Distance learning and foreign language teaching

Miroslav Trajanovic, Dragan Domazet, Biljana Misic-Ilic

DISTANCE LEARNING AND FOREIGN LANGUAGE TEACHING

MIROSLAV TRAJANOVIC[1], DRAGAN DOMAZET[1],
BILJANA MISIC-ILIC[2]

[1] Faculty of Information Technologies
Trg Republike 3, 11000 Belgrade, Serbia
e-mail: miroslav.trajanovic@fit.edu.yu; dragan.domazet@fit.edu.yu
[2]Faculty of Philosophy, University of Nis
Cirila i Metodia 2, 18000 Nis, Serbia
e-mail: biljana.misic@fit.edu.yu

Among numerous modes of technology enhanced learning there are not many that have received as much attention as distance learning. Stimulated by the recent rapid developments in Web technologies, researchers in both ICT and education are constantly working to make the most of technological resources and put them to the best pedagogical use. In the area of foreign language teaching a lot has been done to cover a variety of world languages, but there are constant attempts for new solutions, taking into consideration specific needs of language learners. This paper is based on our experience in implementing and the desire to improve a set of three academic English language courses at the Faculty of Information Technology (FIT), the first university institution that have introduced distance learning system in Serbia and delivers academic programmes both traditionally and as distance learning. The first part of the paper presents the technological aspect of the FIT e-learning system, common for all FIT courses. Then we move on to discuss the major specificities of foreign language teaching. Next, we examine the process of development and implementation of English courses at FIT in terms of general course design, selection of teaching materials, technological and pedagogical processing of course materials, the role of the teacher, student support and motivation, performance assessment, course evaluation, and key differences between the two modes of delivery which have to be taken into account. The final part of the paper deals with the noted inadequacies and difficulties of technological and pedagogical nature, as well as challenges and new steps in improving the English courses at FIT. In conclusion, we highlight the complexity of technological, organizational, and not the least, pedagogical issues involved, but also hope to provide a solid starting point for more ambitious projects concerning distance learning and foreign language teaching.

Keywords: e-learning; foreign language

1 INTRODUCTION

For the past two years the Faculty of Information Technologies (FIT) in Belgrade has been organizing, along with the traditional academic program, the distance learning program for its students from Serbia and other European countries as well. The technological platform for the distance learning system is the *Oracle iLearning* system. The system has proved itself in practice as robust and very suitable for most of the academic courses. However, the common practice of foreign language teaching and learning poses a series of specific requirements for the distance learning system which are difficult or almost impossible to implement.

The paper first gives a short description of the distance learning system and English language teaching at FIT. Then follows the overview of the problems encountered in teaching materials preparation and course distribution. The final sections of the paper show and discuss some solutions and the results achieved in this kind of teaching.

2 METHODOLOGY

2.1 Technological platform of the e-learning system

The technological scenario for the e-learning system is shown in Figure 1. It means that all the participants in the process are connected to the Internet and that they can communicate among themselves via the Internet. The participants of the distance learning process are:
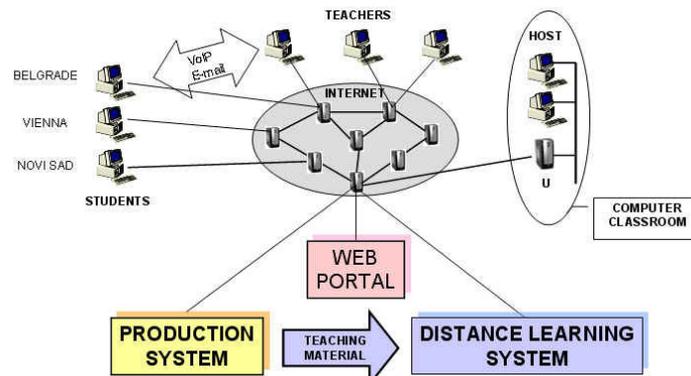
FIGURE 1. Technological scenario of the e-learning system

• Teachers, whose role is to prepare the teaching material, follow the students' activities throughout the semester, provide support for the students and assess them. Teachers can perform their activities at the FIT premises or at some distant locations.

