E-LEARNING AS AN EFFICIENT TOOL FOR LANGUAGE LEARNING AND TEACHING PROCESSES

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Abstract: The paper deals with a description and tutors' experience of three computer aided methods used in English language teaching at the University of Defence: videoconferencing with a Canadian lecturer, interactive electronic learning support and webquests. Based on positive students' acceptance of e-learning implementation, further prospects of computer aided instruction are considered.

Key Words: English language, e-learning, military, Study Portal, videoconferencing, webquests.

"E-learning is a continuous, never-ending educational process. Everyday getting new knowledge."

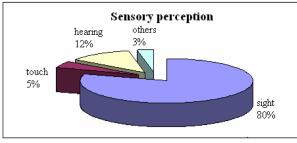
(D. Abernathy, 2000)

1. INTRODUCTION

Information and communication technologies (ICT) enter all human activities and they affect them significantly. They play a more and more important role in education, including the teaching of languages. As a result, the traditional perception of teaching, especially motivation elements, is changing. Other important factors that come into play are easy access to information resources on the Internet and new ways of synchronous and asynchronous communication. Since information and communication technologies have become an instrument for improvement and facilitation of various areas of human activities, it is relevant to reflect on their implementation in language teaching with the purpose of increasing its quality efficiency. If used properly from both the methodological and technical points of view, their potential can be advantageously exploited in language teaching in the 21st century.

Its advantages and disadvantages are dealt with in many papers. Some advantages of using e-learning in education are obvious, the others are not so apparent. Let us mention the main advantages of e-learning [8]. It is first of all achieving higher efficiency of teaching resulting from its flexibility, interactivity, individual approach and multimedia character. Moreover, e-learning offers access to the latest information from anywhere which is both time- and cost effective. Net technologies synchronization enable continuous accessible resources and the presentation of up-to-date materials. All these advantages are multiplied if Learning Management System (LMS) is used in e-learning. LMS is a special software installed on the server which provides various instruments for creation. administration and distribution of educational content, as well as instruments of on-line communication, assessment and feedback. The access to such an LMS is then possible from anywhere by using a common internet browser.

One of the indisputable advantages of elearning is presenting study materials in electronic form, so the learner can receive information through several senses. The latest research focused on sensory perception shows that it is sight that is primarily used while receiving information. According to this research, 80 % of information at school is transferred by sound. In other words, it is hearing that is involved in the perception process most. Multimedia try to eliminate this deficiency and to affect primarily human sight and, at the same time, to involve hearing. The reason behind this is the fact that a balanced sensory perception is of immense importance for both the remembering and recollection of what have been taught [5].



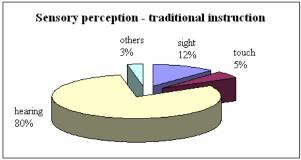


Fig. 1 Disproportion between ideal and real perception [5]

This knowledge is used in teaching languages at the Language training Centre of the University of Defence (LTC UoD), as the requirements for exit language level are continually rising. UoD graduates will take positions as military technical or economic experts and they will have to communicate primarily in English with their counterparts from NATO. That is why their exit English level should be at approximately upper-intermediate level. Although it might seem to be too high, the graduates have to be prepared for sophisticated communication in the area of general, political, technical and military matters.

It is not easy to meet these requirements. So if the task is to be fulfilled, it is necessary to maximize the efficiency of the teaching process.

This can be approached in different ways, for instance by designing the content, structure and methods of teaching to best fit the end-of course requirements, as well as to the requirements of real-life practice. Another way to improve the whole teaching process is to

include the methods of e-learning in the curriculum.

Generally speaking, implementing and further development of e-learning depend primarily on the teaching philosophy of the educational institution, its technical equipment, as well as its staffing by qualified human resources. Needs for information support at the University of Defence are regularly analyzed and assessed by the IT Board.

The most frequently used methods of implementing e-learning into language teaching at the University of Defence are interactive electronic learning support, webquests and videoconferencing with a Canadian lecturer.

2. INTERACTIVE ELECTRONIC ENGLISH LANGUAGE LEARNING SUPPORT OF THE UoD

Electronic English language support was created by a team of English language tutors and students at the Language Training Centre, Faculty of Military Technology, in 2005-2007. It is accessible through the UoD Study Portal which enables UoD students and staff to use it at any time on any computer. It is based on the language needs analysis carried out beforehand, and follows the principles of open learning. It contains more than 300 electronic theme-based objects organized into 8 sections, as shown in Figure 2.



Fig. 2 UoD Study Portal: English language learning support page

Each section is further divided into several thematically oriented sub-sections where interactive learning objects are being systematically stored. All the learning objects are provided with interactive feedback, which allows the users to practice English language skills, grammar and military vocabulary on their own, and thus encourages their independent learning.

