

*Full Length Research Paper*

# Language learning strategies and styles among Iranian engineering and political science graduate students studying abroad

Shakarami Alireza\* and Mardziha H. Abdullah

English Department Faculty of Modern Languages and Communication, University Putra Malaysia, P.O. Box. 43300, Selangor, Malaysia.

Accepted 28 December, 2009

Language learning strategies are used with the explicit goal of helping learners improve their knowledge and understanding of a target language. They are the conscious thoughts and behaviors used by students to facilitate language learning tasks and to personalize language learning process. Learning styles on the other hand, are “general characteristics of intellectual functioning that pertain to you as individual and differentiate you from some one else “. For example some learners may be more visually oriented while some other learners are more auditory oriented, some might be more tolerant of ambiguity, but some others may not. The present study tried to find out language learning strategies employed by some Iranian post graduate students studying abroad (non language major) in their foreign language learning process taking into account their general learning styles and disciplines. It used Joy Reid perceptual leaning style test and Oxford SILL as well as in depth interviewing to work out the respondents learning styles and strategies respectively trying to find out the general pattern of their language learning.

**Key words:** Language learning, strategies, styles, disciplines, ESL.

## INTRODUCTION

Language learning strategies have been the focus of attention in much recent research. Once, the “information processing model” derived from Cognitive Psychology was the main theoretical framework for the LLS (Grenfell and Macaro, 2007). Later on it was argued that LLS should encompass more than internal, psychological and personal constraints; rather, they should also account for some social and affective aspects of learning and in fact LLS was “an adventure of the whole person not just some of its parts” (Grenfell and Macaro, 2007). Many factors appear to influence general patterns of language learning and strategy choice, such as degree of awareness, age, sex, nationality, ethnicity, general learning styles, personality traits, motivation level, and purpose for learning the language. This study looks at the differences in learning styles and language learning strategies between

two groups of post-graduate Iranian students from different disciplines in a Malaysian university. One group of students is enrolled in an Engineering program while the other group consists of Political Science students. Since the medium of instruction for post-graduate programmes in this university is English, the students need to be constantly developing their English language proficiency to do well.

Language learning strategies help learners improve their knowledge and understanding of a target language. They are the conscious thoughts and behaviours used by students to facilitate language learning tasks and to personalize the language learning process (Cohen et al., 1996). Strategies have been classified by researchers under different taxonomies. The context of learning, shaped by the educational/cultural values of the society in which individuals are studying a new language, combined with language learners’ goals; together determine the types of learning tasks engaged in and thus the types of learning strategies that can be expected to best assist learning. Therefore, different sets of language learning

---

\*Corresponding author. E-mail: [hahkarami\\_alireza@yahoo.com](mailto:hahkarami_alireza@yahoo.com).  
Tel: +60172732819.

strategies and hence different or modified classification systems can coexist for researchers (Chamot, 2004).

Cognitive theories lie at the core of earlier strategy taxonomies. For example, O'Malley and Chamot (1990) based their justifications on the cognitive principles proposed by Anderson that viewed language learning strategies as skills acquired as declarative knowledge, which would subsequently become procedural as a result of extensive practice. Strategies then lead to actions aiming to retrieve and store new information until this information is automatized. Oxford, on the other hand, was more interested in the "mental action" aspect of strategies (Macaro, 2004) rather than their knowledge basis. This led to her definition of them as "specific actions taken by the learner to make learning easier, faster, more enjoyable, more self-directed, more effective, and more transferable to new situations" (1990: 8).

Oxford (1990) opines that students can benefit most from the strategy training when they know why and when particular strategies are important, how to use them, and how to transfer them into the new situation. It should also take into account a learner's attitude toward the learning situation and pay special attention to the learner's style of learning. In the same line of thought, Skehan (1998) believes that "to a greater or lesser degree, the strategies and learning styles that someone adopts 'may partly reflect personal preference rather than innate endowment'" (Oxford, 1998: 237).

In order to help learners achieve greater control over their own learning, it is important to help them become aware of the strategies they use in their language learning. With this purpose in mind, the researchers developed questions to guide the study, as follows:

1. What are the strategies most and least frequently employed by the two groups of ESL learners in their language learning process? Is there a difference between the two groups in terms of their language learning strategies?
2. Is there a difference between the two groups in terms of their learning styles?
3. What language learning difficulties are faced by these two groups of ESL learners?
4. What strategies do they use to overcome their perceived language learning problems?

## LITERATURE REVIEW

### Language learning strategies

Learning strategies are defined as thoughts, mental steps, behaviours or operations or techniques that learners use to help them comprehend or learn a new language and to regulate their effort to do so (Wenden, 1991, O'Malley and Chamot, 1990). Chamot et al. (1987) defines them as techniques, approaches or deliberate

actions that students take in order to facilitate learning and recall of both linguistic and content area information. McDonough (1995:5) categorizes strategies as "the choices, compensations and plans which enable the development of skills and processes. Skills and processes are the surface manifestations of the strategies that learners use". He sees strategies as the "network of thousands of decisions put into action, consciously or subconsciously, appropriately or inappropriately and with varying degree of frequency and consistency that form the underlying fabric of our foreign language learning" (McDonough, 1995 in Macaro, 2001).

