

## Building a Synchronous Virtual Classroom in a Distance English Language Teacher Training (DELTT) Program in Turkey

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### ABSTRACT

This paper reports a synchronous project, "the virtual classroom" prepared for the Distance English Language Teacher Training (DELTT) Program. The process of developing the synchronous project and the interface with its specific components were reported with examples and supported by theoretical background from the related literature. The evaluation of the project concludes that the virtual classroom facilitated increased authentic interaction and encouraged learners to become more autonomous. When the group of students who prefer the traditional classroom, however, was considered a blended approach which consists of both virtual classroom and traditional face-to-face classroom was suggested as the most efficient way for Turkish EFL learners.

**Keywords:** Virtual classroom, blended approach, synchronous project, distance education

### INTRODUCTION

Training language teachers has been the responsibility of Education Faculties in Turkey since 1982. The insufficient number of the graduates, however, compared to the number of the students trying to learn English increased the demand for new projects for training English language teachers. Especially the changes in the national curriculum of primary education in 1997-1998 academic years, and the insertion of language lessons for the 4th and 5th grade students increased this demand dramatically. *English Language Teacher Training Project* signed with the cooperation of Ministry of Education and Anadolu University, Open Education Faculty in 28 February 2000 was the result of this demand. The curriculum of the program is accepted almost as the same as the ones applied in all the Education faculties which have a face-to-face education system in the country. According to the proposed project, however, a blended model which included face-to-face lessons during the first two years and distant education during the 3rd and 4th years was agreed on, with some minor changes in the overall curriculum. As a result, this blended program called Distance English Language Teacher Training (DELTT) started to be implemented as a unique teacher training program in the world.

Face-to-face component which included the first two years included skills courses such as reading, writing, speaking etc., and aimed at increasing teacher trainees' language proficiency. The distant education component, on the other hand, had the content courses such as linguistics, methodology, teaching English to young learners, etc aiming to give students both theoretical and practical knowledge about their profession, supplemented with online facilities. Approximately 10.000 students have been attending the program for 5 years, since 2000-2001 academic years, and 619 of them graduated successfully during the last two years. Various synchronous and asynchronous projects have been developed in order to improve the program, to enrich educational experiences, and

especially to reach the 3rd and 4th grade students who are distant language learners. The primary aim of this paper is to report the synchronous project, called *the virtual classroom* which is prepared as a pilot project for teaching second year *advanced reading* course. The virtual classroom project has been spanning for two academic years.

## THE PROCESS OF DEVELOPING THE SYNCHRONOUS CLASSROOM PROJECT

The term *virtual classroom* covers the different infrastructures using different technologies to create it. It can range from a closed-circuit interactive television system among different schools in a region or different regions, as explained by Hobbs and Christianson (1997), to the insertion of the internet applications. The infrastructure of the Internet-based synchronous virtual classroom should have some specifications. First of all, all the participants must definitely be included in the broadcasted program on the Internet. Broadcast information might include the audio and the video of the instructor, or some other information sources like animations, presentation slides, texts, stable or motion pictures. Secondly, the learners as well as the instructor can ask and answer questions or give comments during the class. These questions, answers, or comments should be shared by all the participants immediately. As stated by Pinar and Campo (1998) the effectiveness of any kind of virtual classroom depends on the infrastructure used in it.

After reaching the administrative decision to an internet-based infrastructure, a number of companies capable of supplying technical equipment and the necessary facilities we desire were contacted. After the negotiating processes, one of the companies was agreed on, and the faculty and the company started the project with forming their teams who would be responsible from the Project. Team members included both technical and educational people from both sides, and they started negotiations on the requirements, possibilities and facilities. During this period, in-service training was also supplied for the team members of the both groups in order to help them use a shared language and understand each other reciprocally.

