Effects of Learning Styles on Writing Skills of First Year LMD Students of English as a Foreign Language in Mohamed Lamine Debaghine Setif 2 University

Iman Raha * Said Keskes **

ملخص
تهدف هذه الدراسة إلى استقصاء فعالية أساليب التعلم المختلفة في تطوير مهارات الكتابة لدى الطلبة. في محاولة جادة لاستكشاف احتياجات الطلبة على هذا المستوى، وحذراً أنهم يعانون من بعض الصعوبات في مجال الكتابة، وعلل المشكلة الأساسية التي تواجه المتدربون في هذا السياق، هي أنهم تعليمهم دون تعظيمهم بطرق أساسية وآليات التعلم المختلفة. وفي هذا السياق تم اختيار عينة عشوائية من طلبة السنة الأولى ومن ثم تقسيمهم إلى مجموعة ضابطة وأخرى تجريبية. وقد تم تقديم المجموعة التجريبية بجعلهم يدركون اهمية أساليب التعلم حيث تم تقسيمهم إلى مجموعات صغيرة حسب النشاط، كما تم تحديد المهام والأنشطة لكل مجموعة وفق الأسلوب المختار. النتائج المتوصل إليها بعد الختام -الذي اعتبر كاختبار قبلي وبعدين- أثبتت أن أداء المجموعة التجريبية كان أفضل بكثير من الضابطة من حيث أداء مهارات الكتابة.

الأسماء المفتاحية: أساليب التعلم، مهارات الكتابة، اختبار قبلي، اختبار بعدي، مجموعة تجريبية، مجموعة ضابطة.

Résumé
La présente étude a pour but d'examiner l'efficacité des différents styles d'apprentissage dans le développement des compétences rédactionnelles. Dans une tentative d'exploration des besoins des étudiants à ce niveau, nous avons constaté que l'un des principaux problèmes qu'ils rencontrent est qu'ils ont reçu un enseignement sans que les styles d'apprentissage n'y soient pris en considération. Un échantillon de première année a été choisi aléatoirement puis divisé en deux groupes dont l'un est de contrôle et l'autre est expérimental. Le group expérimental a été suivi et encadré de manière à ce que les étudiants prennent pleine conscience de l'importance des styles d'apprentissages. Ces étudiants ont été divisés en petits groupes hétérogènes selon le style préféré, et les activités ont été définies en fonction du style d'apprentissage. Les résultats obtenus après le test écrit, considéré comme test antérieur et postérieur, ont montré que la performance du groupe expérimental était bien meilleure de celle du groupe de contrôle.

Mots clés : Compétences rédactionnelles, styles d'apprentissage, test antérieur, test postérieur groupe de contrôle, groupe expérimental.

Summary
The aim of this study is to investigate the effectiveness of using learners' different learning styles in developing the writing skills. Prior to the exploration of their specific needs, it was found that they experienced writing difficulties. One of their major problems is that they were taught regardless to their different learning styles. Two classes of first year students were randomly chosen and divided into a control and an experimental group. The Grasha-Riehman Learning Style Survey (GRLSS) was distributed given to the experimental group to help them be aware of their learning styles. They were divided into small heterogeneous groups according to their learning styles. The activities used in teaching were based on their learning styles. A writing test was used as a pre-test and a post-test. The analysis result of the pre-test showed no statistically significant differences, which in turn proves the equivalence of the two groups. Meanwhile, the analysis result of the post-test showed the following: There are statistically-significant differences between the experimental group and the control group at a significance level of 0.05 for the interest of the experimental group. The results of this investigation statistically support the research hypothesis.

Keywords: control group, experimental group, learning styles, pre-test, post-test, writing skills.

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**Introduction**

None of us as teachers can deny the fact that sometimes we find ourselves in the situation where our students are bored in our classes (Glasgow & Hicks, 2003). They are not motivated, confused and look tired. If so, it is time to think about a different teaching style in our classes (Killen, 2006). Learners learn in different ways such as hearing, seeing, taking notes, imagining and visualizing among many others (Rayner & Cools, 2012). These ways are called learning styles. Much research has been done on learning styles in recent years (Armstrong & Mahmud, 2008; Chen & Tsai, 2008; Demirbas & Demirkan, 2007; Garcia, Amandi, Schiaffino, & Campo, 2007; Herbert & Stenfors, 2007; Hyde, 2007; Kayes, 2007; Reynolds & Vince, 2007; Welsh, Dehler, & Murray, 2007; Sievers, 2007). A sizable body of empirical research suggests that students learn better when they are taught in forms that fit their way of learning (Lovelace, 2005; Ogden, 2003). Does this mean that we should adapt our teaching to fit our students’ learning styles?

