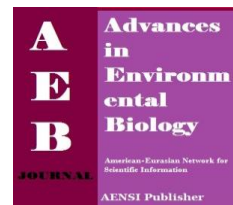




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The Comparative Study of Virtual and Non-Virtual Methods of Teaching EFL in Focus

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ABSTRACT

From both a practical and a theoretical point of view it has been important to understand the differences between virtual and non- virtual teaching and learning mechanisms and the role they played in second language learning. One of the most frequently asked question in language teaching circles is whether language should be taught virtually or non- virtually, and one of the central issues in the psycholinguistics of second language acquisition is whether adults can learn a language fully through the same non virtual learning mechanisms used by the child in learning a first language implicitly (passive and non- selective). Non virtual learning takes place exactly how it sounds, i.e. non virtually. Skill and behavior is taught, practiced and considerable time acquiring information and learning new skills. Virtual learning is seen as any study form in which individuals have primary responsibility for planning, implementing, and even evaluating the effort. Research, Scholarship, and interest in virtual learning have literally exploded around the world in recent years. Because of what mentioned above the present study was conducted. The purpose of this study was to compare and contrast (a) the effectiveness of virtual and non- virtual methods of teaching, (b) the measurement of student learning performance (c) and the difference between student outcomes for virtual and face to face classes (non-virtual) - measured as difference between treatment and control groups means. Students were randomly divided into two groups, one taught in a traditional classroom (non- virtual) and the other taught virtually. Text, lectures and exams were standardized between the conditions. Contrary to the proposed null hypotheses, quantitative results demonstrated the virtual class scores an average of 10% higher than the traditional class on both examinations. Further, post-test results indicated the virtual class had significantly higher perceived peer contact, and time spent on class work, but perception of more flexibility, understanding of the materials and greater effect toward learning at semester end, than did the traditional class. Moreover, as the result of the study indicated the female's performance in both groups were better than males although the females showed higher means in non-virtual mode of teaching. These results will expectantly help ELT teachers and course designers to step firmly in improving the language teaching and learning issues in Iran.

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INTRODUCTION

This paper is a study, highlighting the application of the concept of virtual and non- virtual in use to different places by addressing on this main question: Are there any significant differences between the study of virtual and non- virtual methods of teaching EFL in focus?

One problem frequently identified in curriculum study and which has led to the demise of the method, is the gap between exact roles adopted by teacher and students and the way language is used to promote learning in specific classroom, this is because of the pedagogical process.

In pedagogical changes process, we can point to two views: first, non virtual method which continued to 70s, in this method, teacher sees all the students the same, and functionally can't care students, differences in the area of learning process, strategies and procedures. In this method, teacher is representing knowledge and student is receiving it. This is as a one way street, which can't lead to the good results in pedagogical zone (Michigan Department of Education).

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Second, virtual method in which the student himself/herself is responsible to explore the data. Because s/he uses multimedia like virtual, Audio – visual and class, it is also student – centered way. In virtual view, discovery learning is reinforced a lot and its responsibilities are on student. It can be done perfect virtual and half virtual, which is called self-learning.

Virtual learning is extremely broad based, whereas those in universities and schools are specialty based. There are so many lies that are taught in schools which are uncovered, like teaching history and political issues.

Non virtual view is a very task oriented style, but virtual view is much more open ended project style, the difficulty is in the mind set. Have a task, complete a task [8].

There are studies and real life examples of extremely successful self-learners and one cannot deny that being able to find information and solve problems on your own through analysis and self-education promotes intelligence. [7] Research It is believed virtual learning has a powerful value. It is benefited from a well-rounded understanding of the subject, while seeking many instructors for that subject. Pace is important because at times ones have to avoid overload, which is as detrimental as too little information. More than anything pace is usually faster than normal in self-directed learning. Students learn more than college student, in the same amount of time. It is believed ones have the necessary knowledge to qualify for multiple degrees.

Nowadays, if you want to learn something, get a teacher, but you have to pay a cost and these costs are expensive. To be self-learning is just great for whom, who are at work or lack of money and time to participate in classes. [18].

Virtual learning can be done successfully. If you make sure you really want to learn something and it is the key elements of motivation and it depends on your information you have at that time, it means, if you have enough stuff to go forward to learn, start learning new materials and find out how you feel most comfortable and become encourage by enough information, so do experimental stuff, because it helps you to get into the topic. For example, teacher often try to explain why something works like they've seen in the function, so it would be good if you can do the experiment on your own, make a thought experiment or get a video of that practice in real life communication, although in some fields concrete examples may lead off-road, but in most cases it will help you to understand what's that stuff all about, it's not beneficial to learn some formulae, statistics if you cannot imagine what they describe.

Try to practice, what you want to learn, It means do more than learn because it increases learning, after twenty minutes study, try to use what you have studied. [12].

