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Metacognitive Learning Strategies and Academic Success of TEFL M.A. Students in Distance Education

Keivan Zahedi

Parastoo Dorrimanesh

Abstract

Appropriate use of metacognitive learning strategies (MLS) can contribute to the development of autonomy in distance learners, which is of paramount importance to their educational success. This paper reports on the frequency of MLS used by M.A. distance students of TEFL and it is intended to find out whether this particular set of strategies has any effect on these learners' academic success The academic success rate of the subjects is determined based on their university average scores. The subjects consisted of 36 M.A. TEFL distance learners who were asked to fill out Oxford's Strategy Inventory for Language Learning (SILL) questionnaires. For the purpose of analysis, the students were classified as high and low achievers based on their average scores. The results indicate that with α set at 0.05, there is no statistically significant correlation between the use of MLS and academic success of the participants

1. Introduction

Distance education is not a new phenomenon. Its earliest version was developed in the mid 19th century. The development of distance education is the result of moving away from traditional methods and approaches to teaching and learning which put the most emphasis on teachers' roles and moving towards a learner centered approach instead, which gives most of the learning responsibilities to the learners and views teachers as guides, helpers, and facilitators. In this way learners can be helped to develop autonomy. This system of education has gained a considerable amount of success in providing instructional services in different fields to learners and students all over the world. Considering the great many differences between traditional and this modern mode of education, the issue of quality of instruction and course materials seems more significant. Therefore, some effort should be put into identifying factors which influence the quality of distance learners learning and consequently their educational success. One way of improving the quality of the system is to find out about learning strategies (LS) especially MLS which might be effective in this specific mode of education.

Research into language learning strategies began in the 1960s which was particularly influenced by developments in cognitive psychology (Williams and Burden 1997). "Early researchers tended to make lists of strategies and other features presumed to be essential for all good L2 learners" Oxford (1994:1). In most of the research on language learning strategies (LLS), the main concern has been on investigating what good language learners do to help their

learning. However, it is evident that most distance education learners differ in personal and social characteristics and situations from conventional learners (Filcher & Miller 2000). A great number of distant learners are older; they have job and family commitments and as a result less time available for studying, as opposed to conventional learners. Another difference is that some of them are continuing their education after a long delay. This causes them to go through learning processes differently to some extent. In addition, due to the facts that there is limited amount of instruction provided to these students, small amount of interaction exists among the learners, and the very limited amount of contact between learners and their instructors and professors, it is vital to help these learners in becoming independent and ultimately lifelong learners. Of course, training lifelong learners should be the goal of any education system. Lockwood and Gooley (2001) define lifelong learning as an ongoing process which motivates learners and assists them in acquiring new knowledge, skills, and understanding that can also be applied in new contexts. Therefore, we have to come up with ways of equipping our distance learners with the needed tactics to achieve the required or expected success. MLS seem to have a significant role in achieving the high objectives of distance education systems, one of them being training autonomous learners. Consequently, it is the responsibility of educators to make students specially distance learners aware of the importance of applying these strategies in their studies and provide them with the needed instruction. According to Hacker, Dunlosky & Graesser

> Metacognitive awareness consists of three parts: thinking of what one knows (metacognitive knowledge), thinking of what one is currently doing (metacognitive skill) and thinking of what one's current cognitive or affective state is (metacognitive experience). What is important is that all this knowledge, the beliefs and perceptions are related to learner autonomy, in that they are needed to make informed decisions about one's learning. If it is the aim of education to let learners take charge of their own learning, then they need to be able to plan, monitor and evaluate their learning. And in order to do so, they need to be metacognitively aware. (quoted in Reinders 2000)

Harris (2003:4) believes that "metacognition is concerned with guiding the learning process itself and so includes strategies for planning, monitoring and evaluating both language use and language learning; key elements in developing autonomy."

