Language Learning Context, Learning Style and Iranian EFL Students' Essay Writing Performance: A Critical Thinking Perspective in a Web. 2.0 Environment

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Abstract—This study attempted to identify and check how language learning context, and learning style in a web 2.0 environment could affect Iranian EFL students' essay writing performance from a critical thinking perspective. To this end, 90 male and female EFL learners at the upper intermediate level of language proficiency from Payamnoor University selected and were divided into two equal group; first the experimental which received web based teaching method through Wiki space on the internet and second the control group with traditional method of writing in class. The selected material for both group was *Researching Second Language Classroom* by Sandra Lee M.C. Kay, published in 2008. Both groups received the material during 10 sessions of 120 minutes. The data collected through pretest/ posttest assessment and analyzed t-test procedure by using statistic package of social science (SPSS) demonstrated that experimental group had a better performance in writing than the control group. Confirming the benefits of using web2.0 in writing, the research findings are helpful to improving the writing ability of Iranian English learners.

Index Terms—learning style, language learning context, essay writing performance, critical thinking, Web assisted language learning, Web 2.0 environment

I. INTRODUCTION

In the past two decades there was a growing interest in using internet base application for educational purposes such as foreign language learning so caused the invention of web and then promotion to web2.0 nowadays. Using web2.0, language user could learn and take part in classes individually or by peers' groups without any time and place limitation beside a very low internet cost. Students writing practices could be shared on the widest networks in order to communicate with critical point of view and thinking. Pedagogical, technical, social, and managerial dimensions of moderator or teacher in an online environment for learning which have a very important role in learning promotion in web assisted language learning (WALL), were identified by Berge (1995). Although the teacher attendance is a serious affair in web2.0 learning context but there are few web related language learning research available especially in Iran. The way students see, listen, react, reflect, and logically think, analyze, visualize, and give reason is the students learning style; found by found by Felder and Silverman (1988), were divided in four general categories: active-reflective, visual-verbal, sequential global, and sensory-intuitive which are very crucial to be seen to achieve a deep language learning. Searching a lot for critical thinking papers, there is no precious design of reading and analysis about critical thinking in essay writing. It could be one of the reasons Iranian EFL students are not able to write an appropriate and acceptable essay in English Therefore, this study faced some questions, hypothesis and is going to find a suitable way to solve these troublesome parts of English language for both students and teachers.

II. STATEMENT OF THE PROBLEM

As Kevin & Joseph (2007), identified online environment has several undeniable features in learning process and Wiki space is one of many web 2.0 components that can be used to enhance the learning process by allowing learners to post inputs, create, add, remove, edit the content and give comments in essay writing easily and quickly, they also showed that a web communication and collaboration tool can be used to engage students with others within a collaborative environment which is not limited to students. Irfan N. Umar, Mohan Rathakrishnan (2012) mentioned that active students learn by trying things out and enjoy working in groups but reflective students learns by thinking things through, prefer working alone or with a single familiar partner, visual learners prefer learning using materials such as pictures, diagrams and flow charts while others prefer learning using written and spoken explanation, sequential students follow linear processing when solving problem and learn in small incremental steps whereas global learners

progress toward holistic thinking processes. Despite its significant importance, Iranian universities' students must undertake some essay writing courses as a requirement for scientific research conducting in which they have to know critical thinking, researching, well organized opinion giving about research subject matter beside using communicative skills in writing process. To be successful in mentioned courses students must possess independent thinking and proficient language usage abilities. As Rathakrishnan and Umar (2010) mentioned although students are able to refine generalization and compare analogous situations, they are unable to use precise vocabulary.