• Distance learning system administrator, whose task is to process and publish teaching materials, administer the users and maintain the system.

• Students, whose task is to study using the teaching material and on-line tutorials in the synchronous and asynchronous regime. Moreover, students have to complete homework assignments, knowledge tests and examinations. Both traditional students and e-learning students can use this e-learning system.

The raw teaching material prepared by the teachers consists of lecture texts, figures, presentations, audio recordings, video recordings, the list of external web locations, quizzes, tests and exam tasks. All these components comprise the input into the production system, whose task is to produce the teaching material in the form suitable for publication at the distance learning system. The schematic representation of the functioning of the production system is shown in Figure 2. The completed teaching material is stored at the database and is available to all the authorized users (students, teachers, and administrators).
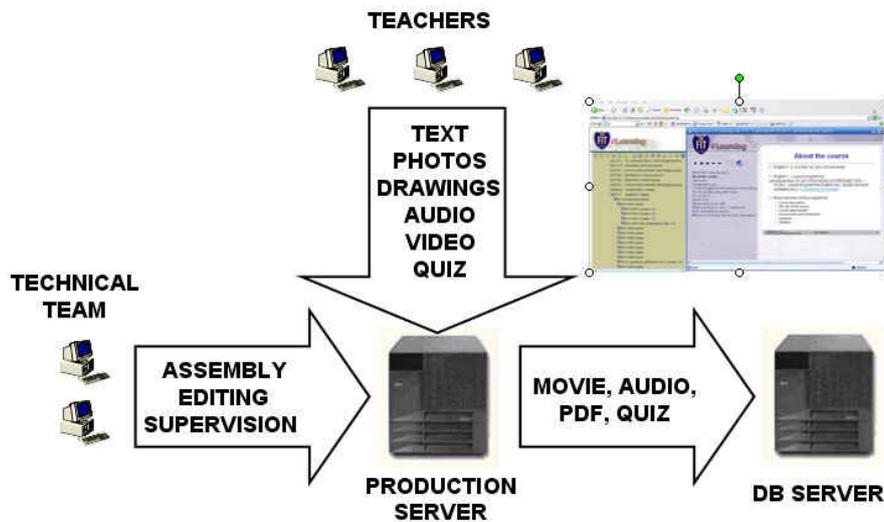
FIGURE 2. Production system

During the production of the teaching material it should be constantly kept in mind that is has to be designed in such a way that a distance learning student does not notice that s/he is not in the classroom. This can be achieved only with the adequate combination of audio/video content. The main result of the production is the audio/video recording of the lecture, which is, upon students' request, emitted at the time most suitable for them. Unlike students in traditional education, the distance learning student has the option to go forward and backward through the lecture and repeat it as many times as s/he needs to learn the material.

Communication between the teachers and the students is also done via the Internet. (Figure 3). They have synchronous and asynchronous methods at their disposal. Synchronous methods include chat, VoIP, and video conferencing. Among the asynchronous methods only e-mail and forum are used. The production of the same audio/video recording can be done in various qualities, corresponding to various transmission speeds. Although it is possible to work with lower bandwidth, the minimum recommended bandwidth should be 64 Kb/s. Technically this can be achieved if all the users have ISDN or, even more common, ASDL connection with the ISP.

