type of strategies learners use. Interviewees reported a large number of Study, Study Organization and Concentration strategies whereas results obtained from the questionnaire reported a low frequency of use of Study and Study Organization strategies. Since interviews allowed learners freely and openly to report the activities, procedures, or strategies, they use in general learning, and in language learning, the type of strategies they reported did not concur with strategies included in the questionnaire. However, the strategies that interviewees reported complement and extend the strategy repertoire that learners use in language learning.

General learning strategies used in language learning have a predictive value of 13.5 % on language achievement. Although this might not be considered as a high predictive value, it does represent a substantial effect considering the number of other variables that influence language learning.

According to data gathered from quantitative methods, Achievement Motivation and Interaction in Class strategies primarily predicted language achievement test scores, and to a lesser extent by affective and study strategies. Qualitative data indicated that Study, Study Organization and

Concentration strategies that learners frequently use to improve and practice in language learning might also predict achievement test scores.

The teaching of strategies that learners do not find useful or appealing, in an attempt to raise the learners' awareness and an effort to make learners adopt "new" strategies, had no impact on learners' language achievement nor the adoption of strategies for their repertoire. The experimental group did not increase the use of strategies after strategy instruction. It was discussed that learners' perception of the usefulness of the strategy might be a reason for not adopting and using new strategies.

A significant increase was found in two strategies out of the eight strategies used in the strategy instruction sessions. Strategy 43 "selective highlighting"; and strategy 44 "using mind and conceptual maps" had a statistically significant increase; nonetheless, it was not significant enough to boost such strategies to a highly frequent use.

High Achievers and Low Achievers use similar types of strategies although not at a similar frequency rate. Both use Achievement Motivation, Cognitive and Concentration strategies at a higher rate than Cooperative and Study Organization strategies in not only general learning but also in language learning. However, the difference was found on the strategies that revolve around the strategy that learners reported and the degree of appropriateness that learners give to the strategy used.

High Strategy Users and Low Strategy Users also make use of similar types of strategies; nonetheless, not at a similar frequency rate. Both high and low strategy users take advantage of Achievement Motivation, Cognitive and Concentration strategies at a higher rate and Study and Interaction in Class strategies at a lower rate. Qualitative data suggested that high strategy users are found to be high achievers as well; however, this cannot be generalized. For instance, Ofelia's, Aleli's, Milagros', and Karla's high strategy use did not push them to obtain high achievement test scores.

Low strategy users reported lower strategy use than low achievers; this suggests that low achievement does not necessarily represent low strategy use. Low achievement might be related to the lack of appropriateness and the lack of clear purpose for using a strategy.

### **6.3 Contribution of this study**

It is well documented that good or successful learners differ from less successful learners in the type and the frequency of use of learning strategies. However, there is little or no empirical evidence that explains where good or successful language learners obtained strategies from, how they developed such strategies and whether someone taught the strategies to them or not. It would be naive to believe that when learners start language learning, they learn strategies from scratch.

They all have developed a repertoire of strategies since early stages of learning and early life, which they will use in any new learning situation.

Research has also been conducted concerning the transfer of strategies mostly in the areas of reading or writing and in more advanced language levels. Nevertheless, no study has been conducted in the general set of strategies which beginner learners of English transfer from their general repertoire of strategies to language learning as the primary tools to face language learning and the extent to which these strategies will help them in attaining success in language learning.

This study attempted to contribute to the current body of research and places its contribution in the transfer and the pragmatic manipulation of the learners' general strategy repertoire for immediate utilitarian purposes when they start dealing with language learning tasks. This study provides an exciting opportunity to advance our knowledge of the set of strategies that learners bring along with them to language learning and to identify the set of learning strategies that is deployed according to the specificity of the new learning context that language learning represents.

Findings of this study shed a new light on Achievement Motivation strategies, that is, activities and unconscious behaviors that learners use to reach goals, which are the main type of strategies that beginner language learners unconsciously use not only in general learning but also in language learning contexts. Reaching goals has an impact on motivation and the persistent behavior for continuing the long process of learning a language. Consequently, Achievement Motivation strategies can be perceived as the trigger to the management and use of different type of strategies that learners consciously use, namely, Cognitive, Study, Study Organization, Interaction in class, Concentration, and Cooperative strategies.

The study offers some valuable insights into the perspective that the transfer of strategies as a result of explicit strategy instruction needs to consider different variables to have a positive and a greater impact on language learners. The teaching of strategies based on the teachers', instructors' or researcher's perception of usefulness might not be enough for learners to adopt and use strategies. Learners adopt and use strategies based on their goals, needs, and deficiencies of language learning even though they might not be entirely aware of the appropriate use of the strategy. Thus, such factors need to be considered in the selection of strategies to be taught. In this way, strategy instruction can have a more significant effect on learners' adoption of strategies for language learning.

## **6.4 Pedagogical implications**

Pedagogically, the notion that adult beginner English learners have an already developed set of strategies that they use across different learning contexts might provide a potential framework to help teachers and institutions identify the need for teaching new and specific learning strategies.

Within this regard, strategy instruction could be provided more accurately to fill the gap that beginner English language learners have for language learning strategies.

Additionally, the use of new strategies in language learning does not imply that such strategies are beneficial for beginner English language learners. Thus, it is important to focus effort on the correct approach in using the strategy according to learners' learning goals. For example, listening to songs in English to identify vocabulary or grammar, to improve pronunciation, to gain fluency or to monitor understanding; reading to learn new vocabulary, to identify grammar structures or to practice comprehension; speaking with family to improve fluency or to evaluate their communication skills. These are some examples of the different outcomes learners could obtain when listening to songs; however, learners possibly are not aware of the purpose in using a strategy, or what benefits of using a strategy. Consequently, it is necessary to identify and redirect efforts to more beneficial objectives for language learning and ideally prescribe learning strategies individually and according to learning goals. Strategy instruction should take into account teaching the purpose for using strategies so that learners can be equipped with a more accurate set of strategies that will help them reach their learning goals.

Additionally, since the use of strategies is different for language learners at various levels, the teaching of learning strategies should be matched with the learners' goals, needs, deficiencies and purposes in language learning. Learners need to know why they are using learning strategies, what the purpose in doing an activity is and the benefits strategies will have in their learning.

Teachers should be aware of the strategies learners use to learn. They should be able to aid learners in using strategies that suit their deficiencies. Since learners frequently use Achievement Motivation strategies and Interaction in Class strategies, and that they have a positive effect on language achievement, teachers may encourage their use in the classroom more frequently.

## **6.5 Limitations of the study**

A number of limitations can be drawn from the present study. One limitation concerns the interviews, which were conducted by the end of the language course. Since interviews were conducted in the language learning setting, it was felt that learners provided strategies having in mind language learning and not general learning contexts. Consequently, GLS could have been less accurate and overshadowed by the LLS that learners were making use of at the moment of the interviews. In this sense, it would have been more productive for this study to include a set of interviews at the beginning of the experiment to be able to differentiate more accurately the strategies learners use in their general learning contexts so that LLS would not interfere with the reported GLS.

Because findings suggest a number of strategies used in language learning, a section of LLS should be included in the second administration of the questionnaire. Strategies specific to language learning such as practicing the language with family or friends, watching TV, listening to the radio, listening to songs, or translation which might be more representative of language learning.

Another limitation of this study is in regards to the number of strategy sessions included in the treatment as well as the strategies contained in the sessions. Although the success of strategy training is not limited to the length of the instruction (Hassan et al. 2005), it was felt that a more frequent and a higher number of strategy sessions would have had more impact in the acquisition or adoption of the strategies by the learners. It was also felt that a more representative sample of learning strategies used in language learning could have been more appealing to learners; that is, strategies that helped them deal with specific language learning tasks at beginner language levels.

A final limitation of this study concerns the categorization of the strategies. It has been discussed that there is no clear cut of categorization of the strategies in language learning. Dornyei (2005) debated for the lack of a clear classification of individual strategies that set limits among categories; for example, memory strategies and cognitive strategies clearly overlap. In the same vein, researchers have classified differently general learning strategies. An extra category could have been included in the description of the strategies reported by interviewees. That is, strategies reported were categorized according to the categories of the GLS questionnaire (first administration) used in this study; however, in LLS there was no clear-cut to define which strategies belonged to what category because some strategies were limited to language learning. In other words, language learners reported a set of strategies difficult to fit into any of the existing categories of this study.

## **6.6 Suggestions for further research**

This study has provided interesting findings concerning the strategies that learners use in general learning as well as the transfer of such strategies to language learning as the first tools to face language learning at beginning stages. However, this study has also raised suggestions that might be useful for future research.

This study examined beginner learners of English; further research should be conducted to investigate the amount of general learning strategies that learners in more advanced levels transfer to language learning in order to know the extent to which such strategies in language learning aid advanced students.

An interesting finding was that learners possibly use strategies without being aware of the purpose for using learning strategies; for instance, why, or what for, they use a strategy. Further

work needs to be conducted concerning the learners' intentions and the purpose for using a strategy. The purpose for using a strategy needs to be made explicit and explained by learners in order to identify whether strategies are being used correctly. In this way, the use of learning strategies can help learners improve areas that need to be improved.

Research needs to be conducted to find more efficient ways of training learners to use language learning strategies effectively. Research can be conducted on the length, the amount and the type of strategy instruction that has more impact on the learner's adoption of learning of strategies. Additionally, the type of strategies that learners are more susceptible to accept and adopt not only in the short term but also in the long term.

It has been found that more or less motivated, more or less proficient, older or younger, male or female, more or less advanced learners use different types of strategies and at different frequency rates. It has been difficult to generalize the type of strategies that have more impact on most learners; therefore, more research should be conducted in extracting a manageable set of strategies that would benefit most types of language learners despite the apparent individual differences for strategy instruction to have an impact on more learners.

Finally, research concerning strategy use has suggested that the use of LLS has an impact on language achievement or success. It has also concluded that different variables deploy the choice of learning strategies. Then, the possibility of joined effects of different variables on the selection of learning strategies and the impact these combinations have in language learning can be researched. For instance, the beneficial effect a motivated and a demotivated learner might have from the teaching of metacognitive strategies.

## **6.7 Final Conclusion**

In general, the results of this study have informed that there is a positive effect of learning strategies in language learning; and that a higher use of learning strategies improves language achievement; nonetheless, there might be exceptions. The success in strategy use is attributed to different factors, for example, the specific learning goal of using a strategy can be of importance. Knowing why a strategy should be used and how this can help in learning is something the learners need to be aware when using a strategy so that the use of the strategy has an impact on their learning. Different types of learners might use the same strategy with diverse effects. The value of using learning strategies accounts for a significant contribution to learning; yet, the interaction between variables and the amount of contribution in combination remains uncertain. Upon examination, learners use a combination of Achievement Motivation, Cognitive, Study and Study Organization strategies that allow them to deal with learning. This combination of strategies appears to be effective not only in general learning contexts but also in language learning, which

suggests that learners transfer strategies to language learning. The use of unconsciously transferred strategies helps learners deploy the conscious use of other strategies, namely, Study, Study Organization, and Concentration strategies. Learners use Study and Study organization in an attempt to store information in memory for a later retrieval. They use Concentration strategies to stay focused on the information received and the language tasks. They also use Cognitive strategies to enable them to understand, learn, code, and recall the information of the new task that language learning represents.

The present study has contributed to the field of learning strategies by identifying the types of strategies beginner English language learners' use and transfer of learning strategies from general learning to language learning contexts in an unconscious way and as the main tools that help them deal with language learning. However, such strategies might not be enough to deal with a specific learning context such as language learning. Learning English as a foreign or a second language is a complex process that deals with a great diversity of learners', internal and external, individual variables, and full of mutual interactions among variables. When learners face a new language learning context, inevitably they will use the strategies that they know or perceive as useful, and which they have developed through a lifetime of their learning not only in the educational system but also in everyday life. Nonetheless, it does not mean that the strategies they use will lead them to success in the new learning context. Learners will need to adapt their strategies to the new learning context and will need to find new strategies that suit the type of tasks required, and eventually, they will embed them into their strategy repertoire.



## APPENDICES

## Appendix A Learning strategy questionnaire LSQ adapted translated

*Learning Strategy Questionnaire*

The purpose of this questionnaire is to know the study and learning strategies that influence the academic performance of students. Through this questionnaire, it is intended to identify the needs and problems that might emerge during the study activities in this course, with the intention of helping you reflect and improve your learning strategies. Please, read carefully each item and answer frankly and objectively as possible.