As is evident from Iranian students' writing, they have some problems in clarifying and analyzing the meaning of words or phrases during essay writing which caused by lack of reading and exquisite design of analysis and critical thinking, so it is important to become more skilful in evaluating and analyzing information (critical thinking). Being passive in giving opinions, students become reluctant to take part in collaborative discussion in online environment. In sum students' different learning styles must be considered as an important point. As we know, any of these problems disturbs students learning, and the consequence of students' failure in learning is hatred of English. Based on the above-described problem it is interesting to investigate whether formal language learning and learning style assist students' critical thinking and essay writing performance in a web. 2.0 environments. Students' active or reflective learning style also was investigated. Therefore the objective of this study to propose a solution for this issue based on the investigation of active and reflective students' essay writing performance and critical thinking in a wiki space environment.

III. THE SCOPE AND OBJECTIVES OF THE STUDY

The scope of the study is, to compare two approaches in teaching writing through web 2.0 instructions. In order to solve the problems in part 1.2 researcher worked on formal language learning and learning style assist students' critical thinking and essay writing performance in a web2.0 environments along with the Students' active or reflective learning style.

Another main purpose behind this research is finding some information which is practical and applicable in further research in TEFL field. The goal of this research is to highlight:
1. Language learners' performance will be improved in the web environment along with.
2. Learning English by web is time saving and less expensive.
3. Language learners' writing performance with critical thinking abilities will be improved.

The results of this study can be generalizable in all universities and private language institute of Iran, therefore a large community of teachers and students can get benefit out of the finding of this research.

IV. RESEARCH QUESTIONS

In keeping with the purpose of this study the following questions were raised:
1. To what extent do language learning context, and learning style affect Iranian EFL students' essay writing performance and critical thinking in a web. 2.0 environments?
2. What technical elements contribute to the promotion of Iranian EFL students' essay writing performance and critical thinking in a web.2.0 environments?

V. RESEARCH HYPOTHESIS

Based on the research questions two hypotheses were formulated on follows:
1. There is no relationship between language learning context and Iranian students' essay writing performance and critical thinking in web environment.
2. Students' style of learning has no impact on students' way of thinking and writing performance in the web environment.

VI. LITERATURE REVIEW

This review is divided into two parts. The first part take focus on theoretical background, theoretical framework, and motivation of the project, the importance of the problem, prevailing theories, and previous trends that have been applied on them are going to be discussed. The second part of this chapter presents the empirical background, which is a brief review of what others have done with regard to this topic that is, section 2.3.

A. Theoretical Background

This study stocks are a mixture of Berge (1995), Garrison, Anderson & Archer (2000), Felder & Silverman (1988), Paul (1993), and Vygotsky (1978) which identified the teachers' roles and their interaction with language learners. Adding Khandaghi (2012) and Paul (2003) papers' conclusion together, find out that critical thinking is identifying correct conclusion beside the judgment components. Critical thinking has two faces: first macro and then micro cognitive strategies which more specifically have 18 macro and nine micro critical thinking sub branches which are essential for students to deepen their critical thinking ability.

As cited in Irfan N. Umar, Mohan Rathakrishnan (2012), Berge (1995) and Hussein (2010) have explained the

importance of online teachers' guidance to the students and suggested four dimensions of an online teacher's role (pedagogical, social, technical and managerial roles) and some of the roles of PROT moderator are: (i) to facilitate the students to understand the objective, critical concepts, and help the students to be self-motivated, (ii) to involve passive students to participate in collaborative discussion, (iii) to become a feedback giver, refine, and update the learning material when the students cannot find the solution, (iv) to give direct comment on the content and learning objectives especially if the discussions go out of the topic (Cumming, 2000), (v) to develop the students' ideas by using their experiences, encourage debate, convey idea maturely and edit peers ideas, (vi) to present conflict opinion and offer intellectual feedback, (vii) to provide ideas to the students on how to solve some problems and give motivation , and (viii) to encourage students to use pictures, data, and analysis to answer the given topics by using search engines in online learning. In contrast, SROT moderators' roles are (i): to promote human relationships and develop group cohesiveness by giving support and keeping to the main objective (ii) to promote a friendly environment and community feelings to support students' cognitive learning processes (iii) to gently accept students' comments and deals with exceptions off the list, (iv) to show empathy to the students' input, (v) to give comments on students input through email if necessary (Berge, 1995) and use interpersonal approach, (vi) to encourage inter group communication instead of taking leading roles in establishing a wider community (Bonk, et al., 2001), and (vii) to encourage the students to work in a mutual cause in online learning by using special introductory techniques, dyadic collaborating and facilitate informal discussion among learners.

