# SVETIMŲJŲ KALBŲ STUDIJOS/ STUDIES OF FOREIGN LANGUAGES

## Web-based Learning: Activities and Platforms

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**Abstract.** At present young people need both digital literacy and proficiency in foreign languages in order to participate actively in society and to become fully-fledged members of the European labour market. Therefore, developing students' competence in ICT and foreign languages is essential in higher education. A synthesis of both is being sought for in designing different language modules at the Centre of Foreign Languages, Kaunas University of Technology (KTU).

The paper presents theoretical considerations as well as empirical observations testifying to the usefulness and efficiency of ICT integration into foreign language teaching / learning. The authors share their experience in implementing new technologies in different English language courses as well as participating in Internet-based communication projects with partners from other European countries.

A survey about the level of the Internet penetration and the students' attitude towards it was carried out among KTU students, and the analysis of the survey results is presented in the paper. The authors highlight the advantages and threats of digital inclusion, point out the current needs in the area and present recommendations for language specialists applying new technologies in their work.

Competence in Information and Communication Technologies (ICT) has become a vital part of social progress and an essential tool for people all over the world to have in order to be able to participate effectively in society.

With this task in view, EU leaders agreed in March 2000 on an ambitious goal for Europe:

"to become the world's most competitive and dynamic knowledge-based economy by 2010, in particular with regard to the development of the on-line economy and providing citizens with the access and skills needed to live and work in the information society" (Lisbon Strategy, 2000).

With the prospect of Lithuania joining the EU in 2004, priorities in education are given to digital literacy and foreign language competence. Digital literacy enhances such democratic values as autonomy, gender equality, human rights, etc., while proficiency in foreign languages can help young people enter the European market on an equal basis with their peers from West European countries. In addition, ICT can be used as a powerful tool to develop the ability and skills for young people to participate in a democratic and knowledge-based society as adults in due course.

In response to current requirements and demands, the authors of the present study have addressed **the problem** to determine the potential of digital inclusion in language curricula and to define efficient ways of implementing new technologies in language learning / teaching.

**The aim** of the study was to analyse the present state of digital literacy in tertiary education and to identify the ways of successful ICT application in language learning / teaching.

The research methods used were: analysis of theoretical sources, documents, survey and empirical study.

Digital technologies have doubtlessly introduced enormous possibilities in education worldwide, however, the extent of their penetration differs from country to country. The European Commission claims ensuring digital literacy for young people and orientation towards life-long learning among its main tasks (Education and Training 2010, 2000). According to the Eurobarometer, the computerization of EU schools with the Internet connection reached 93% in March 2002, some of the countries (Denmark, Finland, Germany, Ireland, Sweden, UK) having approached the maximum 99-100%. In general, the Internet penetration in EU countries has increased from 18.3% in March 2000 to 40.4% in June 2002. (eEurope, 2002).

So far, Lithuania has been lagging behind many European countries in the areas of Internet access and digital resources. The Internet penetration increased to 20% in 2002, compared to less than 10% at the beginning of 2001 (Steponavičienė, 2003). The minimum ratio of computers per student in Lithuanian upper secondary schools is 5-10 times less than in West European countries and standards proposed by educational specialists (Summary of the Strategy for ICT Implementation in the Lithuanian Education, 2002).

However, the situation is changing fast, and the highest authorities of the Republic admit that "Information explosion and global communication create a setting of open competition of new quality, where the greatest superiority is provided by knowledge and information competence" (Monkevičius, 2002). National, municipal budgets and EU structural funds are allocated to the National Programme of ICT imple-

mentiation at school, which foresees that in the years 2003-2004 all teachers and students will have the Internet access (Monkevičius, 2002).

Access to new technologies and digital literacy are essential factors in higher education and language learning in particular, since they could "best contribute to the implementation of language curricula and instruction ... and to the development of multimedia literacy, intercultural communication competence and life-long learning skills – skills that are crucial for graduates to be successfully employed in the European labour market" (TNP2 Final Report, 2003).

In order to determine the level of students' digital literacy, a survey was carried out by the KTU Centre of Foreign Languages in autumn 2003, and its results are presented in the following table. The respondents were 186 first year KTU students.