For example, you have studied causative sentences; try to make some different sentences substitutionally the causative verbs in passive and active forms, during your self-learning. You can ask the experienced people to help, and to guide you how and what to do for better learning, the most available are teachers. They can help and show the good and near path to get your target easier. Also experienced teacher can judge you evaluate what you have done because one of the problems of virtual learning is measurement. How can one measure the rate of self-learning? By what standard do we measure? There is no quantification for this type of education and until our schools and nonprofit universities figure out a way to profit from people, there will be no programs that would help to prove or disprove this theory. Because there is no formative exams. In virtual universities like "Payam Noor" there is just summative scores at the end of the term.

So, what should be the unit of measurement for assessing virtual learning under the four phases of self-regulation: task perception, goal – setting, planning, enacting, or adaptation?

First of all, we know people studying by virtual learning know deeply what they do, it means they study to learn not to be evaluated.

Second, there is no limitation of time. Educational institutes rely on periodical tests exams. Get the self-learner has no solid foundation in which to measure what they are learning in order to track the progress towards the goals.

Third, even if we do somehow find a way to measure progress at learning, how do we define if we are learning fast enough; one big reasons. It is preferred virtual learning over dropping loads of money into an educational institute is that ones don't have to conform to their rate of teaching learning any way, if you as a self-learning student want to be measured, get experienced people to judge you regularly or randomly [37].

Having an open mind when you are try to learn yourself, it helps to see connections to things you already like, thus increasing comprehension and motivation, don't focus just on the practical or on the theoretical aspects of something. This only leads to stereotypes like the stupid sports man. So, just gathering knowledge is one of the most common mistakes of people.

Time table of learning is the best learning strategy, if you don't spend a decent amount of time, the best strategy doesn't help you. It should be programmed according to the topic.

Before and after each session everything should be clear, what you want to do should be organized and it organizes your learning [39]. virtual learning supports home- schooling , experiential education ,open schooling and life-long learning. Keeping a journal ,setting goals, planning and taking action are key tools. Self-improvement, personal development and the development of character are central themes of virtual learning.

In virtual learning, the individual takes the initiative and the responsibility for what occurs. Individuals select, manage, and assess their own learning activities, which can be pursued at any time, in any place, through any means, at any age. In schools, teachers can work toward virtual learning a stage at a time. Teaching emphasizes virtual learning skills, processes, and initiating personal challenge activities and developing the personal qualities to pursue them successfully. Some researchers have highlighted the motivational component of virtual learning, arguing that this kind of learning is effective because it makes students more willing and more motivated to learn. But few researchers have examined how virtual learning might influence cognitive processes, such as those involved in attention and memory.

According to Gureckis and Markant [30] research from cognition offers several explanation that help to account for the advantages of virtual learning. For example, virtual learning helps us optimize our educational experience, allowing us to focus effort on useful information that we don't already possess and exposing us to information that we don't have access to through passive observation. The active nature of virtual learning also helps us in encoding information and retaining it over time. Virtual learning, which has its roots in adult education, is an approach that has also been tried with learners in elementary and secondary schools.

The benefits of virtual learning in terms of the type of learners it develops. The literature on virtual learning indicates that virtual learners demonstrate a greater awareness of their responsibility in making learning meaningful and monitoring themselves, Garrison [24]. They are curious and willing to try new things, Taylor views problems as challenges desire change, and enjoy learning. He also found them to be motivated and persistent, independent, self-disciplined, self-confident and goal-oriented.