Lehman (1999: 49) explains that the instructors should feel themselves very comfortable with the new technology and the new medium for focusing on the instruction only. He suggests using the following three activities would help them feel comfortable;

- Knowing the components of the new environment.
- Discovering the differences between the traditional classroom and the new interactive environment.
- Practicing with the new tools.

Therefore, in order to help instructors to become comfortable with the new medium, a series of in-service training sessions were held. These in-service training sessions aimed at encouraging the technical team for gaining basic pedagogic terminology knowledge, as well as facilitating technological competencies of the educational team. As a result, in order to make the synchronous project both pedagogically and technically as effective as possible, team members from both groups were exposed to a series of meetings.

After reaching a consensus, a series of synchronous lessons were prepared and tested in the computer lab in order to prevent any possible technological problems before starting the real application.

The aim and the characteristics of the program were explained to the students at the beginning of the application through face-to-face meetings. During these orientation meetings, personal information regarding students' prior online experience, their attitudes towards using computer for their education, motivation and facilities they privately have at home was shared. Some introductory exercises which were prepared beforehand were also used in order to create a sense of excitement for the virtual class, to encourage students to become familiar with basic terminology and technology. And

also, to practice the technology and the computer facilities they were using, shortly to help them in becoming techno-comfortable. Among all, the most important reason was to help students to set the right frame of mind for the synchronous classes which would be a completely new experience for both the students and the teacher.

Finally, the Project was started officially and the students had synchronous lessons in the computer lab one week and face-to face lessons in a traditional classroom the following week. A technical team also existed in the laboratories during the lessons to give the necessary support both to the teacher and the students. This technical team had the opportunity to get online help from a more professional team from the company in another city during the lessons when they needed to do so. A native speaker teacher also participated in the Project as a guest online lecturer especially while teaching students new vocabulary items related to the text they were going to read.

The following section will explain the virtual classroom in terms of the infrastructure used throughout the pilot project. Each component of the infrastructure will be explained focusing on their functions and usage with specific examples.

## THE VIRTUAL CLASSROOM

VisiClass program which aims to create a synchronous virtual learning environment by bringing students and teachers from different places together was used in the Distance English Language Teacher Training Program. The program VisiClass has six main parts:

- The content provider interface
- The learner interface
- The instructor interface
- The management interface
- The recorded lesson interface
- The database

### The Content Provider Interface

The content provider is the most important aspect of delivering an Internet-based virtual lesson. Mantyla and Gividen (1997) argue that the success of an online course is measured by the degree of enjoyment the learners get by the content, and the method of its delivery, rather than the technology used in it. Therefore, the content and the audio-visual materials are the vital elements of an online course.

Pitt and Clark (1997) point out that since learners have different learning styles and preferences, online educators need to address to differences by preparing various activity types. Using multiple instructional strategies is the best way to accomplish this while designing an online course. Designing the content provider of the program is the first step of delivering a lesson in the Internet-based virtual classrooms. The content parts are classified below:

#### Presentation slides

The slides are prepared with a different program like Power point and content provider helps the instructor to make this presentation a content part. Generally, virtual classroom programs allow the instructors either using two or more slides in one content part (the instructor passes from one slide to another in the same content part) or creating different content parts for each slide.

#### White board

This content part acts as a classic blackboard in the classroom and creates an opportunity both for the students and the learners to share their ideas or products. While the instructor can write or draw something on the whiteboard, and share it with the learners, he/she can also ask and allow a learner to use the whiteboard. Moreover, a previously

prepared board might be used during the presentation. The program also allows recording a board which wants to be stored for the future usages.

### Questions

Various types of questions can be prepared using the program; multiple-choice, gap filling, true/false, matching, ordering and jumbled-sentences can be given as examples of different question formats prepared during the project. There can be one content part for one question, or different kinds of questions can be prepared easily in a content part as a test or survey.