Table 1. Findings of KTU student survey

1.	Do you use the Internet?	
	a. yes	98.5%
	b. no	1.5%
2.	How long have you been using the Internet?	
	a. 1 year	1%
	b. 2 years	18%
	c. 3 years	28%
	d. 4 years and longer	52%
3.	How often do you use the Internet?	
	a. daily	69.5%
	b. once-twice a week	18.5%
	c. occasionally	12%
4.	Which of the following have you done?	
	a. entered a chat room	88%
	b. sent an e-mail message	83%
	<ul> <li>sent an Internet greeting card</li> </ul>	44%
	d. bought something online	4%
	e. set up your own website	19%
5.	What do you use the Internet for?	
	a. information	100%
	b. correspondence	83%
	c. learning materials	30%
	d. games	8.5%
	e. music	7.5%

The summary of the answers clearly demonstrates that the academic youth constitute the most advanced part of the Lithuanian society. The answers testify to the respondents' digital competency, and the majority of them appear to be well experienced and frequent users of the Internet, referring to it for a variety of reasons, however the dominating aims – to use the Internet as a source of information and means of communication – correspond with its main application areas in language teaching, therefore it is reasonable to exploit the Internet potential in language curriculum, thus adjusting to the students' interests and diversifying the language course content.

During the last decade ICT have been playing an increasingly important role in language learning. According to researchers (Chantel, 2002, Fox, 1998; Krajka, 2000, Kuang-wu Lee, 2000, Warschauer, 1997, etc.), new technologies increase

students' motivation, provide authentic materials and individuallisation of study, independence from one source of information, enhance students' achievement and consciousness of the world around them. Since the majority of the World Wide Web materials are presented in the English language, the Internet resources tend to become an integral part of any English course as they "offer a more practical real life language experience, providing students with functional communicative experiences that serve the learners' needs as well as motivate them to use English in their daily lives" (Fox, 1998).

The Centre of Foreign Languages of Kaunas University of Technology has sufficient experience in integrating ICT, and the Internet in particular, into language teaching / learning.

Since 1997 a group of the faculty have been working in the area of ICT implementation in different language courses. As a result, computer programs and the Internet resources have complemented and enriched the traditional teaching materials in the language curriculum.

The Internet materials are applied in different ways, depending on the learning / teaching objectives and course requirements, the following being among the most popular:

- Searching the web for information on the topic under study,
- Visiting the recommended websites and summarizing the information,
- Preparing presentations on the given topic,
- Exchanging arguments for and against,
- Sharing the collected information during group discussions,
- Writing essays based on the Internet materials,
- Preparing conference presentations,
- Developing and presenting group tasks,
- Communicating via a virtual classroom (Nicenet),
- Participating in on-line communication projects.

According to Jones (2000), three different models of online language learning can be defined: distributive, tutorial and co-operative. In the distributive model, materials are made available on-line and communication one-way. In the tutorial model, materials are provided with two-way communication between the teacher and the learner. In the cooperative model, students exchange their views and ideas not only with the teacher, but also among themselves.

While integrating the Internet materials into the process of language teaching / learning at the KTU Centre of Foreign Languages, all these models have been implemented, the latter two being developed with the help of the virtual class Nicenet and on-line communication projects Simulab and eCole.

The virtual class Nicenet (www.nicenet.org) has been successfully used as a course management tool for different English language courses. It provides an easy way for students and teachers to communicate, to send messages and share

documents, to supplement the course with new authentic materials via "Link Sharing" section and to offer access to updated assignments, classifying them according to the topics under study. This networked learning environment offers a wide range of possibilities for both teachers and learners and is highly rated by the students in regular end-of-term surveys.