Computer technology, digital media, and Internet surfing recently have filled all aspects of our life as a result change the traditional educational systems to modern education, enhance the knowledge and skills acquisitions or learning.

Nowadays student centered learning requirement is mostly customizable usage of technology. In an effort to provide practitioners and policy -makers with some guidance about how to use technology to support student-centered learning initiatives, Education Development Center, Inc. (EDC) conducted an extensive review of the research and practice literature. We built on the literature on technology integration as a framework for understanding various uses of technology to personalize learning. This report summarizes the findings from this review and discusses implications for practice, policy, and research. Using technology for purposes, such as writing, research and analysis rather than simply drills and practice—can enhance student competencies that surpass the knowledge and skills typically measured in achievement tests. These competencies include problem solving, creativity, collaboration, data management and communication. Many employers find these skills lacking among today's college graduates. In addition, a number of organizations ranging from the Partner -ship for 21st Century Skills to the U.S. Department of Education see literacy in digital media as essential for succeeding in a global society. (http://www.nmefoundation.org)

As more information is made accessible via the internet it becomes more important for tomorrow's students to know how to access that information and how to use it. It is important that local, state and national standards dictate technology be integrated into content standards. Technology cannot simply be its own content standard. Technology is used in many aspects of our daily lives, so we must prepare our future citizens to effectively use current technology. We must also instill these same students with the imagination to take today's technology and develop it into tomorrow's innovation. Use of technology in teacher preparation programs (http:// www.slideshare.net).

B. Empirical Background

Learning style as the way students sees, listens, reacts, gives reasons, reflects, thinks logically, use intuition, visualizes and analyses of information in which they could stimulate their ideas and experiences to engage in the learning experiences, Felder and Silverman's (1988), found four dimensions for learning style: active – reflective, visual – verbal, sequential – global, and sensory intuitive which active students learn by trying things out and enjoy working in groups but reflective students learns by thinking things through, prefer working alone or with a single familiar partner. Visual learners prefer learning using materials such as pictures, diagrams and flow charts while others prefer learning using written and spoken explanation. Sequential students follow linear processing when solving problem and learn in small incremental steps whereas global learners progress toward holistic thinking processes. Irfan N. Umar, Mohan Rathakrishnan (2012). As Wable system (2001) cleared the teacher, learner, and researcher accommodation beside an interactive environment of computers, internet, and language analysis as the most required means for language learning classes. A crucial consequence of the interactive nature of this system is that users actually create information through their use, and this information enables the system to improve with use. (http:// www.tc.columbia.edu). According to Khandaghi (2012), the process of accessing a clear conclusion and reasoning means called critical thinking. Critical thinking was divided in two faces by Paul and Elder (2002) one is macro and the other micro cognitive strategies which have 18 macro and 9 micro critical thinking skills in them for cognitive and affective components to make the process of thinking deeper through students. Van-Waes, Van-Weijen, and Leijten (2014) selected twenty students each completed a module on writing 'bad news' letters designed for Business Communication courses at the undergraduate level. Their reading and writing processes were recorded. The letters were also graded to determine their quality. An effect of learning style was found: Active and Reflective writers approached the task differently, but only in the beginning of the process. In this early stage, reflective learners were more likely to focus on the theory section than Active learners. This shows that each of the students beside their own different style of learning also has their own writing preference although their learning style has no effects on their writing quality.

Wolff (2013) demonstrates that successful compositional engagement with Web 2.0 applications requires an evolving

interactive set of practices similar to those practiced by gamers, comics, and electronic literature authors and readers. What we learn about these practices has the potential to transform the way we understand writing and the teaching of writing within and outside of a Web 2.0 ecosystem.