> As Wenden (1985) reminds us, there is an old proverb which states: "Give a man fish and he eats for a day. Teach him how to fish and he eats for a lifetime". Applied to the language teaching and learning field, this proverb might be interpreted to mean that if students are provided with answers, the immediate problem is solved. But if they are taught the strategies to work out the answers for themselves, they are empowered to manage their own learning. (Griffiths, 2004: 2)

So, it is the aim of this study to investigate the usefulness of MLS as a proper subset of learning strategies (LS) to help distance TEFL learners to achieve academic success. Since the target population of this study is the population of TEFL distance students, and one of the factors leaving an extreme effect on these students' academic success is their knowledge of English language, the main focus of our study is on MLS used in learning English by the students. Based on the definitions of these strategies offered by some researchers—e.g. Oxford (1990) who believes that "metacognitive strategies provide a way for learners to coordinate their own learning process" (p.136) and Livingston (1997) who suggests that "metacognition refers to higher order thinking that involves active control over the cognitive processes which influence learning" (p. 1)—metacognition is about information processing in general, and it can be concluded that MLS are not only applicable in language learning but in all learning situations. However, in this study

the questionnaire seeks information about subjects' metacognitive strategy use through some statements regarding the use of this strategy in the process of language learning. It should be noted that some language researchers use the terms learning strategy and language learning strategy interchangeably.

2. Background

Besides the introduction, this paper consists of 7 sections and 5 subsections. Section 2 which includes 5 subsections provides readers with a review of studies conducted in relation to learning strategies in general and metacognitive strategies in particular. Subsection 2.1 presents some definitions of learning strategies by some key figures of EFL and ESL. Subsection 2.2 reviews different taxonomies of LLS introduced by experts such as Oxford, Chamot and O'Malley, Macaro etc. In subsection 2.3 definitions of metacognition and metacognitive learning strategies and different categories of MLS are provided. In subsection 2.4 focuses on studies related to MLS in distance education context. The last subsection, that is, subsection 5, presents some information as to the learning theories which support the role of metacognition in learning. The third section presents some justifications as to the necessity of conducting the present study. Section 4, is the methodology section with some information on the data collection, sampling methods, and participants. It also focuses on instruments used in this study. Statistical methods used to analyze the data are discussed in this section, as well. Section 5 presents the results of data analysis with the help of some tables. The next section, section 6, presents conclusions reached based on the results of data analysis. Section 7, discusses the results from data analysis and is followed by section 8, the last section, which is about the pedagogical implications of the study.

2.1. Language Learning Strategies (LLS)

According to Chamot (2004), the concept of LLS was introduced in the L2 field in the mid 1970s for the first time by researchers such as Stern (1975) and Rubin (1975). Since then a number of definitions of LLS have been proposed by key figures in the field. By studying these definitions one can see that earlier researchers focused their attention on the learning outcomes and defined LS as devices and techniques that learners use or attempts they make to get better results (e.g., Rubin 1975; Tarone 1981). However, in the late 1980's a change of focus can be detected which places more emphasis on the processes involved in learning. In this new approach, most experts define LS as choices, behaviors, thoughts, plans, and techniques used by learners which facilitate their learning process and make it a more enjoyable experience (e.g., Chamot 1990; Oxford 1990; McDonough 1995 {as cited in Macaro 2001}; Cook, 2001).

2.2. LLS Taxonimies

Different experts have categorized LLS in different ways, and as Oxford (1994) puts it they are based on different systems which indicate the lack of a coherent and well accepted system for describing these strategies. For instance, McKeachie, Pinch, and Lin (1986) introduced a taxonomy which encompassed the following three aspects of learning: (1) Cognitive, (2) Metacognitive, and (3) Resource Management. But O'Malley and Chamot (1990) classified LS into four categories: (1) Cognitive Strategies, (2) Metacognitive Strategies, (3) Social Strategies, and (4) Affective Strategies. According to Stern (1992), there are five main LLS. They are as follows: (1) Management and Planning Strategies, (2) Cognitive Strategies, (3) Communicative–Experiential Strategies, (4) Interpersonal Strategies, (5) Affective Strategies (as cited in