The information obtained in this questionnaire will be used exclusively for general statistical purposes and for the designing of support programs oriented towards improving academic level of learners in this university. There are neither right nor wrong answers in the questionnaire. Thus you should worry about neither notes nor grades. Choose the option that fits your particular case. Sentences have different possibilities of an answer, and you must choose the one that fits your regular study activities. Read carefully every sentence and circle the option that best reflects what you do when you study.

**General Information**

Student code \_\_\_\_\_

Circle the option that best describes your information

Group that you belong to	<b>07:00-9:00</b>	<b>9:00-11:00</b>	<b>11:00-13:00</b>	<b>13:00-15:00</b>	<b>17:00-19:00</b>
Sex	<b>Female</b>	<b>Male</b>			
Age	<b>18-23 years</b>	<b>24-29 years</b>	<b>30-35 years</b>	<b>36-41 years</b>	<b>42- or more</b>
¿Are you a university student?	<b>Yes</b>	<b>No</b>			

1. When I read, I can identify main information of the text.

a) Always or almost always	b) Frequently	c) sometimes	d) seldom	e) never or almost never	f) Almost never
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2. When I study, I try to relate new things that I am learning with the ones I already knew.

a) Almost never	b) A few times	c) A few less than half of the time	d) A few more than half of the time	e) Many times	f) Almost always
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3. When I read, I imagine what the book describes.

a) Almost always	b) Many times	c) A few more than half of the time	d) A few less than half of the time	e) A few times	f) Almost never
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4. When I study, I try to explain in my own words the main points of what I read.

a) Almost never	b) A few times	c) A few less than half of the time	d) A few more than half of the time	e) Many times	f) Almost always
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5. When I finish reading what I am studying in English, I get my own conclusions.

a) Almost never	b) A few times	c) A few less than half of the time	d) A few more than half of the time	e) Many times	f) Almost always
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6. When I am in class, I think of every topic that the teacher explains to make sure I understand it.

a) Almost never	b) A few times	c) A few less than half of the time	d) A few more than half of the time	e) Many times	f) Almost always
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7. When I gather with my classmates to do a project in teams, I participate all along the project.

a) Almost never	b) A few times	c) A few less than half of the time	d) A few more than half of the time	e) Many times	f) Almost always
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8. Every time I learn something new, I use it in different situations to practice it.

a) Almost never	b) A few times	c) A few less than half of the time	d) A few more than half of the time	e) Many times	f) Almost always
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9. When I solve problems, first I try to understand what it is about, and later I solve it.

a) Almost never	b) A few times	c) A few less than half of the time	d) A few more than half of the time	e) Many times	f) Almost always
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10. When solving problems, I try to see it from different angles.

a) Almost never	b) A few times	c) A few less than half of the time	d) A few more than half of the time	e) Many times	f) Almost always
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11. When I study every topic, I look for examples to make sure I understand.

a) Almost never	b) A few times	c) A few less than half of the time	d) A few more than half of the time	e) Many times	f) Almost always
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12. I keep on reading a book until I finish what I need to study for the class.

a) Almost always	b) Many times	c) A few more than half of the time	d) A few less than half of the time	e) A few times	f) Almost never
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13. I can't concentrate, or I get distracted so easily.

a) Almost never	b) A few times	c) A few less than half of the time	d) A few more than half of the time	e) Many times	f) Almost always
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14. When the teacher asks something in class, I consider I know it, but I can't remember it

a) Almost always	b) Many times	c) A few more than half of the time	d) A few less than half of the time	e) A few times	f) Almost never
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15. I believe that there are things that distract me easily when I study.

a) Almost always	b) Many times	c) A few more than half of the time	d) A few less than half of the time	e) A few times	f) Almost never
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16. When I start studying, I feel tired, or it makes me sleepy

a) Almost never	b) A few times	c) A few less than half of the time	d) A few more than half of the time	e) Many times	f) Almost always
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17. When I am interrupted while I am studying, it is hard for me to go back to my studying.

a) Almost always	b) Many times	c) A few more than half of the time	d) A few less than half of the time	e) A few times	f) Almost never
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18. When I study, I stand up to do other things, or I stop studying for a while.

a) Almost never	b) A few times	c) A few less than half of the time	d) A few more than half of the time	e) Many times	f) Almost always
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19. When I study, I organize the material by topics to analyze them one by one.

a) Almost never	b) A few times	c) A few less than half of the time	d) A few more than half of the time	e) Many times	f) Almost always
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20. I easily forget what I saw in my previous class.

a) Almost always	b) Many times	c) A few more than half of the time	d) A few less than half of the time	e) A few times	f) Almost never
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21. When I have to study or do homework, it is difficult to start it.

a) Almost always	b) Many times	c) A few more than half of the time	d) A few less than half of the time	e) A few times	f) Almost never
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22. When I read while I am studying, I get distracted thinking about other things.

a) Almost never	b) A few times	c) A few less than half of the time	d) A few more than half of the time	e) Many times	f) Almost always
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23. When I finish studying, I ask myself questions to confirm what I learned or what I lack.

a) Almost never	b) A few times	c) A few less than half of the time	d) A few more than half of the time	e) Many times	f) Almost always
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24. After solving a problem in class, I make sure that the result is correct and logical.

a) Almost never	b) A few times	c) A few less than half of the time	d) A few more than half of the time	e) Many times	f) Almost always
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25. When I am answering an exam, I get so nervous that I forgot what I studied.

a) Almost always	b) Many times	c) A few more than half of the time	d) A few less than half of the time	e) A few times	f) Almost never
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26. When I solve problems, I like to develop new ideas and different hypothesis.

a) Almost always	b) Many times	c) A few more than half of the time	d) A few less than half of the time	e) A few times	f) Almost never
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27. I feel I am capable of learning what my classmates achieve in class.

a) Almost always	b) Many times	c) A few more than half of the time	d) A few less than half of the time	e) A few times	f) Almost never
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28. After reading what I am studying, I gather with my classmates to comment on important points.

a) Almost never	b) A few times	c) A few less than half of the time	d) A few more than half of the time	e) Many times	f) Almost always
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29. When I finish studying a topic, I take down key words that help me remind it.

a) Almost never	b) A few times	c) A few less than half of the time	d) A few more than half of the time	e) Many times	f) Almost always
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30. I like my homework to be one of the best.

a) Almost always	b) Many times	c) A few more than half of the time	d) A few less than half of the time	e) A few times	f) Almost never
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31. When I study difficult topics, I review them until I can master them.

a) Almost always	b) Many times	c) A few more than half of the time	d) A few less than half of the time	e) A few times	f) Almost never
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32. It is important for me to do things better every time when I study.

a) Almost always	b) Many times	c) A few more than half of the time	d) A few less than half of the time	e) A few times	f) Almost never
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33. Before I perform a task in, first I try to have the academic criteria that the teacher pointed out.

a) Almost never	b) A few times	c) A few less than half of the time	d) A few more than half of the time	e) Many times	f) Almost always
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34. When I study in a team with my classmates, we make sure that everybody in the team learns the topics well.

a) Almost always	b) Many times	c) A few more than half of the time	d) A few less than half of the time	e) A few times	f) Almost never
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35. When I answer a study guide, I understand every question in order to study the correct information.

a) Almost never	b) A few times	c) A few less than half of the time	d) A few more than half of the time	e) Many times	f) Almost always
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36. I have an agenda of studying activities for each day of the week.

a) Almost always	b) Many times	c) A few more than half of the time	d) A few less than half of the time	e) A few times	f) Almost never
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37. I read in advance the topics that we will see in future classes

a) Almost never	b) A few times	c) A few less than half of the time	d) A few more than half of the time	e) Many times	f) Almost always
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38. I study more than what the teacher demands in class

a) Almost never	b) A few times	c) A few less than half of the time	d) A few more than half of the time	e) Many times	f) Almost always
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39. When I study a topic, in addition to the material of the program, I look for other books to complement it.

a) Almost always	b) Many times	c) A few more than half of the time	d) A few less than half of the time	e) A few times	f) Almost never
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40. The period of time that passes between topics are explained and when I review is:

a) less than 4 hours	b) between 5 and 12 hours	c) 12 and 24 hours	d) 2 days and 4 days	e) 5 days to 8 days	f) more than a week
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41. In class, I sit on the front chairs in order to pay more attention.

a) Almost always	b) Many times	c) A few more than half of the time	d) A few less than half of the time	e) A few times	f) Almost never
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42. When I study, the effective time of study is:

a) I almost don't study	One to 2 hours a week	3 to 4 hours a week	Around an hour a day	2 to 3 hours a day	4 to more hours a day
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43. When I read while I am studying, I highlight the most important concepts.

a) Almost never	b) A few times	c) A few less than half of the time	d) A few more than half of the time	e) Many times	f) Almost always
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44. When I study, I make mind maps or conceptual maps in order to relate the most important concepts.

a) Almost never	b) A few times	c) A few less than half of the time	d) A few more than half of the time	e) Many times	f) Almost always
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45. I actively participate in classes.

a) Almost never	b) A few times	c) A few less than half of the time	d) A few more than half of the time	e) Many times	f) Almost always
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46. When I study, I take notes of the most important ideas of what I read.

a) Almost always	b) Many times	c) A few more than half of the time	d) A few less than half of the time	e) A few times	f) Almost never
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47. When I read while I am studying, I write some questions that later I answer in a second reading.

a) Almost always	b) Many times	c) A few more than half of the time	d) A few less than half of the time	e) A few times	f) Almost never
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48. When I study for an exam, I have so many things to read or study that I do not have time to study every topic.

a) Almost always	b) Many times	c) A few more than half of the time	d) A few less than half of the time	e) A few times	f) Almost never
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49. When I prepare for an exam, I do exercises or write notes to study in more detail until I study every topic in more detail.

a) Almost always	b) Many times	c) A few more than half of the time	d) A few less than half of the time	e) A few times	f) Almost never
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50. After studying for an exam, I organize my notes from the most general to the most specific aspects.

a) Almost never	b) A few times	c) A few less than half of the time	d) A few more than half of the time	e) Many times	f) Almost always
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51. When I prepare for an exam, I ask my classmates to gather with me in order to study together.

a) Almost never	b) A few times	c) A few less than half of the time	d) A few more than half of the time	e) Many times	f) Almost always
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## Appendix B Language learning strategy questionnaire LLSQ translated

The purpose of this questionnaire is to know the study and learning strategies that influence your learning of English. Through this questionnaire, it is intended to identify the needs and problems that might emerge during the study activities in the English course, with the intention of helping you reflect and improve your language learning strategies. Please, read carefully each item and answer frankly and objectively as possible.

The information obtained in this questionnaire will be used exclusively for general statistical purposes and for the designing of support programs oriented towards improving English language learning in this university. There are neither right nor wrong answers in the questionnaire. Thus you should worry about neither notes nor grades. Choose the option that fits your particular case. Sentences have different possibilities of an answer, and you must choose the one that fits your regular study activities. Read carefully every sentence and circle the option that best reflects what you do when you study.

