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# Learning-how-to-learn: Sophomore university students' learning styles and strategies in Iran

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**Abstract**

Managing a class to suit students' learning styles has been widely discussed by EFL scholars and a number of studies have investigated on students' academic achievement. The purpose of this paper is to present the results of a comparative investigation into the learning styles and strategies of learners with different achievement levels of the students of Islamic Azad University (IAU), Shahreza Branch, IRAN.
50 second-year English majors were chosen from six classes on writing/ grammar, reading, listening and speaking courses. They were categorized as High-achievers, Medium-achievers and Low-achievers, on the basis of their scores on TOEFL exam containing four parts, i.e. listening, reading, writing and structure, as a criterion taken for second language learning. The participants of the study were asked to complete Oxford's Style Analysis Survey (SAS) and to attend a semi-structured interview. The data were analysed using Chi-square Analysis. Findings revealed significant differences in patterns of language use of students with different learning styles. Teachers' being aware of students' learning styles and strategies in order to match teaching styles and teaching materials to the class can be considered as one of the most important implications of this study.

Keywords: academic achievement, learning styles, learning strategies, SAS

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## 1. Introduction

Incorporating learning strategies and learning-how-to-learn into language curricula has been of growing interest since late 1980's. Such a focus helps students learn more efficiently and facilitates the activation of a learner-centered philosophy (Nunan, 1988, 1995 a, b). Generally speaking, learner's being well-developed in learning-how-to learn skills leads to their being more effective classroom learning opportunities and will then result in students' being sufficiently prepared for keeping language learning outside of the classroom (Wong & Nunan, 2011).

Learning-how-to-learn rather mastery of bodies of factual information has increasingly been the focus of the university level instruction. Tsui (2006) stated that learning is not about cramming in information. It is about learning by doing. It is about looking at issues in various ways and developing capacities, especially the ability to dig below the surface to reach the truth . ……. That is why our goal is to teach students to learn how to learn rather than merely passing information to them …. .

It is believed that learning styles and preferred learning approaches influence students' learning (Abu-Moghli, Khalaf, Halabi & Wardam, 2005). This is the baseline for finding any evident correlation between learning styles and learning outcomes (Cassidy & Eachus, 2000; Giordano & Rochford, 2005; Kia, Alipour & Ghaderi, 2009; Marefat, 2007; Moenikia & Zahed-Babelan, 2010; Ounwattana & Moungchoo, 2008; Saricaoğlu & Arikan, 2009). Many scholars tried to define the term "Learning Styles" in various ways. Learning styles can be the indicator of the way a learner perceives, interacts with, and responds to the environment and as a criterion for individual differences (Carson& Longhini, 2000). Loo (2004) cited a Kolb's (1984) definition of learning styles as the ways through which people produce concepts, rules and principles which directs them in new situations. Pierce (2000) defines learning styles as the way student prefers in learning materials (cited in Seif, 2001). Hartley (1998) interpreted learning styles as the approaches in which each person deals distinctively with different learning tasks. Oxford (2003) introduced or defined learning styles as the common approaches students apply to learn a new language or any other subject.

Mid 1970s has been the starting point of substantial growth in the literature on learning leaning styles (e.g., Oxford, 1993; Oxford & Anderson, 1995; Reid, 1987, 1995, 1998; Wintergerst et al., 2001, 2003), on learning strategies (e.g., Anderson, 2005; Cohen, 1998; Naiman et al., 1978; O'Malley & Chamot, 1990; Oxford, 1990a, 1996; Oxford & Burry-Stock, 1995; Oxford & Ehrman, 1995; Rubin, 1975; Stern, 1975; Wenden & Rubin, 1987) and on the relationship between learning styles and strategies (e.g., Carson & Longhini, 2002; Ehrman et al., 2003; Ehrman and Oxford, 1990; Ely and Pease-Alvarez, 1996; Oxford, 1990b, 2001, 2003; Rossi-Le, 1995; Wong & Nunan, 2011). In these studies, there have been various descriptions and definitions of learning styles and strategies.