2.2   English language courses at fit

The FIT curriculum specifies three English courses, English 1, 2 and 3, in the first, second and third semester, respectively. Content-wise, these courses are the combination of general English and English for special purposes (ESP for IT), with ESP content progressively increasing to 80% in English 3. The first level is intermediate, while the final is upper-intermediate with elements of advanced ESP for IT. The aim of these courses, specified by the faculty authorities, on the basis of IEEE recommendations, is to train the students for oral and written communication in professional and academic settings. The teaching goals, defined in this way, suggested as the best choice the task-based and student-oriented teaching approach instead of the text-based or teacher-oriented one.
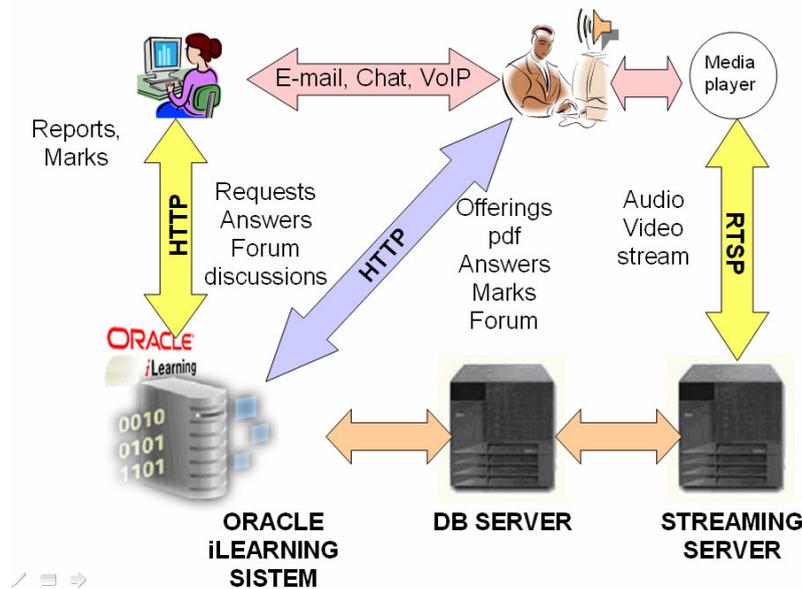

FIGURE 3. Communication inside the e-learning system

The starting point in designing and creating these three courses were some basic issues concerning course development, especially of a university language course[1].

These basic parameters are:
- to determine the level and proportion of general language and ESP
- to focus on all four language skills (listening, speaking, reading, writing) and their integration
- to include additional elements, specific for academic purposes, such as basics of academic reading, writing and oral presentation
- to select and/or create appropriate teaching materials

Additional tasks, stemming from specificities of FIT and the fact that the course has to be the same for both traditional and distance learning students are:
- to co-ordinate these two different teaching and learning media (the traditional one, in the classroom, and the e-learning one)
- to provide approximately the same options and tasks for both categories of students, taking care that e-learning students do not get deprived of some usual communication activities.

In the following part of the paper we discuss how we dealt with these issues as well as with some other conceptual and practical problems and tasks.

The primarily pedagogical issues of course design and materials selection are of less importance for this paper, so we focus on questions primarily related to e-learning. It should be just mentioned that the primary teaching materials include the coursebook, practice book and audio CD pack *Language to go, Intermediate and Upper intermediate* (Longman) for general English and *Oxford English for Information Technology* (Oxford University Press) for ESP.

Due to the specificities of the dual distribution of the courses, the option we have chosen for our e-learning mode is a hybrid course. Theory defines it as: "*Hybrid* systems usually comprise a collection of materials made available on CD-ROM or on an institutional intranet, with links to the Web and regular contact with tutors by email, telephone or videoconferencing." (Walker, 2007). In our case all basic teaching materials are available offline – coursebooks, practice material, some audio materials, answer keys for all the tasks.

Some of the noted advantages of a hybrid course include:

- no need for the student to be constantly online, thus avoiding potential technical problems

- all the students have the same teaching materials, in this case high quality coursebooks

- hybrid courses in recent literature on CALL (Computer Assisted Language Learning) are recommended as the optimal solution – "in order to be efficient, Web-based courses should be blended or hybrid", (Wolff, 2003)

---

[1] According to Graves (Graves, 1996) the process of course development includes needs assessment, determination of goals and objectives, content conceptualization, selection and development of materials and activities, organisation of content and activities, and finally, assessment, evaluation and modification of the course.