**General Information**

Student code \_\_\_\_\_

Circle the option that best describes your information

Group that you belong to    07:00-9:00    9:00-11:00    11:00-13:00    13:00-15:00    17:00-19:00

Sex                                  Female                  Male

Age                                  18-23                  24-29                  30-35 years                  36-41 years                  42- or more  
years                                  years

¿Are you a university student?                  Yes                          No

I am studying English because ...                  I like the language                  I want to do something useful with my spare time                  It is a requirement of the university                  It gives me credits for my career                  I want to improve myself

Circle the option that best describes the time you designate to learn English additional to class time and the SAC                  Just the class time                  1-2 hours a week extra to class                  2-4 hours extra to class                  4-6 hours extra to class                  6 or more hours

Which skill do you consider more important when studying English?                  Speaking                  Writing                  Listening                  Reading                  Grammar

**Circle the answer that best describes your activities in learning English**

1.                  When I read in English, I can identify main information of the text.

a) Always or almost always	b) Frequently	c) sometimes	d) seldom	e) never o or almost never	f) Almost never
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2.                  When I study English, I try to relate new things that I am learning with the ones I already knew.

a) Almost never	b) A few times	c) A few less than half of the time	d) A few more than half of the time	e) Many times	f) Almost always
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3. When I read in English, I imagine what the book describes.					
a) Almost always	b) Many times	c) A few more than half of the time	d) A few less than half of the time	e) A few times	f) Almost never
4. When I study English, I try to explain in my own words the main points of what I read.					
a) Almost never	b) A few times	c) A few less than half of the time	d) A few more than half of the time	e) Many times	f) Almost always
5. When I finish reading what I am studying in English, I get my own conclusions.					
a) Almost never	b) A few times	c) A few less than half of the time	d) A few more than half of the time	e) Many times	f) Almost always
6. When I am in the English class, I think of every topic that the teacher explains to make sure I understand it.					
a) Almost never	b) A few times	c) A few less than half of the time	d) A few more than half of the time	e) Many times	f) Almost always
7. When I gather with my classmates to do an English project in teams, I participate all along the project.					
a) Almost never	b) A few times	c) A few less than half of the time	d) A few more than half of the time	e) Many times	f) Almost always
8. Every time I learn something new in English, I use it in different situations to practice it.					
a) Almost never	b) A few times	c) A few less than half of the time	d) A few more than half of the time	e) Many times	f) Almost always
9. When I solve problems in English, first I try to understand what it is about, and later I solve it.					
a) Almost never	b) A few times	c) A few less than half of the time	d) A few more than half of the time	e) Many times	f) Almost always
10. When solving problems in English, I try to see it from different angles.					
a) Almost never	b) A few times	c) A few less than half of the time	d) A few more than half of the time	e) Many times	f) Almost always
11. When I study every topic in English, I look for examples to make sure I understand.					
a) Almost never	b) A few times	c) A few less than half of the time	d) A few more than half of the time	e) Many times	f) Almost always
12. I keep on reading a book until I finish what I need to study for the English class.					
a) Almost always	b) Many times	c) A few more than half of the time	d) A few less than half of the time	e) A few times	f) Almost never
13. I can't concentrate, or I get distracted so easily.					
a) Almost never	b) A few times	c) A few less than half of the time	d) A few more than half of the time	e) Many times	f) Almost always
14. When the teacher asks something in the English class, I consider I know it, but I can't remember it					
a) Almost always	b) Many times	c) A few more than half of the time	d) A few less than half of the time	e) A few times	f) Almost never
15. I believe that there are things that distract me easily when I study English.					
a) Almost always	b) Many times	c) A few more than half of the time	d) A few less than half of the time	e) A few times	f) Almost never
16. When I start studying English, I feel tired, or it makes me sleepy					
a) Almost never	b) A few times	c) A few less than half of the time	d) A few more than half of the time	e) Many times	f) Almost always

17. When I am interrupted while I am studying English, it is hard for me to go back to my studying.					
a) Almost always	b) Many times	c) A few more than half of the time	d) A few less than half of the time	e) A few times	f) Almost never
18. When I study English, I stand up to do other things, or I stop studying for a while.					
a) Almost never	b) A few times	c) A few less than half of the time	d) A few more than half of the time	e) Many times	f) Almost always
19. When I study English, I organize the material by topics to analyze them one by one.					
a) Almost never	b) A few times	c) A few less than half of the time	d) A few more than half of the time	e) Many times	f) Almost always
20. I easily forget what I saw in my previous English class.					
a) Almost always	b) Many times	c) A few more than half of the time	d) A few less than half of the time	e) A few times	f) Almost never
21. When I have to study or do English homework, it is difficult to start it.					
a) Almost always	b) Many times	c) A few more than half of the time	d) A few less than half of the time	e) A few times	f) Almost never
22. When I read while I am studying English, I get distracted thinking about other things.					
a) Almost never	b) A few times	c) A few less than half of the time	d) A few more than half of the time	e) Many times	f) Almost always
23. When I finish studying English, I ask myself questions to confirm what I learned or what I lack.					
a) Almost never	b) A few times	c) A few less than half of the time	d) A few more than half of the time	e) Many times	f) Almost always
24. After solving a problem in the English class, I make sure that the result is correct and logical.					
a) Almost never	b) A few times	c) A few less than half of the time	d) A few more than half of the time	e) Many times	f) Almost always
25. When I am answering an exam in English, I get so nervous that I forgot what I studied.					
a) Almost always	b) Many times	c) A few more than half of the time	d) A few less than half of the time	e) A few times	f) Almost never
26. When I solve problems in English, I like to develop new ideas and different hypothesis.					
a) Almost always	b) Many times	c) A few more than half of the time	d) A few less than half of the time	e) A few times	f) Almost never
27. I feel I am capable of learning what my classmates achieve in the English class.					
a) Almost always	b) Many times	c) A few more than half of the time	d) A few less than half of the time	e) A few times	f) Almost never
28. After reading what I am studying in English, I gather with my classmates to comment on important points.					
a) Almost never	b) A few times	c) A few less than half of the time	d) A few more than half of the time	e) Many times	f) Almost always
29. When I finish studying a topic in English, I take down key words that help me remind it.					
a) Almost never	b) A few times	c) A few less than half of the time	d) A few more than half of the time	e) Many times	f) Almost always
30. I like my English homework to be one of the best.					
a) Almost always	b) Many times	c) A few more than half of the time	d) A few less than half of the time	e) A few times	f) Almost never

31. When I study difficult English topics, I review them until I can master them.

a) Almost always	b) Many times	c) A few more than half of the time	d) A few less than half of the time	e) A few times	f) Almost never
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32. It is important for me to do things better every time when I study English.

a) Almost always	b) Many times	c) A few more than half of the time	d) A few less than half of the time	e) A few times	f) Almost never
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33. Before I perform a task in English, first I try to have the academic criteria that the teacher pointed out.

a) Almost never	b) A few times	c) A few less than half of the time	d) A few more than half of the time	e) Many times	f) Almost always
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34. When I study English in a team with my classmates, we make sure that everybody in the team learns the topics well.

a) Almost always	b) Many times	c) A few more than half of the time	d) A few less than half of the time	e) A few times	f) Almost never
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35. When I answer a study guide in English, I understand every question in order to study the correct information.

a) Almost never	b) A few times	c) A few less than half of the time	d) A few more than half of the time	e) Many times	f) Almost always
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36. I have an agenda of studying English activities for each day of the week.

a) Almost always	b) Many times	c) A few more than half of the time	d) A few less than half of the time	e) A few times	f) Almost never
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37. I read in advance the English topics that we will see in future classes

a) Almost never	b) A few times	c) A few less than half of the time	d) A few more than half of the time	e) Many times	f) Almost always
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38. I study more than what the teacher demands in the English class

a) Almost never	b) A few times	c) A few less than half of the time	d) A few more than half of the time	e) Many times	f) Almost always
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39. When I study a topic in English, in addition to the material of the program, I look for other books to complement it.

a) Almost always	b) Many times	c) A few more than half of the time	d) A few less than half of the time	e) A few times	f) Almost never
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40. The period of time that passes between English topics are explained and when I review is:

a) less than 4 hours	b) between 5 and 12 hours	c) 12 and 24 hours	d) 2 days and 4 days	e) 5 days to 8 days	f) more than a week
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41. In the English class, I sit on the front chairs in order to pay more attention.

a) Almost always	b) Many times	c) A few more than half of the time	d) A few less than half of the time	e) A few times	f) Almost never
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42. When I study English, the effective time of study is:

a) I almost don't study	One to 2 hours a week	3 to 4 hours a week	Around an hour a day	2 to 3 hours a day	4 to more hours a day
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43. When I read while I am studying English, I highlight the most important concepts.

a) Almost never	b) A few times	c) A few less than half of the time	d) A few more than half of the time	e) Many times	f) Almost always
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44. When I study English, I make mind maps or conceptual maps in order to relate the most important concepts.

a) Almost never	b) A few times	c) A few less than half of the time	d) A few more than half of the time	e) Many times	f) Almost always
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45. I actively participate in the English classes.

a) Almost never	b) A few times	c) A few less than half of the time	d) A few more than half of the time	e) Many times	f) Almost always
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46. When I study English, I take notes of the most important ideas of what I read.

a) Almost always	b) Many times	c) A few more than half of the time	d) A few less than half of the time	e) A few times	f) Almost never
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47. When I read while I am studying English, I write some questions that later I answer in a second reading.

a) Almost always	b) Many times	c) A few more than half of the time	d) A few less than half of the time	e) A few times	f) Almost never
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48. When I study for an exam in English, I have so many things to read or study that I do not have time to study every topic.

a) Almost always	b) Many times	c) A few more than half of the time	d) A few less than half of the time	e) A few times	f) Almost never
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49. When I prepare for an exam in English, I do exercises or write notes to study in more detail until I study every topic in more detail.

a) Almost always	b) Many times	c) A few more than half of the time	d) A few less than half of the time	e) A few times	f) Almost never
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50. After studying for an English exam, I organize my notes from the most general to the most specific aspects.

a) Almost never	b) A few times	c) A few less than half of the time	d) A few more than half of the time	e) Many times	f) Almost always
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51. When I prepare for an English exam, I ask my classmates to gather with me in order to study together.

a) Almost never	b) A few times	c) A few less than half of the time	d) A few more than half of the time	e) Many times	f) Almost always
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Appendix C Interview guide

**Interview guide**

What activities do you do to learn?

How do you study in general? For exams in general?

What do you do in order to overcome your difficulties?

How do you study for exams?

Why are you studying English right now?

In your opinion, what characteristics do good learners have?

What do you do to understand better when you read?

What do you do to memorize information?

How many times have you tried to learn English before?

What do you find most difficult in learning English?

What skill is the most important in learning English?

What activities do you do to practice or study outside the classroom?

How do you study English outside the classroom? For a language test?

Do you know how you learn? How do you learn better?

## Appendix D Lesson plans of strategy instruction

<b>Lesson plan Strategy Sessions</b>				
<b>Cognitive strategy 4 Explain in your own words</b>				
<b>Step</b>	<b>Procedure</b>	<b>Time</b>	<b>Material</b>	<b>Interaction</b>
	Review common vocabulary	3	Visuals	Whole
<b>Explain</b>	Explain that <b>explaining in your own words</b> is a very useful strategy, to explain what you have read or heard or when you want to say something that you do not find the word	1	None	Whole
<b>Model</b>	“When I was living in the USA, I wanted to buy a Drill. I forgot to look up the word in my dictionary before I left home. At first, I hesitated to enter the store. Then I decided to try to explain the concept of the drill. I told the salesman that I needed to make holes. He said, “Ah! You want a drill!”	3	None	Whole
<b>Practice Speaking</b>	Tell the students that each one will choose an object and will then explain to the class what it is by substituting an explanation for the precise word. Provide examples how do you call, how do you say the thing that... it`s...	2	List of vocabulary	Pairs
	Have learners describe the series of words in pairs	5		Pairs
	Explain to learners that the same approach can be used when reading or listening, or writing	2	Passages on paper	Pairs
	Give a list short passage with basic information and cognates	3		Pairs
	Have learners read individually	1		Pairs
	Have learners work in pair and explain each other what they understood	3		
<b>Evaluate</b>	Have students evaluate their performance, have students say what they need in order for them to use the strategy more accurately. Asks students how they felt using the strategy	3	None	Whole
<b>Transfer</b>	Ask students for other uses of the strategy	2	None	Whole

<b>Study Strategy 44: Mind and conceptual maps</b>				
<b>Step</b>	<b>Procedure</b>	<b>Time</b>	<b>Material</b>	<b>Interaction</b>
<b>Explain</b>	Explain that making conceptual maps is a useful learning strategy, especially when students are trying to master vocabulary items or remembering concepts. One way to learn a list of new terms is to memorize the list. However, explain that it is usually easier to learn the information when it is organized in a logical way. One can make associations, and the information is easier to remember	1	None	Whole
<b>Model</b>	Give a personal example. For example, when you were learning a list of items of clothing in English, you found it useful to divide the items into the categories of male, female, and child.	1	None	Whole
<b>Practice Writing</b>	Tell the students that they are going to create maps of verbs in the categories they believe are significant for them. Hand out a list of verbs in present and past. Tell them to put the words in 4 or five categories using any scheme desired. Elicit the possible categories from the learners. Have learners add 3 verbs to each category. They will look for them using the resources strategy. Resource strategy -they can use the computer to look for other verbs. Paraphrase- They can ask the teacher by using the paraphrasing strategy, or the resource strategy.	1 3 3	Verb list  Notebooks Computer with the internet	Individual Individual pairs
<b>Evaluate</b>	Ask students whether categorizing the new terms helped them learn. Ask them to give other examples of how they can use the strategy mind maps to learn more efficiently and effectively.	3	None	Whole
<b>Transfer</b>	Ask learners how they would apply it in different tasks outline the best ideas	1	None	Whole