Actually, the concept of learning styles has been differently defined. In this study, learning styles refers to an individual’s characteristics and preferred ways of gathering, interpreting, organizing and thinking about the information (Davis, 1993, p. 185 as cited in Martin et al., 2006, p. 174). Learners do acquire, retain the information differently and that is why some learners are visual learners, while others are auditory or kinesthetic learners. Visual learners learn by means of charts, and pictures. Auditory learners learn by listening to lectures and reading. Kinesthetic learners learn by doing. Because of these different learning styles, teachers should incorporate in their curriculum activities related to each of these learning styles and consequently give an equal opportunity to their learners to succeed in their classes (Warren, 1997).

Cuaresma (2008) claims that while we use all of our senses to take in information, we each seem to have preferences in how we learn best and in order to help all students learn, we need to teach to as many of these preferences as possible.

When the learning styles of students in a class and the teaching style of the instructor are incompatible, with adverse potential effects, the students may be bored and become inattentive in class, do poorly on tests, get discouraged about the course, the curriculum and themselves, and in numerous cases change to another programme or drop out from school (Felder & Spurlin, 2005, p.103). Teachers, confronted by low-test grades, unresponsive or hostile classes, poor attendance, and dropouts, may become overly critical of their students “making things even worse” or begin to doubt if they are in the right profession (Felder & Henriques, 1995, p. 21).

The major aim of this study is to investigate the effectiveness of teaching activities based on the students’ learning styles in developing their writing skills. Developing the writing skills requires teachers’ and students’ awareness and understanding of the different learning styles. Knowing students learning styles can help in many ways enhance learning and teaching. First, teachers can benefit by getting information about how their students can learn better, which afford the teachers with a deeper understanding and help them in preparing the learning objectives and content. Second, making students aware of their learning styles can help them understand their strengths, weaknesses, and why sometimes learning is difficult for them. Furthermore, providing students with learning content and activities that fit their preferred way of learning can make learning easier for them. This hypothesis is supported by many educational theorists like (Coffield, Mosley, Hall, & Ecclestone, 2004, and Pashler et al., 2008). This matching hypothesis is supported by educational theories. Moreover, studies such as those by Bajraktarevic, Hall, and Fullick (2003) demonstrated supportive results.
Through interviewing both students and teachers in the Department of English at Mohammed Lamine Debaghine Setif 2 University, it became clear that most students find it difficult to write in English. Writing is challenge for most first year LMD students of English, even teachers are wondering about this dilemma and struggling with their students when it comes to write just small paragraphs.

The researcher used the focus group discussion to explore this issue, it was found that students really experience many difficulties in writing; they are not accustomed to write, they cannot express their ideas on paper, and one major factor is that most teachers use the same writing instructions and activities with the whole class depreciating their students’ different learning styles.

Since the purpose of the present study is to identify students’ different learning styles, two questions were raised:

- What are the different learning styles of first year LMD students of English at Mohammed Lamine Debaghine Setif 2 University?

- Do preferred learning styles help first year LMD students of English at Mohammed Lamine Debaghine Setif 2 University improve their writing skill

**Hypothesis of the Study**

The main purpose of the present research is to examine the effectiveness of different learning style on science. Prior research and theory served as the foundation upon which the study was developed. In an attempt to expand knowledge in the field of education, the following hypothesis was developed and served as the guiding force of the study.

Using teaching activities based on students’ preferred learning styles will improve their writing skills.

In this experimental study, the independent variable which was manipulated is the activities based on preferred learning styles and the dependent variable which was measured is the writing skills.

1. **Literature Review**

Learning styles refer to a range of competing and contested theories that aim to account for differences in individuals’ learning (Coffield et al., 2004). These theories propose that all people can be classified according to their style of learning. A common concept is that learners differ in how they learn.