To provide an illustration, a screenshot of an e-learning object meant for military English students at an intermediate level of proficiency is shown in Figure 3. It comes from the Military Reading section. The aim of the exercise is to practice vocabulary in the context of military training. A user has to fill in the gaps by dragging and dropping appropriate words into the right gaps. By clicking on your score button at the bottom of the page, the user is provided with feedback; in this case in the form of scoring. After clicking on the Check button, wrong answers turn red.

This electronic object has been created by a UoD student. The English language tutor used the 'guided-project method' for this purpose. The process of material development enabled the students to practice their language skills, grammar, vocabulary and military English. All the students engaged in creating electronic objects considered the task attractive.



Fig. 3 Screenshot of an e-learning object created by WO Jana Slavikova

3. WEBQUESTS

Another project using multimedia at the English language training in a form of

webquests was created at the Department of Languages at the Faculty of Military Technologies UoD. The project was tested and verified on Ph.D. students in the summer term of the academic year 2005-2006. The aim of this project was to make the English language training better and more effective as well as to offer the students modern methods to enhance their motivation. A further idea was to provide students with authentic texts. Working up the tasks the authors of webquests main effort was to reflect real life needs and thus to develop as authentic tasks as possible.

Webguests are relatively new activities that have found their applications also in teaching "WebQuest" languages. The term coined in 1995 by Prof. Bernie Dodge from San Diego State University (http://eduscapes.com/sessions/travel/define.ht ml). He defines this kind of activity as "an inquiry-oriented activity in which some or all of the information that students interact with comes from resources on the Internet" http://en.wikipedia.org/wiki/WebQuest) (http://www.longwood.k12.ny.us/lhs/teach/epit rell/definition.html).

4. VIDEOCONFERENCING TECHNOLOGIES

Current videoconferencing technologies enable synchronous communication between a native speaker and students regardless of the distance between them. The advantage of synchronous videoconferencing communication is the fast reaction. Thereby this kind of communication comes close to the classical method of language training in the classroom.

Cooperation with the Canadian Forces Language School in St. Jean and Canada School of Public Service in Montreal enables creating virtual classrooms and communication between a teacher in Canada and students from the Military University in the Czech Republic.

Teachers at the Language training Centre of the University of Defence together with Canadian colleagues set up a project Partnership for Learning Program (PLP) aimed

at promoting communication with the support of modern technologies.

The ICI-Design, a Canadian company, which is headquartered in Quebec City, specialized videoconferencing developed software for this project. Due to this, software real-time connections between the Czech Republic and Canada are possible. ICI-Design, which supplied the software, specializes in research and development of audio and video "multi-stream" technology that permits multiside videoconferencing sessions via Internet. The software brings a controlled, yet easy, access to the website where students and teachers can meet in spite of being at different locations. All users are equipped with headsets and web cameras. The breaking point is in transmission of sound and picture first to Atlanta and then to London to be boosted before it is transmitted to the Czech Republic. This ensures a better quality of video and audio reception than ever before. Thanks to the software there can be up to ten people present at the website using individual screens. Interactions between the teacher participants are facilitated with special technical features, which ICI Design created for this particular application [1].



Fig. 4 On-line session

A technician at the UoD site is responsible for explaining how to start. However, the process is very simple. There is an instruction sheet so that students can follow the steps to get to the discussion portal. The instructor is at the website waiting and ready to conduct discussions in English.

A learner-centered and engaged pedagogical approach is emphasized in the project. Thus the students play a significant role in choosing relevant and interesting topics according to their military, cultural, and individual lives. The topics are discussed at the website during the videoconferencing sessions and subsequently in writing via e-mails as a feedback. The dual-prolonged approach of adding a written component to the oral session is chosen to prepare students linguistically for the intensity of the on-line discussion. The project is based on creating a virtual classroom environment for the following groups:

- Military students at the Faculty of Economics and Management.
- PhD students at the Faculty of Economics and Management.
- Teaching personnel at the University of Defence.

The participants of the program are usually eight to ten students (Fig. 4) and the instructor. Each participant is able to view the other participants on the screen. There is one screen that is designated as the visitor's screen. This screen is used for various English-speaking guests participating in our discussions.

The English language program of the PLP, as mentioned above, is concentrated on oral interaction among the participants. However, a written communication link, using the Web, is set up among students and the instructor to support the class discussion. The curriculum for the program resembles other NATO-sponsored programs designed for international discussion and cooperation. The material resources used to spark the conversations are chosen at the discretion of the instructor in consultation with participants and colleagues at both the Canadian and Czech sites. These resources involve guest speakers from the military and civilian populations.

5. STUDENT'S ACCEPTANCE AND FURTHER PROSPECTS THE IMPLEMENTATION OF E-LEARNING

In 2006 the LTC began a process of incorporating e-learning experiments into its curriculum. Consequently, students'

evaluation of the project was carried out. It has been found that learning outcomes and students' acceptance were very good. One of the significant aspects of students' evaluation is shown in Figure 5.