Virtual learning allows learners to be more effective learners and social beings. Guthrie [29] noted that the virtual learners in a concept-oriented program demonstrated the ability to search for information in multiple texts, employ different strategies to achieve goals. Virtual learning comes at a time of great transformation in how individuals and organizations learn how they transfer learning into performance—in the classroom and online—remains as important as ever. However, virtual learning is much more than virtual training. Learning should not stop at the end of class. The term virtual learning simply occurs at the computer, which generally means over the internet, with the information delivered via a browser, like the internet explorer, firefox, netscape navigator, the World Wide Web through public internet or private intranet. The role of virtual learning naturally increases in adult, for the potential possibilities of the personality are extremely great, and formed world outlook will make it possible to develop one's abilities more successfully, systematically. This is especially true since life does not stand still and society is developing scientifically and technically. As with the development of many new ideas virtual learning has created some confusion in that many related concept are often used interchangeably or in similar ways. Examples includes virtual learning, self-planned learning, learning project, self-education, self-teaching, autonomous learning, independent study, and open learning. Yet these terms typically offer varied, though sometimes subtly different, emphases. Consequently, virtual learning is a term recognizing both external factors that facilitate a learner taking responsibility, and internal factors that predispose an adult accepting responsibility for learning-related thoughts and actions. At the same time there is a strong connection between virtual learning and learner self-direction. Both internal and external aspects of self-direction can be viewed on a continuum and optimal learning conditions exist when a learner's level of self-direction is balanced with the extent to which virtual learning opportunities are possible. In addition, because people can carry out self-directed learning outside of training organizations or formal schools, many administrators are beginning to look toward such learning as a means for stretching scarce education dollars. Several researchers also have demonstrated that giving some learning responsibility back to learners in many instances is more beneficial than other approaches. For example, in the workplace employees with busy schedules can learn necessary skills at their own convenience through self-study, some technical staff in organizations who must constantly upgrade their knowledge can access new information through an individualized resource center. Since 1994, the World Wide Web and related internet resources have become an increasing viable component in higher education pedagogy. This has led to significant interest in the implementation of internet based virtual teaching. Any experimental evidence has been generated to demonstrate the effects of virtual versus traditional class format on student performance. What has appeared is largely qualitative or devoid of empirical analysis altogether and argued as simply a remedy or antidote to the deficiencies of the traditional classroom. If quantitative, the data tend to be based on a single class and hence, no experimental comparison, or self-selected samples of two or more classes. Considering the amount of money being expended in higher education on infrastructure, software, training and technological pedagogy, this lack of experimental evidence is unconscionable. An attempt was made to address these deficiencies by engaging in an experimental design in which students from the same class were randomly assigned the first day to either virtual or non-virtual classroom. These conditions were used to test the effects of face to face, virtual professor-student interaction, on the test performance of the students. The null hypothesis was that face to face interaction makes no differences in student test performance. The research hypothesis asserts that it does. In particular, it is argued that such face to face interaction with the professor is fundamental to the learning process and that without it students suffer. 11) Knowledge and skills for innovative and complex problem solving within multicultural and

multidisciplinary environments can be acquired through virtual teaching methods which encompass a wide-concept of learning through problem solving, and collaborative learning.

The outcome of this study about virtual teaching methods at the language institute suggests that these methods (non virtual, virtual-learning) are appropriate for several reasons, one of them is that exchanging among students influences the obtaining of better learning achievements during the education process. These achievements are reflected through various learning activities, carried out within virtual learning methods. Thus, students have an opportunity to brainstorm, to clarify problems within the group, and to come up with new, innovative solutions. Another reason in favor of virtual learning methods is the saving of time dedicated to study. Most of the required workload is done within the group through learning. From the efficiency perspective, students also tend to learn quicker within a group, and gain several skills, such as how to learn, who to ask for help, from whom to learn or how to find useful information.

Personal computers and the Internet have revolutionized entire sectors of American society. Facebook, Twitter, YouTube, Skype and other online communications media have allowed billions of people around the world to share ideas in a matter of seconds, mostly at a very low cost. These advances in computer technology are as remarkable as they are familiar. But most people are not aware of how computers and Internet technology are transforming the way students learn. This emerging education paradigm is often called virtual learning and it has the potential to improve student achievement, educational access and schools cost-effectiveness. Specifically, virtual learning uses computer software, the Internet or both to deliver instruction to students. This minimizes or eliminates the need for teachers and students to share a classroom. Virtual learning does not include the increasing use of e-mail or online forums to help teachers better communicate with students and parents about coursework and student progress; as helpful as these learning management systems are, they do not change how students are taught.

In virtual learning: Instruction is not provided by a teacher; instead, instruction is provided by software installed on a local computer or server. This software can frequently customize the material to suit the specific needs of each student. It is similar to computer-based instruction, but in this case, the software that provides the instruction is delivered through the Web and stored on a remote server. Elsewhere: Instruction is provided by a teacher, but that teacher is not physically present with the student. Instead, the teacher interacts with the student via the Internet, through such media as online video, online forums, e-mail and instant messaging. Some times: it combines traditional face-to-face instruction, directed by a teacher, in effect, instruction comes from two sources: A traditional classroom teacher and at least one of the forms of virtual learning described above. Virtual learning is also known as digital learning or e-learning.

In non-virtual learning, students and teachers rely on each other to access sources of knowledge and share their information, expanding the general scope of the educational process to include not just instruction, but the expansion of knowledge. The role change from keeper of knowledge to facilitator of learning presents a challenge and an opportunity for educators to dramatically change the way their students learn. The boundaries between teacher and student have less meaning with interactive learning.