The aforementioned definitions of LLS focus on psychological aspects of learning strategies, with little attention paid to social and affective aspects. Eventually, however, LLS were differentiated into four distinct categories: cognitive, metacognitive, social, and affective (Chamot 1987, Oxford, 1990). Cognitive strategies usually involve the identification, retention, storage, or retrieval of words, phrases, and other elements of the target language. *Metacognitive* strategies deal with pre-planning and self-assessment, on-line planning, monitoring and evaluation, as well as post-evaluation of language learning activities. Such strategies allow learners to control the learning process by helping them coordinate their efforts to plan, organize, and evaluate target language performance. *Social* strategies include the actions that learners select for interacting with other learners, a teacher, or with native speakers. Affective strategies serve to regulate learner motivation, emotions, and attitudes.

There are numerous inventories employed by the researchers in the field to assess learners' language learning strategies (LLS). LASSI (Weinstein et al., 1987; 1988), MAI (Schrew and Dennison, 1994), MARS (Mokhtari and Richard, 2002), MRSQ (Taraban et al., 2004), ESCOLA (Jimenez et al, 2009) are just a few examples. A review of the literature shows that the Strategy Inventory for Language Learning or SILL (Oxford, 1990) is to date the most comprehensive and most widely used instrument in the study of LLS. According to Ellis (1994: 539), Oxford's taxonomy of language learning strategies was the most comprehensive classification of LLS in the late 1980s and early 1990s, a view that is echoed by Cohen and Macaro (2007) at a much more recent time. Unlike other inventories, the SILL pays more attention to the social and affective side of learners as well (Green and Oxford, 1995). It is a standardized measure for collecting and analyzing information about language learners strategies widely used in studies correlating strategy use with variables such as learning styles, gender, proficiency level, and culture (Bruen, 2001; Chamot, 2004).

The SILL divides strategies into two major categories: direct and indirect. Each group comprises three subcategories: Direct strategies consist of memory, cognitive, and compensation strategies. Their common

denominator lies in their involving the target language. Indirect strategies, on the other hand, are those that support and manage language learning without necessarily involving the target language directly. This latter group consists of metacognitive, affective and social strategies.

SILL has been used extensively to collect data on large numbers of mostly foreign language learners (Olivares-Cuhat, 2002; Wharton, 2000; Oxford and Burry-Stock, 1995; Oxford, 1990; 1996, in Cohen and Macaro, 2007). It is a standardized measure with versions for students of a variety of languages, and as such can be used to collect and analyze information about large numbers of language learners. It has also been used in studies that correlate strategy use with variables such as learning styles, gender, proficiency level, and culture (Bruen, 2001; Wharton, 2000; Bedell and Oxford, 1996; Green and Oxford, 1995; Oxford and Burry-Stock, 1995, cited in Chamot, 2004).

Introspective questionnaires like SILL, however, are reported to suffer from some shortcomings: the concepts and questionnaire items may not be well understood by the respondents. In addition, respondents may report things they think are right, not the things they actually do, and they may fail to recall the strategies they use. Consequently, it seemed advisable to use more than one method of eliciting information to cross-check the data. Thus, this study used questionnaires as well as semi-structured interviews to collect data.

### Language learning styles

Unlike strategies, learning styles are not techniques. They are stable and constant traits associated with individual learners. Much of the general research related to learning styles has centred on Kolb's (1984) conceptualization of learning styles in his Experiential Learning Model. Kolb describes four learning styles based upon how people perceive information to gain new insights through either abstract thinking or concrete experiences and how people process this information to internalize it either through observing and reflecting on it or by working with the new information to test it.

Brown (2000), citing Keefe, asserts that learning styles "serve as relatively stable indicators of how learners perceive, interact with, and respond to the learning environment" (p.114). Learning styles, are not something that can be taught to the learners because they are personal traits and characteristics of each learner inherent within him. However, the recognition of students' learning styles can help teachers better understand learners and has very important implications for course planning, teaching, and learning.

A learning style consists of combinations of cognitive, affective, and physiological traits. It has its own distinctive characters and is generalized over situations and persists

for some time (Shore, 1995). Thus, it is a term referring to consistent tendencies or preferences within an individual (Brown, 2000).

In considering the interrelation of styles and strategies, Brown (in Cohen 1998) says that learning strategies do not operate by themselves, but rather are directly tied to the learner's underlying learning styles and other personality related variables in the learner. Grenfell and Harris (1999:5) propose that "the emphasis on learning to learn marks an intention to approach language learning from a different direction: rather than a perfect model, it focuses on the learner, their particular competence profile, learning styles and developmental stage..." This has led educators to examine the concept of learning strategies as techniques or skills that an individual elects to use in order to accomplish a learning task. Since the choice of learning strategy is related to some other internal and external factors, this study looks at the LLS and styles of students in two different academic disciplines.