### Motion video

Motion videos related to the topic of the reading text were inserted to the content. The main aim of using video extracts, mostly taken from original CNN news, was to build schemata to help students to understand the text. That is why, they were provided before students read the text as a pre-reading activity during the class. In their study, Sakar and Ercetin (2005) found that intermediate level EFL students found visual information, especially video and graphics very useful to help them understand the text, and they expressed positive attitudes towards reading on the computer. The negative correlation between the overall annotation use and reading comprehension, however suggested negative effects of multimedia annotations. They believe that audio recordings and videos especially might have distracted learners and interfered with their reading comprehension. In this study, therefore, learners were asked to watch the video with the guidance of the teacher, having a different purpose each time they watch. As a result, including motion video for this project served four different purposes in the lesson;

- schemata necessary for understand the reading text was built,
- curiosity and motivation of the students for reading the text were increased,
- the other skills such as listening and speaking were integrated into the lesson,
- different learning styles were addressed.

### The image

The images (photographs, pictures, graphics, etc.) were used as content parts in the virtual classrooms. Besides, it was possible to support images with the written explanations when needed. Images were especially used in teaching unknown words students would meet in the reading texts.

### The web page director

This content part helps the instructor to direct the learners to the web pages easily. When this content part is chosen, it automatically directs the instructor and the learners to the web page address defined before.

### Group working

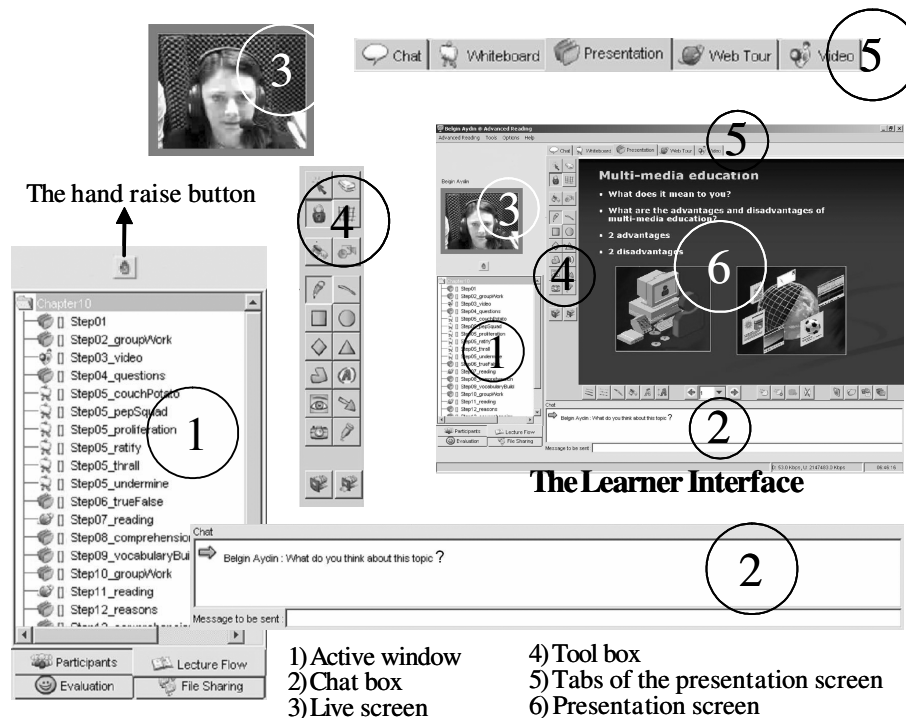
Considering the importance of interaction in a language learning environment, group work activities were designed in the project. During the lesson, the instructor may want to divide the learners into groups and want from them to work in these groups. Number of the students of the groups depends on the instructor and the activity type. The members of a group could communicate via using the microphones and speakers or a chat room. Group members can speak among themselves and their speech is not heard by the other groups. Teacher can talk to all the groups at the same time, follow the groups separately, and can interact with the groups and manipulate their study if s/he wishes. Each group has its own board, chat room, and web and discussion board. Teacher can redesign the groups whenever s/he wants to do so. Groups can share their production with the others at the end of the group work.