The key issue in the realization of a hybrid course is how to convey at the distance the existing teaching materials and activities, especially the instructions. As mentioned before, all the classes are planned in great detail in advance, carried out and recorded in Power Point as slides and as narration. Everything that the teacher says, asks, or explains in the classroom s/he anticipates and records in the Power Point presentation. Having the narrated recording, which is richer than just the text on the slides, is very important for several reasons. Primarily, it gives the student the sense of a 'real' teaching session. For foreign language teaching in particular this is essential because the student both sees the text and hears the pronunciation, which is not possible if lectures are given only in the written pdf. or ppt. format. The narration explains and elaborates the slides, but also addresses the students directly, inviting them for further communication, and serves both as the instruction and listening comprehension activity. When working with the coursebooks, the students are very precisely directed to the pages in the coursebooks, with very detailed instructions and explanations. It is important to note that the students can pause the narration to complete the task from the coursebook, and then go on to the next activity/task at their own pace, unlike the students in the classroom, who have to follow some average pace of the group. The e-learning students, unlike classroom students, can also repeat the slides/narration as many times as they want, thus having more time for listening to the lectures/activities. The Power Point slides and recorded narration are accompanied by the lecture texts (mostly the more formal and structured explanations of grammar, vocabulary, learning and problem-solving strategies, homework tasks and mini-project assignments) in the pdf. format. Together with the coursebooks and recorded classes, for all the activities in class, all tasks and practice materials, there are additional pdf. files with the answer keys and model/suggested answers. The audio CD, which is a part of the cousebook pack, is available only online, but, of course, as the commercial CD, it can be bought together with the coursebook. Naturally, if the students need or want to, they can always check their answers with the teacher, via e-mail. A student can also record her/his comments and send them via e-mail as the audio file. What is especially significant and needs special emphasis is the fact that there is a very strong support segment for the e-learning student from the teacher, who regularly communicates with them vie e-mail, mostly in English, but if necessary also in their mother tongue. Moreover, the students can also communicate among themselves, via e-mail, forum or chat. From the point of view of the teacher, such classes, as well as course management as a whole, request much more demanding and more detailed preparation, engagement and organizational skills, as well as a considerable level of technological skills.

One of goals of English 1, 2, and 3 courses is to develop, improve and practice the language skills of listening, speaking, reading, and writing, as well as skills integration. Due to the very nature of e-learning, with the lack of face-to-face interaction, it is the speaking component which makes the greatest problem, but this does not mean that this component has been totally neglected, as is the case with many CALL and language e-learning systems. Our solution has been to provide learning options for and assess one particular mode of oral communication – the oral presentation, which will be dealt with in greater detail soon. Table 1 presents the typical language teaching/learning tasks and the materials and methods used for completing them both in the traditional and distance learning mode, together with the used and suggested tools for distance learning.

Knowledge assessment at FIT is in accordance with the Bologna declaration. This means continuous assessment of knowledge, and, in case of English, performance and proficiency. A student gets 60% of the final mark through pre-exam activities and 40% as the final written test mark. In case of English 1, 2 and 3, the final exam is primarily the assessment of grammar, vocabulary and language functions, while the mastery of language skills is mostly assessed in pre-exam tasks and activities. This gives the e-learning students more time for preparation, and in a way, lowers the stress. The pre-exam tasks include:

- Progress test (grammar, vocabulary and use)

This is a two-page test given around mid-semester, covering only the learned material. This test has a dual function. It should indicate the student's progress and identify the problem areas which need remedial action. Moreover, it serves as the model for the final exam, which has more or less the same form but is considerably longer and covers the material from the whole course. This test is given as the word document, for traditional students to do it in the classroom, while the e-learning students have a set, limited time to do it and submit it via e-mail to the teacher.