## METHODOLOGY

### Participants

In the light of the literature and the individual differences in the learners, we sought to study thirty graduate students from two different disciplines at University Putra Malaysia (UPM) to determine their language learning strategies and preferred learning styles to look for any possible differences between their strategies choice and their learning styles taking their disciplines into consideration and work out the ways they deal with their language learning process.

The respondents of the study were from two different disciplines that is Industrial Management Engineering (IME) and Political Science (PS). They had their academic studies in English at UPM, were all middle-aged PhD students and had received their masters in Iran where they had all their courses studied in Persian. They had passed 12 credit hours of English in their BA level and 3 credit hours of English for special courses in their Masters. They all sat for the UPM placement test before the commencement of their formal studies and all were required to take part in the tertiary English courses to improve their English, in other words they all needed supplementary instruction as their English was not in a satisfactory level for their formal education. All had considerable problems dealing with new situation in which they needed English for their study and different acts of life.

### Data collection methods

Answers to the study's research questions were sought by two Survey Questionnaires namely strategy inventory for Language Learning (SILL) and Perceptual learning

**Table 1.** SILL results for political science students (PS).

<b>Learning strategies</b>	<b>N</b>	<b>Mean</b>
Social strategies	15	3.7111
Compensation strategies	15	3.5778
Metacognition strategies	15	3.1037
Affective strategies	15	2.7889
Cognitive strategies	15	2.7857
Memory strategies	15	2.6815
<b>Overall mean</b>		<b>3.108</b>

**Table 2.** SILL results for industrial management engineering students (IME).

<b>Learning strategies</b>	<b>N</b>	<b>Mean</b>
Metacognitive Strategies	15	4.4037
Cognitive strategies	15	3.5905
Memory strategies	15	2.9926
Compensation strategies	15	2.9111
Affective strategies	15	2.9000
Social strategies	15	2.5333
<b>Overall mean</b>		<b>3.638</b>

style Indicator as well as in-depth semi structured oral interviews.

The SILL was administered to work out priorities regarding the most and least frequent strategies employed by informants. Perceptual Learning Style questionnaire was used to find out every individual member's preferred learning style. The two survey questionnaires were administered to all the participants and eight students were randomly selected for the interviews. The results were cross checked later on.

Responses to the questionnaires were analyzed to provide both descriptive statistics on patterns of learning behaviour and to explore potential differences between responses, and the language learning strategies employed by two different groups of ESL learners. Interview responses sought to find out the most encountered problems of these learners and the relevant strategies they used to overcome the problems. They were also studied carefully to find out the ways in which participants' discipline impacted on their styles of learning.

## RESULTS

### Language learning strategies

Tables 1 and 2 tabulate the results of SILL administration for the two groups respectively. Differences emerged in terms of the language learning strategies members of the two groups employ. Students of PS overall used fewer

language learning strategies (3.108 vs. 3.638). The mean for SILL in four out of the six strategies was lower compared to the mean value of the other group. Social strategies (M = 3.71) were reported as the most frequently used strategies for PS. The second high mean value of SILL belonged to Compensation strategies (M = 3.57) which is reported in the literature to be relative to a lower proficiency. Metacognitive strategies mean (M = 3.1) stood in third place possibly suggesting that, they were more under the constraints of social and compensatory strategies in ESL learning and their decision making rather than Metacognitive strategies. Affective strategies were the fourth reported (M = 2.78) suggesting that the PS students gave their priority to other constraints rather than affective ones in their ESL learning and possibly in the other acts of life as well. Memory strategies were at the bottom of the strategies list for PS; although memorization was reported to be widely used by this group in the interviews.

The IME students indicated their highest priority in the use of Metacognitive strategies (M = 4.4) suggesting that managing, evaluation, and monitoring play important roles in their ESL learning. Compensation strategies for IME were less than their counterparts in the other group (2.91 vs. 3.57), they used less compensatory devices to comprehend and produce English utterances through their use of specific jargons that they mostly employed. A rather low value of affective strategies (M = 2.9) for IME compared with their high value of total strategy mean possibly expressed their effort to deemphasize the affective part of their being as future managers.

**Table 3.** T-Test analysis comparing mean scores for each paired variables (two tailed).

Paired samples test		Paired differences							
		Mean	Std. Deviation	Std. error mean	95% Confidence interval of the difference		t	df	Sig.(2-tailed)
					Lower	Upper			
Pair 1	Memory PS vs. IME	-.31111	.74559	.19251	-.72401	.10178	-1.616	14	.128
Pair 2	Cog. PS vs. IME	-.60476	.76211	.19678	-1.02680	-.18272	-3.073	14	.008
Pair 3	Comp. PS vs. IME	.66667	.87514	.22596	.18203	1.15130	2.950	14	.011
Pair 4	Metacog. PS vs. IME	-1.00000	.71146	.18370	-1.39399	-.60601	-5.444	14	.000
Pair 5	Affective. PS vs. IME	-.11111	.82776	.21373	-.56951	.34729	-.520	14	.611
Pair 6	Social PS vs. IME	1.17778	.66805	.17249	.80782	1.54773	6.828	14	.000

**Table 4.** Mean value for perceptual learning style preferences of the two groups.

Learning style	Visual	Tactile	Auditory	Group	Kinesthetic	Individual
PS	31.5	39.75	37.5	40.5	39.75	25
IME	46	38	36	37	43.5	38

The lowest reported value of strategy use for IME was for the social strategies ( $M = 2.53$ ) suggesting that they tended to be more independent and showed less desire to consult their problems with their peers.