<b>Study Strategy 47: Making questions before and after reading</b>				
<b>Step</b>	<b>Procedure</b>	<b>Time</b>	<b>Material</b>	<b>Interaction</b>
<b>Explain:</b>	Explain that making questions after reading is a very useful learning strategy to help them understand when reading or listening in English	2	None	Whole
<b>Model:</b>	Give students an example of how you have used this strategy. Tell them, for example, that when you are reading you usually look at the picture, then you create an idea about the text, then you read the title and try to connect the first idea about the content, then you make questions before you read in order to find information; then you read once and try to answer the questions you made.	2	None	Whole
<b>Practice:</b>	Paraphrase- have students describe food items Personalize-ask students what they do when they go to a restaurant, and they do not know how to Use imagery- show a picture of people in a restaurant and elicit vocabulary Identify - ask what the conversation will be about and what information they will probably listen to. Have learners make questions they expect to find the answer in the text. Have students read a conversation in a restaurant and answer their questions Have learners verify their answers	3 2 2 3 1 2 5	Visuals  Visuals CD Copies Menus	Whole  Individual
<b>Evaluate</b>	Ask students how making questions before reading helped them			
<b>Transfer:</b>	Ask students where else they could practice role playing			

<b>Study Strategy 23: Making questions to verify I understand</b>				
<b>Step</b>	<b>Procedure</b>	<b>Time</b>	<b>Material</b>	<b>Interaction</b>
<b>Explain</b>	Explain that making questions to verify you understood is a learning strategy that helps us verify how much we have understood when we read or listen	2	None	Whole
<b>Model</b>	Tell students that you can retain more and better when you ask yourself questions about what I read. Read out loud a passage and at the end write comprehension questions and answer them.	2	None	Whole
<b>Practice Listening</b>	<p>Have learners see a visual of a person getting dressed and have learners infer from the pictures.</p> <p>Tell students that they will listen to the routine of a person</p> <p>Have learners think of their own routine and think about what they can or can't say in English. Have learners ask the doubts they might have</p> <p>Have learners listen</p> <p>Have learners take down notes or words to remember</p> <p>Have learners write 4 to 5 questions related to what they listened</p> <p>Have learners ask the questions themselves</p> <p>Play the tape again</p> <p>Have learners answer their questions</p>	<p>1</p> <p>3</p> <p>5</p> <p>3</p> <p>2</p> <p>5</p> <p>3</p> <p>2</p>	<p>Picture</p> <p>None</p> <p>None</p> <p>Pictures cutouts</p> <p>Notebooks</p>	<p>Whole</p> <p>Whole</p> <p>Individual Whole</p> <p>Trios</p> <p>Trios</p> <p>Trios</p>
<b>Evaluate</b>	Have students evaluate the utility of the strategy	1	None	Whole
<b>Transfer</b>	ask them how they could use it in other tasks	1	None	Whole

<b>Study Strategy 28: Gathering with friend to see what we learned</b>				
<b>Step</b>	<b>Procedure</b>	<b>Time</b>	<b>Material</b>	<b>Interaction</b>
<b>Explain</b>	Explain that gathering with classmates is a useful strategy because it allows you to exchange information, corroborate, and obtain information	2	None	Whole
<b>Model</b>	Tell students that when you worked with classmates and commented the important information you could identify where you had problem areas and your strength areas and that helped you direct effort in your problematic areas	2	None	Whole
<b>Practice</b>	This activity should be used in the day before the exam.	1	Picture	Whole
	Have learners open their notebooks and text books	3	None	Whole
	Have learners individually write important (to their consideration) information on a single sheet of paper.	5	None	Individual Whole
	Have learners groups in four and compare sheets	3 2	Pictures cutouts	Trios
	Have learners explain or comment why they considered that information important	5	Notebooks	Trios
	Have learners construct only one sheet of paper with all the information of the group	3		Trios
		5		Trios
<b>Evaluate</b>	Have students evaluate the utility of the strategy	1	None	Whole
<b>Transfer</b>	Ask them how they could use it in other tasks	1	None	Whole

<b>Study Strategy 43: Selective highlighting</b>				
<b>Step</b>	<b>Procedure</b>	<b>Time</b>	<b>Material</b>	<b>Interaction</b>
<b>Explain</b>	Explain learners that Selective Highlighting/Underlining is used to help learners organize what they have read by selecting what is important	2	None	Whole
<b>Model</b>	Explain the learners that it is easier for you to locate information in an article when you highlight because they can help you understand, remember and identify information. Project a piece of reading on the board and highlight important vocabulary, later try to retell the most important information by using the highlighted info	2	None	Whole
<b>Practice Reading</b>	<p>Have learners Read the passage.</p> <p>Ask learners to reread and begin to highlight main ideas and their supporting details.</p> <p>Ask learners to highlight only the facts which are important or the key vocabulary, not the entire sentence.</p> <p>After highlighting, have learners share with their classmates what they have highlighted and summarize what they read.</p> <p>Learners may wish to use various colors of highlighters to identify main ideas from details (e.g., use orange to represent main ideas and yellow to represent supporting details).</p>	<p>1</p> <p>3</p> <p>5</p> <p>3</p> <p>2</p> <p>5</p> <p>3</p> <p>5</p>	<p>Reading passage</p> <p>Copies</p> <p>Markers</p> <p>Markers</p> <p>Color markers</p>	<p>Individually</p> <p>Trios</p>
<b>Evaluate</b>	Have students evaluate the utility of the strategy	1	None	Whole
<b>Transfer</b>	Ask them how they could use it in other tasks	1	None	Whole

<b>Study Strategy 46: Summarizing</b>				
<b>Step</b>	<b>Procedure</b>	<b>Time</b>	<b>Material</b>	<b>Interaction</b>
<b>Explain</b>	Explain learners that summarizing is how we take larger selections of text and reduce them to their bare essentials: the gist, the key ideas, the main points that are worth noting and remembering.	2	None	Whole
<b>Model</b>	Explain to them that summarizing is something we usually do when we answer the questions. What was the movie about? Or What was the book about? Show them a long reading and explain to them the main point in a summary	2	None	Whole
<b>Practice Reading Writing</b>	After students have used selective underlining on a selection, have them translate the underlined information to a new sheet	2	Reading from prior strategy	Individual
	Have them summarize the reading by using the information from the highlighting of what they can remember of the key ideas in the piece.	5	Sheet	
	They should only look back at their underlining when they reach a point of being stumped.			
	They can go back and forth between writing the summary and checking their underlining several times until they have captured the important ideas in the article in the single paragraph.	5		Pairs
	Have them compare summaries and observe what they missed	3 3		Whole
<b>Evaluate</b>	Have students evaluate the utility of the strategy	1	None	Whole
<b>Transfer</b>	Ask them how they could use it in other tasks	1	None	Whole

<b>Cognitive Strategy 8: Put into practice what you learn</b>				
<b>Step</b>	<b>Procedure</b>	<b>Time</b>	<b>Material</b>	<b>Interaction</b>
Explain	Explain the learners that putting into practice strategy is a very useful strategy to help you make learning more meaningful and interesting. And a very good concrete way to demonstrate learning. Explain that they can put into practice what they learn when they read, listen, speak or write.	2	None	Whole
Model	Tell the learners that when you were learning English, you liked to imagine where to use something new that you had learned. Explain that when you learned to use the expression <b>WOULD YOU LIKE...</b> you imagine asking a customer <b>WOULD YOU LIKE A GLASS OF WATER?</b>	2	None	Whole
Practice	Brainstorm from the learners a list of grammar topics they have seen Ask them if they know when they can use every grammar topic	3	Board	Whole
	Assign learners in groups of 4 a grammar topic Have learners brainstorm all the situations in which they could use such strategy.	5	Flipchart Sheet Markers	Groups
	Have learners present information to the group Have other learners add up new ideas	5 4		Whole
	Show learners a video and have them identify the grammar topics they explored Have learners discuss if the situations were right	3		Whole
Evaluate	Have students evaluate the utility of the strategy	1	None	Whole
Transfer	Ask them how they could use it in other tasks	1	None	Whole

## Appendix E List of learners chosen for the interviews

Student code	Type code	Type of student	LLSQ Mean	Test Score 1 <sup>st</sup> Adm	Name
2311	HAE	High Achiever Experimental	4.53	102	Rita
1496	HSUE	High Strategy User Experimental	5.31	31	Karla
2253	LAE	Low Achiever Experimental	3.65	10	Cynthia
2322	HAC	High Achiever Control	4.82	101	Evelyn
1753	HSUC	High Strategy User Control	4.90	34	Ofelia
2267	HAE	High Achiever Experimental	3.80	99	Jacobo
1581	LAE	Low Achiever Experimental	4.98	11	Sonia
1492	LSUE	Low Strategy User Experimental	3.24	24	Monica
2343	HAC	High Achiever Control	4.33	90	Lilia
1754	HSUC	High Strategy User Control	4.80	40	Celia
2336	LAC	Low Achiever Control	3.69	45	Eduardo
1508	ASUE	Average Strategy User Experimental	3.69	39	Manuel
1891	HSUE	High Strategy User Experimental	4.73	38	Milagros
1621	ASUC	Average Strategy User Control	4.06	72	Gustavo
1739	HSUC	High strategy user Control	4.63	63	Aleli
1943	HSUC	High Strategy User Control	4.67	88	Luisa
1520	LSUC	Low strategy User Control	3.37	94	Lucy
1531	ASUC	Average Strategy user Control	4.14	56	Susana
1837	LSUC	Low strategy User Control	3.29	14	Alma
1682	LAE	Low Achiever Experimental	3.37	50	Escarlet

## Appendix F List of recommended strategies translated into Spanish

### ESTRATEGIAS DE APRENDIZAJE

***Identifica la información principal del texto.*** Esto te ayuda a crear la habilidad de entender más rápidamente lo que lees o lo que escuchas.

***Relaciona las cosas nuevas que estas aprendiendo con lo que ya sabes.*** Esta estrategia te ayuda a entender con mayor claridad lo que lees o escuchas.

***Imagina lo que se describe en el libro.*** Esta te ayuda a retener mayor información de lo que lees o escuchas.

***Explica con tus propias palabras lo que has entendido de lo que has leído o escuchado.*** Esta estrategia te ayuda a entender más clara y rápidamente la nueva información.

***Saca tus propias conclusiones de lo que escuchas o lees.*** Esta estrategia te desarrolla la habilidad de entender más rápidamente

***Participa en trabajos de equipo.*** El trabajo en equipo te da la oportunidad de comparar el conocimiento que has aprendido y el que aún no has aprendido.

***Pon en práctica lo que aprendes.*** Esta estrategias te ayuda a saber hasta qué grado ( y hasta qué grado no!) puedes manejar la información que recibes.

***Haz tus propios ejemplos para asegurarte de entender lo que lees o escuchas.*** Esta estrategia te ayuda a entender y practicar la información que recibes, además que te ayuda a memorizar la información más significativamente.

***Lee y escucha cuanto puedas.*** Esta es la mejor manera de poner en práctica tu nuevo aprendizaje y evaluar donde debes de trabajar más.

***Concéntrate en lo que escuchas, lees o estudias.*** Esta estrategia te permite entender mayor información y como consecuencia mayor retención.

***Adecúa y adapta tus condiciones de estudio.*** Esta estrategia te permite crear un ambiente donde te sientas más cómodo y no genere distracciones en tu estudio.

***Organiza el material por temas para analizarlos uno por uno.*** Esta estrategia te permite desglosar la información para entender más claramente.

***Estudia notas de clases anteriores.*** Esta estrategia te permite tener activo el conocimiento anterior para aplicarlo a nueva información.

***Pregúntate lo que leíste o escuchaste para confirmar que entendiste.*** Esta estrategia te permite retener mayor información; además de evaluar que tanto entendiste de lo escuchado o leído

***Encuentra tus propias formas de relajarte.*** Esta estrategia te va permitir sentirte apto para el aprendizaje.

***Compara con otros compañeros lo que lees o entiendes en la clase.*** Esta estrategia te permite evaluar tus conocimientos al compararlos con los de tus compañeros.

***Anota palabras clave que te ayuden a recordar lo que lees o escuchas.*** Esta estrategia te ayuda a entender y recordar lo que lees o escuchas.

***Repasa una y otra vez hasta dominar los temas donde tienes dificultades.*** Esta estrategia te ayuda a recordar y a manejar la información que recibes.

***Lleva una agenda de actividades de estudio de cada día de la semana.*** Esta estrategia te ayuda a controlar el tiempo que dedicas a cada área de tu estudio.

***Lee desde antes los temas que se van a exponer en clase.*** Esta estrategia te ayuda a entender con más rapidez la información que se presenta en clase; además te ayuda a ganar confianza en ti mismo para el aprendizaje.

***Estudia aunque no vayas a tener examen.*** Esta estrategia te ayuda a entender y retener con mayor rapidez la información que recibes; además te ayuda a ganar confianza en ti mismo para el aprendizaje.

***Consulta otros libros o internet para complementar lo que viste en clase.*** Esta estrategia te ayuda a recibir diferentes tipo de información para a entender mejor.