These days teaching foreign language with new technologies such as computers, mobiles, tablets, internet base programs, and webs are growing in all over the world and especially in Iran we could find an extreme number of application in language teaching/learning but the vacancy of writing ability skills is obvious. This study intended to show how students could benefits more from writing ability in doing research by critical thinking which ultimately affect scientific writing in second language area. By using web based application in this study the limitation of time and place of students will be eliminate and they could reach the professor class any time and everywhere in online or offline mode, which give the students opportunity to learn how to write and practice writing.

VII. METHODOLOGY

A. Participants

The participants who took part in study were selected from among Iranian EFL freshman students in Payam Noor University in the summer of 2014. These participants were selected from among a large sample of 90 EFL learners after taking the placement test. Both males and females participated in this study. Attempts were made to include an equal number of each gender so that the gender factor could be controlled.

Sampling Procedure

There were two placement tests for this process: first English entrance exam of universities (Konkur exam) which proved us that all participants are in the same level of general English proficiency especially in English writing, and then a solution placement test developed by Edwards in 2007.

ninety male and female students between the ages of 18 to 22 were divided randomly into two groups: 45 of them were placed in one class as the control group, which received traditional teaching methods of writing, and the other 45 were placed in another class as the experimental group, which received web based teaching method through wiki space on the internet. The following table shows the final number of students in the study and the type of treatment for each sample group.

TABLE 6.1
NUMBER OF STUDENTS IN THE STUDY SAMPLE GROUPS AND RELATED TREATMENT

Group	Total	Active	Reflective	Treatment
Exp. G.	45	22	23	web based
Cont. G.	45	-	-	traditional

B. Materials

In this study, the researcher used several instruments to understand the language learning context, learning style and Iranian EFL Students' essay writing performance as a critical thinking perspective in a Web. 2.0 environment and data collecting which included the placement test, the pretest, the posttest, and the treatment which is going to be explained more.

Placement Test

In order to choose homogenous participants and place them in the relevant groups, solution placement test developed by Edwards in 2007 also were used. This test designing is for assessing general knowledge of the key language as well as receptive and productive skills and the level of students. The test has three parts, in the first section 50 multiple choice questions which tests students' knowledge of grammar and vocabulary from elementary to intermediate level are available; the second part consists 10 graded reading comprehension items, and the third section was a writing tasks which allows students to produce the language. Participants divided in proficiency level based on their received scores and the test developer identified criterias. Passing the English Entrance Exam of Universities (Konkur Zaban exam in Iran); shows that all of the freshmen had enough general proficiency in English especially in English writing. After ensuring about the homogeneity of the participants, the researcher continued to next step. The reliability of the tests as a standard one has been established as it has been used frequently in between students for several years constantly. It has also gain the validity of a standard test measuring the general proficiency of students.

Pretest

This study took advantage of pretest assessment as its data collection instrument which included a writing assessment for both control and experimental group. Students in the two groups were asked to take part in this test. A sample writing skills test were held in two parts which firstly students wrote an essay of 400/500 words about the English language research in 60 minutes, then examinees were presented with an essay and were asked to look for errors in grammar, punctuation, usage, and style in 30 minutes in class. Exam essays were evaluated by faculty members drawn from the English departments, independently two university professor corrected each essay based on the correction guide if the correction scores have more than two points differences a third university professor had third time correction duty. Papers with 8 higher scores have the research requirement to take part but 6 and lower marks wouldn't be able to take part. Their writing proficiency was similar and they did not have any extra writing practice at home.

Posttest

In order to examine the impact of independent variable (formal language learning) and a moderator variable (active or reflective learning style) on dependent variable (students' level of critical thinking in essay writing performance) in a Wiki space environment a posttest which included writing for both control and experimental group were held. Students in two groups were asked to take part in this test. They were asked to write a paper about a subject of second language research in the taught style.

The Index of Learning Style Questionnaire

The Index of Learning Style Questionnaire instrument (ILSQ) by Felder & Solomon, (2001) was administered to categorize participants into two groups of active and reflective students by 10 items of the instrument.