In order to compare our observed mean values with standard scores, a t-test analysis was used as reported in Table 3. A two-tailed t-test analysis (comparing two related means for two groups of the students e.g. memory strategies mean for the two groups) was used to find out how our observed mean scores could be compared to the t-critical values and how our mean values are valid to distinguish between the two groups based on standard t-scores. A look at Table 3 shows that our respondents in the two disciplines at the level of .05 had a sharp and significant difference in their Social ( $t = 6.828$ ) and Metacognitive strategies ( $t = -5.444$ ). Their differences in cognitive ( $t = -3.073$ ), and compensation ( $t = 2.950$ ) strategies are significant and meaningful; however they proved not to be so much different in their Memory ( $t = -1.616 < 2.048$ ) and affective strategies use ( $t = -.520 < 2.048$ ) where 2.048 is the critical t-score for the number of students in each of our groups at the acceptance level of (.05).

### Perceptual learning style

The results obtained from Perceptual learning style indicator for PS and IME students as tabulated in Table 4 suggests that PS students learning styles are mostly 'Major' as for 'Tactile' ( $M=39.75$ ), 'Auditory' ( $M = 37.5$ ), 'Group' ( $M = 40.5$ ) and 'Kinesthetic' learning styles ( $M = 39.75$ ). However; their 'Visual' ( $M = 31.5$ ) and 'Individual' learning styles ( $M = 25$ ) are 'Minor'.

Table 4 also shows that IME students had all their

learning styles sensory modalities in the 'Major' form (Visual = 46, Tactile = 38, Group = 37, Kinesthetic = 43.5 and Individual = 38) except their 'Minor' auditory style (36).

In order to answer the questions raised by this study, results from Tables 1, 2 and 4 were compared and the data from semi-structured interviews were analyzed.

It was found out that there are some differences in the case of the two groups' language learning preferences; for instance, IME students showed a higher tendency to use their vision and less desire to use auditory modality in their learning styles. The two groups displayed a sharp difference in the case of 'individual' learning styles (38 vs. 25). Students of PS showed a higher usage of 'tactile', 'auditory', and 'group' modalities, but lower degree of 'visual' and 'individual' preferences in their learning styles.

The analysis of the results of Table 4 also indicated that a low value for 'visual' learning style along with a higher value of 'auditory' style is in accordance with the characteristics of the students in the field (PS), as they are involved with abstract ideas and more inclined toward hearing not seeing. They have to make arguments based on abstract ideas and beliefs; while IME students based their assumptions and discussions on some concrete and tangible statistics, formulas, and graphs.... A high value for 'group' style as well as low value of 'individual' style for PS indicated their desire to act as a group not by themselves in ESL learning probably suggesting that political people use their group and peer advice in their ELS learning and logical decision making.

Table 4 also shows a high value of 'visual' and lower value of 'auditory' for IME students, probably suggesting that they are more inclined to seeing things in order to decide rather than hearing. A higher value for 'individual'

relative to 'group' learning style might show that although they care about others in their language learning and work situation, seek their advice and opinion; but eventually it is the prospective manager who makes the final decision independently. High values of 'kinesthetic' and 'tactile' styles possibly indicate their tendency to get more involved in the language tasks and activities to overcome the problems and difficulties.

### Problems encountered

The interview findings represented some perceived problems in their language learning grouped and classified as follows:

#### Language anxiety

Most of the students interviewed reported that they had a feeling of stress and anxiety when they were speaking in English and especially at the test time or class presentations. For example student 3 (PS) put forward that:

"Since my primary school days, I have been very scared whenever I take exams. When I am scared, I cannot remember what I have learned in English."

The same was the case with student 5 (IME) in a different wording:

"When I am under stress or am afraid, I cannot remember things I already know. I do not know why, but it has been the case from the early days of my schooling"

"All the students with the same problem reported that they forget the grammatical structure and vocabulary items when they need them". Student 2 (PS) suggested that: "Suddenly my mind goes blank; I cannot remember anything" It is absolutely important that all of them reported this happened mostly with the subjects they did not like. This emphasizes the role of affective factors in the language teaching and learning contexts as suggested by Shakarami and Mardziah (2008).

#### Frustration

All the interviewees seemed to be frustrated about their inability to express themselves in English. They knew that their inability to express themselves in English was a barrier for them to learn. Wenden (1987, as cited in Wenden and Rubin, 1987) noted that good language learners realizes that in order to communicate well in English an individual must also be able to think in English as well. None of These students seemed capable of thinking in English and therefore could not express their

thoughts in English well. They did not know how to overcome their perceived barrier that is their inability to express themselves in English and could just perceive and describe their weakness.