The concept of learning styles has been studied in various ways. Learning styles have been defined as a certain specified pattern of behaviour according to which the individual approaches learning experience. Reid (1995) defined learning styles as “an individual’s natural, habitual, and preferred way(s) of absorbing, processing and retaining new information and skills” (p.viii). Grasha (1996) has defined learning styles as, “personal qualities that influence a student's ability to acquire information, to interact with peers and the teacher, and otherwise participate in learning experiences” (p. 41). Felder et al. (2002) described learning style as the way a learner acquires, retains and processes information. They defined the concept of learning style using a method of the information processing perspective that describes the unique individual approach of perceiving, encoding, storing and retrieving information.

Blackmore (1996) suggested that one of the first things educators can do to aid the learning process is to simply be aware that there are diverse learning styles in the student population. It is well known that people have different learning styles that work best for them. One approach for an instructor to take is to address a variety of learning styles with their teaching plan. It is also important to encourage students to understand their preferred learning style. By the time students reach university it is often assumed that they have figured out the most productive way to study. In fact this is not always true. Teachers should make students aware of the various learning styles and encourage them to
consider their preferred style in their learning experience.

The concept of learning style can be important in improving the teaching/learning process, not only in informing teaching practices but also in bringing to the surface issues that help faculty and administrators think more deeply about their roles and the organizational culture in which they carry out their responsibilities (Diaz & Cartnal, 1999). Some studies show that identifying a student's style and then providing instruction consistent with that style contribute to more effective learning (Claxton & Murrell, 1987, p. iii).

According to Keefe (1979, p. 9), field dependence/independence measures the degree to which an individual uses an analytical as opposed to a global way of experiencing the environment (cited in Blankley & Tomlyn, 2008, p. 233). Field dependent individuals engage a global organization of the surrounding field, and perceive parts of the field as fluent. In contrast, field independence learners discern discrete parts of the field, distinct from the organized background. On the one hand, field dependent learners depend on cues and structure from their environment and then make the learning process contingent on their experience in that environment. Field dependent learners tend to have short attention spans, are easily distracted, and prefer casual learning environments. In addition field dependent learners choose instructional situations that elicit their feelings and experiences. Field dependent persons are also more socially oriented, less achievement-oriented and less competitive, than field independent individuals (Blankley & Tomlyn, 2008, p. 231). Field-independent students are usually intrinsically motivated, enjoy analytical activities, are individualistic in their thinking and readily engage in activities in the classroom. Field dependent students are extrinsically motivated, very aware of the social environment, take a more communal view in their thinking, and will not engage in activities until they have checked them out to see if they make sense or are safe.

There are many approaches to identify students' learning style preferences. As a result of the intense interest on learning styles, a number of models and scales were proposed to identify how a student learns (Berrill et al., 2006): the Gregorc model presented four learning styles (i.e. concrete sequential, abstract sequential, abstract random and concrete random; Ekici, 2001); the Myers-Briggs Type Indicator (Myers, & McCaulley, 1986); the Felder-Silverman Learning Style Model (sensing/intuitive, visual/verbal, inductive/deductive and active/reflective; Felder, & Silverman, 1988); Kolb’s Model (active/reflective, abstract/concrete; Kolb, 1984); the McCarthy Learning Style Model (Dunn, & Dunn, 1993) and the Grasha Riechmann Learning Style Scale (GRLSS; Grasha, 1996) can be given as examples. On the basis of all these models, it can be said that there are data gathered about cognitive styles and research findings aimed to find out individual differences and varying evaluation of learning approaches (Keefe, & Ferrell, 1990).

Selected learning style instruments have been well-researched and reported extensively in the literature; others are the products of interviews by their developers, clinical applications, or other research studies. Instruments that have been validated through experimental investigations represent a more solid foundation (Riding & Rayner, 2000). With a variety of learning style instruments in use, it is important to select an appropriate instrument according to the unique requirements of the learning context (Sims & Sims, 1995, p. 200).

Many important factors to consider when selecting a learning style instrument, they include: considering the intended use of the data to be collected, finding an instrument and matching it to the intended use, and finally selecting the most appropriate instruments (Diaz & Cartnal, 1999). Other concerns included the validity of the instrument, reliability issues, test administration difficulties and cost.

Of the different learning style instruments, the Grasha-Reichmann Student Learning Style
Scales (GRSLSS) seems ideal for assessing student learning preferences in a college-level distance learning setting. The GRSLSS (Hruska-Riechmann & Grasha, 1982; Grasha, 1996) was chosen as the tool for determining student learning styles in the present study based on criteria suggested by James and Gardner (1995).