***Estudia la información vista en clase lo más pronto posible para reforzar lo que aprendiste.*** Esta estrategia te ayuda a reforzar lo que viste en clase ya que corres el riesgo de no recordarla.

***Siéntate en los lugares donde puedas poner más atención.*** Elige un espacio en el salón de clase donde puedas escuchar y ver bien las explicaciones o materiales.

*Señala en el texto los conceptos e ideas más importantes (subraya, haz anotaciones, encierra párrafos, etc.)* Esta estrategia te ayuda a organizar la información que recibes, lees o escuchas.

*Haz cuadros sinópticos o mapas metales o conceptuales para relacionar y recordar las ideas e información más importantes.* Esta estrategia te ayuda a organizar y recordar información más eficientemente.

**Participa activamente en clase (haz comentarios, preguntas importantes, críticas constructivas, etc.)** Esta estrategia te ayudará a poner en práctica de manera natural la información que sabes; además que te dará la oportunidad de aclarar dudas en caso de que la haya.

*Escribe en una hoja los puntos más importantes de lo que lees.* Esta estrategia te ayudara a recordar con mayor facilidad la nueva información.

*Escribe algunas preguntas que después puedas contestar en una segunda lectura.* Esta estrategia te ayudará a entender más rápidamente lo que lees.

*Haz ejercicios o escribe notas.* Esta estrategia te ayudará a entender más claramente lo que estudias o lees.

*Reúnete con tus compañeros a estudiar.* Esta estrategia favorece a tener alguien que pueda resolver tus dudas en caso que existan.

**Appendix G Learners' profiles**

Name: Rita	Age range: 18-23	Gender: Female	Student Code: 2311
Achievement score pre: 102	Achievement Score Post: 133		Group: Experimental
LSQ average: 4.53		LLSQ average: 4.98	
Type of student: High achiever Experimental group			
Strategies most commonly used reported by the questionnaire			
<b>LSQ</b>		<b>LLSQ</b>	
<b>Most Used:</b> Study: 29, 43, 46, 50 Concentration: 15, 22 Cognitive: 1, 3 Achievement Mot: 12, 30, 33 Cooperative: 7 Interacting: 41 <b>Total: 13</b>		<b>Most Used:</b> Study: 29, 43, 46 Study Organization : 19 Concentration: 13, 14, 16 18, 20, 21, 22 Cognitive: 1, 2, 4, 5, 11 Achievement Mot: 12, 31, 30 Cooperative: 7, 34 Interacting: 27, 41 <b>Total: 23</b>	
<b>Least Used:</b> Achievement Mot: 24 Interacting: 37 <b>Total: 2</b>		<b>Least Used:</b> Study: 23 <b>Total: 1</b>	
Prior Experience in English: Elementary, Secondary and Preparatory			
Reasons for studying: Likes English intrinsic motivation			
Areas of difficulty: Pronunciation			
<b>Reported strategies in Learning English (LLS):</b> Practicing, improve or learn English Watching TV, videos, movies Reading Talking with friends Asking for help Listening to music Looking for opportunities to practice		Analyzing information Making notes Looking for information Reviewing Relating new information to memorize Paying attention	
<b>Reported strategies in General learning contexts (GLS):</b> Making notes Looking for information Reviewing notes Writing key words Looking for opportunities to practice <b>Searching on the internet for unclear information</b> <b>Copying form board</b>		Not studying in order not to get confused Making key notes Reviewing key notes Paying attention Relating new information to prior information Creating their own games Asking friends for clarifications and explanation	

Name: Karla	Age range: 18-23	Gender: Female	Student Code: 1496
Achievement score pre: 31	Achievement score post: 107		Group: Experimental
Average of strategy use Pre: 5.31		Average of strategy post: 4.65	
Type of student: Highs strategy user Experimental group			
Strategies most commonly used reported by the questionnaire			
<b>LSQ</b>		<b>LLSQ</b>	
<b>Most Used:</b> Study: 29, 43, 44, 46, 49, 50 Study Organization : 19, 36 Concentration: 13, 15, 20, 21, 22 Cognitive: 1, 2, 3, 4, 5, 11 Achievement Mot: 9, 12, 30, 31, 32, 33 Affective: 25 Cooperative: 7, 28, 34, 51 Interacting: 27, 38, 41, 45 <b>Total: 34</b>		<b>Most Used:</b> Study: 29, 43, 44, 46, 47, 49 Study Organization : 19, 39, 40 Cognitive: 2, 3, 4, 6, 8, 10, 11, 26 Achievement Mot: 9, 12, 30, 31, 32, 33, 35 Cooperative: 7, 28, 34, 51 Interacting: 27, 37, 38, 41, 45 <b>Total: 34</b>	
<b>Least Used:</b> Study: 23 Concentration: 16 Achievement Mot: 24 <b>Total: 3</b>		<b>Least Used:</b> Study: 23 Study Organization : 48 Concentration: 13, 14, 15, 16, 17, 20, 21, 22 Achievement Mot: 24 Affective: 25 <b>Total: 12</b>	
Prior Experience in English: Secondary and Preparatory			
Reasons for studying: Take advantage of idle time			
Areas of difficulty: listening			
<b>Reported strategies in learning English (LLS):</b> Practicing with native speakers (family) Texting Listening to music Watching movies in English Seeking for help Asking for correction		Reviewing notes Reviewing textbooks Making board games with English words	
<b>Reported strategies in General learning contexts (GLS):</b> Seeking for help Relating new information to old information to memorize Paying attention to understand Gathering with friends to review notes Creating games to memorize information Doing the homework		Making summaries to study and trying to memorize Reading many times until memorizing Reviewing books Reviewing notes	

Name: Cynthia	Age range: 18-23	Gender: Female	Student Code: 2253
Achievement score pre: 10	Achievement score post: 88	Group: Experimental	
Average of strategy use Pre: 3.65		Average of strategy post: 3.94	
Type of student: Low achiever Experimental group			
Strategies most commonly used reported by the questionnaire			
<b>LSQ</b>		<b>LLSQ</b>	
<b>Most Used:</b>  Concentration: 14, 16, 17, 22 Cognitive: 1, 3, 6, 8 Achievement Mot: 9 Cooperative: 7, 34 Interacting: 27, 41 <b>Total: 13</b>		<b>Most Used:</b>  Study: 29 Study Organization : 39 Concentration: 17 Cognitive: 2, 6, 11 Achievement Mot:9 Cooperative: 7, 34 Interacting: 41 <b>Total: 10</b>	
<b>Least Used:</b> Study: 44, 50 Study Organization : 19, 36 Cognitive: 11, 26 Achievement Mot: 24 Cooperative: 28 Interacting: 37 <b>Total: 9</b>		<b>Least Used:</b> Study: 44 Study Organization : 36 Concentration: 14, 21 Cognitive: 4, 26 Achievement Mot: 24 Interacting: 37 <b>Total: 8</b>	
Prior Experience in English: Secondary and Preparatory			
Reasons for studying: Take advantage of idle time			
Areas of difficulty: listening			
<b>Reported strategies in learning English (LLS):</b> Watching movies and videos Listening to music Practicing with other people Reviewing lessons and exercises done in class daily		Reading for trying to understand Reading for memorizing Looking for vocabulary in a dictionary Paying attention	
<b>Reported strategies in General learning contexts (GLS):</b> Paying attention Reviewing lessons daily Relate new information with old information Looking for information Answering exercises		Reading to understand Watching tutorials Reading to remember Looking for unknown information Relating new things to something easy or known	

Name: Evelyn	Age range: 18-23	Gender: Female	Student Code: 2322
Achievement score pre: 101	Achievement score post: 139	Group: Control	
Average of strategy use Pre: 4.82		Average of strategy post: 4.76	
Type of student: High achiever control group			
Strategies most commonly used reported by the questionnaire			
<b>LSQ</b>		<b>LLSQ</b>	
<b>Most Used:</b> Study: 29, 46 Study Organization : 19 Concentration: 17 Cognitive: 1, 2, 3, 4, 6, 8, 11, 26 Achievement Mot: 12, 32, 33 Cooperative: 7 Interacting: 27, 41, 45 <b>Total: 19</b>		<b>Most Used:</b> Study: 29, 43, 46 Study Organization : Concentration: 13, 16, 18, 21, 22 Cognitive: 2, 3, 4, 5, 6, 10, 11, 26 Achievement Mot: 9, 30, 32, 33 Cooperative: 7 Interacting: 27, 41, 45 <b>Total: 24</b>	
<b>Least Used:</b> Study: 23, 50 Achievement Mot: 24 Cooperative: 51 <b>Total: 4</b>		<b>Least Used:</b> Study: 44 Study Organization : Achievement Mot: 24 Cooperative: 51 Interacting: 37 <b>Total: 4</b>	
Prior Experience in English: Secondary and Preparatory			
Reasons for studying: taking advantage of the time for school requirements			
Areas of difficulty: Grammar, recalling vocabulary, listening			
<b>Reported strategies in learning English (LLS):</b> Listening to the radio Asking for help someone who knows Looking for unknown information Practicing Speaking with peers Paying attention to her own mistakes and others'		Writing down key notes Reviewing notes Asking teachers Analyzing others' mistakes Corroborate information Asking questions in class Applying new information to real contexts Setting challenges analyzing patterns in examples	
<b>Reported strategies in General learning contexts (GLS):</b> Planning for future events Setting goals Reading and Rereading to understand concepts Getting the main idea Looking for information		Setting challenges Paying attention Paying attention to her own mistakes and others' Asking for help someone who knows Identifying patterns Looking for answers to her own questions Reviewing notes	

Name: Ofelia	Age range: 36-41	Gender: Female	Student Code: 1753
Achievement score pre: 34	Achievement score post: 70	Group: Control	
Average of strategy use Pre: 4.90		Average of strategy post: 4.43	
Type of student: High Strategy user Control group			
Strategies most commonly used reported by the questionnaire			
<b>LSQ</b>		<b>LLSQ</b>	
<b>Most Used:</b> Study: 43 Study Organization : 39 Concentration: 13, 14, 15, 18, 20, 22 Cognitive: 1, 3, 4, 8 Achievement Mot: 9, 12, 30 Cooperative: 7 Interacting: 41, 45 <b>Total: 18</b>		<b>Most Used:</b> Study: 47, 49, 50 Study Organization : 19 Cognitive: 3, 4, 5, 10, 15 Achievement Mot: 9, 32 Cooperative: 28, 34 Interacting: 45 <b>Total: 14</b>	
<b>Least Used:</b> Study: 23 Achievement Mot: Cooperative: 51 <b>Total: 2</b>		<b>Least Used:</b> Cognitive: 26 Achievement Mot: 24 Cooperative: 51 <b>Total: 3</b>	
Prior Experience in English: Secondary and Preparatory			
Reasons for studying: Requirement of the school			
Areas of difficulty: Grammar, listening and speaking			
<b>Reported strategies in learning English (LLS):</b> Watching TV, movies Listening to music Practicing with family Reviewing notes, vocabulary		Reviewing books Doing exercises on the book's webpage Writing ideas to express Looking for vocabulary in the dictionary Searching for help with someone who knows Reading in silence to memorize vocabulary	
<b>Reported strategies in General learning contexts (GLS):</b> Reviewing notes Reading notes Reading and Writing summaries		Writing what is important Writing what is interesting Reviewing books Searching for unknown information	

Name: Jacobo	Age range: 18-23	Gender: Male	Student Code: 2267
Achievement score pre: 99	Achievement score post: 128	Group: Experimental	
Average of strategy use Pre: 3.80		Average of strategy post: 4.75	
Type of student: High achiever experimental group			
Strategies most commonly used reported by the questionnaire			
<b>LSQ</b>		<b>LLSQ</b>	
<b>Most Used:</b> Concentration: 15, 16, 48 Cognitive: 1, 11 <b>Total: 5</b>		<b>Most Used:</b> Concentration: 15, 20, 22 Cognitive: 2, 4, 11 Achievement Mot: 30 Interacting: 41, 45 <b>Total: 9</b>	
<b>Least Used:</b> <b>Total: 0</b>		<b>Least Used:</b> <b>Total: 0</b>	
Prior Experience in English: Primary, Secondary and preparatory			
Reasons for studying: Taking advantage of idle time			
Areas of difficulty: Grammar			
<b>Reported strategies in learning English (LLS):</b> Looking for opportunities to practice when watching TV Practicing phrases Practicing with family Concentrating on reading Repeating out loud Creating examples			
<b>Reported strategies in General learning contexts (GLS):</b> Reading notes Use imagery Using information Revising notes Create their own examples Trying to concentrate on reading			