### Inability to express themselves

IME interviewees perceived that their inability to express was a learning difficulty. They maintained that although they understood what was read or addressed toward them, they were unable to respond properly in their study or in their social interaction. They explained that their inability to express what they know was the reason they could not do well in their daily functioning. For instance, student 5 described his inability to express ideas as:

"I can not communicate the ideas properly. I know it in English but I cannot write it. I do not know how to spell either. I know what I want to tell, but I can not say it properly...When some one asks me a question; I know the answer but I can not answer properly, both in speaking and writing"

It seemed that this student was one step ahead of his colleagues as he understands his weakness in one special aspect of language learning and used everything in his disposal (cognitive and metacognitive strategies) to overcome his inferred problem.

### First language negative impact

All the four PS interviewees reported that they had all their thoughts in Persian and that they had problems in understanding of the written and spoken language addressed toward them. There were some occasional misconceptions and misunderstandings in their communication with others. The following extract is from student 1 (PS):

"When I read something in English, I try to imagine it in Persian, the same goes with the communication".

His inadequate English proficiency did not let him to comprehend and more importantly infer the concept which is hidden in the English texts.

The other noticed problem in the interviews was the existence of what is called "Split" by Prator as cited by Brown (2000) in his development of hierarchy of difficulty based on the strong version of contrastive analysis of the languages in which one item in the native language splits into two or more items in the new language. Our informants mostly used 'He' and 'She' interchangeably and mistakenly. The reason could be found in the existence of only one subject pronoun for addressing human with no gender difference in Persian (their mother tongue); While they had to split the subject pronouns in

English for male and female that proved to be problematic for them.

### External influences

External factors could be related to Attribution theory, advanced by Weiner (1986), suggesting that expectancy is tied to attributions about one's success. Some learners believe that their language learning success is attributable to their own actions or abilities, while others believe that their success depends on other people or on fate.

Based on the Social Cognitive theory, the learners learning environment integrate in a way that their cognitive responses, behaviours, and environment all cooperate to create learning. When learners understand the importance of learning something and believe that they can accomplish the learning task, "self-efficacy", they will then "self-regulate their learning" and try to manage and monitor their efforts to gain "mastery".

Bandura's model (1997) based on self-efficacy, defines it as "beliefs in one's capabilities to organize and execute the courses of action required to produce given attainments" (p. 3). Such beliefs influence the amount of effort people put forth and how long they continue to pursue tasks, including learning tasks, in the face of obstacles and failures. Bandura (1977) asserts, "If people believe they have no power to produce results, they will not attempt to make things happen" (in Ehrman and Oxford, 2003).

Out of the eight interviewees, six students perceived that their learning difficulties were caused by external influences (all four PS and two IME). These external influences were school, teachers and social environments. Students 1 and 4 (PS) believed that their secondary school teachers were responsible for their failure in English. Student 5 (IME) felt that the comprehension of his lessons depended on his university lectures explanation. He put it this way:

"I can understand some lecturers but some I can not. I do not know why but maybe the lecturer explanation is not clear enough. It depends on how the lecturer says it."

Student 6 (IME) expressed a similar perception with the following comment:

"The lecturer usually finds that what I've written is wrong."

"Students 2 and 3 (PS) reported that as they are mostly in contact with their country fellows and use their first language for communication, their success in English is not satisfactory".

"When I am with my friends never fancy of speaking

English, I am always speaking Persian. We speak Persian when we talk or even study".

The students did not seem to take responsibility for their own learning but blamed their school teachers, university lectures and social environments as causes of their problems in learning English. They felt that their teachers were very important in helping them to learn English; in other words they liked to be spoon fed by the teachers or lectures to lead them in their learning process. They report having been taught the vocabulary and grammar of English but the skill and strategies required for reading and listening comprehension may have been less emphasized. This would imply that they were not taught to learn English holistically but rather in a fragmented form that does not help them actually apply and use the language.

They did not speak English among themselves either. They seemed to be more comfortable speaking in a language they were familiar with. According to Wenden (in Wenden and Rubin, 1987) a good language learner needs to practice as often as possible and to place themselves in situation where they are required to speak the language. They also had difficulty expressing themselves in English and did not have the confidence when speaking in the target language. As reported by Shakarami and Mardziah (2008) affective variables are found to play a crucial role in language learning. Successful learners use their whole person in their act of language learning.

PS interviewees (all four) did not seem to have high self-motivating or self-encouraging strategies and some had negative perceptions of their ability to use and learn English. Some considered English as a barrier for them to learn other subjects and did not seem to have employed strategies to overcome this barrier. Majority of IME students on the other hand, seemed to know that the blame does not go with their school teachers and lecturers completely but their attempts, self efficacy, and practice for language learning as well. They perceived that in order to learn a language, one should encourage himself and try to socialize with others using the target language among other factors.