The learning style typology developed by Grasha and Richmann is distinct from the other models in that it is based on students’ responses to actual classroom activities rather than on a more general assessment of personality or cognitive traits. Grasha argues that this situation-specific approach is more likely to be reliable and valid. Using a personality type approach requires the researcher to extrapolate the results to classroom settings; whereas the Grasha–Riechmann typology is designed to help faculty identify teaching techniques that address particular learning styles. Moreover, Grasha-Riechmann Student Learning Style Scales (GRSLSS) was chosen to collect the data from the sample because it seems ideal for assessing student learning preferences in a college-level. The GRSLSS (Hruska-Riechmann & Grasha, 1982; Grasha, 1996) was chosen as the tool for determining student learning styles in the present study based on criteria suggested by James and Gardner (1995). First, the GRSLSS is one of the few instruments designed specifically to be used with senior high school and college/university students (Hruska-Riechmann & Grasha, 1982). Second, the GRSLSS promotes an optimal teaching/learning environment by helping faculty design courses and develop sensitivity to student/learner needs. Third, the GRSLSS promotes understanding of learning styles in a broad context, spanning six categories. Students possess all of six learning styles, to a greater or lesser extent. This type of understanding prevents learning style stereotyping, and provides a rationale for pursuing personal growth and development in the underused learning style areas (James & Gardner, 1995). A brief discussion of each learning style is included below.

1. **Independent learners**: prefer independent study, self-paced instruction, and would prefer to work alone on course projects than with other students. Learn the content they feel is important and are confident in their learning abilities. Preferences: independent study. They prefer to work alone. They prefer the projects that they can design.

2. **Dependent learners**: characteristics of students who show little intellectual curiosity and who learn by what is required. They view teacher and peers as a source of structure and guidance and prefer an authority figure to tell them what to do and how to do it. Preferences: outlines or notes on the board, clear deadlines and instructions for assignments. They prefer teacher-centered classroom methods.

3. **Competitive learners**: learn in order to perform better than their peers do and to receive recognition for their academic accomplishments. They feel must compete with other students in a course for the rewards that are offered. Preferences: become a group leader in discussions.

4. **Collaborative learners** acquire information by sharing and by cooperating with teacher and peers. Preferences: They prefer lectures with small group discussions and group projects rather than individual projects.

5. **Avoidant learners** are not enthusiastic about learning content and attending class or acquiring class content. They are typically uninterested and are sometimes overwhelmed by class activities. Preferences: generally turned off by most classroom activities. They would prefer no tests. Do not like enthusiastic teacher.

6. **Participant learners** are interested in class activities and discussion, and are eager to do as much class work as possible. They are keenly aware of, and have a desire to meet their teacher’s expectations. Preferences: lectures with discussion. They like class reading assignments. They prefer teachers who can analyze and synthesize information well.
Table 1 describes the characteristics of each style along with corresponding preferences in classroom environment.

### Table 1. Characteristics of Grasha-Riechman Learning Styles

<table>
<thead>
<tr>
<th>Style</th>
<th>Characteristics</th>
<th>Classroom preferences</th>
</tr>
</thead>
<tbody>
<tr>
<td>Competitive</td>
<td>Compete with other students</td>
<td>Teacher-centered, class activities</td>
</tr>
<tr>
<td>Collaborative</td>
<td>Share ideas with others</td>
<td>Student-led small groups</td>
</tr>
<tr>
<td>Avoidant</td>
<td>Uninterested, non-participant</td>
<td>Anonymous environment</td>
</tr>
<tr>
<td>Participant</td>
<td>Eager to participate</td>
<td>Lectures with discussion</td>
</tr>
<tr>
<td>Dependent</td>
<td>Seek authority figure</td>
<td>Clear instructions, little ambiguity</td>
</tr>
<tr>
<td>Independent</td>
<td>Think for themselves</td>
<td>Independent study and projects</td>
</tr>
</tbody>
</table>

The styles characterized by the GRSLSS refer to an amalgam of characteristics assigned to all students (Grasha, 1996, p. 127). Every person has some proportion of each learning style (Kingdon, 2009, p. 13). Ideally, one would have a balance of all the learning styles, however most people gravitate toward one or two of the learning style preferences. Learning preferences are likely to change as one encounters new life and educational experiences. Grasha (1996) also has suggested that particular teaching styles might encourage students to adopt certain learning styles (p. 177).