Hismanoglu 2000). Macaro (2001) has opted for a "continuum of subconscious (or 'less conscious') and direct strategies at one end and conscious and indirect strategies at the other..." (p. 24). A more recent taxonomy is offered by Leaver et al. (2004) which divides LS into two groups of deep and surface strategies. Nonetheless, Oxford (1990) has suggested the most comprehensive taxonomy which consists of two main categories and six subcategories. On the one hand, there are direct strategies which consist of memory, cognitive, and compensation strategies. These LLS directly involve the use of the target language and require mental processing of the language. Indirect strategies, on the other hand, consist of metacognitive, affective, and social strategies. They support and manage language learning without (in many instances) directly involving the target language. However different these taxonomies might be, most of them take MLS as a category of LS, but they just might use different labels.

2.3. Metacognition and MLS

Early mention of metacognition was made by Flavell, a child developmental psychologist. He suggested that metacognition is what organizes the learning process. It involves constant monitoring and regulation of cognitive process to accomplish cognitive goals (Flavell 1976). After Flavell, some other researchers focused their attention on MLS and offered different definitions for the term. But what can be inferred from these definitions is that MLS can simply be viewd as "Thinking about thinking" (Anderson 2002). Biehler and Snowman (1997) considered metacognition as a very broad concept which covers everything an individual can know that relates to how information is processed. Experts agree that appropriate use of this strategy set influences learning process positively (Anderson 2002) and they view it as what controls cognitive processes of learning (Livingston 1997). What is worth noting is that all researchers who have offered classifications of MLS, agree that MLS involve active control of learning through steps such as planning, monitoring, and evaluating learning processes (Oxford 1990; O'Malley and Chamot 1990; Cornford 2002; Anderson 2002; Leaver, Ehrman, & Shekhtman, 2004); although they might have used different names for them.

2.4. Distance Education and MLS

Research studies in regard to the use of MLS in distance education context reveal that distance learners need these strategies more than conventional learners (e.g., White 1995; Major & Levenburg 1997; Jegede *et al.* 1999, Rogoza 2005). White (1995) found that mode of study is the predominant influence on metacognitive dimensions of strategy use and that distance learners use theses strategies more than other learners. The study conducted by Jegede *et al.* (1999) pointed out that "Amongst the list of variables which intervene in achievement-oriented studies, locus of control and metacognition have been found to exert considerable effects" (p. 2). For this reason, they conducted a study in which a total of 712 students, sampled from high achievers and low achievers participated. The analysis of both qualitative and quantitative data showed some patterns of differences in locus of control and the use of MLS by low achievers and high achievers. For instance, high achievers rated themselves significantly higher than low achievers in a number of scales such as confidence with studies, ability to cope well with studying in distance learning mode, and motivation by the need to avoid failure. High achievers indicated that they always employed some strategies to learn in manners which showed significant differences from the way the low achievers learned to learn. Rogoza (2005) focused on the concept of learner-centeredness and suggested that flexibility and adaptability in using LS in new situations are necessary for achieving success in today's world. She also argued that "These attributes are even more important for distance learners and that their success depends on their

ability to apply appropriate learning strategies in self-directed learning" (p. 2). The cognitive-metacognitive domain is one that Rogoza has placed the most emphasis on. She also refered to the work of Romainville (1994) who found that a relationship exists between academic performance and high achievement of students who actively apply their metacognitive knowledge about cognitive processes.