- Listening comprehension test

This is a short 15 minute test with 10-multiple choice and fill-in the blanks questions, distributed at the set time as the e-learning test, for both traditional and e-learning students. The system records the answers.

- Homework writing assignments

They are related to lectures and mostly practice functional writing according to the given model, with the length and demands progressively increasing. In English 3, half of the tasks are group problem-solving integrated skills activities, where a group of 3-4 students, produces a joint short written report.

- Home reading and writing.

In each course students have to read a book simplified at the corresponding level and complete the given tasks related to language study, text study and essay writing. The significance of extensive reading in the foreign language of texts which are not exclusively professional is widely accepted in foreign language teaching[2].

- Oral presentation

Traditional students do the oral presentation alive, in front of their colleagues, whereas e-learning students record it as an audio or video file. Using the given presentation model, the students talk on professional, specified topics. Unfortunately, this is the only formal and obligatory mode of oral communication and presentation. These oral presentations recorded by e-learning students can be posted at the FIT forum. This can not only increase the student's awareness of public speaking in English, but also invite other students to provide feedback, thus promoting communication.

---

[2] In case of these three English courses the books are contemporary novels/biographies related to IT: Bill Gates: *The Road Ahead* (intermediate Penguin Readers, Longman), Isaac Asimov: *I, Robot*, (upper intermediate Oxford University Press Bookworm readers), Bill Gates: *Business @the Speed of Thought* (advanced Penguin Readers, Longman

TABLE 1. Difference between traditional and distance learning method

Teaching/learning task	Traditional	Distance learning	Distance learning tools
Home reading and writing	Books and typed documents	Pdf documents, word documents submitted via email, feedback from the teacher	e-mail
Oral presentation	Oral presentations in front of the colleagues	Audio/Video clip	Microphone, Web cam, Skype
Dialogue practice	Pair/group work, students talk and listen	Students open audio conference	VoIP, Google Talk, Skype
Grammar and vocabulary practice, checking and correction	Written and oral tasks, Immediate feedback from the teacher, for simple tasks written answer key	Very detailed answer key, suggested/model answers, additional and remedial activities and explanations upon student's request	e-mail, forum
Writing practice	Paper, correction	Hypertext comments, real email communication with teacher and peers	e-mail, forum
Problem-solving activities (individual)	Books and web resources available, notes and oral/written reports	Books and web resources available, written report	e-mail
Problem-solving (group)	Communication direct, face-to face, various resources available, paper note-taking for brain-storming	Communication by email or chat, voice over IP (recorded and submitted to the teacher), various resources available, note-taking as hypertext, comments added	Circulating document with comment, chat, forum Writing, different students add their comments
Feedback from the teacher	Direct, oral, immediate, real-time	Usually written, delayed	e-mail, chat, Skype
Presentation of lecture content, instructions for activities	Teacher's live oral presentation Written material Teacher reacts directly	Recorded teacher's presentation, slides and narration Written material Teacher anticipates the possible questions and problems and provides instructions accordingly	Audio-video stream pdf
Listening comprehension	Live communication, audio coursebook pack	Recorded presentations and instructions by the teacher, audio coursebook pack	CD, audio-video stream
Listening comprehension test	Audio CD, cassette, paper test note taking	Audio recording at the system, test at the system	Media player, e-learning system

Nevertheless, this is not the only oral communication mode - once a month there are audio conference classes, on a given topic and with activities announced in advance, where both traditional and e-learning students can take part. Since these are not obligatory, only the students who want to do it, participate. There are, however, several problems with such real-time classes. It is often difficult for the e-learning students to manage their time in order to take part[3]. Moreover, sometimes the broadband connections do not work properly and fast enough, which causes unpleasant interruptions and delays. Also, the discussion groups larger than five participants (the teacher included) can not work properly, so the students have to be divided into several groups, with the teacher joining alternatively each of them for a short period of time. Recent literature on CALL describes several attempts to include the oral communication component into e-learning (Kötter, Shield & Stevens, 1999, Humpel & Huck, 2004, Volle, 2005). The main common feature of these attempts is that they combine real-time and recorded communication, the number of students is rather small, and, most importantly, it is the students who primarily take the initiative and are in charge of the communication activity, with the teacher acting primarily as a facilitator, and less as a moderator or assessor. Unfortunately, our experience is that students, despite claiming they need oral communication, are very reluctant to take part and hardly take any responsibility, even when one of them is assigned the role of the group moderator.