### 2. Research Methodology

#### 2.1 Research Design

For the purpose of this study, a quantitative approach specifically an experimental research design was selected. Such design has six distinguishing characteristics, namely, statistical equivalence of subjects in different groups; comparison of two or more groups or sets of conditions; direct manipulation of at least one independent variable, measurement of each dependent variable; use of inferential statistics, and potential for maximum control of extraneous variables. The experimental research design of choice is that of a pre-test post-test control group design (McMillan & Schumacher, 2001, p. 321). This design the researcher opted for had a control group and an experimental group. The control group receives no treatment, it was taught by the traditional method of teaching without considering the learners’ preferred learning styles, and it receives instruction in the usual traditional manner of teaching without any knowledge of their learning styles preferences, while the experimental group receives the treatment. It was divided into small heterogeneous groups according to their different kinds of learning styles. The experimental group and the control group were subjected to the same pre-testing and post-testing as means of collecting data. The experimental group was exposed to a systematic training of some activities based on their learning styles.

#### 2.3 Sample of the Study

The population of this study was first year LMD students in the Department of English at Mohamed Lamine Debaghine Setif 2 University. It includes both males and females aged between 16 and 21. Participants for this study (N = 70) were chosen from different groups of first year LMD students in the Department of English at Mohamed Lamine Debaghine Setif 2 University. They are studying written expression three hours per a week. The students were selected among the whole population of 460 students.

There were eight groups in the department of English. Two groups were assigned randomly. Group A served as the control group and group B represents the experimental one. The experimental group was divided into small groups according to their learning styles. The selected classes were representative of the entire population.

The study was limited to first year LMD students of English at Mohamed Lamine Debaghine Setif 2 University. They were chosen because it is better for them to be aware of their learning styles from the very beginning of their learning experience.
so as to get the chance to benefit from that in their following years.

**2.4 Procedures for Collecting Data**

The empirical aspect of the study was carried out over a period of three months (the whole second semester). But, before the treatment being administered, and in order to answer the first research question “What are the different learning styles of first year LMD students of English at Mohammed Lamine Debaghine Setif 2 University?”, the experimental group responded to the learning style inventory in order to determine the students’ preferred ways of learning within each sub group.

**2.4.1 Student Learning Style Scale**

First, all participants were explained the nature and objectives of the research and provided opportunity for consent. Next, the researcher distributed the GRSLSS and reviewed the instructions for completion of the inventory. The GRSLSS was administered in a group setting during a class hour. The inventory was self-scored by the student and raw scores were obtained for each of the learning style categories.

Psychometric properties of the GRSSL indicate that the cronbach alpha for Avoidant, Collaborative and Participant is acceptable as 7 out of 9 values are above 0.7 while for Competitive is 0.74 (O’Fathaigh,2000). Studies by Bourhis and Stubbs (1991) indicate the reliability of GRSSL as follows: 0.5 Dependent, 0.68 Competitive, 0.55 , Independent, 0.81 Avoidant, 0.77 Collaborative and 0.78 Participant. Curry (1983) reported that an average test-retest correlation of 0.80 across scales within the measures.

**2.4.2 A Pre-post Writing Test (Appendix 1)**

To answer the second research question, a writing Test was designed by the researcher with the help and guidance of some teachers of English from the department. In fact, this Test is a modified version of the one developed by the teacher of English Dr. Ahmed Nabih which was used for the same purpose and objectives of this study.

**A) Objectives of the Test:**

To assess students' ability to:
1. Free-writing about a given picture.
2. Identifying the irrelevant sentences.
3. Correcting fragments.
4. Correct the run-on sentences in a given text.
5. Write a paragraph about a given topic.

**B) Item Type**

The items were of the following types:
1. Free-writing.
2. Editing.
3. Revising.
4. Writing a paragraph.

**C) Instructions of the Test**

From the very beginning of the administration of the Test and in order to avoid ambiguity and confusion, Test instructions were written in simple English. They were brief, easy to understand and free from ambiguity. They gave information about the purpose of the test and time allowed to complete the test.

**D) Test Reliability**

To establish the reliability of the test, it was administered to a sample of 20 university first year English students other than the sample of the study. Then the same test was administered to the same group under approximately the same conditions. An interval of three weeks separated the two administrations. The reliability coefficient of the test was estimated using Cronbach Alpha Formula. The estimated value was (0.8) which is considered reliable for the purpose of the current study.

