

THE EFFECTS OF PERSONAL FACTORS ON VIRTUAL AND NON-VIRTUAL LEARNING

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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 play in second language learning. One of the most frequently asked questions in language teaching circles is whether language should be taught virtually or non-virtually, and one of the central issues 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 are taught and practiced and they demand 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. Due to above said reasons, 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 difference between student outcomes for virtual and face to face(non-virtual) classes. The students were randomly divided into two groups, one was taught in a traditional classroom (non-virtual) and the other was taught virtually. Texts, lectures, and exams were made standardized for the two groups. Further, post-test results indicated the virtual class had significantly higher perceived peer contact and the time spent on class work. Also, the virtual class had perception of more flexibility, understanding of the materials and greater effects toward learning at semester end that of than the traditional one.

Keywords: *Virtual Learning, Non-Virtual Learning, Personal Factors, Traditional Classes.*

INTRODUCTION

This study highlights the application of the concept of virtual and non-virtual use of methods as it has been indicated in the main question:

Are there any significant differences between the study of virtual and non-virtual learning based on personal factors?

One problem frequently identified in curriculum study which has led to the demise of the old methods and emergence of new methods, is the gap between those roles adopted by teachers and students and the way language is used to promote learning in specific classroom due to the pedagogical process.

In learning process there are so many aspects such as: traditional method which kept on too long, in this method, tutor sees all the learners the same and practically cannot care student's differences in the area of learning, methods, and ways. In this method, teacher is representing knowledge, and student is receiving it. This is mainly as a one-way road, which cannot lead to the good final effect in educational issue.

On the other hand, the virtual method in which the students are responsible to find out the data. Because they use multimedia for virtual and audio – visual classes, virtual learning is student – centered. In virtual view, discovery learning is reinforced a lot and its main focus is on students. It can be achieved through perfect virtual or half virtual, which is called self-learning. Self-learning is a very usual term in first language while those other terms in universities and schools are specialty-oriented.

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, compete a task (Benbunan-Fich, & Hilts, 2003).

There are so many deep researches which are very qualified in evaluation around self-learners and one cannot deny that being able to find information and solve problems on one's own through analysis and self-education promotes intelligence. (Bates and Poole, 2003) It is thought virtual learning has an undeniable value. Pace is important in virtual learning because at times one has to avoid overload. More than anything pace is usually faster than normal in self-directed learning. Students learn more than college students, in the same amount of time, because they themselves prepare their own studying program. It is believed one in virtual has the necessary knowledge to qualify for multiple degrees.

Nowadays, if you want to learn something, you should get a teacher, have to pay a cost and these costs are expensive. Self-learning is just great for those, who are at work or lack of money and time to participate in classes (Choi and Kang, 2010).

Virtual learning can be done successfully if you make sure you really want to learn something; it is the key element of motivation, and it depends on your information you have at that time, it means, if you have enough materials to go forward to learn, start learning new things and find out how you feel most comfortable and become encouraged by enough information, so do experimental act because it helps you to get into the topic. For example, teacher often tries to explain why something works like they have 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 is that object all about, it is not beneficial to learn some formulae or statistics if you cannot imagine what they describe.

Try to learn practically what you are going to learn; it means action is louder than words because it increases learning, after twenty minutes' study, try to use what you have studied (Bruffee, 1993) For example, you have studied causative sentences; try to make some different sentence substitutions, apply 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 ones are teachers. They can help and show you the good and near path to get your target easier. Also experienced teacher can judge you and evaluate what you have done because one of the problems of virtual learning is measurement. As you know the big problems in virtual learning are: 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 (Lukman and Krajnc, 2012). Because there is no formative exam. In virtual universities like "Payam Noor" there are just summative scores at the end of the term. Thus, what should be the unit of measurement for



assessing virtual learning? 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 exams. Self-learning has no flexible foundation by which to measure, what they are learning in order to get the progress towards the goals.

Third, even if we do somehow find a way to measure progress in learning, how do we determine if we are learning fast enough? one big reason for preferring virtual learning over dropping loads of money into an educational institute is that students 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 (Krajnc, 2009). Having an open mind when you are trying to learn yourself, it will help you to see connections to things you already like, thus increasing comprehension and motivation, do not focus just on the practical or on the theoretical aspects of something. So, just gathering knowledge is one of the most common mistakes of most people. Time table of learning and having a clear program are the best learning strategies. If you don't spend enough amount of time, the best strategy does not 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 since it organizes your learning (Levin, Kim and Riel, 1990). Virtual learning supports self-learning, home-learning, endless schooling and life-long learning. Keeping a journal, knowing target, good timetable 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 individuals can predict what occurs because they know what they do and what they want. Individuals select, manage, and assess their own learning activities, which can be followed up at any time, in anywhere, through any means, at any age. At 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 support them successfully. Some instructors have highlighted the motivational details of virtual learning, arguing that this kind of learning is effective because it makes students more eager and more motivated to learn. But few others have examined how virtual learning might influence learning processes, such as those involved in attention and memory.