It should be noted that one of the ideas in the design of these three English courses was to provide opportunities for realistic learning situations, in particular to enable the students to learn and use English in tasks related to and facilitating their study of other, IT-related courses at FIT. Homework writing and oral presentations are the areas of the most pronounced collaboration between English, and other, IT-related courses. Especially in English 2 and English 3, the tasks are set in such a way to include the content covered as assignments or projects in professional courses. This not only enables the connecting of the professional knowledge and language knowledge in a meaningful way, but also promotes peer and collaborative learning in a realistic environment, which is one of the key methodological recommendations in contemporary foreign language teaching (Vygotsky, 1978, Salaberry 1996, Rüschoff, 2001). A typically successful example is that the seminar papers and project tasks for some IT courses, for which the students have to use resources both in English and in their mother tongue, are presented orally, in an appropriately adapted version in English, and graded as the oral presentation.

3 RESULTS

The described system for distance learning of English has been already used for three semesters. The following Table 2 shows the results scored by traditional and distance learning students.

---

[3] The suggestion that these classes should be only for e-learning students, and take place late at night, with the teacher working from home, has not been tested yet, since there was no interest from the students.

TABLE 2. Students enrolled at English courses and their examination results

Type of students			English 1	English 2	English 3
	Students (total)		83	18	23
Traditional students	Total enrolled		22	4	7
	Exam taken		20	4	6
	Passed		19	4	5
	Failed		1	0	1
	Pre-exam points (average)		46,00	48,12	43,20
	Mark (average)		**7,70**	**7,75**	**7,00**
Distance learning students	Total enrolled		61	14	16
	Exam taken		34	14	7
	Passed		34	14	7
	Failed		0	0	0
	Pre-exam points (average)		49,41	50,20	45,50
	Mark (average)		**8,22**	**8,70**	**8,60**

We would like to note that these exam results should be taken tentatively, as a tendency rather than as a compelling evidence. It should be noted that the marks need not be taken as an absolutely reliable indicator of one mode of teaching being superior to another (as it may seem that the distance mode is superior to the traditional one!). It is common that the students enter the faculty with very different language levels, and some distance learning students have work experience with foreign companies, which can explain their better exam scores. A more interesting indicator is that distance learning students, on the average, tend to gather more points for pre-exam assignments than the traditional students. It seems that they, to compensate the lack of direct contact, put more effort into pre-exam task. Another possible explanation, and a rather unfavourable one, could be that distance learning students have someone else, very proficient in English, who completes their tasks. Our conviction, however, is that it is not the case, because their final test results roughly correlate with their pre-exam results.

On the other hand, the fact that distance learning students do not score *worse* than the traditional ones is a clear indicator that our distance learning course is indeed a viable, workable alternative, with satisfactory results. Needless to say, there is always room for improvement, about which we would comment in the following section.

4 DISCUSSION

In this section we would mention some potential and noted problems and advantages of applying the e-learning model to the teaching of English, as well as our observations after three semesters.

Typical general distance learning systems do not have installed systems to support synchronous and asynchronous communication, and as such they are not quite suitable for

foreign language learning. By using additional tools such as Google Talk, Skype, various forums, whiteboards, etc. these problems can be overcome.