To ensure that the test was valid, the researcher asked a group of TEFL experienced teachers working in the department to comment on the content, the questions, the clarity of the test instructions, the suitability of the topics to the level of university first year students, and the clarity of the
questions. Then the test was modified according to the comments and suggestions.

2.4.3 Data Analysis and Interpretation

a/ Results of Descriptive Statistics and Independent T-test

The Test of the study was administered as a pre-testing tool. The statistical Package for Social Sciences (SPSS) version 20 was used to analyze the obtained data. Table (2) represents the statistical analysis of data of pre-test and post-test in the control group and the experimental group. It provides the descriptive statistics of the two groups in terms of the number of the participants (N), means and standard deviation (SD). The mean score for the control group was (12.0286) in the pre-test.

The mean score of the experimental group was (11.6143) in the pre-test. There were close means of scores between the two groups. So, descriptively and seemingly, we can see that the difference between the means is not significant.

Moreover, as shown in Table (2), the same number (N) of the students participated in the post-test. The mean score of the control group was (12.1000) in the post-test. The mean score of the experimental group was (14.6714) in the post-test. Since descriptive statistics could not offer the researcher valid information to reject or sustain the null hypothesis, the Independent T-test was used to determine this difference in both pre-test and post-test in Table (4) and Table (5).

Before conducting the independent T-test, it is extremely important to mention the results of the skewness and kurtosis analysis to check the normality distribution of the obtained data from the control group and the experimental one. As displayed in Table (3), the ratios of skewness and kurtosis over their receptive standard errors are within the range of -1.96 and +1.96 (Field, 2009; Pallant, 2005). Accordingly, figure (1) and figure (2) shows the normality of the control and the experimental groups in the pre-test. Moreover, figure (3) and (4) demonstrates the normality of the control and experimental group in the post-test.

### Table (2): Descriptive Statistics

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experimental group</td>
<td>35</td>
<td>11.6143</td>
<td>2.8362</td>
</tr>
<tr>
<td>Pre-test</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Control group</td>
<td>35</td>
<td>12.0286</td>
<td>2.6289</td>
</tr>
<tr>
<td>Post-test</td>
<td>35</td>
<td>12.1000</td>
<td>2.4609</td>
</tr>
<tr>
<td>Experimental group</td>
<td>35</td>
<td>14.6714</td>
<td>2.0685</td>
</tr>
</tbody>
</table>

### Table (3): Test of Normality

<table>
<thead>
<tr>
<th></th>
<th>Experimental group (pre)</th>
<th>Control group (pre)</th>
<th>Control group (post)</th>
<th>Experimental (post)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Skewness</td>
<td>-.326</td>
<td>-.500</td>
<td>-.448</td>
<td>-.280</td>
</tr>
<tr>
<td>Std. Error of Skewness</td>
<td>.398</td>
<td>.398</td>
<td>.398</td>
<td>.398</td>
</tr>
<tr>
<td>Kurtosis</td>
<td>-.407</td>
<td>-.511</td>
<td>-.928</td>
<td>-.559</td>
</tr>
<tr>
<td>Std. Error of Kurtosis</td>
<td>.778</td>
<td>.778</td>
<td>.778</td>
<td>.778</td>
</tr>
</tbody>
</table>

Figure 1

Figure 2
A t-test analysis was run to determine if there were any statistically significant differences between the two groups’ mean scores on the pre-test measuring writing skills. The independent T-test is an inferential statistical test that determines whether there is a statistically significant difference between the means in two unrelated groups. The results of the T-test scores are presented in Table (4). The Levene’s Test for equality of variances showed that the F value (F= 0.465) for the significance of difference between mean achievement scores of the control group and the experimental group. Moreover, the P value (P= 0.2) which is greater than 0.05 level. Hence, it is clear that there is no statistically significant difference in pre-test writing performance between experimental group and control group. Thus, since the difference is not significant, the two groups were assumed equivalent. So it can be said that there was no significant difference between means of scores of the experimental group and the control group on the pre-test.
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Table (4): Independent Samples T-test for Pre-test Scores in two Groups.

<table>
<thead>
<tr>
<th></th>
<th>Levene’s Test for Equality of Variances</th>
<th>t-test for Equality of Means</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>F</td>
<td>Sig.</td>
</tr>
<tr>
<td>Pre</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Equalvariances assumed</td>
<td>.465</td>
<td>.498</td>
</tr>
<tr>
<td>Equalvariances not assumed</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Valid N (listwise)</td>
<td>35</td>
<td></td>
</tr>
</tbody>
</table>

6/ The Experimental Treatment

To study the effect of the learners’ different learning style on writing achievement, null hypothesis-2 “There is no statistically significant difference between means of scores between the control group and the experimental group on the post-test of writing skills.” was formulated. To test this hypothesis, two groups of the students were taken as the control group and as an experimental group.