According to Guericke's and Markant's (2012) research, from cognition offers several explanations that help account for the advantages of virtual learning. For example, virtual learning helps us optimize our educational experience, allow us to focus effort on useful information that we do not already possess and expose us to information that we do not 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.

STATEMENT OF THE PROBLEM

There has universally been an inquiry regarding the fact that how people with different ways manage to learn. In most parts of learning areas, people encounter with problems which



prevent them from mastering a language. It even occurs in the contexts which people have exposure to the target language but if there is not the necessary exposure to the language being taught the problem will be worse. The other issue is the inevitable growth of technology and the impression it has on people lives. In this study, this issue has come to be discussed more specifically with regard to Iranian EFL learners' perceptions toward virtual and non- virtual methods. Many people believe without teacher, paper book and class, learning is impossible, it is not basically wrong, but learning does not only rely on teacher and attending in different classes. When learners are aware of the required techniques for learning, they can follow up the rest endless way. Mostly, virtual learning is easier for those, who are at work, and cost of classes is vital for them in contrast to non-virtual. 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 those, who are at work or lack of money and time to participate in classes.

Purpose of the study

This study aims at exploring the difference between virtual and non-virtual method of learning and teaching EFL in focus. Having come to realize this comparative relationship, the researcher will consider address the issue at the center of his focus.

Significance of the study

This study provides with guidelines to recognize students' self- abilities and self-learning characteristics easily by the use of virtual and non-virtual method of teaching, and discover the most appropriate way of learning and teaching. The present study helps the learners and teachers to find an effective way of easy, early, and useful procedures so as to get their target (teaching and learning). It can be achieved, but it needs a good and logical schedule.

Related Literature

The technique employed by this study and most related researches is known as, the adult's learning projects and it was the first attempt to better understand learning-oriented individuals which was made by Tough (1979), a Canadian researcher and one of the Houle's doctoral students.

This work has stimulated many similar studies with various locations. In parallel scholarship during this time period, Knowles (1984) popularized in North America the term 'andragogy' with corresponding adult instructional process. His publication, virtual learning, provided foundational definitions and assumptions that guided much subsequent research:(a) virtual learning assumes that humans grow in capacity and need to be self-directing (b)learners' experiences are rich resources for learning, (c)individuals learn what is required to perform their involving life tasks,(d)an adult's natural orientation is task or problem-centered learning (e), and virtual learners are motivated by various internal incentives, such as need for self-esteem, curiosity, desire to achieve, and satisfaction of accomplishment. Another important research effort was Guglielmino's (1977) dissertation. She developed the virtual learning Readiness scale, an instrument subsequently used by many researchers to measure self-directed readiness or to compare various virtual learning aspects with numerous characteristics. Spear and Mocker's (1984) work on organizing circumstances showed how important it is to understand a learner's environmental circumstances in promoting virtual learning if we compare it with non-virtual learning, Its classification was based on the definition of Dekeyser (1995) that an instructional treatment is explicit if rule explanation forms part of instruction (deduction) or if learners are asked to attend to particular forms and try to find the rules



themselves (induction). We can get virtual learning in discovery learning and better understanding the materials.

Brookfield (1986), a British adult educator in the United States, describes other higher education efforts where individualized, virtual learning opportunities exist, including locations in Germany, Denmark, and Eastern Europe. Brockett and Hiemstra (1990) describe several self-directed efforts in China, Indonesia, Japan, Norway, Russia, Saudi Arabia, Sweden, and Tanzania. During the academic year 2008/9, a focus was 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. (2009) 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 them 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.



METHODOLOGY

Participants

A sample of four classes each of which was involved 25 students (between the age of 20 to 25, their level was elementary, and they lived in Qazvin). 50 Students were to be involved in virtual method (25 males and 25 females) and 50 students sat for non-virtual method (25 males and 25 females). So both groups (virtual and non-virtual) were under the treatment of methods of teaching (all learners received treatment, but the use of treatments were different). These participants were adult elementary level learners who studied English in private English language institute.