During the academic year 2008/9, a focus has been given to the educational process within decoupling of environment pressure from quality of life communicating strategies (DEC) virtual group. As mentioned in the previous section, all the courses consist of five stages. In the first stage (orientation) the main coordinator, together with tutors, form study groups, based on a diversity principle, where students from their own countries and with the same or similar backgrounds are arranged into different study groups. Then each student receives a student manual and a timetable. These activities present an introduction to the course. An individual student's activity begins by filling-out the Pexpi – a Personal Expertise Page, including 'personal data' (name, gender, birthday), 'about me' interests and hobbies, 'expectations of EVS (European virtual seminar)', 'EVS availability', 'Expertise areas', 'Fields of interest', 'Learning and work experiences', and 'Suggestions'. As Rusman *et al.* [52] claim, the main aim of the Pexpi is to build a relationship of trust and understanding between collaborating individuals. This Pexpi is essential before proceeding with further group and individual activities. Within the DEC (decoupling of environment pressure from quality of life communicating strategies) group, the second point of Pexpi entitled 'about me' has caused certain problems, because students were unsure as to, which information about themselves should be presented, that is the one regarding their study, private life or both. Most of the students wrote down information about their studies, character, and family members. During this phase, the preparedness for communication and collaboration by students emerged. Some of them wanted to share a lot of information, whilst others were more reserved. One of the students did not actually want to expose his personal information to the others and did not want to share this on blackboard. Therefore, he sent the Pexpi to the main coordinator only. In the second stage (group forming and community building), the actual collaboration begins. Each student group receives a case-study, with a short introduction to the topic. All the documents are accessible through blackboard, which also presents the only opportunity for communication and collaboration.

Question And Research Hypothesis:

Q: Are there any significant differences between virtual and non-virtual methods of teaching EFL in focus?

H0: There are no significant differences between virtual and non- virtual methods of teaching in focus.

Methodology:

Participants:

A sample of four classes each of which will be involved 25 students. 50 Students are to be involved in virtual method (25 males and 25 females) and 50 students will sit for non- virtual method (25 males and 25 females). So we have two groups under the treatment of (virtual and non-virtual) methods of teaching. These participants will be adult elementary level learners who studying English in private English language institute.

Instrumentation:

The data will be collected by using a KET (key English Test) as a Pre- test, then the Treatment will be given and a standardized multiple-choices test will be administered based on the taught materials at the end of the courses as the Post test.

Procedure:

In order to conduct the research, a number of EFL learners will be chosen randomly and based on an elementary proficiency test (KET) their homogeneity will be assessed. Then, 100 homogeneous learners will be selected and they will be put in 4 groups including 25 males and 25 females in each class. 2 groups of males and females are going to get virtual kind of teaching and 2 others will be practice the non- virtual one. After treatment period, for analyzing the data the Independent Sample T-test analyses will be taken to show the groups mean differences. The first day of class students were asked to fill out the pre-test answer sheet prior to assignment to conditions. Students were then given a pre-assigned number indicating which room they were to adjourn to. Traditional students were sent to a regular classroom while the virtual students stayed in the lab. Each section was given identical instructions by the instructor as to the scope, content and expectations for their performance in the class. Subsequently, students in the virtual class were given instructions by the lab assistant on the requisite technology necessary to accomplish the virtual format of instruction. This technology included instruction in accessing e-mail, World Wide Web and on line connections. To assure student competency, the virtual class met for a second week to review the previous week's instruction, thereby maximizing their ability to carry out the class in the virtual setting.

The non- virtual class meets every Monday during the following 16 weeks as scheduled from 10 am to 1 pm. The virtual class met only twice after the first two weeks, during the 8th and 16th week to take the midterm and final examination. The non- virtual class solved common weekly problem assignments submitting them in each week.

Summary of the finding and discussion:

To accept or reject the stated null hypotheses, the data obtained through the post test were analyzed by using SPSS 15.0 Software.

The first null hypothesis, which the present study tried to reject, was "There is no significant difference between the virtual and non-virtual contexts of teaching."

The data was obtained through a standard test (Appendix ----) called '...KET.....', and the participants sat for the test in two different contexts under the investigation of this study, i.e. virtual and non-virtual contexts of teaching or rejecting the above hypothesis, an One-sample t-test was conducted to compare the scores for teaching contexts, i.e. virtual and non-virtual. As table (1) and (2), there was a big significant difference in scores for virtual= (M=70.7, SD= 7.8) and [non-virtual= M= 69.8, SD=8. 8; t (98) = 64.42, P< 0.0005]. According to the guidelines proposed by Cohen (1988), i.e. .01= small effect, .06= moderate effect, and .14= large effect, the magnitude of the differences in means was very big (eta squared= 0.97). Therefore, the first hypothesis could be strongly rejected.

Table 1

One-Sample Statistics				
	N	Mean	Std. Deviation	Std. Error Mean
Post-score virtual	50	70.7000	7.75979	1.09740
Post-score non virtual	50	69.8000	8.80399	1.24507

Table 2

	One-Sample Test					
	Test Value = 0					
	t	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
				Lower	Upper	
Post-score virtual	64.425	49	.000	70.70000	68.4947	72.9053
Post-score non virtual		49				

The second null hypothesis which the present study tried to reject was, "There is no significant difference between males and females in virtual context."