Comparatively speaking, learning styles are general approaches to language learning, while learning strategies are specific ways to deal with language tasks in particular contexts (Cohen, 2003; Oxford, 2003; cited in Wong & Nunan, 2011). Kinsella (1995) states that 'Styles' is the more general term, being "an individual's natural, habitual, and preferred way of absorbing, processing, and retaining new information and skills" (p. 171). Learners deploy these styles which seem to be quite stable regardless of the subject being studied or the skill being mastered.

Learning style is a group of interrelated characteristics in which the general is larger than the specific i.e. learning style is Gestalt in which internal and external operations are derived from individual's neural biology. It combines his personality and growth and shows them as a behavior (Keefe & Ferrell, 1990; cited in Moeinikia & Zahed-Babelan, 2010). Styles and strategies applied in language seem to be among the most important variables having impact on second language performance.

Learning is under the influence of individuals' styles and learning outcome is higher for students who are able to use multiple learning styles (Felder, 1995; Reid, 1987; Reid, 1998; Claxton & Murell, 1987; Mulalic, Mohd Shah & Ahmad, 2009). Learning strategies are the specific mental and communicative procedures that learners employ in order to learn and use language (Chamot, 2005; O'Malley & Chamot, 1990, cited in Wong & Nunan, 2011). Although in most classrooms learners are unaware of these strategies, every task and exercise will be underpinned by at least one strategy. According to Macaro (2001), one of the hypotheses being tested by learning strategy researchers is that awareness and deployment of strategies will lead to more effective language acquisition. The goal of learning strategies, as mentioned by Weinstein and Mayer (1986) is to "affect the learner's motivational or affective state, or the way in which the learner selects, acquires, organizes, or integrates new knowledge" (p. 315). Learning strategies enable students to take more responsibilities of their own language learning and personal development. "Learners' proactive contribution to enhancing the effectiveness of their own learning" (Dörnyei, 2005) is essential in developing skills in learning-how-to-learn.

Learners' learning styles and their own preferences may differ in various situations. For instance, some learners, prefer to learn by reading textbooks, while others prefer a verbal explanation (Riazi & Riasati, 2007, cited in Bidabadi & Yamat, 2010). In addition, people may differ in how they most effectively show their understanding; either orally or in writing and through graphs or figures. Concerning the importance of learning styles in various contexts, and in order to explain individuals' learning style preferences, several learning style models have been developed. The "Memletics Model" is one of the learning style models assessed by the Memletics Learning Styles Inventory, which is based on the concept that everyone has a mix of learning styles, classifying learning styles into seven different types of learners: visual, aural, verbal, logical, physical, solitary, and social (advanogy.com, 2003-2007).

In connection with language learning styles, Willing (1994) identified four major styles: communicative, analytical, authority-oriented and concrete derived from learner strategy preferences. According to Felder (1996), Kolb' learning style model classifies students into four types of learners based on their preferences for how they take in and how they internalize information. Individual combinations of these preferences yield the following four learning styles: accommodator, diverger, assimilator, and converger (cited in Loo, 2004) The results of the Myers-Briggs Type Indicator (MBTI ) classify learners as extroverts or introverts, sensors or intuitions, thinkers or feelers, and judgers or perceivers. Christison (2003) distinguishes between cognitive style (field dependent versus field independent, analytic versus global, reflective versus impulsive); sensory style (visual versus auditory versus tactile versus kinesthetic) and personality styles (tolerance of ambiguity, right brain versus left brain dominance).

Oxfords' (1993) study on the five learning styles contrasts identified in her Style Analysis Survey (SAS) is a research most closely related to the links between learning styles and strategies, including: visual versus auditory (the use of physical senses for study and work), extroversion versus introversion (dealing with other people), intuitive-random versus concrete-sequential (handling possibilities), closure-oriented versus open (approaching tasks), global versus analytic (dealing with ideas). Each of the five style contrasts constitutes a comparative style continuum. Recognizing these learning styles, recognizing their strengths and thus expanding their learning potential learning styles of great is important to learners.

As noted by Oxford (1993), once learners are aware of their own learning styles, it enables them to adapt their learning strategies to suit different learning tasks in particular contexts. Learners can take advantages of their learning styles by matching learning strategies with their styles; similarly, learners can compensate for the disadvantages of their learning styles to balance their learning by adjusting learning strategies (cited in Wong & Nunan, 2011).