As a conclusion, including the visual aspect like presentation slides, motion video and the images to the content aimed at helping the learners understand the course material easily, and improving their reading proficiency as a result. As Lehman (1999) states, well-designed, appropriate, and meaningful visual presentations facilitate learners'

comprehension. Depending on the type and purpose of the lesson delivered, different content parts and different applications might be designed to create an efficient learning environment.

### The Learner Interface

The learners in the project had the synchronous interaction. As pointed out by Payne (1999), learner interaction means receiving the instructions, evaluating performance and achievement of learning outcomes and objectives, evaluating instruction, evaluating individual personal traits and mutual learning. As soon as the learners come into the computer lab, they install the learner interface facility to their individual computers to be able to join the synchronous virtual course. Once they install this facility and join the lesson, the interface resembles the one shown in picture: 1



Picture: 1 The learner interface

Active window is one of the main parts of the learner interface. Four different parts, that is participants, lecture flow, evaluation and file sharing are included in the active window. The *participant tab* shows the names of all the participants allowing the instructor and the learners to monitor who is attending the course. *Lecture flow tab* shows the content parts of the lesson step by step.

The learners can only see the list of the content parts in this window; they are not allowed to activate any of the steps, the instructor has all the control. The learners are also allowed to evaluate the lesson or the instructor's performance by using the *evaluation tab* at the end of the lesson.

This facility helps the instructor and the content providers to have an overall evaluation of the lesson and find the best way of reaching their learners. And finally, *file sharing tab* helps the learners to share their files on their computers with the instructor and the other learners easily.

*The hand raise* button above the active window allows learners to send a signal meaning they want to participate in the lesson orally. They might want to answer the instructor's question, ask their own questions or make a comment about a topic.

Both the instructor and the other learners hear the learner who is given the floor. More than one student's microphone might be activated at the same time. Therefore, two-way audio allows live conversations between all the participants.

The second main part is the *chat box*. "Internet Relay Chat" is the widely used conversational forum in which any user can open a channel and attract guests to it, all of whom speak to each other as if in the same room (Turkle, 1997).

In other words, the learners easily adopt chat box component and encourage the others to use it. They might all become actively engaged in the lesson. Both the learners and the instructor can use the chat box as a way of communicating with each other.

In some conditions, this facility may be very useful. One of the biggest advantages for the teacher is getting feedback from all of the students simultaneously, something which is almost impossible to do in a traditional face-to-face classroom.

*Live screen* is the third main part of the learner interface. The visual communication is unidirectional; the learners watch their instructor's live image on their screen, but the instructor can only have the voice connection with the learners. However, it is possible to provide a bidirectional visual communication between the teacher and the students when all the learners are equipped with a webCam. Especially when the learners participating in the online course are from different places, or cities, this becomes a very important facility. The fourth part is the *tool box* which functions as the classical board in a traditional classroom. The instructor uses this part to draw or write something on the whiteboard. S/he might also allow one of the learners to use this toolbox. Everything, written or drawn on the board appears on the others' whiteboards.

*The tabs of the presentation screen* are another part. These are chat tab, whiteboard tab, presentation tab, web tour tab, and video tab. As this is a synchronous lesson, sometimes something happens differently from the content parts prepared before.