First, the thirty five students involved in the experimental group had to finish the learning style inventory adopted to help them identify their different learning styles. Second, students were given different kinds of activities according to their different learning styles. Students had group work, discussion and individual work. In each lesson there were different activities addressing the different kinds of their learning styles.

c/ Post-testing

The test of the study was administered as a post-testing tool. The statistical programme SPSS was used to analyze the obtained data and to find the difference between pre and post testing data of the study group. Based on Table (5), the observed F value (F= 1.963) for the significance of difference between mean achievements scores of the control group and the experimental group. Moreover, the P value (P = 0.000012) is less than 0.001 which means that there is statistically significant difference between means of scores obtained by the subjects of the control group and the experimental group on the post test of writing in favor of the post-test scores of the experimental group. Hence, it is clear that there was a statistically significant difference between the experimental group and the control group on the post test in favor of the experimental group. This difference indicated that using teaching activities based on students’ preferred learning styles may have a positive effect on students’ performance in writing skills. So it can be said that there was significance difference between means of scores of the experimental group and the control group on the post-test due to group variable in favor of the experimental group.

Table (5): Independent Samples T-test for Post-test Scores in two Groups

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<th>Levene’s Test for Equality of Variances</th>
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<td>Equalvariances not assumed</td>
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2.5 Discussion
The present study investigated the role of using students’ different learning styles on developing their writing skills. In this part, the researcher had formulated two null hypotheses and two research questions in the beginning of the study. There were two variables, the learning styles as dependent variable and the development of the writings skills as the independent one. The analysis of data was done using the independent T-test.

After analyzing the data, it was found that there was a significant difference between the pre-test and post-test scores of the participants. Results of the control group and the experimental group at the pre-test and post-test showed a significant improvement in the students’ overall writing skills through the different activities used by the researcher.

Again, by observing the means between the two groups, one can simply notice the effectiveness of using the different learning styles. Hence, the results of the study showed that teaching with accordance to the learning styles had positively affected the students’ writing skills. It was proved that the experimental group performed much better on the post–writing test than the control group. Thus, using different learning styles had a positive effect on developing university students’ writing skills.

The results of the current study are in line with results of Daniel, Price, and Merrifield (2002) who stated that group work, one of the elements of the incorporation of competitive and collaborative learning styles, not only gave students greater practice opportunities, but also allowed them to escape from traditional teacher-fronted lessons. Werner (2003) also proved through the results of his studies the effectiveness of utilizing the cooperative learning techniques compared with the traditional lecture method in developing the essay writing skills of first year English majors. He researcher highlighted the importance of the awareness of students’ different learning styles by both teachers and students. It helps teachers to connect appropriately with their students and can help improve the methods of presentation. Teaching to learning styles by incorporating a variety of learning strategies can make teaching more rewarding and enhance student learning at the same time.

**Conclusion**

From the analysis of the data, it is obvious that the two groups were approximately equal in their modest performance in the pre-test of writing. They find difficulty to free-write about a picture or a given topic. It is clear that a lot of learners can keep some sentences by heart, but when it came to expressing themselves freely in writing. They also have difficulties in writing even simple English sentences.

Results of the post-test show a clear improvement in the performance of the experimental group. Their ability to distinguish between relevant and irrelevant sentences, to edit and revise a given text and to write correct English sentences in a paragraph form was developed.

Inevitably, students bring to the EFL classroom a diversity of learning styles, as Grasha (1996) argues, and in the in the reality of the EFL classroom teaching, it is impossible to always take all of learning preferences into account; also, it is impossible to constantly remember how each student learns best, learning style is just one of the many factors which influence the learning process and the learning results. The problem is not that faculty/students mismatches sometimes occur, but rather it is the failure to acknowledge and work out the potential conflict and misunderstanding that undermine student learning. Indeed, acknowledgment can be empowering for students if they can be aware of their preferred learning styles and assisted in stretching their capabilities to accommodate greater variety (Werner, 2003).