The Textbook: Researching Second Language Classroom

Beside the tests, participants also were given a textbook which was taught during the research. The textbook was researching second language classroom by Sandra Lee Mc Kay, published in 2008. The book consists of four units that students were familiarized with second language research in first session; in the second part the data collection instrument were introduced, the data analysis processes are available in chapter three, and at the final unit research report writing results are available. In addition learners were taught about certain important characteristics of writing.

The control group were taught based on the traditional teaching methods of writing and also received materials, feedbacks, and through traditional way, but in the experimental group all the materials, instructions, feedbacks, and teaching courses were available through web environment in a Wiki space.

Wiki space

Developing a wiki space was done by the researcher because web based environment was a substantial part of the research and participants had to use it for sending and receiving materials and their assignment through it.

All the contents of this web fulfilled the needed materials of the course such as book, direction, teaching videos, topics, feedbacks, examples, and etc. In addition participants were given an email address which they used in a case that there was any internet crashes.

C. Procedure

Data Collection

In order to select, place the participants, and collect the data, first of all, the 90 freshman students who took part in Entrance Exam of universities (Konkur exam) could pass. Their writing was similar and they did not have any extra writing practice at home. And also the Oxford solution placement test (OSPT) was administered, it should be noted that the validity and reliability of this test already have already been established.

These 90 male and female students between the ages of 18 to 22 were then randomly assigned to two equal groups. These two classes were characterized as follow:

1. Forty five students were assigned to one class as the control group to receive instruction as usual way of teaching without internet.

2. The other forty five made another class as the experimental group to receive treatment in an internet based class.

Ensuring about the homogeneity of the participants, the researcher continued to the next step. The only difference between these two groups was their web-based application. The Index of Learning Style Questionnaire instrument (ILSQ) by Felder & Solomon, (2001) was administered to categorize participants into two groups of active and reflective students by 10 items of the instrument. Both groups participated in writing course for 10 session of 120 minutes, two sessions each week. The experimental group students used a Wiki space environment during the course and they sent their writing tasks in wiki environment. The teacher corrected them and wrote comments about their writings in web too. But the control group students worked in hard copy form during the class.

Data Analysis

To address the research questions of the study at the end of the course a post test was administered. An analysis of variance (ANOVA) was conducted on students' pretest scores to show the homogeneity. The gathered data were analyzed by Statistical Package for the Social Science (SPSS) version22.

The descriptive statistics such as frequencies, means, percentages, and the variance (ANOVA) to show the groups' differences were obtained. A MANOVA method of analyzing data was used to investigate the difference between active – reflective students' writing performance and critical thinking.

VIII. RESULTS

In order to assess the effect of training among the groups of learners, the performance of the participants in experimental and control groups were to be compared to make sure that they were homogeneous at the beginning of the treatment. To this end, an Oxford Solution Placement Test (OSPT) was administered and the obtained data was then calculated and analyzed, the result of which appear in the table below.

TABLE 8.2
DESCRIPTIVE STATISTICS FOR THE MEAN COMPARISON OF THE OSPT BETWEEN EXPERIMENTAL GROUP AND CONTROL GROUP.

	VAR00002	N	Mean	Std. Deviation	Std. Error Mean
VAR0000	1	45	38.4444	5.18380	.99762
	2	45	38.8462	3.58544	.70316

1= Experimental group, EG, or group A
2= Control group, CG, or group B

Based on table structure in (http//: www.europeanevaluation.org) it is shown in table 8.2, there is no significant difference between the mean scores of EG and CG groups (the mean score for experimental group is 38.4444 and that for control group is 38.8462 that is a difference of .4018 which is not a significant difference). In order to be more objective regarding the claim of homogeneity of the two groups an independent sample t-test was run between the scores of OSPT of control and experimental groups, the results of which are presented in table 8.3. As it is shown in this table the *p value* is greater than that of expected (.062>.05) and the t-observed is -.327 which is lower than the t-critical from the table of t-scores, so it means that the observed difference was not significant and it can be claimed that the two groups were homogeneous in terms of their proficiency level. As a result, the study went on safely with these two groups.