2. Learning styles and strategies and learners' level of proficiency

Regarding the importance of knowledge of strategies, Nunan (1999) argues that learning will be more effective, if learners have greater consciousness of what they are doing and if they are aware of the processes underlying the learning, leading to the students' being highly motivated. Gan (2004) explored the relationship between language proficiency and self-directed language learning (cited in Wong & Nunan, 2011). Through carrying out a qualitative investigation into the attitudes and strategies of nine successful and nine unsuccessful Chinese EFL learners, Gan et al. (2004) found that attitudes towards the learning of the target language rather than specific strategies seemed to differentiate the successful from the unsuccessful learners.

Since there is a paucity of data on the relationship between strategies an language proficiency (as noted in Wong & Nunan, 2011), the study reported hereafter, will attempt to shed light on both differences in strategy awareness and attitudes to learning (carried out by Jones et al., 1987; Gan et al., 2004 ), but on differences in the use of the specific strategies ( as the comparative investigation of the strategy use of Effective versus Ineffective learners, done by Wong & Nunan, 2011) and not only on Low and High achievers , but also on Medium achievers.

## 3. The Study

### *3.1. Objectives*

This study was aimed at exploring if there are significant differences between High-proficient, Low- proficient and Medium- proficient learners and their learning styles, strategy preferences and patterns of practice and use, examined in four different classes including: writing, reading, listening and speaking courses at the tertiary level in IRAN, to shed light on the effect of learning styles and strategies on second language learning, and to explore any consistency with findings of studies in other contexts.

### *3.2. Research Questions*

With regard to some aspects of language learning, the present study attempted to answer the following research questions:

1) Are there any significant differences between the overall learning styles of High, Medium and Low proficient learners?
2) Are there any significant differences in the individual learning strategy preferences of High, Medium and Low proficiency levels?

### *3.3. Variables*

The grades obtained on TOEFL exam was the independent variable. The independent variable consisted of three levels:

"Higher proficient, defined as those who obtained A or B grade on the examination, "Medium proficient", as learners who obtained something in the middle ( C or D grade ), and "Low proficient" learners as E or F grade obtainers. The dependent variable was the students' responses to a questionnaire on strategy preferences, learning practices and attitudes.

### *3.4. Subjects*

The participants of this study were a group of 50 Iranian EFL Sophomore University students ( both third and fourth semesters), majoring in Translation at the Faculty of Humanities, English Department, Islamic Azad University (Shahreza Branch), IRAN. They were selected from 6 classes on four different language skills, including: writing, reading, listening & speaking courses. Of

these, 10 got A or B ( High –achievers ), 22 got C or D ( Medium- achievers ), and the remaining 18 received E or F (Low - achievers ) on that exam.

### *3.5. Instruments*

The instrument utilized in this survey consisted of 2 parts:

I. A forty- item questionnaire ( actually a revised version of the Original Oxford's (1993) Style Analysis Survey (SAS)), was the first part of the survey, through which the participants were asked to indicate their in-class and out-of-class strategy attitudes rated and scored on a five-point scale. The chosen list taken from the first five parts of the model out of eleven, was related to five learning styles contrasts identified as : visual versus auditory (the use if physical senses for study and work), extroversion versus introversion (dealing with other people), intuitive-random versus concrete-sequential (handling possibilities), closure-oriented versus open (approaching tasks ), global versus analytic (dealing with ideas).

II. The second part was designed for some information to be orally solicited as:

* The amount of time (hours per week) to English practice (in-campus and off-campus), * Regular classes conducted in English (in percentage), * The importance of English, * Self-evaluation of language proficiency level (knowing the vocabulary, expressions & grammar to talk about basic subjects in English), * The degree of English learning enjoyment.

### *3.6. Procedures*

The questionnaire was distributed and the data were collected and then analyzed. Four students were randomly selected from each High, Medium, and Low achievement group ( N=12 ). A 10-to-15 minute person-to-person interview was also conducted including the twelve participants of aforementioned achievement groups.

## 4. Results and Discussions

In this section the results are going to be analyzed and displayed according to the following Tables (in %), considering the first research question.