2.5. Metacognition and Theories of Learning

According to Hoskin (2000), the positive role of metacognition in learning is supported by three theories of learning, namely, cognitive development, behaviouristic, and information-processing learning theories. Piaget's theory of cognitive development supports the evident role of metacognition in the development of cognition and intelligence. This theory suggests that metacognition serves as a bridge between developmental stages. Hoskin believes that metacognition has a role in behaviouristic learning theories as well. He refers to the social learning theory offered by (Bandura 1977) which suggests that instead of learning through experience, one can learn to symbolically learn behaviour, through cognitive organization. In addition, it is possible to use observation of self and self-regulation to facilitate reproduction of desirable behaviour and outcomes through an iterative process (Zimmerman 1983). The author also relates the concept of metacognition to information-processing theories of learning where the storage and use of knowledge is likened to that of computers. Computers retrieve and use knowledge via algorithms (codes). He maintains that compared to young learners, adult learners have algorithms with more information and loops (Simon 1979; Anzai & Simon 1979) and are capable of self-modification or self-regulation. The author believes that metacognition applied in these systems adds to the complexity of the algorithm, and this will increase the potential for problem-solving and goal-reaching.

3. Rationale for the Present Study

By reviewing the existing literature, it can be seen that many research studies have been devoted to exploring the effect of LLS in conventional modes of education. A smaller number of studies have investigated the effect of MLS. In Iran, some research studies have focused on LS (e.g., Tahmasebi 1999; Zavaragh 2000; Paktint 2005), and just a few of them on LS in distance education (e.g., Jafarigohar 1998; yadegari 2004); even a smaller number have examined the use of MLS and their effect on learning (e.g., Eslami Rasekh & Ranjbari 2003). But to the best of the researchers' knowledge so far no research study in Iran has explored the use of MLS in distance education. Even on an international scale not many studies have investigated this effect in distance education. Nevertheless, many experts view the use of metacognitive skills as necessary for achieving educational success. Cornford (2002) states that from a cognitive psychology perspective, effective learning through the lifespan is dependent upon effective information processing and the possession and quality of basic learning-to-learn skills and knowledge centered upon cognitive and metacognitive skills. Filchre and Miller (2000) believe that "The metacognitive strategies and resource management strategies may provide adult students with the most promising tools to enhance their success in distance education courses." Considering the body of research conducted which support the positive effect of MLS on language learning (Oxford 1994; Chamot 1990;) and the belief that the use of this strategy set contributes to the development of learner autonomy which is of paramount importance in distance education, and also due to the fact that up to this point, no research study in Iran has investigated the use of MLS in distance education, it is intended to investigate this strategy as an influential factor of academic success, and to find out whether there is any association between the use of MLS and academic

success of TEFL students in distance education at M.A. level. The expected outcome can be stated in the form of a null hypothesis that there is no association between the use of MLS and success level of TEFL students in distance education at M.A. level.

4. Methodology

In this study, the target population consisted of TEFLM.A. students of distance education. The sample based on availability consisted of 36 TEFL M.A. students. The sample consisted of 8 males and 28 females. Their ages ranged from 22 to 45. The data was collected during the second semester of 1385-6 Iranian academic year (2007). In order to collect the needed data a questionnaire was used. The questionnaire consisted of two parts. One part sought some Bio-data which consisted of participants' age, sex, and the number of university credit hours taken. To measure the use of MLS, part D of Oxford's (1990) Strategy Inventory for Language Learning (SILL)[i] was used. This inventory uses a 5 point Likert-scale for which the learners are asked to indicate their response (1, 2, 3, 4, 5) to a strategy description (1. Never or almost never true of me; 2. Generally not true of me; 3. Somewhat true of me; 4. Generally true of me; 5. Always or almost always true of me). Part D is concerned with MLS which are the focus of the present study. This questionnaire has been presented in two versions. Version 5.1 contains a total of 80 items of which 16 items assess the use of MLS by English speakers who are learning a foreign language. Version 7.0 contains 50 items of which 9 items assess the use of MLS by EFL and ESL students. In regards to version 7.0, Oxford states that: "The language is very simplified, but this version [version 7.0] operates similarly to Version 5.1 in most other respects" (Oxford, 1990, p. 199). Therefore, it was decided to use part D of 5.1 Version; however, to minimize the effect of misinterpretation of the items by the subjects it was decided to translate them into Farsi. The translated version was checked by a professional translator for accuracy. It was attempted to find possible associations between students' average scores and items of the questionnaire. In doing so, at first the means, standard deviations, and rank orders for each item were calculated. Next, for the purpose of analysis, the subjects were divided into the two groups of low and high achievers. Since the subjects average scores were between 12 and 18 (out of 20), the ones with averages below 15 were put in the low achievers and the ones with averages above 15 were put in the high achievers group. The tests used to find possible associations were Somers'd asymptotic tests. To measure correlations, Spearman correlation coefficients were calculated.