### Strategies used

#### Note-taking

All the students declared they took notes in class. This practice seemed to be the most favoured because all the students mentioned variations of the same practice. These seem to boost their comprehension as they reviewed their notes to: a) Simplify the notes, b) Rewrite them and c) check their notes with other students. Student 1 (PS) put it this way:

"I will simplify what the lecturer has said after the

class. That way it will be easier for me to understand. I go home and rewrite the notes.”

Note taking is used by students to help them organize what they have learned during a lesson, however, this is not a very helpful strategy for them to learn English. It does not enhance their ability to learn the language because the first prerequisite for good note taking is a good command of English. This ineffectiveness is evidenced as some students translate what they heard into Persian and write their notes in Persian. Carrier (2003) noted that listening strategies are important to help students become proficient in note taking as well. It is also questionable if these students were actually able to do note-taking accurately as they may not have needed listening skills and strategies for it.

### **Memorization**

For students 2, 3, 4 (PS), and 5, 6 (IME), memorization was the strategy used to overcome some of their learning difficulties. Student 3(P.S) said that he memorized most of the time. He asserts:

“I do not know how to write back. If the words are difficult, I can not understand them...Most of the time I have to memorize.”

Some students also believed that memorizing enabled them to express correctly. For example Student 3 (P.S) maintained:

“I do not know how to spell the words, especially long words. You know some times the spelling of the words does not match their pronunciation. I have not learnt the spelling rules before, so I have to memorize them.”

Some of them declared they could establish a good image of themselves among their peers if they can express their ideas correctly. Student 7(IME) put it this way:

“Once I was going to talk about my research topic and methodology intended to be used, it was very difficult but at last I managed to memorize all I had to say to my classmates and my lecturer”

Memorization as similar to rote-learning is the process of learning by committing facts to memory with minimal attention to meaning. Language is difficult to learn using such strategies. According to Nunan (1999) memorization is not effective as learners does not acquire information perfectly that is, one thing at a time but rather they learn many things imperfectly at the same time. They have to structure and restructure their learning in complex and non-linear ways and that is the very thing that makes

language learning very difficult. Interview results show that most of our student respondents memorized lots of language chunks without logically making any connection between them.

### **Translation**

Another strategy used to overcome their learning difficulties was translation of English words and sentences verbatim into their mother tongue. This strategy was reported by two students (5,8) from IME and three PS students (1,3,4). They translated to the language they are more comfortable with. Student 3 (P. S) described it as:

“I see the word in Persian first... my notes are all in Persian.”

Translated works included lecture notes, what the lecturers said in class and even works to be done as assignments for the class. They were all hand written in Persian first and then translated to poor English. As argued by Wenden (1987, cited in Wenden and Rubin, 1987) a good language learner must think in the intended language and try to avoid translation from his mother tongue. Student 1 (PS) once told:

“My car has got some problem, I am going to change its candles”

In order for individuals to effectively translate from one language to another, they must be equally proficient in both languages. Berne (2004) found that students with poorer language strategies skills would use translation as a means to help them understand English. The gist of the message can be lost in translation from one language to another if the translator is not proficient enough in the two languages. Therefore it is questionable if these students could effectively translate actually and still retain the information. This strategy could potentially confuse them rather than help them learn the material they were supposed to learn. Student 1(P.S) transliterated the word from Persian to English as the words “candle and spark plug” are homophones in Persian (one word with two different meanings that is candle and spark plug) that is why he confused the two.

### **DISCUSSION**

Considering the differences observed among the study's two groups of respondents, some points could be argued from the results. Social strategies were reported to be the most frequently used strategies for PS. A very high mean value of social strategies for PS students indicates their need for discussion and consultation as Political people are more involved in arguments and debate and

have to deal with other people, making dialogues orally, struggling to persuade others and justify their stance and positions, and report to others. Student 4 (PS) maintained "when facing a problem, the first thing coming to my mind is consultation and discussing it with my friends to see what they think about it", this goes in line with high value of their 'Group' learning style as well.

PS students as future politicians require lots of speaking and circumlocution skills, as they are not bound with just political jargons and have to opine in multi faceted varieties of affairs, so they have to compensate for their lack of proficiency through gestures, circumlocution, paraphrasing and asking the others and consulting ideas and concepts in their language learning as well. It is in agreement with their 'Group major' and 'individual minor' learning styles and could be related to their 'tactile and kinesthetic' styles because they prefer to be more involved in the task through socialization.

Although they use their Metacognition to manage their language learning and other affairs, monitor their performance and evaluate their success or failure; however, they were more under the constraints of social and Compensatory strategies in ESL learning and decision making rather than Metacognitive strategies. 'Their highest priority goes with socialization abilities'.

Low value of affective strategies suggests that the Political students gave their priority to other constraints other than affective ones in their ESL learning and possibly in the other acts of life as well. A rather low mean value for Cognitive strategies possibly indicates that they are not well informed about the role of conscious efforts in ESL learning. In their academic performance they pay more attention to socialization and discussion with peers rather than logically thinking and deciding independently when facing problems.