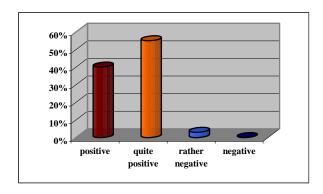


Fig. 5 Students' evaluation of the impact of the electronic learning support on their English language skills development

Encouraged by positive feedback from 166 military students, the authors [2] channeled their efforts into suggesting a preliminary model of a distance learning course tailored to military professionals' specific language needs if such a course were given the green light for design.

By offering the draft of the English language course syllabus, the authors took the first step that could become subject to further elaboration by a potential course design team.

In Figure 6, a prospective course content is shown. It is meant for military professionals preparing for the NATO STANAG 6001, SLP 3333, and English language examination.

- **Study Guide** provides instructions on how to use the e-learning environment and offers effective study strategies.
- 10 Modules are divided into Chapters and Lessons. Each Lesson might include invariant and variant content.
- Exam skills offer auto-tests based on NATO STANAG 6001 examination format.

The authors believe that the course design proposal might contribute to further Czech Armed Forces decisions about incorporating elearning elements into military professionals' education.

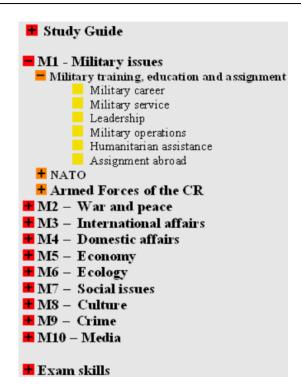


Fig. 6 Prospective course design

6. CONCLUZION

In accordance with the growing interest in distance learning opportunities in higher education, the UoD English language tutors have been seizing the opportunity of exploring the challenges posed by e-learning. The search for effective teaching-learning methods responds to NATO military professionals' needs to enhance their English language skills in compliance with NATO STANAG 6001 requirements.

By incorporating on line teaching tools and technologies into the teaching-learning process, the tutors expect to meet the challenging objectives.

However, most of them do not see elearning as a panacea for English language acquisition, and emphasizes the importance of face-to-face instruction, particularly in developing conversational skills. They are trying to implement e-learning sensitively, bearing in mind one of the Plato's quotation: "Someday, in the distant future, our grandchildren's grandchildren will develop a new equivalent of our classrooms. They will spend many hours in front of boxes with fires glowing within. May they have

the wisdom to know the difference between light and knowledge."[9]

BIBLIOGRAPHY

- Cechova, I., Nedoma, R., Implementace videokonferencnich technologii do vyuky cizich jazyku, Sbornik z mezinarodni konference o elektronicke podpore výuky SCO 2007, Masarykova univerzita, Fakulta ekonomicko spravni, Brno, 2007, ročník 4, str.75-79, ISBN 978-80-210-4296-4;
- 2. Cechova, I., Stanková, E., It Takes Two to Tango – through cooperation to the of distance komplexity a learning course design, In Sborník příspěvků z mezinárodní konference Kompetence v cizích jazycích jako důležitá součást profilu absolventa vysoké školy, Univerzita obrany, Brno, 2007, s.52-57, ISBN 978-80-7231-261-0;
- 3. Dvorsky, J., Jonakova, S., Stankova, E., Zdokonalovani obsahu a metod vyuky anglickeho jazyka na Univerzieĕ obrany, [Zaverecna zprava projektu specifickeho

- vyzkumu K-218 FVT UO], Univerzita obrany, Brno, K-218 FVT UO, 2005;
- 4. Hite, C., *Language Learning in Distance Education*, Cambridge University Press, 2003, ISBN 0-521-89455-7;
- 5. Kopecky, K., *E-learning (nejen) pro pedagogy*, Hanex, Olomouc, 2006, ISBN 80 85783 50 9;
- 6. Manak, J., Svec, V., *Cesty pedagogickeho vyzkumu*, Brno, 2004, 78s., ISBN 80-7315-078-6;
- 7. Slozilova, E., Sikolova, M., Webquests as an Effective Means of Teaching Integrated Skills, Sborník mezinarodní konference Ways to teaching and learning, Hradec Kralove, 2007, s.123-132, ISBN 978-80-7041-321-0;
- 8. Stankova, E., Svoboda, P., *Prichod elearningu do ceskeho vysokoskolskeho vzdelavani*, Listy Univerzity obrany 2/III, 2006, s.12-13;
- 9. *Thinkexist.com* [online]. 2008 [cit. 2008-02-27]. Dostupný z WWW: http://thinkexist.com/quotation/someday-in-the-distant-future-our-grandchildren-s/406616.html.