### *4.1. Low, Medium and High proficient learners' learning styles differences and contrasts*

Table 1.Using physical senses for study and work ( Visual vs. Auditory )

| **Visual** | Never | Rarely | Sometimes | Often | Always |
|---|---|---|---|---|---|
| Low | 8.33 | 2.78 | 27.8 | 16.7 | 44.44 |
| Medium | 12.5 | 23.6 | 20.8 | 41.7 | 23.61 |
| High | 6.94 | 16.7 | 6.94 | 15.3 | 9.72 |
| **Auditory** | | | | | |
| Low | 11.1 | 23.6 | 22.2 | 18.1 | 25 |
| Medium | 8.33 | 11.1 | 27.8 | 48.6 | 26.39 |
| High | 1.39 | 2.78 | 33.3 | 9.72 | 8.33 |

According to Table (1), the dominant style of Low-proficient learners (44.4%) and Medium-proficient learners (41.7%) would have been Visual, whereas Medium learners had a higher tendency toward being an Auditory style than High and Low Proficient learners. Comparison of

percentages indicate that High-proficient learners tended to be Auditory than Visual and this preference was felt for Low-proficient learners, as being Visual other than Auditory.

Table 2. Dealing with other people ( Extroverted vs. Introverted )

| **Extroverted** | Never | Rarely | Sometimes | Often | Always |
|---|---|---|---|---|---|
| Low | 15.3 | 25 | 29.2 | 16.7 | 13.89 |
| Medium | 2.78 | 12.5 | 69.4 | 26.4 | 11.11 |
| High | 0 | 2.78 | 5.56 | 16.7 | 30.56 |
| **Introverted** | | | | | |
| Low | 8.33 | 8.33 | 22.2 | 16.7 | 44.44 |
| Medium | 19.4 | 29.2 | 31.9 | 30.6 | 11.11 |
| High | 12.5 | 20.8 | 12.5 | 5.56 | 4.16 |

Table (2) indicates that Low-proficient learners preferred to be more Introverted (44.4%) than Extroverted (although the difference in the obtained percentages was not significant). High-proficient learners had a high preference over being Extroverted (30.56%) than being Introverted (4.16%).The big difference between the percentages of Extroverted - Medium learners (69.4%) and Introverted – Medium learners indicates that the learners' highly-preferred style is Extroverted style instead of Introverted style in this respect.

Table 3. Handling possibilities ( Random-Intuitive vs. Concrete-Sequential )

| **Random-Intuitive** | Never | Rarely | Sometimes | Often | Always |
|---|---|---|---|---|---|
| Low | 51.4 | 20.8 | 15.3 | 6.94 | 5.55 |
| Medium | 18.1 | 29.2 | 52.8 | 9.72 | 12.5 |
| High | 1.39 | 5.56 | 5.56 | 20.8 | 22.22 |
| **Concrete-Sequential** | | | | | |
| Low | 23.6 | 16.7 | 23.6 | 18.1 | 18.06 |
| Medium | 20.8 | 15.3 | 36.1 | 27.8 | 22.22 |
| High | 16.7 | 2.78 | 9.72 | 13.9 | 12.5 |

Table (3) is indicative of the way the students try to handle possibilities to be classified as Random-Intuitive versus Concrete-Sequential. Low-proficient learners handled possibilities not intuitively since 51.4% of the answered the related questions extremely negatively. Medium-proficient learners (52.8%) outperformed High-proficient learners in intuitive handling of possibilities (22.22%). About 23.6% of the Low-proficient learners also reacted as to be Concrete-Sequential learners, showing their manner being involved in dealing with possibilities. Medium-proficient learners tended to be more Concrete-Sequential (36.1%) than High-proficient learners (16.7%). High-achievers showed rare preference over being Concrete-Sequential style.

It can be inferred that Low-proficient learners Like to be Concrete-Sequential (23.6%), and the willingness toward being Intuitive-Random was high for both Medium and High proficient learners, but with a significant difference in the percentage of the participants for the two levels (52.8% and 22.22%).