As it is obvious in tables (3) and (4), one can reject the above null hypothesis. For rejecting this null hypothesis, an independent-sample t-test was conducted to compare the scores of virtual participants for their genders. There was a big significant difference in scores for their genders: male ($\bar{m}=66.4$, $SD=5.86$) and female [$\bar{m}=75.00$, $SD=7.07$; $t(48)=-4.7$, $P<0.0005$]. The magnitude of the differences in means, according to the guidelines proposed by Cohen (1988), was moderate ($\eta^2=0.3$). Therefore, the second null hypothesis can also be rejected because the significant value is smaller than the alpha value (0.05).

Table 3

Group Statistics

sex of my participants	N	Mean	Std. Deviation	Std. Error Mean
postscore virtual male	25	66.4000	5.86657	1.17331
female	25	75.0000	7.07107	1.41421

Table 4

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
Post-score virtual	.922	.342	-4.680	48	.000	-8.60000	1.83757	-12.2947	-4.90532

The second null hypothesis which the present study tried to reject was, "There is no significant difference between males and females in non- virtual context."

As it is obvious in tables (5) and (6), one can reject the above null hypothesis. For rejecting this null hypothesis, an independent-sample t-test was conducted to compare the scores of virtual participants for their genders. There was a big significant difference in scores for their genders: male ($\bar{m}=65.6$, $SD=6.34$) and female [$\bar{m}=74.00$, $SD=9.01$; $t(48)=-3.8$, $P<0.0005$]. The magnitude of the differences in means, according to the guidelines proposed by Cohen (1988), was weak ($\eta^2=0.2$). Therefore, the second null hypothesis can also be rejected because the significant value is smaller than the alpha value (0.05).

Table 5

Group Statistics

sex of my participants	N	Mean	Std. Deviation	Std. Error Mean
postscore non virtual male	25	65.6000	6.34429	1.26886
female	25	74.0000	9.01388	1.80278

Table 6

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
Post-score virtual	.922	.342	-4.680	48	.000	-8.60000	1.83757	-12.2947	-4.90532

The fourth null hypothesis which the present study tried to reject was, "Genders (females vs. females and males vs. males) do not contribute to the results of virtual and non-virtual contexts."

As it is obvious in tables (7) and (8), one can reject the above null hypothesis. For rejecting this null hypothesis, a one-sample t-test was conducted to compare the scores of virtual against non-virtual participants for their genders. There was a big significant difference in scores for the females in these two contexts: female virtual ($\bar{m}=66.4$, $SD=5.86$) and female non-virtual [$\bar{m}=65.6$, $SD=6.344$; $t(48) = 56.59$, $P < 0.0005$]. The magnitude of the differences in means, according to the guidelines proposed by Cohen (1988), was strong ($\eta^2 = 0.9$). Therefore, the first part of the fourth null hypothesis about the females in these two contexts can be strongly rejected because the significant value is smaller than the alpha value (0.05).

Table 7

One-Sample Statistics

	N	Mean	Std. Deviation	Std. Error Mean
female virtual	25	66.4000	5.86657	1.17331
female nonvirtual	25	65.6000	6.34429	1.26886

Table 8

One-Sample Test

	Test Value = 0					
	t	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
female virtual	56.592	24	.000	66.40000	63.9784	68.8216
female non-virtual		24				

For the second part of the null, based on the One-sample T-test, as was shown in table (9) and (10), There was a big significant difference in scores for the males in these two contexts as we saw for females: male virtual ($\bar{m}=75.0$, $SD=7.07$) and male non-virtual [$\bar{m}=74.0$, $SD=9.01$; $t(48) = 53.03$, $P < 0.0005$]. The magnitude of the differences in means, according to the guidelines proposed by Cohen (1988), was strong ($\eta^2 = 1$). Therefore, the second part of the fourth null hypothesis about the males in these two contexts can be strongly rejected because the significant value is smaller than the alpha value (0.05).

Table 9

One-Sample Statistics

	N	Mean	Std. Deviation	Std. Error Mean
male virtual	25	75.0000	7.07107	1.41421
male nonvirtual	25	74.0000	9.01388	1.80278

Table 10

One-Sample Test

	Test Value = 0					
	t	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
male virtual	53.033	24	.000	75.00000	72.0812	77.9188
male non-virtual		24				

Conclusion:

The present study focused on the investigation of the attitudes of subjects who worked both in virtual and non-virtual method of teaching EFL in focus. i.e. attitudes towards teaching courses, attitudes towards students, and their practices in virtual and non-virtual classes. The analyses of the data showed that the subjects had different attitudes towards their class areas. In another words, they had different feeling as well as different attitudes towards teaching and learning in virtual and in non-virtual methods.

According to further analyses of the data, results showed different attitudes towards their students in virtual and non-virtual methods. Based on these differences, students in different contexts seem to be treated differently due to the different methods, materials and educational aids which teachers have towards them.