Name: Sonia	Age range: 36-41	Gender: Female	Student Code: 1581
Achievement score pre: 11	Achievement score post: 80	Group: Experimental	
Average of strategy use Pre: 4.98		Average of strategy post: 3.55	
Type of student: low achiever Experimental group /high strategy user			
Strategies most commonly used reported by the questionnaire			
<b>LSQ</b>		<b>LLSQ</b>	
<b>Most Used:</b> Concentration: 16, 20, 21 Cognitive: 1, 2, 3, 4, 5, 6, 10, 11 Achievement Mot: 9, 12 Cooperative: 7 <b>Total: 14</b>		<b>Most Used:</b> <b>Total: 0</b>	
<b>Least Used:</b> <b>Total: 0</b>		<b>Least Used:</b> <b>Total: 0</b>	
Prior Experience in English: Secondary			
Reasons for studying: Likes the language and would like to learn			
Areas of difficulty: memorizing vocabulary and listening comprehension			
<b>Reported strategies in learning English (LLS):</b> <b>Reviewing</b> Listening to music and to the radio Paying attention Watching TV Watching Tutorials Repeating Trying to invest time Doing grammar and listening exercises		Taking an extra class on you tube Repeating out loud Writing everything Reviewing notes Looking for meaning Imagining things	
<b>Reported strategies in General learning contexts (GLS):</b> Reviewing notes Asking to a more experience one		Looking information in books Using imagery when reading Writing notes	

Name: Celia	Age range: 36-41	Gender: Female	Student Code: 1754
Achievement score pre: 40	Achievement score post: 75	Group: Control	
Average of strategy use Pre: 4.80		Average of strategy post: 2.84	
Type of student: High strategy user control group			
Strategies most commonly used reported by the questionnaire			
<b>LSQ</b>		<b>LLSQ</b>	
<b>Most Used:</b> Study: 29, 43, 44, 46 Study Organization : 19, 39 Cognitive: 1, 2, 3, 4, 6, 10, 11 Achievement Mot: 9, 30, 31, 32, 33 Cooperative: 34 Interacting: 27, 41 <b>Total: 21</b>		<b>Most Used:</b> Study Organization : Cognitive: 2, 3, 6 <b>Total: 3</b>	
<b>Least Used:</b> Cooperative: 28, 51 <b>Total: 2</b>		<b>Least Used:</b> Study Organization : 36, Concentration: 21, 22 Achievement Mot: 30 Cooperative: 28 Interacting: 37, 38 <b>Total: 7</b>	
Prior Experience in English: Secondary and preparatory			
Reasons for studying: Taking advantage of the time for future school requirements			
Areas of difficulty: Grammar			
<b>Reported strategies in learning English (LLS):</b> Memorizing rules Doing exercises in the book Writing the sound of the word in Spanish Translating Using the dictionary Listening to music, news guessing lyrics Paying attention Studying		Looking for opportunities to practice and forcing herself to use the language Speaking out loud in front of the mirror Reviewing vocabulary Reviewing notes Practicing with native speakers Trying to use the language Repeating to listen to myself Writing many times	
<b>Reported strategies in General learning contexts (GLS):</b> Making notes Reviewing notes Reading out loud		Reading Making questionnaires Answering questionnaires Study the questionnaires	

Name: Eduardo	Age range: 18-23	Gender: Male	Student Code: 2336
Achievement score pre: 45	Achievement score post: 85	Group: Control	
Average of strategy use Pre: 3.69		Average of strategy post: 3.59	
Type of student: Low strategy user control group			
Strategies most commonly used reported by the questionnaire			
<b>LSQ</b>		<b>LLSQ</b>	
<b>Most Used:</b> Study: 43 Concentration: 15 Cognitive: 5, 11 Achievement Mot: 9, 30, 32 Cooperative: 34 <b>Total: 8</b>		<b>Most Used:</b> Cognitive: 5 Cooperative: 7 <b>Total: 2</b>	
<b>Least Used:</b> Achievement Mot: 12, 24, 33 <b>Total: 3</b>		<b>Least Used:</b> Study: 47 Achievement Mot: 24 Cooperative: 28 Interacting: 37 <b>Total: 4</b>	
Prior Experience in English: Secondary and preparatory			
Reasons for studying: taking advantage of the time for future school requirements			
Areas of difficulty: memorizing vocabulary			
<b>Reported strategies in learning English (LLS):</b> Reading in English Watching TV Listening to music and books software Reading		Practicing speaking Practicing with the book and its webpage	
<b>Reported strategies in General learning contexts (GLS):</b> Concentrating Reading for understanding Reviewing notes Making Study guides Explaining to prove learning		Researching about the topic Creating good conditions for studying Using imagery Focusing attention Trying to remember what the teacher said	

Name: Lilia	Age range: 36-41	Gender: Female	Student Code: 2343
Achievement score pre: 90	Achievement score post: 129	Group: Control	
Average of strategy use Pre: 4.33		Average of strategy post: 4.69	
Type of student: high achiever high strategy user control group			
Strategies most commonly used reported by the questionnaire			
<b>LSQ</b>		<b>LLSQ</b>	
<b>Most Used:</b> Study: 43, 49 50 Study Organization : 39 Concentration: 16, 20, 22 Cognitive: 2, 6, 8, 10, 11 Achievement Mot: 31, 35 Cooperative: 34 Interacting: 41, 45 <b>Total: 17</b>		<b>Most Used:</b> Study: 29, 43, 46 Study Organization : 19, 36, 42 Concentration: 20, 21, 48 Cognitive: 1, 5, 8, 11 Achievement Mot: 9, 12, 33 Cooperative: 34 Interacting: 27, 41, 45 <b>Total: 20</b>	
<b>Least Used:</b> Study: 23 Cognitive: 4 Achievement Mot: 24 <b>Total: 3</b>		<b>Least Used:</b> Achievement Mot: 24 Affective: 25 Cooperative: 51 Interacting: 37 <b>Total: 4</b>	
Prior Experience in English: Secondary and preparatory and one language school			
Reasons for studying: wants to improve her oral skills			
Areas of difficulty: Speaking			
<b>Reported strategies in learning English (LLS):</b> Translating Watching TV and movies Listening to songs Identifying and Repeating phrases and vocabulary from the songs		Taking another language class online in addition to this one Investing time Doing listening exercises from the book's software or platform Taking notes Reviewing notes	
<b>Reported strategies in General learning contexts (GLS):</b> Memorizing by reading Studying in groups Asking and answering questionnaires		Trying to memorize Reviewing notes Not following her own rhythm to fit the group Reading and making notes	

Name: Monica	Age range: 18-23	Gender: Female	Student Code: 1492
Achievement score pre: 61	Achievement score post: 90	Group: Experimental	
Average of strategy use Pre: 3.24		Average of strategy post: 3.29	
Type of student: low strategy user experimental group			
Strategies most commonly used reported by the questionnaire			
<b>LSQ</b>		<b>LLSQ</b>	
<b>Most Used:</b> Study: 29, 43 Concentration: 14, 18 Cognitive: 3 Achievement Mot: 30 Cooperative: 7, 34 <b>Total: 8</b>		<b>Most Used:</b> Study Organization : 19 Concentration: 48 Cognitive: 3, 15, 16 Achievement Mot: 30, 35 Cooperative: 34 Interacting: 41 <b>Total: 9</b>	
<b>Least Used:</b> Study: 46, 50 Study Organization : 36, 42 Concentration: 13, 22 Cognitive: 10, 26 Achievement Mot: 33 Affective: 25 Cooperative: 28, 51 Interacting: 37, 45 <b>Total: 14</b>		<b>Least Used:</b> Study: 43, 44, 46, 47, 49 Study Organization : 36, 42 Cognitive: 4, 10, 11, 26 Achievement Mot: 12, 33 Affective: 25 Cooperative: 28 <b>Total: 15</b>	
Prior Experience in English: Secondary and preparatory and in one language school 3 levels			
Reasons for studying: requirement for the school			
Areas of difficulty: Grammar			
<b>Reported strategies in learning English (LLS):</b> Listening to music, looking for lyrics and singing Reviewing notes Repeating many times Writing lists and memorizing		Organizing vocabulary Trying to memorize Reading out loud	
<b>Reported strategies in General learning contexts (GLS):</b> Reviewing notes Creating questionnaires Answering questionnaires Summarizing important information Looking for information		Looking for adequate environments for studying Paying attention Comparing new information with already know information Trying to memorize	

Name: Manuel	Age range: 24-29	Gender: male	Student Code:1508
Achievement score pre: 39	Achievement score post: 100		Group: experimental
Average of strategy use Pre: 3.55		Average of strategy post: 3.69	
Type of student: average			
Strategies most commonly used reported by the questionnaire			
<b>LSQ</b>		<b>LLSQ</b>	
<b>Most Used:</b> Study: Study Organization : 19,42 Concentration: Cognitive: Achievement Mot: 33 Affective: Cooperative: Interaction in class: 28,34 <b>Total: 5</b>		<b>Most Used:</b> Concentration: 17 <b>Total: 1</b>	
<b>Least Used:</b> Study: 23 Study Organization : 36 Concentration: 15 Interaction in class: 45 <b>Total: 4</b>		<b>Least Used:</b> Study: 40,42 Study Organization : Concentration: 13 Achievement Mot: <b>Total:3</b>	
Prior Experience in English: secondary and preparatory			
Reasons for studying: school requirements and future work			
Areas of difficulty: pronunciation and speaking			
<b>Reported strategies in learning English (LLS):</b> Trying to speak to improve English Watching TV Listening to music Listening to English to improve pronunciation Repeating in silence		Making an effort to recall where she saw it Asking for clarification to understand Using the dictionary to look for vocabulary Reading notes Reviewing notes Copying notes Doing exercises on the book's website	
<b>Reported strategies in General learning contexts (GLS):</b> Reviewing notes Asking classmates for notes to complete his notes Studying notes Creating own exercises to answer Trying to memorize theory Making notes when necessary		Gathering with friends to study Exchanging notes with friends Talking about class topics Reading notes for exams Reading books for exams Making mind maps	

Name: Milagros	Age range: 18-23	Gender: female	Student Code: 1891
Achievement score pre: 38		Achievement score post: 107	Experimental
Average of strategy use Pre: 5.14		Average of strategy post: 4.73	
Type of student: High strategy user average achiever			
Strategies most commonly used reported by the questionnaire			
<b>LSQ</b>		<b>LLSQ</b>	
<b>Most Used:</b> Study: 29,43,49 Study Organization: 19,36,39,42 Concentration: 13,14,21,22,20 Cognitive: 2,3,5,8,11,26 Achievement Mot: 9,12,30,31,32,33,35 Affective: 25 Cooperative: 7,28,34 Interaction in class: 27,38,41 <b>Total: 34</b>		<b>Most Used:</b> Study: 29,43,46,47,49,50 Study Organization:19,42 Concentration: 16,17,18,20,21,22 Cognitive:6 Achievement Mot: 30,31,32,33,35 Affective: 25 Cooperative: 34,51 Interaction in class: 27,41,45 <b>Total: 26</b>	
<b>Least Used:</b> Study: 23 Cognitive:24 <b>Total: 2</b>		<b>Least Used:</b> Study: 23,44 Study Organization: 39 Concentration: Cognitive: 26 Achievement Mot: 24 Interaction in class: 37,38 <b>Total: 7</b>	
Prior Experience in English: secondary, preparatory			
Reasons for studying: school requirements and taking advantage of the time			
Areas of difficulty: Grammar			
<b>Reported strategies in learning English (LLS):</b>		Doing exercises on the book's website	
Transcribing notes form textbook		Attending SAC	
Transcribing exercises form book to notebook		Reviewing exercises	
Making own examples to understand grammar		Reviewing notes	
Applying information		Looking for vocabulary to understand reading	
Studying		Asking for vocabulary to teachers when reading	
Doing homework		Reading and repeating to memorize	
		Writing repeatedly to memorize	
		Reading list of vocabulary to memorize	
<b>Reported strategies in General learning contexts (GLS):</b>		Writing (unclear strategy)	
Planning for the future		Writing many times to memorize	
Studying (working hard)		Looking for other sources of explanation	
Doing exercises on the platform		Asking for clarification with a more experienced (teacher, classmates)	
Comparing exercises to understand better		Reading notes	
Studying (reviewing, reading)		Reading books or textbooks	
Searching for unclear information		Making notes to recall information	
Searching for unknown information		Transcribing notes to recall information	