Table 4. Approaching tasks ( Closure-Oriented vs. Open )

| **Closure-Oriented** | Never | Rarely | Sometimes | Often | Always |
|---|---|---|---|---|---|
| Low | 15.3 | 27.8 | 15.3 | 23.6 | 18.06 |
| Medium | 20.8 | 25 | 30.6 | 23.6 | 18.06 |
| High | 4.17 | 6.94 | 19.4 | 12.5 | 12.5 |
| **Open** | | | | | |
| Low | 13.9 | 16.7 | 20.8 | 26.4 | 22.22 |
| Medium | 19.4 | 26.4 | 25 | 29.2 | 22.22 |
| High | 4.17 | 13.9 | 18.1 | 9.72 | 9.72 |

As it can be obtained from Table (4), High-proficient learners got some close percentages, with a slight difference (19.4% as Closure-Oriented learners, and 18.1%, as Open learners ). Medium-proficient learners approached the tasks roughly the same, in a Closure-Oriented manner and also in an Open manner as well (30.6% and 29.2%). They were split between Closure-oriented and Open style, with the former style just edging out the latter style.

Table 5. Dealing with ideas ( Global vs. Analytic )

| **Global** | Never | Rarely | Sometimes | Often | Always |
|---|---|---|---|---|---|
| Low | 19.4 | 13.9 | 13.9 | 20.8 | 31.94 |
| Medium | 18.1 | 15.3 | 44.4 | 18.1 | 26.39 |
| High | 9.72 | 9.72 | 11.1 | 11.1 | 13.89 |
| **Analytic** | | | | | |
| Low | 12.5 | 26.4 | 15.3 | 26.4 | 19.44 |
| Medium | 11.1 | 19.4 | 41.7 | 13.9 | 36.11 |
| High | 5.56 | 13.9 | 8.33 | 15.3 | 12.5 |

Table(5) demonstrates that Low-proficient learners preferred to deal with ideas Globally other than Analytically (31.94%), while the Medium-proficient learners were split between Global style and analytic style, with Global students just edging out the Analytic learners(41.7%). The higher percentage was allocated to Analytic learners with high-proficient level (15.3%) than High-proficient Global learners (13.89%), with a not that significant difference.

According to the above Tables, the dominant learning styles of Low proficient learners were exactly split between Visual style and Introverted style (44.44%) followed by Global (Holistic) style (31.94%). Their lowest preferred style was for Random-Intuitive style (51.4% responded "Never"). Medium learners showed preference for Extroverted style (69.4%) followed by Random-Intuitive style (52.8 5%) and Auditory style (46.8%). Their least preferred style was Open style (29.2%). The three top preferred styles adopted by High-proficient learners were Auditory (33.3%), Extroverted style (30.56%) and Random-Intuitive (22.22%). They showed the least amount of preference for Global (Holistic) style (13. 89%).

The Chi-square analyses for the cross-effects (mutual effects) between proficiency levels and learning styles yielded the following data:

For Low-proficient learners, having visual style the Chi-square analysis was: d.f.=1, Chi-square= 10.935 significant at .001, p-value (sig )< .o5( at 5% level of significance ). According to the obtained statistics, this highly significant difference shows remarkable effect of proficiency level on students' adopted learning style. The interactional (cross) effects between achievement levels in terms of learners' learning styles were highly significant at the first two levels of proficiency (i.e. Low & Medium) of Extroverted style: d.f.= 1, chi-squares =22.572 (Low) and 19.427 (Medium), at .000 level of significance, p< .05 (at 5% level of significance); Another significant difference between Low-proficient learners and their adopted style (Introverted style ): d.f.= 1, Chi-square = 29.757, at .000 significant level, p<.05; Low and Medium proficient learners with Random-Intuitive Style and their highly significant difference between their

proficiency level and adopted 9 preferred ) learning style: for Low achievers: d.f. = 1. Chi-square = 48.611, at .000 level of significance, p< .05, and for Medium achievers: d.f. = 1, Chi-square = 25.568, at .000 level of significance, p < .05.

*4.2. Low, Medium and High proficient learners' learning strategy preferences*

(Considered as the obtained results referring to the second research question)

Strategy preferences lead to appropriate styles taken by the students. The most and least preferred strategies of all three achievement levels were as below:
The **most** preferred strategies of **Low-proficient** learners:
I prefer to learn with TV or video rather than other media.
When I am in a large group, I tend to keep silent and listen.
I follow directions carefully.
I don't worry about comprehending everything.
I prefer short and simple answers rather than long explanations.