The analyses of the data also showed that the gender is an effective factor; especially it plays a positive role in virtual method of teaching. It is clearer in their post-scores. It seems worthy to note that the subjects' sexes (Male, Female) have strong influence on final results.

Therefore, both males and females had been affected by different methods of teaching, differently males comparison showed virtual method of teaching scores were better than non-virtual, but not noticeable, but females comparison showed something else. It showed females who were involved in virtual method of teaching were more successful than non-virtual.

The other data analysis conducted by the present study was on the effect of method of teaching on males, females virtually and the effect of method of teaching on males and females non-virtually. According to this analysis, results showed significant differences in teaching activities in virtual and non-virtual methods of teaching on different genders; in most cases their attitudes led them to do different activities in different method of teaching. Of course, some activities seemed to be the same in these two methods. For instance, 'Reading texts for language analysis', 'Planning exam answers, e.g. analyzing questions, and organizing answers', and 'Working on the etymology (suffix, prefix, and root)' were the activities which showed no differences in virtual and non-virtual method of teaching. If this study puts these three exceptions aside, a conclusion will be achieved that the subjects in most of their instructional activities in virtual method and non-virtual method, showed differences (in virtual method students were given materials and they did their activities independently but in non-virtual method students were taught traditionally).

The further results of the data analyses showed that the activities of male subjects were different from female ones in doing language games, working in groups, writing short passages in class, listening to others using English in class, doing project work in English, and taking part in role-plays in virtual and non-virtual method of teaching.

A significant difference in doing this activity was reported between females, females and males, males in virtual method of teaching.

Some differences also have been seen in activities for their background of education though in most cases there were no significant differences. For example, 'in working in pairs', 'writing assignments outside of the class', 'doing speaking activities for its improvement', 'teaching vocabulary in isolation', and 'doing inventive activities', learning in virtual method showed a significant difference from those who were taught non-virtually.

According to this investigation all materials for virtual and non-virtual methods were used equally, in 'reading texts for language analysis', and 'doing reading comprehension activities', there were differences among low, medium, and high experienced participants. There were no differences in doing the activities caused by the subjects' experience.

In summary, this study succeeded to reject all four null hypothesis, although the first, second, and fourth null hypotheses were rejected strongly. According to this study, teachers showed different attitudes towards their teaching courses as well as their students attended in those areas (in virtual and non-virtual methods). Not only that but also their attitudes towards different contexts and students contributed to their behaviors and actions. They adjusted their actions based on their hidden mental maps called attitudes. This investigation introduced the virtual method of teaching as an important factor, which influenced the teachers' attitudes, and teachers' attitudes in students self-study.

This study finally revealed that both method are effective and each of which has its own advantages and disadvantages, but if we have a good route map, enough facilities, clear lesson plan and efficient available materials, somehow virtual method of teaching is more effective, less costly, less time consuming, suitable for those who are at work and their time is limited.

Implication for Teaching Methodology:

The results of this investigation can help the teachers to adjust their method of teaching according to the needs of participants, where they are to teach. When teachers see their courses and their students different, it is not reasonable to use just one method for teaching in different environments where the needs of the learners are very different.

As this study worked on four groups of students (virtually and non-virtually) in Iran, and as there have been some differences in these two methods based on the results reported by the present study, the teachers have to adopt one of the following ways if they are going to be more effective in their teaching:

- Teachers should remove the differences, which exist between the virtual and non-virtual in order to get same attitudes towards those contexts and introduce one method for both environments..
- Teachers should accept different needs of learners and try to introduce their methods based on the learners needs.

Most of the participants of this study showed interests in learning in virtual method because it is more like natural language teaching. Therefore, the results of this study may be a beginning step for those who like to work on teaching methodology and for teachers to know where they are teaching and how and what they should teach according to the different attitudes that they have towards the different teaching areas. When contexts,

from teachers' point of views, are different and students who attend those contexts are different too, consequently, the teaching methods used in those environments have to be different.