Memory strategies were at the bottom of the strategies elicited from SILL for PS; although memorization was reported to be widely used by this group in the interviews, they seemed unaware about the ways their memory and recall could be improved through strategies. It seems to agree with their rather low mean value of cognitive strategies rather than social and compensation strategies as the highly preferred strategies.

The findings of the study indicated the highest priority for Metacognitive strategies for IMEs going in line with a high value for visual and low value for auditory learning style, possibly emphasizing the importance they put on the observation and logical processing and the role of conscious thinking in their ESL learning and decision making in their occupational management task. They try to evaluate, control, and monitor their language learning progress and highly use their cognitive abilities and mental power in their decision making for language learning. They normally turn to scientific sites and their books for information and confirmation of their guesses that require more thinking about the analysis of the problems solution. This confirms their 'individual' learning styles. Student 8 (IME) put it this way:

"Figures and statistics talk to me, I can prove or reject something through statistics, the language I use is specialized (jargon), often you can consult specialized books and websites for information. They are written in simple English".

Lower value of compensation strategies for IME relative to the PS, possibly does not indicate their higher proficiency in English; but may show that they needed less compensatory devices to understand and produce special English utterances. A logical discussion may be that they use mostly specialized jargons in their study and do not need to debate and argue about abstract concepts since they deal mostly with concrete and tangible facts rather than arguments. It is supported with the high value of their 'kinesthetic' learning style (major). A rather low value of affective strategies for IME compared with their high value of overall strategy mean possibly expressed their effort to deemphasize or ignore the affective part of their being as future managers. They preferred to make up their minds based on their thought and metacognition rather than their sensation and feelings.

The lowest reported value for the strategy use was for the social strategies that is in line with their minor 'group' and major 'individual' learning styles that probably puts a second emphasis on their individual independence, of course they benefit from the others' viewpoints as their 'group' learning style is not as low as their auditory modality.

### **Pedagogical implications**

First, the findings of this study indicated that it is critical for classroom teachers to be more aware of the potential differences between their students and ensure that their modules present information that appeal to students in different proficiency levels and abilities in the use of textbooks, handouts, blackboards, tape recorders, and traditional paper and pencil tests. It seems appropriate for the instructors to utilize a variety of instructional strategies to accommodate the needs of their students, giving more interaction chances, participation in role-plays, interaction with others, and group work stimulation.... Moreover, students should be taught how to orchestrate their Language learning strategies use based on their preferred learning styles in order for them to actively and effectively learn language.

Second, the results of descriptive statistics showed that PS students in this study did not employ cognitive and affective strategies as frequently as needed at their language learning. According to Ehrman (1989), effective learners use a variety of learning strategies relevant to the characteristics of the task, to the learning material, and to their own needs (that is., the individual's personality, goals, and stage of learning).

The results of descriptive data also indicated that there

were qualitatively significant differences between each groups' perceptual learning style preferences and language learning strategies. "Students with different learning styles (e.g., visual, auditory, and hands-on) often choose strategies that reflect their style preferences" (Green and Oxford, 1995, p. 292). As a result, if classroom teachers help their students to be more aware of their perceptual preferences, namely their strengths and employ strategies that match their styles of learning, students may become more effective language learners.

On the other side, typology of learning strategy preferences can be useful for identifying groups of learners in the instructional setting. It can help learners become aware of how they initiate learning task and can help instructors plan learning activities to address individual differences. Identifying these differences can be beneficial if they are used to focus on understanding, discussion, and reflective thought about learners.

The findings of the study revealed that the strategies they used to help themselves learn English (especially PS students) did not reflect the practices of good language learners. Some of them used cognitive and metacognitive strategies such as memorization; translation and note taking in a way that did not actually help them learn English. Berne (2004) found that students with poorer language strategies skills would use translation as a means to help them understand English while they need a combination of learning strategies for successful language learning. Wenden (Wenden and Rubin, 1987) noted that students' perception of their ability may direct their behaviors in the language learning process. Students need to use affective strategies like self-encouragement and self-motivation to help them learn; obviously our two groups of informants did not seem to use these strategies in a similar way and wisely enough when learning English, rather some felt discouraged about learning. PS students used words like "difficult" and "not being able to remember words" to describe their feeling about learning English. Negative words reflect a sense of fear about the language they are learning; thereby making learning more difficult. Students of IME though; used different strategies and did not use 'discouraging' words while they were explaining their learning situation. This shows a rather more positive viewpoint for language learning and its related tasks and activities.

In a nut shell, the findings of the present study as in line with the Oxford (1996) indicate that the overall learning style does relate to language learning strategy preferences. The IME students appeared to be high strategy users compared to PS students. Learning styles affects the choice of all six strategy types when measured as a group. The outcome of the SILL indicated that IME respondents obtained significantly higher mean scores for, metacognitive, cognitive, memory, compensation, and affective strategies than did the (PS) students. The only strategy in which the PS reported a higher mean

was social strategies for second language learning that is possibly rooted in their course of study as future politicians who have to argue, debate, and socialize with others.