5. Results

First it was intended to see how frequently each strategy is used by the participants. In doing so, means, standard deviations, and rank order of the 16 strategies were calculated.[ii]

Table 5.1. Mean, Standard Deviation, and rank order of the questionnaire items

Item	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
M	3.9	3.8	3.7	3.7	3.7	4.1	3.8	3.5	3.1	3.9	3.4	4	3.3	4.3	4.5	4
SD	1.1	1.1	1	1	1	1	1.3	1.3	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1
R	5	6	7	7	7	3	6	8	11	5	9	4	10	2	1	4

M= Mean, SD= Standard Deviation, R=Rank Order

As it can be inferred from table5.1, the most and least frequently used strategies are strategies 15 and 9, respectively. It should be noted that even the least frequently used strategy (i.e., strategy 9) has a mean of 3.1. This indicates that these students use MLS at a medium to a high rate. Next, to see whether there is any association between the use of MLS and academic success of the subject, the association between average of students' university scores and each one of the 16 strategies was examined. As mentioned earlier, for the purpose of analysis, the students were assigned to two different groups of low and high achievers. At first, the possibility of using chi-square tests was examined. But since in all 16 instances more than 20% of the cells' expected values were less than 5, using this test was not statistically possible. Therefore, Somers'd asymptotic tests were used instead. In one case where an association was found, to measure the size of association, Spearman Correlation Coefficient was calculated. Summary of the hypothesis testing results is presented in the table below (see next page).

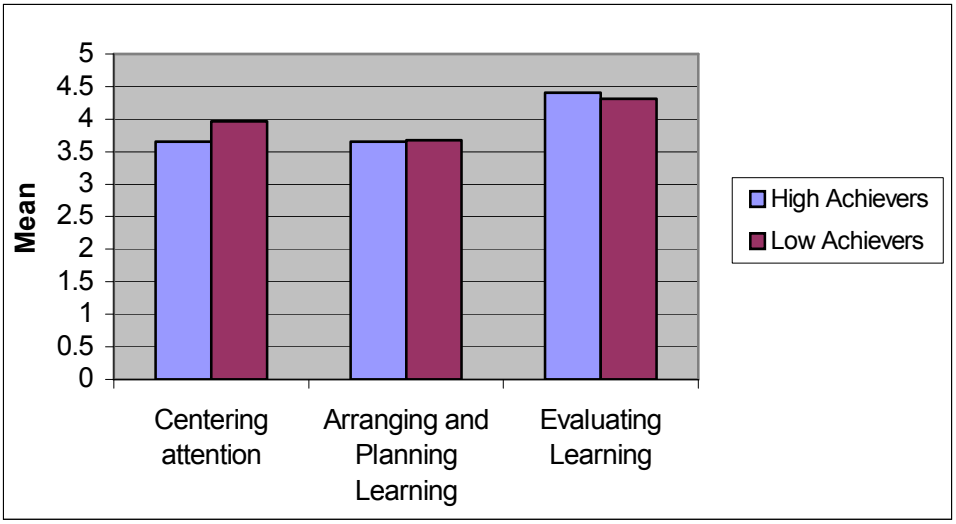
Table 5.2. Summary of Hypotheses Testing Results