Another example of the co-operative model of on-line learning is KTU students' participation in web-based international projects (SIMULAB, 2000-2001, eCOLE, 2002-2003). The projects contained different problem-solving activities, which involved learners from three or five countries. While analyzing the procedure of the problem solving that the learners were involved in (working in groups on a specific task, browsing the Internet, collecting and selecting necessary information, communicating with foreign partners to exchange or share information, impressions, writing reports and placing them in the environment), a constructivist approach to learning can be traced. "Constructivist learning theory predicts that knowledge encoded from data by learners themselves will be more flexible, transferable, and useful than knowledge encoded for them by experts and transmitted to them by an instructor" (Cobb, 1999). This view is supported by Ewing, Dowling and Coutts (1999), who consider knowledge as personally constructed through internal mental actions of the learner. The internal mental actions include organising, adapting, reordering, and inventing or reinventing. A model for a constructivist approach to learning with ICT has been proposed by the above-mentioned authors, and a practical application of the proposed model can be illustrated by drawing a parallel between the principles of the constructivist approach and the eCOLE web-based collaborative cross-curricular activities:

- Learning should be context-based (make sense to real life environment; contextualized in authentic activities; links with existing knowledge; content has established links with past experience). In the project, the students had some general knowledge about the issues under discussion, i.e., alternative sources of energy or different professions.
- 2. Conceptual learning is through active involvement (understanding through participation; knowledge construction is internal; knowledge grows from personal reconceptualizing; learning involves personal meaning; experience becomes part of the meaning). The tasks that were formulated for the students enabled them to find and collate information from the web and other sources, and to put it into their country's report on energy sources or a certain profession in different countries.
- 3. Learning is through collaboration with others (sharing knowledge and resolving misunderstandings; interaction for new knowledge; ideas available for comment; understanding from shared constructing; negotiation of outcomes). Students had to negotiate in their groups on how to structure their task: what parts should comprise the report, who should be responsible for each part, what information to collect, how to put it into meaningful categories. In order to get information about partner countries, they had to exchange messages asking foreign

- partners questions for specific information, giving their own answers to the questions received.
- 4. Learners should have personal autonomy and control over learning (personal decision making; deriving own learning strategies and own goals; learning event developing planning skills; teacher mediation depending on the needs and skills of the learners). When the tasks were distributed among the groups within national groups, each participant had the independence and responsibility for the completion of the task. The teacher acted as a facilitator in helping to move forward when the students couldn't solve the emerging problems themselves.
- 5. Learning is personal growth (thinking on task to reach shared understanding; personal reflection on progress; argument leading to reflection helping refine concepts). Class discussions on the progress achieved made the students reflect on the work they were doing, compare to others and evaluate. The process itself becomes very important.
- 6. Learning outcome is a perspective and understanding (learning outcomes not specified; outcomes unique to the learner; task to help multiple perspectives; different approaches to understanding; no limit to relevance of resource). In the process of the project, the students commented on the findings presented by other countries, they urged their passive peers for their input as they realized that the final outcome could be reached only in close cooperation. No restrictions were set for the students on where to look for the information in order to attain the final results.

The correspondence of theoretical considerations to practical applications testify to the efficiency of the web-based language learning, therefore it is highly recommended to refer to the above mentioned resources as a promising approach to updating language learning and enhancing the learners' motivation.

However, as stressed by most ICT in ELT specialists, the most decisive aspect in applying digital technologies in language teaching / learning is integration of the on-line activities into the syllabus (Eastment, 1998, Warschauer et al, 1997), rather than an unsystematic, random "added-on" activities (TNP2 Final Report, 2003).

### Conclusions

- KTU students possess an appropriate level of digital literacy to be directed to Internet resources as a supplement for regular language courses.
- 2. The Internet provides ample material for updating the foreign language curricula.
- Both the students' interests and the language teaching objectives can be matched by integrating the Internet materials into the language curricula.
- 4. Digital technologies have a positive impact upon the learning process itself, which is as important as the final result in language learning.

 The Internet resources can be most efficiently used when properly integrated into different language courses, rather than "added-on".