Name: Gustavo	Age range: 24-29	Gender: male	Student Code: 1621
Achievement score pre: 72	Achievement score post: 102	Group: control	
Average of strategy use Pre: 3.22		Average of strategy post: 4.06	
Type of student: Average			
Strategies most commonly used reported by the questionnaire			
<b>LSQ</b>		<b>LLSQ</b>	
<b>Most Used:</b> Study: Study Organization: Concentration: Cognitive: 3 Achievement Mot: 9 Affective: Cooperative: 28 Interaction in class: 41 <b>Total: 4</b>		<b>Most Used:</b> Study: 29,44,49 Study Organization: 40 Concentration: 21,22,48 Cognitive: 1,11,8,26 Achievement Mot: 30,32 Affective: Cooperative: Interaction in class: 27,41,45 <b>Total: 16</b>	
<b>Least Used:</b> Study: 47 Study Organization: 36 Concentration: Cognitive: Achievement Mot: Affective: Cooperative: 51 Interaction in class: 37,38,45 <b>Total: 6</b>		<b>Least Used:</b> Study:47 Study Organization: 19,36 Concentration: Cognitive: Achievement Mot: 24 Affective: Cooperative: 51 Interaction in class: 37,38 <b>Total:7</b>	
Prior Experience in English: secondary, preparatory and University			
Reasons for studying: work			
Areas of difficulty: listening comprehension and speaking			
<b>Reported strategies in learning English (LLS):</b> Watching TV in English reading practicing writing and speaking with friends looking for opportunities to practice trying to read a book in English		observing what the teacher wrote, copy and look for more information to review listening to music at all times Practicing speaking Relating new information with old information to memorize easier Paying attention Making games to memorize information	
<b>Reported strategies in General learning contexts (GLS):</b> Putting into practice information learned Reading books for exams Practicing Making notes		Redoing exercises Reading notes Researching information Exchanging notes and questions for exams Asking more knowledgeable to clarify information	

Name: Aleli	Age range: 24-29	Gender: female	Student Code: 1739
Achievement score pre: 63		Achievement score post: 100	Group: control
Average of strategy use Pre: 4.76		Average of strategy post: 4.63	
Type of student: High strategy user average achiever			
Strategies most commonly used reported by the questionnaire			
<b>LSQ</b>		<b>LLSQ</b>	
<b>Most Used:</b> Study: 29 Study Organization: Concentration: 21 Cognitive: 1,3,5 Achievement Mot: 30,31,32,35 Affective: Cooperative: 7,28,34,51 Interaction in class: 27 <b>Total: 14</b>		<b>Most Used:</b> Study: 29,46,49,50 Study Organization : Concentration: 14,20,42,48 Cognitive: 1,2,4,6,8 Achievement Mot: 32,35 Affective: 25 Cooperative: Interaction in class:27,41,45 <b>Total: 19</b>	
<b>Least Used:</b> Study: 23 Study Organization: Concentration: Cognitive: Achievement Mot: 24 Affective: Cooperative: Interaction in class: <b>Total: 2</b>		<b>Least Used:</b> Study: 23,47 Study Organization: Concentration: Cognitive: Achievement Mot: Affective: Cooperative: 51 Interaction in class: <b>Total:3</b>	
Prior Experience in English: secondary, preparatory and 3 English courses			
Reasons for studying: looking for better job opportunities			
Areas of difficulty: speaking			
<b>Reported strategies in learning English (LLS):</b> Repeating words to improve pronunciation Paying attention to pronunciation Miming lip position to pronounce correctly Using translator to help convey messages		Learning vocabulary and translate it to Spanish Trying to use English with friends Reviewing past lessons Answering exercises a second time Reviewing grammar in textbooks Making study guides Making memory games	
<b>Reported strategies in General learning contexts (GLS):</b> Making study guides for exams based on notes Reviewing study guides		Reading out loud to understand Allotting time to studying Looking for the appropriate environment for studying Concentrating on studying	

Name: Luisa	Age range: 36-41	Gender: female	Student Code: 1943
Achievement score pre: 88	126	Group: control	
Average of strategy use Pre: 4.51		Average of strategy post: 4.67	
Type of student: high strategy user high achiever			
Strategies most commonly used reported by the questionnaire			
<b>LSQ</b>		<b>LLSQ</b>	
<b>Most Used:</b> Study: 29,43 Study Organization: 36 Concentration: 20,21 Cognitive: 2,4,10,11 Achievement Mot: 9,30 Interaction in class: 45 <b>Total: 12</b>		<b>Most Used:</b> Study: 43 Concentration: 13,15,16,20 Cognitive: 2,4,8 Achievement Mot:30,32 Affective: 25 Cooperative: 7 Interaction in class: 27,45 <b>Total: 14</b>	
<b>Least Used:</b> Interaction in class: 37,38 <b>Total: 2</b>		<b>Least Used:</b> Achievement Mot: 9 : <b>Total:1</b>	
Prior Experience in English: secondary, preparatory and university			
Reasons for studying: work			
Areas of difficulty: speaking			
<b>Reported strategies in learning English (LLS):</b> Using a translator asking a coworker for help Doing books exercises Reviewing notes for exams Making new notes of notes Copying information from the board Creating own examples Reading notes Reviewing books		Writing new vocabulary on the notebook to study Recalling information by listening Making lists of vocabulary Rereading to understand Answering questions form reading Trying to understand as much as possible Confirming answers with teacher Asking teachers for vocabulary when reading Trying to take conversation class Trying to speak in the classroom	
<b>Reported strategies in General learning contexts (GLS):</b> Trying to read a lot related to topic Reading future information Researching information Making summaries Making questionnaires about readings Making summaries of daily classes Making questions on cards to confirm learning Repeating to memorize		Recalling info with close eyes Gathering with friends to study for exams Summarizing important information from notes and books Asking and answering questions with classmates Roleplaying real situations such as presentations for oral exams or presentations	

Name: Lucy	Age range: 18-23	Gender: female	Student Code: 1520
Achievement score pre: 94	Achievement score post: 134	Group: control	
Average of strategy use Pre: 2.57		Average of strategy post: 3.37	
Type of student: Low strategy user high achiever			
Strategies most commonly used reported by the questionnaire			
<b>LSQ</b>		<b>LLSQ</b>	
<b>Most Used:</b> Study: 46 Study Organization: 19 Concentration: 14,20,48 Cognitive: 5 Achievement Mot: 9,30 Affective: Cooperative: 34 Interaction in class: <b>Total: 9</b>		<b>Most Used:</b> Study:45,30 Study Organization : Concentration: 48 Cognitive: 4,11 Achievement Mot: Affective: Cooperative: 51 Interaction in class: 37 <b>Total: 7</b>	
<b>Least Used:</b> Study: 29,43,44,47,50 Study Organization: 36,39 Concentration: 13,21,22 Cognitive: 6,10,26 Achievement Mot: 39,35 Cooperative: 28,51 Interaction in class:37,38,45 <b>Total: 20</b>		<b>Least Used:</b> Study:44,47,49 Study Organization: 39 Concentration: 21 Cognitive:3,10,26 Achievement Mot: 24,35 Cooperative: 28,51 Interaction in class: 37,38,45 <b>Total:15</b>	
Prior Experience in English: secondary and preparatory			
Reasons for studying: taking advantage of the time			
Areas of difficulty: grammar and speaking			
<b>Reported strategies in learning English (LLS):</b> Doing homework Attending SAC Watching movies Working with computer software Looking for vocabulary to understand reading		Doing grammar and listening exercises on the book's website Reviewing notes and textbooks for exams Reading notes for exams Repeating out loud Copying information from the board Writing vocabulary on the notebook	
<b>Reported strategies in General learning contexts (GLS):</b> No studying to feel less confused Taking notes Reviewing notes Making questionnaires Reading and rereading notes Reading and highlighting important information		Reading notes Paying attention to class if interesting Reading and repeating to memorize Writing many times to memorize Rereading to understand better Looking for vocabulary to understand reading Asking the meaning of vocabulary to someone when reading Guessing vocabulary from context Doing homework	

Name: Susana	Age range: 36-41	Gender: female	Student Code: 1531
Achievement score pre: 56	Achievement score post: 79	Group: Control	
Average of strategy use Pre: 2.75		Average of strategy post: 4.14	
Type of student: average			
Strategies most commonly used reported by the questionnaire			
<b>LSQ</b>		<b>LLSQ</b>	
<b>Most Used:</b> Study: 46 Study Organization: 19 Concentration: 14,48 Cognitive: 5 Achievement Mot: 9,30 Cooperative: 34 <b>Total: 8</b>		<b>Most Used:</b> Study: 43 Concentration: 15,16,28,22 Cognitive: 3,8 Cooperative: 34 Interaction in class: 27,41 <b>Total: 10</b>	
<b>Least Used:</b> Study: 29,43,44,47,50 Study Organization: 36,39 Concentration: 13,21,22 Cognitive: 6,10,26 Achievement Mot:24,35 Cooperative: 28,51 Interaction in class: 37,38,45 <b>Total: 20</b>		<b>Least Used:</b> Study:44 Achievement Mot: 24 Interaction in class: 37 <b>Total:3</b>	
Prior Experience in English: secondary and preparatory and language schools			
Reasons for studying: interaction and transactions and enjoyment			
Areas of difficulty: speaking			
<b>Reported strategies in learning English (LLS):</b> Watching TV with subtitles to understand Trying to listen to music in English Doing homework Doing exercises on the book's website Writing vocabulary many times to memorize Repeating many times to memorize Reading many times until understanding Using the dictionary		Trying to use English Practicing speaking with classmates Attending the SAC Reviewing notes for exams Reading the textbook as reviewing Doing exercises on the textbook Reading and rereading notes Correcting notes Transcribing notes to understand Creating new examples of difficult things	
<b>Reported strategies in General learning contexts (GLS):</b> Taking notes to review for the exams Gathering with friends to study Studying for exams to recall info Transcribing notes to understand information (CLEAN) Reading and rereading to memorize for exams Trying to memorizer notes Reading in silence to understand		Reviewing notes, Reading out loud Writing many times to memorize Reading and underlining important information Researching Looking for information in encyclopedias Making questionnaires and answering them Memorizing answers of questionnaires ç Exchanging notes with classmates Asking more experiences ones such as teachers and classmates	

Name: Alma	Age range: 30-35	Gender: Female	Student Code: 1837
Achievement score pre: 14		Achievement score post: 100	Group: control
Average of strategy use Pre: 2.75		Average of strategy post: 3.29	
Type of student: average			
Strategies most commonly used reported by the questionnaire			
<b>LSQ</b>		<b>LLSQ</b>	
<b>Most Used:</b> Study: 46 Study Organization: 19 Concentration: 14,20,48 Cognitive: 5 Achievement Mot: 9,30 Cooperative: 34 <b>Total: 9</b>		<b>Most Used:</b> Study: 23,29,43,49 Interaction in class: 38 <b>Total: 5</b>	
<b>Least Used:</b> Study: 29,43,44,47,50 Study Organization: 36,39 Concentration: 13,21,22 Cognitive: 6,10,26 Achievement Mot: 24,35 Cooperative: 28,51 Interaction in class: 37,38,45 <b>Total: 20</b>		<b>Least Used:</b> Study:44 Study Organization: 36 Concentration: 21 Achievement Mot: 24,30,32 Interaction in class: 37 <b>Total:7</b>	
Prior Experience in English: secondary and preparatory			
Reasons for studying: enjoyment			
Areas of difficulty: grammar			
<b>Reported strategies in learning English (LLS):</b> Listening to music and watching to develop the listening skills Practicing with native speakers (family in the USA) Getting corrected by someone who knows Practicing writing with native speakers Reviewing notes Reviewing books		Watching TV in English with subtitles Creating games to learn vocabulary to memorize Asking questions of prior information Looking for vocabulary to understand reading Paying attention to understand listening Relating new information to old information to memorize Doing exercises on the webpage Attending SAC and doing exercises	
<b>Reported strategies in General learning contexts (GLS):</b> Allotting time to studying Studying after class Making summaries Reading textbooks to recall information Creating and answering questions Looking for information to clarify Summarizing important information, highlighting important info and copying to notebook		Asking a more knowledgeable one to clarify doubts Exchanging information with friends to assess learning Reviewing notes and textbooks to confirm knowledge Asking teachers to clarify doubts Writing a repeatedly to memorize Repeating to memorize Making mind maps Reading notes Making notes of important information	