Item	Hypotheses Statistic Value	Significance	Result	Correlation Coefficient
1	-0.090	0.548	Accept H0	----
2	-0.204	0.231	Accept H0	----
3	-0.099	0.530	Accept H0	----
4	-0.081	0.618	Accept H0	----
5	0.271	0.180	Accept H0	-----
6	-0.121	0.466	Accept H0	-----
7	0.144	0.378	Accept H0	----
8	-0.185	0.226	Accept H0	----
9	-0.004	0.980	Accept H0	----
10	0.352	0.020	Reject H0	0.365
11	0.055	0.729	Accept H0	----
12	-0.098	0.542	Accept H0	----
13	0.131	0.431	Accept H0	----
14	-0.101	0.562	Accept H0	----
15	0.195	0.285	Accept H0	----
16	-0.023	0.889	Accept H0	----

Number of H0 accepted: 15, Number of H0 rejected: 1

6. Conclusion

Considering the obtained results, and the fact that in the majority of the cases the null hypothesis is accepted, it can be concluded that there is no association between the overall use of MLS and academic success of TEFL distance learners at M.A. level with α set at 0.05. This means that high achievers do not use MLS more than low achievers. In fact in some instances low achievers use this strategy more often, but the difference is not statistically significant. Furthermore, the results of the study show that among the three main sets of MLS, 'evaluation of the learning process' and 'arranging and planning learning' are the most and least frequently used strategies, respectively. Furthermore, none of the three sets were found to have any effect on academic success of the participants.



Graph 3: Mean scores of the two groups of subjects on different sets of MLS as frequency indicators

7. Discussion

The analysis indicates distance education M.A. English majors who use MLS more frequently do not necessarily score higher on their university courses. The findings do not reject the null research hypothesis (i.e., there is no association between the use of MLS and success level of TEFL students in distance education at M.A. level.). Only strategy 10 which belongs to the second set of MLS seems to have a positive association with the academic success of the subjects in this study. The frequent use of the rest of the strategies doesn't seem to relate to the subjects'

academic success. However, one should bear in mind the fact that the number of participants is very small and as a result it is not possible to draw any conclusions with certainty. The results also show that the low achievers use the first set of MLS more often than the high achievers. Maybe, because of their lower scores they feel the need to center their attention more than the other group. The results also show that high achievers use the third set of the strategies slightly more often than the other group. Perhaps frequently evaluating and monitoring learning is helpful in distance learning.

Up to this point we have based our judgments simply on the results of the data analysis. However, one important fact is that with a few exceptions, these M.A. students have been studying as distance learners for only one or two semesters, with an average of 13.39 credit hours passed, as to the time of data collection. Just a few of the participants had studied in this system during their B.A. studies; therefore, they can be viewed as newcomers to the system. Of course, it should be kept in mind that these students have reported to use MLS with an average of 3.46 points which is higher than the medium rate. Other than the small sample size there are other reasons for being cautious in interpreting the statistical findings: for one thing, the data was collected from students' response to the questionnaire which might not be completely accurate. Some participants may claim to use strategies that they do not usually use. Some participants may not understand the strategy descriptions in the questionnaire items. Another point is the frequent use of strategies by learners does not necessarily mean that they use them accurately. What is important is that the strategies should be used accurately and appropriately to produce desirable outcomes. The significant issue is the quality of use and recognizing which strategy is appropriate for which learning activity. Oxford (1990) talks about the right conditions for using learning strategies and suggests that in order for a strategy to be useful, it should be related to the L2 activity, fit the learning styles of the user to some extent, and it should be used effectively and linked with other relevant strategies by the student. Only by the fulfillment of all these requirements may learning become easier, more enjoyable, faster, more independent, and more effective.