#### References:

- Chantel, R. (2002). New Technology, New Literacy: Creating a Bridge for English Language Learners. New England Reading Association Journal, vol.38, Issue 3. Portland.
- Cobb, T. (1999). Applying Constructivism: A Test for the Learner-as-Scientist. EducationalTechnology Reasearch and Development 47 (3), 15-31
- 3. Eastment, D. (1998). ELT and the New Technology: the Next 5 Years.
- 4. http://www.eastment.com.
- 5. ECOLE project: http://www.statvoks.no/ecole/index.html
- Education and Training 2010 (2000), EC Work Programme, http://europa.eu.int/eeurope
- Ewing, J. M., Dowling, J. D. & Coutts, N. (1999). Learning Using the World Wide Web: A Collaborative Learning Event. Journal of Educational Multimedia and Hypermedia 8 (1), 3-22.
- Fox, G. (1998). The Internet: Making it Work in the ESL Classroom. The Internet TESL Journal, vol.IV, No. 9, Sept. http://iteslj.org/
- Jones, G. (2000) How do I Speak? A Review of the Possibilities and Constraints of On-line Language Learning. (as cited in Moote S. (2002).

- Evaluation Considerations for On-line ESL Courses. The Internet TESL Journal, vol. VIII, No.3. http://iteslj.org/).
- Krajka, J. (2002). Using the Internet in ESL Writing instruction. The Internet TESL Journal. vol. VI, No11. http://iteslj.org/
- Kuang-wu, L. (2000). English Teachers' Barriers to the Use of Computer-assisted Language Learning. The Internet TESL Journal. http://iteslj.org/
- 12. Lisbon Strategy (2002). http://europa.eu.int/eeurope
- Monkevičius, A. (2002). Information and Communication Technology Catalyst of the Lithuanian Education Change. Information Technologies at School. Conf. Mat. Vilnius)
- 14. Simulab project: http://oyt.oulu.fi/tsimulab/
- Steponavičienė, G. (2003). The Information Society Moves Forward. Lithuania in the World, Vol.11, No4. Vilnius
- Summary of the Strategy for ICT Implementation in the Lithuanian Education. (2002). Information Technologies at School. Conf. Materials. Vilnius.
- Thematic Network Project in the Area of Languages 2. (2003). Final Report.
- 18. http://www.sprachlabor.fu-berlin.de/elc/en/tnp2.htm
- Warschauer, M. & Whittaker, P. (1997). The Internet for English Teaching: Guidelines for Teachers. TESL Reporter 30, 1 pp 27-33.

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#### Mokymasis internetu: užduotys ir platformos

#### Santrauka

Greitas ir nesudėtingas procesas, vykstantis sudarant ir suprantant naujus leksinius vienetus arba jų reikšmių variantus kalbinės komunikacinės veikloje leidžia manyti, kad šių procesų pagrindas yra įvairių žinių sistemų aktyvinimas ir pavertimas kalba. Visų pirma, žinios apie leksikoną, ypač žinios apie ryšius tarp žodžio semantikos bei sąvokos, lemia leksikono vienetų vartojimą sudarant tekstus. Šie įvairių kalbinių ir nekalbinių žinių sistemų ryšiai, atrodo, lemia metaforų sudarymą ir vartojimą. Tai galima pademonstruoti remiantis modelių analize. Modelių analizė remiasi semantine sąvokų teorija ir dinaminiu leksikono supratimu kaip kalbančiojo ar rašančiojo kalbinės kompetencijos komponentu.

Dabartiniame vystymosi etape ir skaitmeninis raštingumas, ir kalbų mokėjimas tampa prioritetinėmis švietimo sritimis, siekiant ruošti jaunimą aktyviais visuomenės nariais bei pilnaverčiais Europos darbo rinkos partneriais.

Atsižvelgdami į nūdienos reikalavimus, KTU Užsienio kalbų centro specialistai siekia į kalbų mokymą integruoti skaitmenines technologijas. Straipsnyje aptariami teoriniai pagrindimai bei empiriniai stebėjimai, patvirtinantys skaitmeninių technologijų diegimo užsienio kalbų mokyme efektyvumą. Autorės aprašo KTU UKC patirtį šioje srityje, supažindina su atliktos KTU studentų apklausos rezultatais bei pateikia rekomendacijas, kaip naujos technologijos gali papildyti teikiamus užsienio kalbų kursus ir pagerinti užsienio kalbų mokymo kokybę.

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