Knowledge of learning styles cannot be used to remove all difficulties in understanding the learning process and other issues in foreign language teaching. It is necessary for teachers to amalgamate learning styles with other individual differences, such as a learner’s personality, language aptitude, and so on. However, learning styles are significant factor in successful language learning, teachers’
skills in matching and diversifying learners’ style preferences is essential to effective teaching and learning. Knowledge of students’ learning styles is helpful for teachers in class preparation, designing, class delivery methods, choosing appropriate technologies, and individual instruction for effective EFL classroom (Zwyno & Waalen, 2001). Needless to say, my study is just a small part of the research into learning style and its enlightenments for English teaching; further study of it is highly appreciated.

**Recommendations**

Based on the findings of the study, it is highly recommended that:

1. As a stand point, teachers need to acknowledge that their learners are different and ensure that the instructional procedures applied in the classroom take such diversity into account. Because by doing so, this would give advantages to some learners whose learning styles are matched with their teachers’ styles. There are some studies that support these claims (Rassool, & Rawaf, 2007; Shulman, 1990).

2. Teachers of EFL should be aware of the incorporation of learning styles into the classroom activities and the importance of guiding the students to focus on a student-centered cooperative learning context.

3. Heterogeneous grouping should be encouraged in all EFL courses.

4. Designing language activities based on students’ learning styles should be a common goal in teaching EFL.

5. Algerian higher educational system should adopt a programme which educates students about their learning styles. This type of program could include workshops that encourage students to receive the information and modify the information to meet their strongest style.

6. Teachers should become familiar with the theories associated with learning styles and be able to present appropriate materials to students according to their learning styles.

7. Finally, it is appreciated if teachers in their classrooms would classify students into different groups according to their learning styles. They could then administer different types of questions, examples, and activities that match these learning styles and which lead them to fully comprehend concepts that are taught.
References


The Writing Test (Appendix 1)

Activity one

Freewrite about the following picture

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Activity two

Read the following paragraph and identify which sentences are not connected to the main focus of the paragraph. If you think a sentence is irrelevant, put parentheses () around it and underline.

Indian food is becoming more and more popular in UK. a) recent poll indicated that chicken tikka masala is the nation’s favourite dish. b) chickens are usually reared on battery farms in conditions of very poor light and with restricted movement. c) Indian cookbooks have been selling in greater and greater numbers as more people want to experiment with this style of food. d) Due to consumer pressure, free-range chickens are becoming more and more popular. e) One reason for the increasing popularity of Indian food is the increased availability of the spices need to give the food its distinctive flavor. f) there has also been an explosion in the number of the Indian restaurants offering this exotic cuisine at reasonable prices.

Activity three

Read the following pairs of sentences. In each pair one sentence is a fragment. Correct the fragment either by adding something to it or by joining it to the other sentence. There are possible ways to fix each fragment. Write only one.

1. An important person in my life is not a person. He a cat.
2. One night he came to my door. And cried for food.
3. After that first night. Tramp has stayed with me.
4. Tramp is a large, gray cat. With one torn ear.
5. He sleeps a lot during the day. And hunts at night.
6. He tries to catch mice. Too fast for him.
7. My cat and some of the neighborhood cats. They fight sometimes.
8. In the evenings. Tramp watches TV with me.
9. Likes to sleep in my bed. At night.
10. Day or night, he a good friend to me. He keeps me company.

(Singleton, 2005, p.35)
Activity four

Edit the following paragraph. Correct all run-on sentences. Be sure to use proper punctuation and capitalization as necessary.

Next Tuesday, we are going on a field trip to Memphis, we are going to see Graceland. It will be interesting to see where Elvis lived. I am saving my money for the gift shop therefore I cannot let myself buy anything until then. The bus ride there will take us about two hours so we are all going to bring our video games to play. We will visit Graceland in the morning then we are going to eat lunch on Beal Street. It is close to the Mississippi River so we are going to go to Mud Island after lunch. I have been to Mud Island before, however I am excited about going there again. We won’t have time to visit the Memphis Zoo or the Pink Palace Museum we just don’t have time to do it all. My mom thinks we should have gone to the zoo or museum instead of Graceland but I don’t agree with her. My friends and I are excited about our trip we have worked hard to raise the money to pay for it. I think we will learn a lot of interesting facts about Elvis and I know that Mud Island will teach us a lot about the Mississippi River. I love field trips, they make learning fun.

Activity five

Write a paragraph about one of your relatives (father, mother, uncle...etc.). Describe his/her appearance, Personality, and life.