TABLE 8.3
RESULTS OF THE INDEPENDENT SAMPLES TEST OF THE OSPT BETWEEN TWO GROUPS OF RESEARCH.

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means							
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
OPT	Equal variances assumed	4.364	.062	-.327	88	.745	-.40171	1.22884	-2.86871	2.06529
	Equal variances not assumed			-.329	83.353	.744	-.40171	1.22053	-2.85800	2.05458

A. Investigating the First Hypothesis

The first hypothesis of the present study which was formulated based on the first question was that there is no relation between language learning context and Iranian students' essay writing performance and critical thinking in web environment. Therefore, the following steps were taken in order to test the hypothesis and find the answer for the first question of the study.

The scores on the pre-test were first analyzed and tabulated in table 8.4. Accordingly, the pre-test will be seen from two different perspectives in order to serve the two research questions as follows: First, it will be used as an indicator for making sure that both groups are starting from the same level regarding their writing proficiency; second, it will be used for measuring the writing achievement after the treatment.

TABLE 8.4
DESCRIPTIVE STATISTICS FOR THE MEAN COMPARISON OF THE WRITING PRE-TEST BETWEEN EXPERIMENTAL GROUP AND CONTROL GROUP.

Group Statistics

	Group	N	Mean	Std. Deviation	Std. Error Mean
pretest	Control	45	3.1346	1.65262	.32411
	Experimental	45	3.0185	1.70114	.32738

According to the statistics depicted in table 8.4, the mean difference of pre-test for the two groups is 0.1161 (the mean for control group being 3.1346 and for experimental group 3.0185) which is not statistically significant. Since a meaningful difference was not detected, there was no need to run an independent samples t-test. This could mean that all of the participants' writing performance at the onset of the study was nearly the same, so any change in their behavior could be attributed to the treatment used in the study. These findings further support the results of OSPT which confirmed the homogeneity of the participants prior to the experiment.

As explained in previous Chapter, the treatments included a web-based instruction for experimental group and conventional method of writing instruction for control group. Both groups participated in writing course for 10 sessions of about 120 minutes class time, two sessions each week. After the treatment, the participants were asked to take a writing post-test the results of which is shown in the following Table.

TABLE 8.5
DESCRIPTIVE STATISTICS FOR THE MEAN COMPARISON OF THE WRITING POSTTEST BETWEEN EXPERIMENTAL GROUP AND CONTROL GROUP.

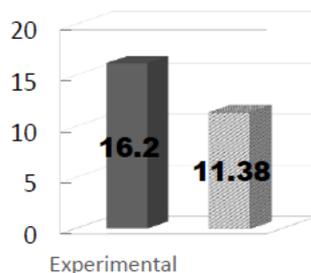|	Group	N	Mean	Std. Deviation	Std. Error Mean
pretest	Control	45	11.3846	1.84015	.36088
	Experimental	45	16.2037	2.02987	.39065

Figure8.1. Graphical Representation of the Means for Hypothesis One.

As it is clearly shown in table 8.5 and figures 8.1, the post-test mean for EG, or group A is 16.2037 which is higher than that of CG, or group B being 11.3846 having a mean difference of 4.8191. So it can be said that the two groups have changed in terms of their writing performance and that this change seems to be significant. In order to ascertain that the difference between post-tests of EG and CG group is significant, an independent sample t-test was run between the post-test scores of the two groups. Table 4.5 illustrates the results of this t-test.

TABLE 8.6
RESULTS OF THE INDEPENDENT SAMPLES T- TEST BETWEEN POST-TEST SCORES OF EXPERIMENTAL GROUP AND CONTROL GROUP.