## CONCLUDING REMARKS

Generally speaking the findings of this study showed that our two groups of learners from two different disciplines had different learning styles and consequently used different strategies in their language learning. It seems advisable for the university curriculum writers and faculty members to classify TEP (tertiary English Program) learners to different groups based on their background knowledge, interests and more importantly their disciplines and present the teaching materials that are more appropriate and in line with their specialized courses in the supplementary English programs rather than presenting them with general language materials for all the students whose linguistic needs and backgrounds are different. It does not seem satisfactory and necessary to have a mixed language class for different students with different styles, strategies, disciplines, and interests.

## IMPLICATION FOR FURTHER STUDY

Although this study tried to uncover some of the main problems experienced by two groups of Iranian graduate students (Industrial Management Engineering and Political Science), it is by no means a comprehensive study through its limited respondents and scope. Further research is needed to work out any probable relationship between the students' academic disciplines and their language learning styles and strategies in other age groups, disciplines, genders, and nationalities in order to gain a more clear perspective for future language teaching planning and curriculum writing and providing modules for classroom activities and tasks.

## REFERENCES

- Berne JE (2004). Listening comprehension strategies: A review of the literature. *Foreign Language Annals* 37(4): 521-533.
- Brown HD (2000). *Principles of Language Learning and Teaching*. NY: Pearson Education.
- Carrier KA (2003). Improving high school English language learners' second language listening through strategy instruction. *Biling. Res. J.* 27(3): 383-410.
- Chamot AU (2004). Issues in Language Learning Strategy Research and Teaching. *Electron. J. Foreign Lang. Teach.* 1 (1): 14-26.
- Cohen DA, Weaver JS, Yuan-Tao L (1996). *The Impact of Strategies – Based instruction on Speaking a Foreign Language*. Center for Advanced Research on Language Acquisition: University of Minnesota.
- Cohen DA, Macaro E (2007). *Language Learner Strategies: Thirty Years of Research and Practice*. New York: Oxford University Press.
- Ehrman ME, Leaver BL, Oxford RL (2003). A brief overview of individual differences in second language learning. *System* 31: 313-330.
- Ehrman ME, Oxford RL (1990). Adult language learning styles and

- strategies in an intensive training setting. *Mod. Lang. J.* 74(3): 311-327.
- Grenfell M, Harris V (1999). *Modern Languages and Language Learning Strategies: In Theory and practice*. London: Routledge.
- Hsiao TY, Oxford RL (2002). Comparing theories of language learning strategies: A confirmatory factor analysis. *Mod. Lang. J.* 86(3): 368-383.
- Jimenez V, Puente A., Alvarado, J. M., and Arrebillaga, L. (2009). Measuring metacognitive strategies using the reading awareness scale ESCOLA. *Electron. J. Res. in Educ. Psychol.* 7(2): 779-804
- Macaro E (2004). Fourteen features of a language learner strategy. Working Paper #4. Oxford: Department of Educational Studies, University of Oxford.
- Nunan D (1999). *Second language teaching and learning*. Boston: Heinle and Heinle Publishers.
- Mokhtari K., Sheorey R (2002). Measuring ESL students' awareness of reading strategies. *J. Developmental Education* 25(1): 2-10.
- O'Malley C, Chamot AU (1990). *Learning Strategies in Second Language Acquisition*. Cambridge: Cambridge University Press.
- Oxford RL, Burry-Stock JA (1995). Assessing the use of language learning strategies worldwide with the ESL/EFL version of the strategy inventory for language learning (SILL). *System*, 23 (1): 1-23.
- Oxford RL (1990). *Language Learning Strategies: What Every Teacher Should Know*. New York: Newbury House Publishers.
- Oxford RL, Ehrman ME, Lavine RZ (1991). Style wars: Teacher-student style conflicts in the language classroom. In S. S. Magnan (Ed.), *Challenges in the 1990s for college foreign language programs* Boston: Heinle and Heinle pp. 1-25.
- Reid JM (1987). The learning style preferences of ESL students. *TESOL Quarterly* 21(1): 87-111.
- Schraw G, Dennison RS (1994). Assessing metacognitive awareness. *Contemporary Educational Psychology* 19(1): 460-475.
- Shakarami A, Mardziah HA (2008). *Managing Foreign Language learning and Teaching Principles Using Analytical Hierarchy Process*. Proceedings to the International Conference on Learning and Teaching-TIC 2008, Malaysia.
- Shore CM (1995). *Individual Differences in Language Development*. United States of America: Sage Publications, Inc.
- Skehan P (1998). *A Cognitive Approach to Language Learning*. Oxford: Oxford University.
- Taraban R, Keer M, Rynearson K (2004). Analytic and Pragmatic Factors in College Students' Metacognitive Reading Strategies. *Reading Psychology* 25(1): 67-81.
- Weiner B (1986). *An Attributional Theory of Motivation and Emotion*. Springer-Verlag, New York, USA.
- Wenden A, Rubin J (1987). *Learner Strategies in Language Learning*. Cambridge: Prentice Hall International.