Name: Escarlet	Age range: 18-23	Gender: female	Student Code: 1682
Achievement score pre: 50		Achievement score post: 78	Group: Experimental
Average of strategy use Pre: 4.24		Average of strategy post: 3.37	
Type of student: low achiever low strategy user			
Strategies most commonly used reported by the questionnaire			
<b>LSQ</b>		<b>LLSQ</b>	
<b>Most Used:</b> Study: 50 Study Organization: 40 Concentration: 21 Cognitive: 1,2,6,10 Achievement Mot: 9,31,32,33,35 Cooperative: 7 Interaction in class: 27,37 <b>Total: 15</b>		<b>Most Used:</b> Study: 46,50 Study Organization : 40 Concentration: 16,17 Cognitive: 1,6,10,26 Achievement Mot: 9,35 Cooperative: 34 Interaction in class: 45 <b>Total: 12</b>	
<b>Least Used:</b> Study: Study Organization: 36 Concentration: 17,48 Cognitive: Achievement Mot: 24 Affective: Cooperative: Interaction in class: <b>Total: 4</b>		<b>Least Used:</b> Study:29,43,44,49 Study Organization: 39,42 Concentration: 15,22 Cognitive: 4,5,8 Achievement Mot: 24,31,33 Affective: 25 Cooperative: 28,51 Interaction in class: 32 <b>Total:18</b>	
Prior Experience in English: secondary and preparatory			
Reasons for studying: future improvement			
Areas of difficulty: Grammar pronunciation			
<b>Reported strategies in learning English (LLS):</b> Listening to music ( a lot) Listening to conversation in you tube for improving pronunciation Doing exercises on the book's website		Allotting time to studying (1 hour) Listening to English Looking for vocabulary (dictionary) to understand reading Looking for translations of songs	
<b>Reported strategies in General learning contexts (GLS):</b> Reviewing notes Reading notes and trying to recall information		Asking teachers for clarification Reading Copying notes or information from the board Reviewing notes for exams Gathering with friends to study and asking and answering questions with classmates	

## Appendix H Achievement Test

## General Knowledge Test Fundamentals 1

Nombre \_\_\_\_\_ Matricula \_\_\_\_\_

1. LISTENING (Audio: Track 9) Escucha la conversación y circula la respuesta correcta.

**Ejemplo:**Last name: Simpson Swanson Smith

- |                   |              |             |             |
|-------------------|--------------|-------------|-------------|
| (1) Title:        | Mrs.         | Ms.         | Miss        |
| (2) First name:   | Anabelle     | Annabelle   | Annabel     |
| (3) Profession:   | engineer     | athlete     | architect   |
| (4) Birthday:     | October 25   | August 25   | August 26   |
| (5) Phone number: | 385-2719     | 314-2610    | 384-2710    |
| (6) Address:      | 59 Grand St. | 15 Main St. | 45 Band St. |
| (7) Class time:   | 6:00         | 6:30        | 7:30        |

2. (Audio: Track 9 Min: 2:25) Escucha la conversación y marca falso (False) o verdadero (True).  true or  false.

**Example:** There is a play next week.

- (8) The event is on Friday.  
 (9) The event is at 7:45.  
 (10) They plan to meet at Jeff's home.  
 (11) Jeff arrives at Marie's home at 7:15.  
 (12) Jeff is late.

true	false
<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>

3. LISTENING (Audio: Track 17) Escucha la conversación, lee el cuadro y marca (✓) el tiempo correcto para cada actividad.

	past	present	future
<b>Example:</b> Mark – break his arm	<input checked="" type="checkbox"/>		
(13) Sophie – get married			
(14) Sophie – study architecture			
(15) Sophie – graduate			
(16) Mark – graduate			
(17) Mark – work			
(18) Emily – change careers			
(19) Emily – work in information technology			

4. (Audio: Track 17 Minute 2:05) Escucha la conversación y marca  falso (false) o verdadero (True).

**Example:** Robert is making fish and pasta for dinner.

- (20) Katie is working tonight.  
 (21) They are going to have dinner together tomorrow.

true	false
<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>

- (22) Katie is going to Robert's house.
- (23) Katie can't cook well.
- (24) Robert is going to make something for dessert.

5. Lee el grupo de palabras y elige la opción que pertenece a un grupo diferente.

Exam item:	a) arehiteet	b) newsstand	c) bank	d) pharmacy
25	a) singer	b) musician	c) friend	d) artist
26	a) bus	b) train	c) taxi	d) pilot
27	a) medium	b) sweater	c) blouse	d) jacket
28	a) sister	b) grandmother	c) daughter	d) neighbor
29	a) across the street	b) around the corner	c) walk	d) on the right
30	a) July	b) Monday	c) September	d) January
31	a) meeting	b) movie	c) party	d) restaurant
32	a) colleague	b) singer	c) boss	d) classmate
33	a) Ms.	b) Mr.	c) Miss.	d) Mrs.
34	a) handsome	b) young	c) pretty	d) good-looking

6. Observa la foto y responde a las preguntas *de manera completa*

Ejemplo:

<table border="1"> <thead> <tr> <th>Monday</th> <th>Tuesday</th> <th>Wednesday</th> <th>Thursday</th> <th>Friday</th> <th>Saturday</th> <th>Sunday</th> </tr> </thead> <tbody> <tr> <td>9:30— meeting</td> <td></td> <td></td> <td>6:35— game</td> <td></td> <td>8:00— hourly Party</td> <td></td> </tr> </tbody> </table> <p><b>Example:</b> What day is the game? <u>It's on Thursday.</u></p>	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	9:30— meeting			6:35— game		8:00— hourly Party		<p>35. What time is it?</p>  <p>_____</p>																																
Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday																																									
9:30— meeting			6:35— game		8:00— hourly Party																																										
<table border="1"> <thead> <tr> <th>S</th> <th>M</th> <th>T</th> <th>W</th> <th>T</th> <th>F</th> <th>S</th> </tr> </thead> <tbody> <tr> <td></td> <td></td> <td></td> <td>1</td> <td>2</td> <td>3</td> <td></td> </tr> <tr> <td>4</td> <td>5</td> <td>6</td> <td>7</td> <td>8</td> <td>9</td> <td>10</td> </tr> <tr> <td>11</td> <td>12</td> <td>13</td> <td>14</td> <td>15</td> <td>16</td> <td>17</td> </tr> <tr> <td>18</td> <td>19</td> <td>20</td> <td>21</td> <td>22</td> <td>23</td> <td>24</td> </tr> <tr> <td>25</td> <td>26</td> <td>27</td> <td>28</td> <td>29</td> <td>30</td> <td>31</td> </tr> </tbody> </table> <p>36. When is Pam's birthday? _____</p>	S	M	T	W	T	F	S				1	2	3		4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	<table border="1"> <tbody> <tr> <td><b>Name:</b> Patrick Wilkes</td> <td><b>Age:</b> 51</td> </tr> <tr> <td colspan="2"><b>Address:</b> 82 Fourth St.</td> </tr> </tbody> </table> <p>37. How old is Patrick? _____</p>	<b>Name:</b> Patrick Wilkes	<b>Age:</b> 51	<b>Address:</b> 82 Fourth St.	
S	M	T	W	T	F	S																																									
			1	2	3																																										
4	5	6	7	8	9	10																																									
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<b>Name:</b> Patrick Wilkes	<b>Age:</b> 51																																														
<b>Address:</b> 82 Fourth St.																																															
 <p>38. Where's the bank? _____</p>																																															

## 7. Completa la oración con la palabra o frase correcta. Encierra en un círculo tu respuesta

**Example:**This (be (is) / does) Jeff's sister, Karen.

39. Where (is / am / are) the children?
40. Anna (need / want / needs) a doctor.
41. (Don't / Isn't / Not) walk to the bookstore. Take the bus.
42. Why (do / does / is) she want that yellow blouse?
43. (Does / Do / Are) they like their new shoes?
44. Rebecca (doesn't / don't / do) want a dress.
45. Who (do / does / wash) the laundry in your family?
46. She (like / have / has) that sweater in green.
46. I (check always / always check / always checks) e-mail in the evening.
48. Do you (have / has / don't have) a new tie?
49. When (is / has / does) the concert?
50. What (are / is / do) your name?
51. What (are / is / have) your parents' occupations?

## 8. Lee el siguiente grupo de palabras y encierra en un círculo la palabra que es diferente al grupo.

**Example:**~~take a nap~~ / do the dishes / do the laundry / clean the house

52. yesterday / tomorrow / last night / last weekend
53. sink / bathroom / toilet / shower
54. desk / computer / printer / stove
55. wavy / straight / blonde / tall
56. coffee / pepper / soda / tea
57. loaf / cheese / bottle / can
58. eye / ear / nose / hip
59. cough / fingernail / fever / carache
60. business / scientist / math / nursing
61. sunny / cloudy / beach / windy

## 9. Completa la oración con la palabra o frase correcta. Encierra en un círculo tu respuesta.

**Example:** Where (does) / do / is) your family live?

62. They live (a house / on an apartment / at home) with their parents.
63. I need help. (Could / Do / Should) you please do me a favor?
64. It (is raining / not raining / rain) in London today.
65. The actor's hair (is / has / did) long and wavy.
66. Hi, Jill. I'm having lunch. (Did / Would / Are) you like to join me?
67. She has a toothache. She (should / is / do) see a dentist.
68. Where (did / was / were) you two nights ago?
69. (Are / Do / When) you driving to work today?

10. Observa la imagen y responde las preguntas de manera completa usando una palabra del cuadro. (No todas las palabras serán usadas)

nothing	cold	6:00
knitting	see a dentist	sick
windy	see a doctor	cloudy

**Example:**

What time is she having dinner with Mark?

At 6:00



70. What's the weather like?



71. What is she doing?

\_\_\_\_\_



72. Bill is sick. What should he do?

\_\_\_\_\_



73. Why can't she go swimming?

\_\_\_\_\_



11. Escribe en la línea la letra de la respuesta que corresponde a la pregunta

**Example:** Do you live far from here? b

(74) Can Michael sing well? \_\_\_\_\_

(75) Would they like to have children? \_\_\_\_\_

(76) Is it snowing? \_\_\_\_\_

(77) Should Becky take something for her cough? \_\_\_\_\_

- a. Yes, it is.
- b. No, I don't.
- c. Yes, they would.
- d. Yes, she should.
- e. No, he can't.

12. Lee la pregunta y responde con respuesta corta.

**Example:**

A: Do you want this?

B: No, I don't.

78 A: Are those pants new?

B: No, \_\_\_\_\_.

80 A: Does he need a doctor?

B: No, \_\_\_\_\_.

82 A: Is this dress nice?

B: No, \_\_\_\_\_.

84 A: Does she have his e-mail address?

B: Yes, \_\_\_\_\_.

79 A: Is she pretty?

B: Yes, \_\_\_\_\_.

81 A: Do I have your phone number?

B: Yes, \_\_\_\_\_.

83 A: Are we late?

B: Yes, \_\_\_\_\_.





- 122 Today is June 6. June 8 is \_\_\_\_\_.  
 a. tomorrow                      b. the day after tomorrow                      c. tonight  
 123 I don't want to go to the beach. It's \_\_\_\_\_.  
 a. too beautiful                      b. too long                      c. too cold

18. Lectura de Comprensión

A. Lee la siguiente información y luego lee las oraciones. Escribe J si se refiere a Jessica, escribe A si se refiere a Allison o escribe JA si se refiere a ambas

**MEET YOUR NEIGHBORS**

Meet Jessica and Allison Parker. They're sisters, but they're very different. Jessica is an artist. She likes things with color. Her clothes have a lot of red, yellow, and orange. Jessica likes to go to the movies and to parties with friends.



Allison is a banker. She has a lot of gray suits for her job. On weekends, Allison always exercises and visits friends. At night she usually goes out for dinner and to a concert.

Every Sunday, the sisters go to a restaurant. They have breakfast, and then they go shopping. They are different, but they are very good friends.

**Example:** She goes shopping on Sundays. JA

- (124) She always exercises and visits friends on weekends. \_\_\_\_\_  
 (125) She likes a lot of colors. \_\_\_\_\_  
 (126) She goes to a restaurant on Sundays. \_\_\_\_\_  
 (127) She works in a bank. \_\_\_\_\_  
 (128) She is different from her sister. \_\_\_\_\_

19. . Vuelve a leer la información anterior y responde las siguientes preguntas.

**Example:** Who is Jessica's sister? Allison

(129) What is Jessica's job?

\_\_\_\_\_

(130) What does Allison do?

\_\_\_\_\_

(131) When do the sisters eat together?

**22. Producción Escrita**

(140-142). **Choose two topics. Write at least three sentences about each.**

- My family members
- Places in my neighborhood
- My household chores or daily activities

**Topic:** \_\_\_\_\_

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**(143-145) Topic:** \_\_\_\_\_

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**23. Producción Escrita**

(146-148). **Choose two topics. Write at least three sentences about each.**

- My life story
- My future plans
- My abilities

**Topic:** \_\_\_\_\_

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**(149-151) Topic:** \_\_\_\_\_

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