The **least** preferred strategies of **Low-proficient** learners:
I need oral directions for a task.
I want to understand something well before I try it.
I trust concrete facts instead of new, untested ideas.
I let things pile up on my desk to be organized eventually.
I ignore details that do not seem relevant.

The **most** preferred strategies of **Medium-proficient** learners:
I remember things better if I discuss them with someone.
I learn better when I work or study with others than by myself.
I try to find many options and possibilities for why something happens.
I like to plan language study sessions carefully and do lessons on time or early.
I ignore details that do not seem relevant.

The **least** preferred strategies of **Medium -proficient** learners:
Charts, diagrams, and maps help me understand what someone says.
I meet new people easily by jumping into the conversation.
I like to discover things myself rather than have everything explained to me.
My notes, handouts, and other school materials are carefully organized.
I prefer short and simple answers rather than long explanations.

The **most** preferred strategies of **High-proficient** learners:
I remember things better if I discuss them with someone.
I experience things first and then try to understand them.
I am open-minded to new suggestions from my peers.
I pay attention to specific facts or information.
I like to know how rules are applied and why.

The **least** preferred strategies of **High-proficient** learners:
I understand lectures better when professors write on the board.
I learn better when I work or study with others than by myself.
I add many original ideas during class discussions.
I let deadlines slide if I'm involved in other things.

I'm good at catching new phrases or words when I hear them.

According to the above high and low strategy preferences of all three achievement levels, it can be inferred that strategies each individual student adopts, will be a reasonable determinant of his/her style(s) of leaning in the class or even in a natural setting and consequently, as a fruitful indicator for the teacher(s) to suit their teaching style(s) to the students' learning styles.

For the remaining parts ( other learning styles and their cross-effects with proficiency levels ), the obtained statistics appeared to show no significant distribution and difference between learners' levels of proficiency and their most preferred learning styles, since the Chi-squares taken from the cross-effects of all levels of proficiency and learning styles preferences were above P-value ( sig> or = .05, p< .05, at 5% level of significance, hence turned to be insignificant and consequently ineffective. It can inferred that learners' most general preferred learning styles of whole learners were a mixture of different learning styles, depending on the nature of courses they have and most of the students preferred extroverted style as their primary or secondary style.

For the second part of the study, the participants took part in a person -to-person 10-15-minute interview, as a feedback to complement the findings of the study. In this follow-up interviews students said that one reason for their being passive during the class is because of lack of sufficient knowledge and awareness of how to manage to become active in class.

## 5. Conclusion

The present study aimed at investigating possible differences in learning styles and strategies to distinguish Iranian Sophomore University students' learning styles preferences. The dominant learning style preferences of Iranian EFL students revealed that the majority of them considered themselves social communicative extroverted learners characterized as field dependent and active (Willing, 1994; Nunan, 1999; Wong & Nunan, 2011; Gan, 2004).

Since Iranian students come to university with diverse general English background (without any natural exposure to English), it is a must for college instructors to take the learners' individual differences into account, not only in terms of their proficiency levels, but also in connection with student motivation, and student knowledge of styles and strategies. In the last decades, a considerable amount of research has been focused on investigating the relationship among teaching strategies, learning styles and academic achievement in higher education ( Akdemir & Koszalka, 2008; Arthurs, 2007: Bidabadi & Yamat, 2010; Gan, 2004; Contessa, Giardiello & Perlman, 2005). Effective matching between teaching and learning styles can only be achieved when teachers are aware of their student needs, capacities, potentials and leaning style preferences (Zhenhui, 2001).

The findings of this study are in the same line with the findings of Wintergerst, Decapua, and Verna (2003) who detected the preferences of group activities of ESL/EFL students and the findings of Moenikia and Zahed-Babelan (2010) who found a considerable importance of learners' being social, verbal and aural, and the roles of these leaning styles in second language learning. The results of this study is also in accordance with McCarthy's (1980) findings, pointing out that instructors should utilize a variety of activities and tasks to make it possible for the students to learn in their own preferred style(s) and also to get a chance to develop other styles as well.