Instrumentation

For collecting the data, a standard test was administered to get a precise result and the best standard test which was in hand and based on the participant's levels was KET that involved different kinds of questions with regard to the four skills (mainly their reading skill). The data were then collected by using a KET (key English Test) as a Pretest, with the reading skill in privilege. Then the Treatment was given and a parallel KET (that is attached in appendices) was administered at the end of the courses as the Post test. In this research, the KET test was administered because it was standard and well known to all learning contexts.

Procedure

In order to conduct the research, a number of EFL learners chose randomly and based on an elementary proficiency test (KET) their homogeneity assessed. Then, 100 homogeneous learners were selected and they were put in 4 groups including 25 males and 25 females in each class (each class includes just 25 students). 2 groups of males and 2 groups of females were going to get virtual kind of teaching and 2 others practiced the non- virtual one. After treatment period (16 sessions) for analyzing the data the Independent Sample T-test analyses were taken to show the groups mean differences. The first day of class before the treatment, 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 identical instructions were given (prepared materials) 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 met 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 (the conditions were kept similar for both groups by constant monitoring by same teacher), during the 8th and 16th week to take the midterm and final examination (because it is mostly student centered). The non-virtual class solved common weekly problem assignments submitting them in each week (as it should be done face to face).

Data Analysis

The statistical analyses of the data were like those of interval data. Then the Independent Sample T-test analyses was necessary.

Design of the study

Regarding the nature of the research questions and hypotheses of this study, it is descriptive in methodology. The ex-post facto design was used in this study because the researcher did not have control over the selection and manipulation of the independent variables in virtual contexts (although the selection and manipulation were mainly controlled by KET tests). The variables were gender, age, personal characteristics, language processing and special treatment.



There was a big significant difference in scores for virtual ($M=70.7$, $SD= 7.8$) and [non-virtual ($M= 69.8$, $SD=8. 8$; $t(98) = 64.42$, $P< 0.0005$]. the magnitude of the differences in means was very big ($\eta^2= 0.97$). Therefore, the first hypothesis could be strongly rejected.

Table 1: Teaching contexts: 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 | 699.8000 | 8.80399 | 1.24507 |

Table 2: Teaching contexts: One-Sample Test

| | 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 | | | | |

There was a big significant difference in scores for their genders (males and females) in virtual contexts: male ($m= 66.4$, $SD=5.86$) and female [$m=75.00$, $SD=7.07$; $t(48) =-4.7$, $P<0.0005$]. 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 |
|--------------------|------------------------|----|---------|----------------|-----------------|
| Post-score virtual | Male | 25 | 66.4000 | 5.86657 | 1.17331 |
| | female | 25 | 75.0000 | 7.07107 | 1.41421 |

Table 4: Genders: Independent

| | 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 third null hypothesis, "There is no significant difference between males and females in non-virtual context."

There was a big significant difference in scores for their genders: male ($m= 65.6$, $SD=6.34$) and female [$m=74.00$, $SD=9.01$; $t(48) =-3.8$, $P<0.0005$]. Therefore, the third null hypothesis can also be rejected because the significant value is smaller than the alpha value (0.05). (Virtual was better)

Table 5: Group Statistics

| | Sex of my participants | N | Mean | Std. Deviation | Std. Error Mean |
|--------------------|------------------------|----|---------|----------------|-----------------|
| Post-score virtual | Male | 25 | 65.6000 | 6.34429 | 1.26886 |
| | female | 25 | 74.0000 | 9.01388 | 1.80278 |

Table 6: Genders: Independent Sample 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 non Virtual | 2.794 | .101 | -3.810 | 48 | .000 | -8.40000 | 2.20454 | -12.8325 | -3.96747 | |

CONCLUSION

This study insisted on the investigation of the views of subjects who worked both in virtual and non-virtual method of teaching EFL in focus, i.e. their attempt to teaching courses, and their practices in virtual and non-virtual classes. The analyses of the data showed that they had different behavior towards their class areas. It means they had different ideas and different beliefs towards teaching and learning in virtual and in non-virtual methods.

Based on these differences, students in different situations seem to behave differently because of the different methods of teaching, tasks, materials and educational aids which teachers have offered them. According to further convey of the data, results showed different opinions towards their students in virtual and non-virtual methods. 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. Post test scores showed more the genders' effects. It seems worthy to note that the subjects' sexes (Male, Female) have strong influence on the final results.

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

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