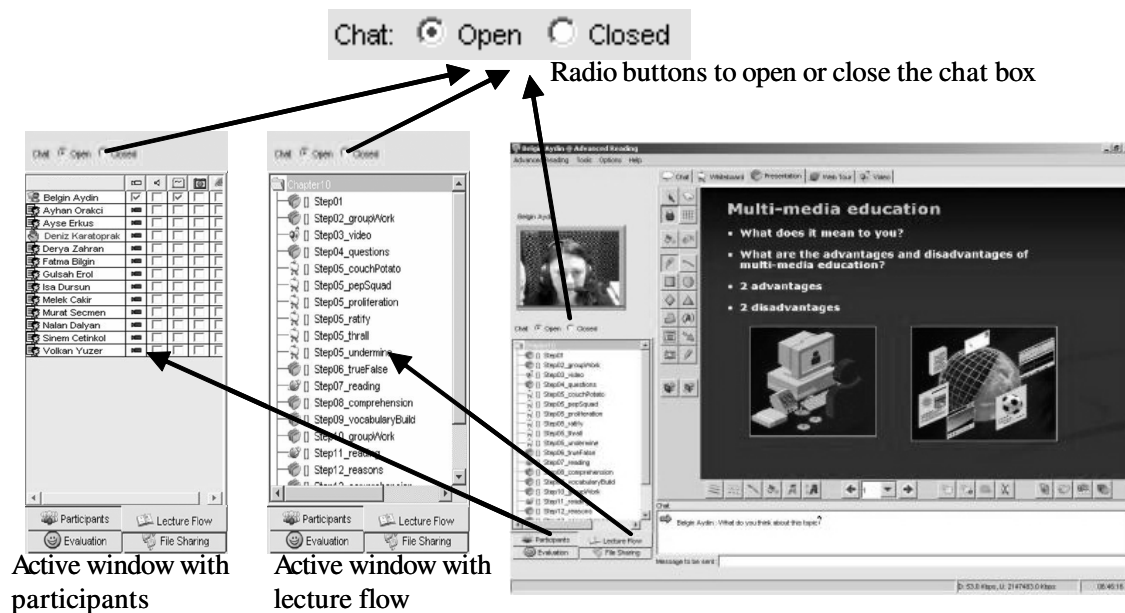
For instance, a learner can ask a question which requires being used a white board by the teacher. In these circumstances, the instructor uses these tabs to reach the different facilities of the presentation screen. When the instructor chooses a tab, the learners' presentation screens show this tab immediately.

A learner recognizes what the presentation screen shows with checking the tabs. The sixth and the last main part is the *presentation screen*. This screen shows the chosen content parts or the chosen tabs above it. They are chosen by the instructor.

If the instructor allows a learner, this learner's choices appear on the instructor's and the other learners' presentation screens. Learners also have the opportunity to send and receive attachments. Sometimes, the instructor may want learners to produce longer texts, as in writing a letter to the author of the text explaining their ideas about what they read. In these cases, learners are asked to open a word file, write their answers and then send it to the teacher and the other students as an attachment.

### **The Instructor Interface**

The instructor directs the virtual classroom through the instructor interface. Like the learner interface, this interface has to be installed to the computer before the lesson.



Picture: 2 The instructor interface.

The instructor interface has active window, chat box, live screen, tool box, presentation screen tabs, and the presentation screen. The locations of them are the same with the locations of the learner interface. However, there are some differences in some facilities (Picture: 2).

There is no hand raise button at the top of the active window. The radio buttons are placed this part to turn on or off the chat communication of all the learners of the virtual classroom. Sometimes the instructor might prefer to turn the chat box off to have the maximum attention of the classroom and to prevent the learners distract each other by chatting about unrelated topics. Also, the content parts on the active window are under the control of the instructor. If the instructor chooses a content part, this content part appears on the presentation screens of the instructor and all the learners.

When a voice signal comes from one or more learners to warn the instructor about raising hand or hands, or when the instructor wants to talk with one or more learners about the lesson, s/he opens the participant part of the active window. The instructor can control the raising hands or the names of the learners on this part. Besides, the instructor opens one or more learners' voice to speak. Also, s/he can give permission to a learner to draw or write something on the white board. S/he uses boxes near the names to give these permissions.

Toolbox for drawing or writing something on the whiteboard, and the presentation screen tabs are always active on the instructor interface. If something is drawn, written, or a presentation screen tab is chosen, the changes appear on the interfaces of the learners at the same time.