The next problem is the computer-aided verification of students' answers to tests other than multiple choice. Even the simplest fill-in tasks, reduced to a single word can be counted as incorrect because of spelling errors or even blank spaces. For more sophisticated fill-in tasks, multiple matching, sentence transformation, and the like, which are so typical for language study, this system could not be used at all. Some specialized distance learning systems are capable of solving some of these problems, but not all. An even greater problem is the automatic pronunciation checking.

Another problem is the motivation of distance learning students. In case of English courses, which do not aim only at acquiring knowledge but also some skills, including communication skills, this problem seems to be the greatest. An extremely significant task of the teacher in preparing the material and implementing the course is how to retain a high level of interaction in the teaching (virtual) environment despite the limited direct contact. The key problem for the students, however, remains the lack of opportunities for direct oral peer communication as well as with the teacher. To alleviate this potential feeling of isolation of distance learning students and strengthen their sense of belonging to the group and the institution, sometimes they are given group problem-solving tasks, and the complete e-mail or chat correspondence is sent to the teacher. This is the area which will be given more attention in the future.

It should be noted that the statistic results clearly indicate that distance learning students on the whole score higher than the traditional ones. As noted above, there are many possible reasons for this. Of course, it cannot be straightforwardly claimed that distance learning is superior to face-to face learning, but we would like to note that this fact leads to the conclusion that, to say the least, distance learning students are not too much underprivileged by being absent from classroom classes. Audio-video streams and various methods of synchronous and asynchronous communication manage to compensate the shortcomings stemming from their absence from the class.

5 CONCLUSIONS

The application of distance learning system to foreign language teaching is a great challenge. The greatest problem is the lack of face-to-face communication with peers and the teacher. The paper shows that by using state-of-the-art tools for synchronous and asynchronous communication this problem can be overcome. Our experience is related to the English language study only, but the similar method is applicable to the foreign language teaching in general.

Our observations, after initial apprehensions, are very positive, but we are aware that we are facing a lot of additional work to improve the courses, modify them, make better multimedia presentations, and, in particular, enhance interactivity. We believe that by applying the combination of pedagogical insights and modern technologies it is possible to realize a successful foreign language distance learning course.

REFERENCES

1   Fitzpatrick A. & Davies G. (2003) (eds.) *The Impact of Information and Communications Technologies on the Teaching of Foreign Languages and on the Role of Teachers of Foreign Languages*. Available at: http://www.icc-europe.com/ - "Report on ICT in FLL".

2   Graves, K. (1996). *Teachers as course developers*. Cambridge: Cambridge University Press.

3   Hampel, R. and Hauck, M. (2004). Towards an effective use of audio conferencing in distance language courses, *Language Learning and Technology Journal* Vol. 8: 1, pp. 66-82.

4   Kötter,M., Shield, L., & Stevens, A. (1999). *Real-time audioa and email for fluency: promoting distance language learners' aural and oral skills via the Internet*. ReCALL, vol 11:2, pp.55-61.

5   *Language Learning and Technology Journal* (special issue on Distance learning), vol.7:3 (2003). Available at: http://llt.msu.edu/vol7num3/default .html.

6   Salaberry, M. R. (1996). The theoretical foundation for the development of pedagogical tasks in computer mediated communication. *CALICO Journal*, 14(1), 5-34.

7   Rüschoff, B. (2001). *Construction of knowledge as the basis of foreign language learning*. Available at: http://www.uni-essen.de/anglistik/bernd/construction.htm

8   Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes.* Cambridge, MA: Harvard University Press.

9   Volle, L. (2005). Analyzing oral skills in voice e-mail and online interviews. *Language Learning and Technology Journal* Vol. 9:3, pp.146-164.

10 Walker R. (2007) *Information and Communication technology for Language Teachers*, http://www.ict4lt.org/en/en_mod2-3.htm#hybrid

11 Wolff D. (2003). *Web-based teaching and learning: a research perspective*: EUROCALL 2003. (unpublished conference paper, quoted from http://www.ict4lt.org/en/en_mod2-3.htm#hybrid).