REFERENCES

- [1] Ajzen, I., & M. Fishbein, 1973. Attitudinal and normative variables as predictors of specific behaviors. *Journal of Personality and Social Psychology*, 27: 41-57.
- [2] Ashton, P., & R. Webb, 1986. *Making a difference: Teachers sense of efficacy and student achievement*. New York: Longman.
- [3] Ashton, P.T., R.B. Webb and N. Doda, 1982. *A study of teachers' sense of efficacy (Final report, Vol. 1)*. University of Florida, Gainesville, FL (ERIC Document Reproduction Service No. ED 231834).
- [4] Allport, Gordon W., 1935. "Attitudes." *A Handbook of Social Psychology*. Ed. C.A. Murchison. Vol. 2. New York: Russell. 2 vols.
- [5] Bagozzi, R., 1978. The construct validity of the affective, behavioral, and cognitive components of attitude by analysis of covariance structures. *Multivariate Behavioral Research*, 13: 9-31.
- [6] Bandura, A., 1977. Self-efficacy: Toward a unifying theory of behavioral change. *Psychological Review*, 84: 191-215.
- [7] Bates, A.W., G. Poole, 2003. *Effective teaching with technology in higher education*. Foundation for success. San Francisco: U.S Jossey- Bass.
- [8] Benbunan- Fich. Hiltz, R.S., 2003. Mediators of the Effective of Online Courses . *IEEE Transaction on Professional communication.*, 46(4): 298-312.
- [9] Brockett, R.G., R.H iemstra, 1990. *Self-direction in Learning: Perspectives in Theory, Research, and Practice*. Routledge, London, UK.
- [10] Brookfield, S.D., 1986. *Understanding and facilitating Adult learning*.
- [11] Brown, H.D., 1994. (3rd ed.) *Principles of Language Learning and Teaching*. Prentice Hall Regents.
- [12] Bruffee, K.A., 1993. *Collaborative learning: higher education, interdependence and authority of knowledge*. Baltimore: The Johns Hopkins University Press.
- [13] Burnkrant, Robert E. and Thomas J. Page, Jr., 1988. "The Structure and Antecedents of the Normative and Attitudinal Components of Fishbein's Theory of Reasoned Action." *Journal of Experimental Social Psychology*, 24 (January): 66-87.
- [14] Campbell, J., 1996. A comparison of teacher efficacy for pre and in-service teachers in Scotland and America. *Education*, 117: 2-11.
- [15] Candy, P. C., 1991. *Self-direction for Lifelong Learning*. Jossey-Bass Publishers, San Francisco, Californi
- [16] Chaiken, Shelly and Mark W. Baldwin, 1981. "Affective-Cognitive Consistency and the
- [17] Effect of Salient Behavioral Information on the Self-Perception of Attitudes," *Journal of Personality and Social Psychology*, 41: 1-12.
- [18] Choi, H., M. Kang, 2010. Applying an activity system to online collaborative group work analysis. *British Journal of Educational Technology*, 41(5): 776-795.
- [19] Craik, G.L, 1840. *Pursuit of Knowledge Under Difficulties: Its Pleasures and Rewards*. Harper & Brothers, New York
- [20] DeKeyser, R.M., 1995. Learning second language grammar rules: An experiment with a miniature linguistic system. *Studies in Second Language Acquisition*, 17: 379-410.
- [21] Fraser, C., 2001. *Introducing social psychology: Attitudes and Actions*. Cambridge University.
- [22] Freeman, D., 1989. 'Teacher Training, Development, and Decision-Making: A Model of Teaching and Related Strategies for Language Teacher Education'. *TESOL Quarterly*, 23(1): 27-45.
- [23] Gabrielatos, C., 2000. *The Shape of the Language Teacher*. Talk at the TESOL Greece 21st Annual Convention, Athens, Greece 22nd May 2000.
- [24] Garrison, D.R., 1997. Self-directed learning: Toward a comprehensive model. *Adult Education Quarterly*, 48(1): 18-33
- [25] Garner, R., E. Wonnacott, & D. Taylor, 1968. A factor analytic investigation. *Canadian Journal of Psychology*, 22: 104-120.
- [26] Gardner, R.C., 1985. *Social psychology and second language learning*. London: Edward Arnold.
- [27] Girard, D., 1986. 'The Eclectic Way'. *English Teaching Forum*.
- [28] Gorrell, J., N. Ares & F. Boakari, 1998. Beliefs in school efficiency: An expansion of notions of teacher efficacy. Paper presented at the meeting of the American Psychological Society, Washington, DC.
- [29] Guthrie, J.T. and Others, 1996. Growth of Literacy Engagement: Changes in Motivations and Strategies during Concept-Oriented Reading Instruction. *Reading Research Quarterly*; v31 n3 p306-32 Jul-Sep 1996. [EJ 530 522]
- [30] Gureckis, T.M. and D.B. Markant, 2012. Selfdirected learning: A cognitive and computational perspective. *Perspectives in Psychological Science*, 7: 464-481.