### The Management Interface

This interface is used by the system operators of the virtual classroom software. Its capabilities are mainly divided into three parts. First, the name, the days, and the times of a course or lesson are prepared from this part. Second, an instructor for a lesson is clarified. There is a username, a password, and a real name of an instructor in the program. All of these are loaded the program from the management interface. When the instructor wants to access the virtual classroom program, first username and password are asked. After filling these parts, the instructors reach their courses and start to use the program. Third, the learners and their lessons are clarified to the program. A learner has a

real name, a username, and a password like an instructor in the program, and this learner follows the same steps of the instructor.

People use internet for different purposes. Searching for different purposes is one of these facilities. (Howard, Raine and Jones, 2003) There is a chance to attract people in the Internet environment to join a course who deal with the contents in this course. A course starts in three ways. First, it may start with only accepting the learners who are responsible from this course. Second, it may start with accepting the whole learners enrolled the system. Third, it may start with accepting who wants to join the lesson. Starting the lesson one of these ways depends on the management and the instructor and these preparations are made from the management interface. Especially the third method can attract the persons to the courses.

### **The Recorded Lesson Interface**

All the lessons can be archived and students are able to review an archived lesson whenever they want to do so. Sometimes a learner participating in the lesson or the other learners taking the same course may want to review a recorded lesson because of some various reasons as not understanding or missing some parts of it. Or in order to review the strategies or the vocabulary items covered during the lesson. The recorded lesson interface helps the learners in these situations. When a learner accesses a recorded lesson, he/she may watch the whole lesson, or only the parts which they want to review.

### **The Database**

All of the instructors and the learners' data, and the recorded lessons are stored in the database. Moreover, the attendance of the learners to the lessons can be checked from the database. Besides, the survey, the test or question results of a learner which has done in the virtual classroom program are stored. Records for each student showing how much they have participated both orally and written, which questions they answered correctly, how much and when they initiated a topic, etc. might also be obtained for academic, pedagogical or research results.

## **EVALUATION OF THE VIRTUAL CLASSROOM PROJECT**

Language learning requires active learning individuals who are responsible from their own learning, who can motivate themselves, who are aware of their weaknesses and strengths and who can use the appropriate strategies for facilitating their learning and overcoming the obstacles. When we consider that these learners are the nominees of training the next generations, becoming autonomous becomes much more important for them in training their own learners to become autonomous, because as Kumaravadivelu (2002) points out, autonomous learners deserve autonomous teachers. Therefore, it can be concluded that one of the biggest advantages of the virtual classroom is the opportunity it gives to the students in encouraging them to become autonomous.

By encouraging individual learning and fostering learners to become independent of the teacher, by letting them use and become familiar with various educational tools and interactive learning environments such as the Internet, video, CD-ROM, it helps future language teachers in gaining a wider vision of education.

One of the key factors of a good system, as pointed out by Moore and Kearsley (2005), is monitoring and evaluating every part of the system frequently and routinely. The review of the related literature reveals that students' emotional reactions towards the inversion of computer into education are not clear. Especially for the teacher trainees being aware of their emotional reactions becomes much more important in raising their consciousness level of the learning and teaching processes. In order to get feedbacks from the students both for evaluation. Evaluation of the program from the learners' perspective and to increase their consciousness level of their learning process, the students participating in the project were asked to keep diaries and write their reflections both about the synchronous application and the traditional face-to-face classes. These diaries were



analyzed and the common positive and the negative points students reflected were discussed in face-to-face meetings during the application. These positive and negative points were also used as the starting point for developing the synchronous program continuously through the implementation process. Therefore, students could see the effect of their comments immediately during the process.

Students' reflections, confirming the study results mentioned in the literature (Moore and Kearsley, 2005), revealed that although numerous problems were experienced, especially regarding technical problems, overwhelming majority of the students preferred virtual classrooms over traditional classes and wished to have all their classes with their computers. They all enjoyed being in the virtual classroom, they stated feeling excited of having such an opportunity, and as a result, they were all motivated and expressed their satisfaction during the 3-hour class period.