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means							
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Control	Equal variances assumed	.136	.014	-.252	88	.802	-.11610	.46094	-1.04146	.80927
	Equal variances not assumed			-.252	83.995	.802	-.11610	.46068	-1.04095	.80876
Experimental	Equal variances assumed	.443	.009	9.044	88	.000	4.81909	.53283	3.74938	5.88879
	Equal variances not assumed			9.061	83.820	.000	4.81909	.53183	3.75130	5.88687

Since t-value for Experimental Group is equal to 9.061, which is greater than -.252 for that of Control group with an alpha= 0.05 (*p value*=.009<.05) and df= 88; therefore, the difference is statistically significant and that shows that EG outperformed CG. As depicted in Table 4.4 and further confirmed through independent samples t-test shown in Table 8.6, with regard to posttest scores, teaching critical thinking in web environments does lead to differences between experimental and control groups. Finally, based on the analysis of the results, the first hypothesis of the study was rejected since, as the results supported, training critical thinking in web environments has positive effect on writing performance of the students.

B. Investigating the Second Null Hypothesis

By proposing the second null hypothesis, the researcher intended to understand if students' style of learning has any impact on students' way of thinking and writing performance in the web environment. In order to embark on testing this hypothesis and finding the answer for the second question of the study, the experimental group was arranged with regards to different learning style. To this end, the Index of Learning Style Questionnaire instrument (ILSQ) by Felder & Solomon, (2001) was administered to categorize participants of experimental group as active or reflective learners (refer to Table 3.1 in Chapter Three). Based on the results of this questionnaire, there were 22 active and 23 reflective learners in this group. The next step was to analyze the results of this group on the posttest with respect to their specific type of learning style. This way we could test the second hypothesis and see which of the two learning style performed better on the post-test after the treatment. The post-test scores of the participants of the EG was then arranged based on their learning style into two sub groups. The following table shows the number of students based on their learning style.

TABLE 8.7
NUMBER OF STUDENTS AND THEIR LEARNING STYLE

Group	Total	Active	Reflective	Treatment
E G. A	22	22	-	web based
E G. B	23	-	23	web based

As shown in Table 8.8 below, posttest means in EGA is $X = 17.7308$ and for EGB equals $X = 13.6071$. So a difference in posttest means in behalf of EGA or the group with active style of learning could be observed. But it is not clear yet whether the difference is significant or not.

TABLE 8.8
MEANS COMPARISON OF EGA AND EGB

Means Comparison posttest

Group	N	Mean	Std. Deviation
EGA (Active learners)	22	17.7308	2.11754
EGB (Reflective learners)	23	13.6071	1.50867

The next step was then to run another independent samples t-test on the results of the post-test to compare the achievements of the two sub groups and to see whether the difference could meet the criteria of being statistically significant. Table 8.9 reports the results.

TABLE 8.9
RESULTS OF THE INDEPENDENT SAMPLES TEST BETWEEN EGA AND EGB.

Independent Samples Test

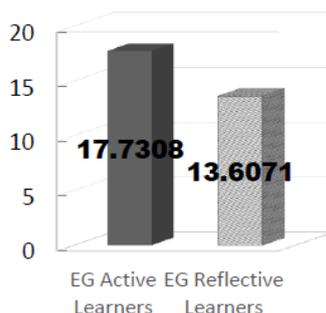|		Levene's Test for Equality of Variances		t-test for Equality of Means					95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Learning Style	Equal variances assumed	.491	.032	6.025	43	.006	4.1309	.25874	2.25312	2. 37851
	Equal variances not assumed			6.053	38.461	.006	4.1309	.24752	2.25406	2.37624

Figure8.2. Graphical Representation of the Means for Hypothesis Two

According to the results in Table 8.9, the amount of t-observed (t= 6.053) is significant at the probability level of p=.006, which shows a statistically significant amount. Based on these results it was concluded that the participants with active learning style outperformed the others with reflective learning style. Therefore, the second null hypothesis, stating that "Students style of learning has no impact on students' way of thinking and writing performance in the web environment" can also be safely rejected.