## 6. Pedagogical Implications

Many research studies such as Smith (1985), Claxton & Murrell (1987), Willing (1988), and Riazi & Riasati (2007) claim that matching learning methods with learning style preferences lead to academic achievements. So, learners' learning styles and teacher instructional methods should be matched in order to enrich the students' learning outcomes (performances) and provide an everlasting flexible environment for the students.

In summary, considering variables influencing performance in a second language, language learning styles and strategies appear to be among the most important ones. Oxford (1993) notes that students' being aware of their own learning styles make it possible for the learners to adjust their learning strategies in order to suitably match different learning tasks in particular contexts (cited in Wong & Nunan, 2011).

A learning-how-to-learn dimension into language pedagogy has always been incorporated and argued for a broad range of pedagogical contexts and situations. Teachers/researchers' applying both qualitative and quantitative data collection methods, including questionnaire and interview are beneficial coupled with learner training and helping learners, especially less effective language learners, identify their weaknesses on one hand and their strengths on the other hand, could have a great positive impact on learning outcomes. Teachers should be fully aware of their students' individual style preferences that consequentially offer significant strengths in learning and working. Learning will be enhanced by students' being aware of the styles that they do not normally apply. Teachers, colleagues and peers in class must give a hand to take the best and the most out of teaching /learning program. Students should be encouraged to explore their most or least preferred learning styles to be applied as a facilitator of their learning, which is the ultimate goal of teaching.

According to Nunan (1999), teaching learners the strategies underlying their learning results in students' higher motivation (171-2), since not all learners automatically know which strategies work best for them. Thus, training strategies explicitly, accompanied by the way each individual deals with learning and experimenting with different strategies can lead to more effective learning. Incorporating learner strategy training into learning programs has always been advocated by educators and researchers.

Here are some suggestions and tips for teachers. For instance, the teacher should enforce time limits in the L2 classroom to keep extraverts' enthusiasm to a manageable level. As Oxford (2003) states, extraverts can also be rotated in charge of leading L2 discussions to get the chance of participating equally with extroverts. Offering variety and choice is the central point to teaching both intuitive-random and sensing-sequential learners. Highly organized structures and multiple options and enrichment activities are possible varieties to be implemented in class for sensing-sequential learners and for intuitive-random students, respectively.

Furthermore, for the closure-oriented and open learners, as suggested by Oxford (2003), skilled L2 teachers can provide a good balance for each learner in the classroom, and sometimes consciously create cooperative groups including both types of learners, even mixed with some other types of learners to make it possible for them to benefit from collaboration with each other. For global (holistic) and analytic students, there is a great need on part of the teacher to provide a balance between generality and specificity of the global and analytic learners to make the process of learning effective. Assessing leaning styles and strategy use of the students by teacher can benefit them to reach great understanding of their styles. On the other way around, not only students' styles and strategies could be assessed by teachers, but also teachers' styles and strategies need to be assessed (by themselves) to let them be aware of their preferences and avoid the possible biases in the L2 environment.

Teachers cannot systematically provide the needed instructional variety if they don't obtain adequate knowledge about their individual styles preferences. Teachers should know that no L2 instructional Methodology single L2 methodology fits all students and classes. According to Oxford (2003), the best version of communicative approach could possibly fit a class with a variety of different stylistic and strategic preferences.

Finally, teachers should be road-map providers to approach learning styles systematically and create student - student and student - teacher collaboration and interaction consciously, deliberately and effectively.

## 7. Suggestions for Further research

In the present study, the focus was on overall effect of students' learning styles and preferences on their leaning in general. Some more studies may be required to examine the influence of students learning styles and strategy preferences on different language skills ( i.e. writing, reading, speaking, and listening in specific). Cultural differences could be another area of research since learners may show different modalities for their learning. For instance, students from Asian culture are said to be often highly visual, with Koreans being the most visual, or Hispanic learners are frequently considered to be auditory. Iranian culture may be taken into consideration to identify students learning styles, as well.

Considering the way motivation relates to learning style and a longitudinal study, when the present participants are asked to answer the same questionnaire after a month or even longer (a period of a year), could be another area of investigation.

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