- [31] Harasim, L., S.R. Hiltz, L. Teles, M. Turoff, 1995. *Learning Networks, A Field Guide to Teaching and Learning Online*. Cambridge MA. The MIT Press.
- [32] Haskel, J.F., 1978. 'An Eclectic Method.' *TESOL Newsletter* 12.
- [33] Hiemstra, R and Brockett, 1994. virtual learning. In T-HUsen&T.N. postlethwaite(Eds.), *the international Encyclopedia of Education*, oxford: pergamon press.
- [34] Johnson, H., 1992. 'Defossilizing'. *ELT Journal* 46/2.
- [35] Karavas-Doukas, E., 1996. 'Using Attitude Scales to Investigate Teachers' Attitudes to the Communicative Approach.' *ELT Journal* 50/3.
- [36] Knowles, M.S. & Associates, 1984. *Andragogy in Action*. Jossey-Bass Publishers, San Francisco, California
- [37] Krajnc, M., 2009. E-learning Environment Integration in the Chemical Engineering Education Process *International Journal of Engineering Education.*, 25(2): 349-35.
- [38] Krech, D., R.S. Crutchfield and E. Ballachy, 1962. *Individual in Society*. McGraw- Hill, New York.
- [39] Levin, J.A., H. Kim, M.M. Riel, 1990. Analyzing instructional interactions on electronic message networks. In: Harasim. L. M. (Ed).
- [40] Lin, H., & J. Gorrell, 2001. Exploratory analysis of pre-service teacher efficacy in Taiwan. *Teaching and Teacher Education*, 17: 623-635.
- [41] Bullard, L.G. and R.M. Felder, 2007. "A Student-Centered Approach to Teaching Material and Energy Balances." A two-part series in *Chemical Engineering Education on an implementation of the stoichiometry course that made extensive use of active and cooperative methods. Part 1. Course Design Chem. Engr. Education*, 41: 93-10.
- [42] Lukman, R. & M. Krajnc, 2012. Exploring Non-traditional Learning Methods in Virtual and Real-world Environments. *Educational Technology & Society*, 15(1): 237-247.
- [43] McArthur, T., 1983. *A Foundation Course for Language Teachers*. Oxford University Press.
- [44] Owen, N., 1999. Teaching Excellence' in *English Teaching Professional*, Issue pp: 42-44.
- [45] Palermo, 1999. Probing the hidden curriculum: teachers' and students' beliefs and attitudes. British Council (18th National Conference for Teachers of English)
- [46] Prator, C.H., 1976. 'In Search of a Method.' *English Teaching Forum*.
- [47] Pratkanis, A.P., 1989. The Cognitive Representation of Attitudes, in Pratkanis, A.R., Breckler, S.J. and Greenwald, A.G. (Eds.), *Attitude Structure and Function*, Hillsdale New Jersey, Lawrence Erlbaum Associates Publishers
- [48] Richards, J. and C. Lockhart, 1995. *Reflective Teaching in Second Language Classrooms*. Cambridge University Press.
- [49] Rokeach, M., 1968. *Beliefs, Attitudes and Values*. Jossey-Bass
- [50] Rosenberg, M.J. and C.I. Hovland, 1960. Cognitive, Affective, and Behavioral Components of Attitudes. In *Attitude Organization and Change: An Analysis of Consistency among Attitude Components*. Eds. M.J. Rosenberg, C.I. Hovland, W.J. McGuire, R.P. Abelson, and J.W. Brehm. New Haven, CT: Yale University.
- [51] Rosenberg, M., 1956. Cognitive structure and attitudinal affect. *Journal of Abnormal and Social Psychology*, 53: 367-372.
- [52] Rusman, E., J. van Bruggen, R. Cörvers, P. Sloep, R. Koper, 2009. From pattern to practice: Evaluation of a design pattern fostering trust in virtual teams. *Computers in Human Behavior*, 25(5): 1010-1019.
- [53] Secord, P.F. and C.W. Backman, 1964. *Social Psychology*. McGraw-Hill
- [54] Schmidt, R.W., 1990. 'The Role of Consciousness in Second Language Learning.' *Applied Linguistics* 11/ 2.
- [55] Scrivener, J., 1996. 'ARC: A Descriptive Model for Classroom Work on Language.' In Willis, J. & D. Willis. *Challenge and Change in Language Teaching*. Macmillan Heinemann.
- [56] Sharwood Smith, M., 1986. 'Comprehension versus Acquisition: Two Ways of Processing Input.' *Applied Linguistics* 7/3.
- [57] Spear, G.E., D.W. Mocker, 1984. The organizing circumstance: Environmental determinants in self-directed learning. *Adult Education Quarterly*, 35: 1-10.
- [58] Strevens, P., 1977. *New Orientations in the Teaching of English*. Oxford University Press.
- [59] Sweet, H., 1899/1964. *The Practical Study of Language*. Oxford University Press.
- [60] Triandis, H., 1971. Attitude theory: In *Attitude and Attitude Change*, 60-100. New York: John Wiley & Sons, Inc.
- [61] Van Els, T., T. Bongaerts, G. Extra, C. van Os & A. M. Janssen-van Dieten, 1984. rev. ed. *Applied Linguistics and the Learning and Teaching of Foreign Languages*. Edward Arnold.
- [62] Wicker, Allan W., 1969. "Attitudes versus Actions: The Relationship of Verbal and Overt Behavior Response to Attitude Objects," *Journal of Social Issues*, 25(4): 41-78.
- [63] Woods, D., 1996. *Teacher Cognition in Language Teaching: Beliefs, decision-making and classroom practice*. Cambridge University Press.