IX. DISCUSSION

One of the several noticeable features online language teaching provides is synchronous and asynchronous communication of teacher and language learners.By web2.0 language user could learn and take part in classes individually or by peers' groups without any time and place limitation by a very low internet cost. For this purpose participants' writing assessments during the classes and at the end of the research was compared with each other and the obtained results from the data analysis process provide a vivid answer to the first prosed question of the study: that language learning context in a web environment can indeed enhance the Iranian EFL students essay writing ability. As Uzunboylu et al. (2011), identified that learners with wiki technology are able to get input, get comments, create, add, edit, and delete the content with ease and not much time consuming. It is implied from their study that language learners can work with other peers and instructor collaboratively about any thought tasks. Having a moderator to encourage and facilitate the learning process, clearly could be seen in their work too. The experimental class participants outperformed the control group regarding the taught second language research rules and this supremacy support the idea that language learning context beside web based classes, reinforce students' writing ability and critical thinking.

Pedagogical, technical, social, and managerial dimensions of moderator or teacher in an online environment for

learning which have a very important role in learning promotion in web assisted language learning (WALL), were identified by Berge (1995). The moderator could manage students' interaction and direction with managerial role, and introduce communication instruments in an online web to boost the concentration on language tasks. (Aydin, 2005; Persico & Pozzi, 2011).

The above demonstrated facts are hoped to shed more light on why control group displayed lower level of writing ability than experimental group.

X. CONCLUSION

The main purpose of this study was investigating the impacts of language learning context and learning style on Iranian EFL students' writing ability in a critical thinking perspective. As one of the few studies on this topic, the study, more specifically aimed in comparing the role of language learning context and learning style of traditional writing teaching process with web based essay writing classes.

In other words the combination of traditional method and modern technology which result in a better and more prolific English learning as a second language. There were no statistically differences between the web based group and the control group at the beginning. However the results of this study there were improvement over time in writing performance and critical thinking for the web based group. It is interesting to highlight this fact that during the treatment there were small effects from pretest and the experimental group showed a greater mean gains in writing performance than the control group. Sharing critical thinking and essay writing instructions through a web is an effective language teaching tools to help EFL learners to improve their essay writing ability which is in agreement with other previous studies on essay writing progress. The usage of only web itself cannot undertake writing ability learning, It should be noted that computer and web couldn't replace teacher who is responsible for developing appropriate material for students, select learning activities, students' preparation for learning, conduct drills, and monitor students learning process. English teachers and specialist could benefit this finding for best materials designing and adaption to improve students 'writing ability. As revealed in the study as previous researches, like (Baharani, 2011; Vinther, 2011; and Wiebi & Kabata, 2011.) Web based language teaching and learning has many advantages like motivating students, giving detailed and immediate feedbacks, reducing anxiety, autonomy for learners, and flexible learning over traditional classes by using hypertext, hypertext, hypermedia, and multimedia in teaching process.

XI. IMPLICATION OF THE STUDY

The findings of this study have considerable implications for EFL pedagogy in Iranian EFL settings. First of all it suggests that writing shouldn't be ignored and should be given the attention they deserve. English essay writing with critical thinking have received little attention in Iranian EFL education and little support is given to help learners. By putting emphasize on the web based language learning especially essay writing with critical thinking, this study suggest a great advantage for presentation and instruction writing in wiki space. Understanding more profoundly the conceptual basis of technology usage in EFL classes which result in better performance in learning.

Becoming more confident and less intimidated by knowing critical thinking and writing rules. Final implication of the study relates to pedagogues and syllabus designers, to benefit from these findings in designing and could use web, computer and technology in language learning process which are very important in explicit teaching, time and place saving.

XII. SUGGESTION FOR FURTHER RESEARCH

Due to the limitations of this study several lines of this research could be suggested for doing more research. Teaching language components could be done in a web based environment in both first and second language. New invention of language learning specially writing applications of technology with saving time and money. This type of research also could be done in lower level of writing as paragraph writing. What is strongly recommended from finding of this study is conducting on different stages of critical thinking also need more research in EFL context especially in Iran.

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