They especially expressed their appreciation for having the visual support during the virtual classes. They also made positive comments about the methodology and positive attitude of the teacher and appreciated support and enthusiasm of the technical team.

When the student reactions were considered as a whole, it is possible to conclude that the majority of the students expressed their positive ideas towards the e-class application, yet, there is a group of students who expressed their preferences for the old-fashioned traditional way. They believe they learn better in a face-to-face classroom interacting with the teacher and the other students directly. As a result, considering different learning styles, the blended model combining both virtual and traditional components seems to be the most effective way for Turkish teacher learners.

According to Moore and Kearsley (2005), with an unseen instructor students are generally more defensive than they would be in a traditional class, but they are unlikely to express this anxiety. When the negative effects of anxiety on learning a language is considered, it was thought that identifying the negative feelings students might have related to both learning a language. And also, using computer would be the first necessary step in finding out solutions for the problems students express and only after that dealing with the sources making students anxious would be possible.

As a result, considering the importance of identifying the anxiety element in the learning process in eliminating its negative effects, the students in the project were given the *Foreign Language Classroom Anxiety Scale* and the *Computer Anxiety Scale* both at the beginning and at the end of the application in order to identify if both language and computer anxiety had any effects on the success and the attitude of the students towards the e-class application. Since the aim of this paper is to report the synchronous project and the infrastructures developed and used, the results of these scales, their relationship with each other and the effects of anxiety students experienced will be discussed in another paper.

Moore and Kearsley (2005) believe that students generally find inter-learner interaction which is fostered by virtual group work activities to be stimulating and motivating. While doing group work activities students develop their collaboration, organization and team building skills as well as exploring their own thinking and as a result increasing their motivation for learning (Fisher, Thompson and Silverberg, 2005). Similarly, students in Muilenburg and Berge's (2005) study associated social interaction with online learning enjoyment and effectiveness.

They, therefore suggest improving social interaction for increasing educational benefits. Students participating in this study also confirm these ideas. Learners reported that when they do not see each other interaction gains more importance in creating a positive and friendly learning environment. They stated their pleasure in having learner-to-learner interaction and working with their classmates.

Similarly, based on their findings, Chou and Liu (2005) conclude in their study that students learning in a technology based virtual learning environment have better learning effectiveness than their counterparts in traditional classrooms. They also have better performances, have higher computer self efficacy because of having higher control on their learning, are more willing to join the class interaction with the other students and the instructor.

As a result, it can be concluded that the virtual classroom application facilitated increased authentic interaction, and allowed greater learner autonomy. Especially shy students stated that they could participate in the lesson much easily when they did not feel spotlighted as in a traditional classroom. When the number of answers given to the teachers' questions was considered, the positive effect of virtual classroom can be understood easily in engaging the learners to the lesson actively.

## CONCLUSION

Beyth-Marom, Saporta and Caspi (2005) strongly argue that students should not be perceived as a homogenous group, but as different individuals with different learning habits, learning styles, preferences and needs. While some students prefer to be autonomous and control their own learning fully, others may need more guidance of the teachers. Therefore, while designing courses we have to find out their preferences, and as they state, we have to be more creative in responding to various styles. While no single instructional method or educational technology can be effective for all types of students, advances in technologies can help us in providing variety in our instruction.

If the degree of enjoyment the learners get by the content and the method of delivery is considered as the criterion of evaluating the success of the program, as argued by Mantyla and Gividen (1997), virtual classroom could be regarded as an effective and successful online course.

When the learners' different learning styles and preferences are considered, however, it would be advisable to include a face-to-face component in order to address to the group of students who prefer it.

Disregarding their concerns even if they are not the majority would mean decreasing the educational effectiveness of any type of an online course. As a result, preparing a blended program including both the traditional face-to-face courses and the internet-based virtual courses seem to be the most efficient way of addressing to both types of learner groups.

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