The findings of some studies might explain the present findings. They suggest that more successful language learners do not always use strategies more frequently but they are more aware of their needs and use strategies more efficiently. Cohen (2004) believes that both descriptive studies (e.g., Vandergrift 2003) and interventionist studies (e.g., Cohen 1998; Macaro 2001) have demonstrated that learners who use strategies (specially the metacognitive ones) are more successful than those who do not. However, as he puts it, language researchers are beginning to link success in language learning to the 'effective' use of strategies. Therefore, it can be said that being strategic is different from being a frequent user of strategies. It means to be skillful at using different strategies in a way that would lead to achieving the best possible results. Nevertheless, learners are not necessarily aware of these skills and the benefits they can gain by using them. "The revolution in cognitive psychology over the past 20 years has demonstrated that it is an unwarranted assumption that learners automatically know how best to learn. The most sensible approach is not to assume the automatic development of learning skills but to teach them quite explicitly" (Cornford 2002:6).

Harris (2003) believed that "of all the self-instructed modes of learning, distance learning requires the greatest degree of autonomy" (p.2). McCarthy (1998) maintained that "Autonomy is a capacity, and like any other capacity, it will grow with practice, or be lost through inactivity."

Hurd (2001) stated that if distance learners want to complete a learning program successfully, they have to maintain their motivation and develop a series of strategies that will enable them to work on their own. However, White (1995) warns against assuming that the distance learning context per se will give rise to autonomy. The reasons underlying the learners' choice of mode of study (work commitments, geographical location) do not necessarily predispose them to taking charge of their own learning. Recent studies indicate the value of teaching learners the strategies they need. From Harris (2003) point of view, the biggest challenge we are faced with today is adapting existing models of strategy instruction (SI) to the context of adults in a distance learning context and with access to very different types of support. Therefore, distance education systems should consider ways of equipping their students with the right learning strategies, especially metacognitive strategies.

Major and Levenburg (1997) believed that the following critical skills seem to be most likely acquired in distance learning environments: (1) Communication skills; (2) Self-directed learning skills. The self-directed learner needs two distinct skill sets which are self-discipline; and metacognitive skills. Regarding metacognitive skills, the authors state that these skills are as important as self-regulatory skills to achieving success in distance learning environments. They have defined metacognitive skills as the self-monitoring skills that are activated during learning activities. They also believe

> Many students need training in this type of self-regulation, and a well-designed distance learning course or system will make such training available. These students will recognize their need to possess these skills if they are to be successful in the distance learning activity, and will thus be motivated (perhaps for the first time in their educational history) to achieve them. (p. 1)

Considering the above claims and the results of the analysis made here, one can see that it is the responsibility of educators to provide students with opportunities to become aware of and practice MLS and encourage them to use them more frequently and appropriately. Students who have mastered the use of this strategy can make the right decisions as to where and when to use other learning strategies and how to coordinate them with each other to get the maximum benefit. By training students to use MLS effectively, they can become more effective and independent learners.

8. Further Pedagogical Implications

The role of language learning strategy instruction (SI) in promoting learner autonomy is widely recognised (e.g., Little 1991; Cohen 1998). However, considering the unique characteristics of distance education in which the direct instructional time is very limited, the main challenge is to determine the way of incorporating strategy instruction into our teaching at a distance. Another issue is the amount of SI. Just how much and how often is it needed? It is believed that SI should take place all year long with the teacher explaining and modeling the use of strategies (Beckman 2002). Major and Levenburg (1997) also believe in training distant learners to use MLS. Hassan *et al*. (2005:3) believe that

> Some of the training strategies are self-learned or self-taught while others, or alternative modes of delivery involve taught elements, i.e [i.e.,] strategy training can be practiced as a self-directed or a taught component of a programme. Both are of interest if the underlying intention is to effect an adoption of learning strategies.

Yet, based on the results of this research, a more appropriate measure may be integrating MLS teaching in classroom instruction. It seems to be necessary to develop some coursebooks to familiarize distance education students with and raise their awareness of MLS. In this way, the learners would assume more responsibility toward their own learning and would become more independent. At least, some parts of course materials should be devoted to MLS and they can be even thought indirectly through learning activities presented to them in their self-study books.

Of course, not all experts believe in strategy training as a requirement. For example, Biggs (1987) states that we cannot be certain about the necessity of SI. It is a matter of opinion which is supported by some research studies, personal experience, theory, and speculation (as cited in Hassan et al., 2005). Nevertheless, most educators believe in the necessity of SI. What is important is that just how we are going to incorporate such training in our teaching. Oxford (1990) classifies strategy training as informed and uninformed and believes that informed training is more useful. She suggests that four levels of information are possible in strategy training. Level A consists of 'encourage me of strategy use in general' without special training. Level B is 'blind training.' Level C is 'informed training.' Level D consists of 'completely informed training (strategy-plus-control training or self-control training).' Elaborating on these levels is beyond the scope of this paper. Only level B which is blind training will be referred to here, since it is the way that some coursebooks deal with the issue of strategy training in distance education. According to Oxford (1990), at blind training level the activities or materials themselves require the use of some specific strategies. These strategies which are chosen subconsciously by learners are called "hidden strategies." The learners are not given any information on the significance of using these strategies. The problem is that blind training results in improved performance in the immediate task only, but learners generally do not continue to use the strategy, nor do they transfer the strategy to other relevant situations (Brown *et al.* 1980, as cited in Oxford 1990). At present, there is little strategy training taking place, at least for EFL students and the training that takes place is blind training. Therefore, there is a need to revise the current study materials. Furthermore, pre-service teachers should receive some training in teaching LS in general and MLS in particular. They should, too, become aware of the significance of using MLS in distance education and transfer their knowledge to their students. A step that can be taken is giving learners questionnaires which assess their strategy use. In this way, educators can help them to become aware of the range of strategies available to them and they become conscious of their own strategy use. In addition, by helping learners to identify their learning styles, instructors can help learners to choose strategies which suit those styles best.

Appendix: Part D of SILL

N	Strategies
1	I preview the language lesson to get a general idea of what it is about, how it is organized, and how it relates to what I already know.
2	When someone is speaking the new language, I try to concentrate on what the person is saying and put unrelated topics out of my mind.
3	I decide in advance to pay special attention to specific language aspects; for example, I focus on the way native speakers pronounce certain sounds.
4	I try to find all I can about how to be a better language learner by reading books or articles, or by talking to others about how to learn.
5	I arrange my schedule to study and practice the new language consistently, not just when there is the pressure of a test.
6	I arrange my physical environment to promote learning; for instance, I find a quite comfortable place to review.
7	I organize my language notebook to record important language information.
8	I plan my goals for language learning; for instance, how proficient I want to become or how I might want to use the language in the long run.
9	I plan what I want to accomplish in language learning each day or each week.
10	I prepare for an upcoming language task (such as giving talk in the new language) by considering the nature of the task, what I have to know, and my current language skills.
11	I clearly identify the purpose of the language activity; for instance, in a listening task I might need to listen for a general idea or for specific facts.
12	I take responsibility for finding opportunities to practice the new language.
13	I actively look for people with whom I can speak the new language.
14	I try to notice my language errors and find out the reasons for them.
15	I learn from my mistake in using the new language.
16	I evaluate the general progress I have made in learning the language.

Endnotes

[1] Chamot (2004), states that most descriptive studies have relied on this questionnaire developed by Oxford (1990).

2 It should be noted that we have adopted the 3 metacognitive learning strategy sets offered by Oxford (1990, p. 137), and they are: 1) Centering your attention; 2) Arranging and planning your learning; and 3) Evaluating your learning. The first set consists of 3 strategies (items 1-3 of the questionnaire); the second sets consists of 10 strategies (items 4-13 of the questionnaire); and the third set consists of 3 strategies (items 14-6 of the questionnaire).

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