

# Application of Information and Communication Technologies in Foreign Language Teaching

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**Abstract.** *The article deals with application of ICT in foreign language teaching in the educational process and also in the autonomous language education*

**Keywords.** information and communication technologies, foreign language education, autonomous education

## 1 Introduction

The new technical and information society based on acquisition and exploitation of the latest information and technologies needs people with key competencies including the whole spectrum of new knowledge and skills. Nowadays it is not enough for a person to be knowledgeable only in his specialization; the time characterized by versatile information spectrum and global labour market demands a generation prepared for new job opportunities. New society has need of new functionally literate people, people not only with professional literacy but also with informational, foreign-language and technical literacy. This interconnection is essential in the new society. Besides the professional competency the ability to work with information technologies, foreign languages and technical literacy, no matter if in technical or non-technical fields, become an integral part of key competencies for the success in the 21st century

## 2 Interdisciplinary relations between ICT and language education

Mastery of a foreign language represents a complex of receptive (reading, listening) and productive skills (writing, speaking) and in dependence on skills level its utilization can be active or passive. To acquire and improve individual language skills ICT can be applied in a large extent not only in the educational process at school but also in the autonomous language study at home.

Accessible technologies and multimedia enable to present verbal and nonverbal materials, they help to clarify the meaning and vitalize the education. They support the educational processes not only by their intensification but also by visualisation, concretization, repetition and create the simulated foreign-language situations as educational situations. Multimedia as a complex of facilities enable to acquire information in audiovisual form including a possibility of interaction and are a prerequisite for effective learning of foreign languages with the help of computer [1].

The PC network Internet opens the access to information. We definitely appreciate dictionaries and encyclopaedias contained on Internet thanks to which our foreign-language vocabulary can be enriched. The advantage of Internet in compare with classical language dictionaries or encyclopaedias consists in access to huge amounts of sources and high search speed of information. By explanations and procurement of relevant information on the text background it helps to decode the unknown text.

While translating from or to a foreign language we can appreciate the huge virtual library of accessible dictionaries of various professional fields and a continuously improving software aimed at translations. This software can be a good helper although experience of the human translator able to consider the whole context of the translated word plays the most important role, still. However there are also programs aimed at orthographical emendation that are very instrumental to translations.

In the language education there can be used a broad range of educational programs for acquisition, fixation and testing of various grammatical features. Implementation of program systems serving for computer assisted language learning can be realized as an intelligent database system [2]. Advantages of testing program systems imply immediate feedback, variable tasks, unloading of teachers from task corrections, and evaluation objectivity; in case of educational programs – individualization of the contents or tempo eventually reduction of negative influence of the surroundings can be considered as advantages.

Our research in 2004 at Slovak Universities of Technology found out following multimedia programs used in education of foreign languages at school or in the autonomous study: DEUMA - Deutsch für Maschinenbau (University of Žilina)  
GERMANIAC – 3 modules: Maschinenbau, Chemie, Elektronik (MTF STU Trnava, FCHPT STU Bratislava, FEI STU Bratislava)  
Waldgespräche – CD ROM – Deutsch für Forstwirtschaft (TU Zvolen)  
Langmaster – Series - Multilevel from beginner to advanced (FCHPT STU Bratislava, Academy of military in Liptovský Mikuláš)  
English for Professional Communication – CD spotlight on interaction (FEI STU Bratislava, MTF STU Trnava)  
English on the Internet-fun – self- study of English Grammar (FEI STU Bratislava)  
[www.englishclub.net](http://www.englishclub.net) – various: grammar, writing (FEI STU Bratislava, MTF STU Trnava)  
Euro Plus+Renard – general English+Business English (SPU Nitra)  
Tell me more (TU Zvolen)  
CD ROM to study book English Grammar in Use (TU Zvolen)  
[www.cambridge.org/elt/inuse/grammar](http://www.cambridge.org/elt/inuse/grammar) (TU Zvolen)  
English for Business Studies (TU Košice)

Cambridge Learners Dictionary (TU Košice)  
New Interchange – English Grammar – AZAR (Academy of Military in L. Mikuláš)

Triple Play Plus (Academy of Military in Liptovskom Mikuláš)

Lingua Land /for beginners/ (Academy of Military in Liptovskom Mikuláš) [3].

Perception and articulation skills represent another important aspect of language skills and include a correct pronunciation

(4). Computer – a digital recorder faithfully records and reproduces audio signals what enables in the acoustic spectrum to get all necessary parameters for their next analysis, identification and comparison. This enables to study not only the so called „transonic features“ but also listen to own pronunciation and to correct it immediately. The method applying the digital recorder enables acoustic synthesis of human speech. This is the principle of programs that allow an echo checking of correct pronunciation by listening. These are the so called DICTIONARY MANAGER files that work in the range of classical user interface (Windows User`s reference Manual 1998), enabling to write down a foreign word and to reproduce its pronunciation in the given language (5).

Along with additional attachments Internet offers a lot of opportunities for development of speaking skills. (6) The user can develop the reading skills -especially the fast reading technique, scanning of authentic actual documents- as well as listening and understanding. Reading and listening thereafter motivate oral speech most often in form of a discussion what can be utilized via Internet conferences.

The so called chats (correspondence written in real time), mails (electronic correspondence) or summarization of texts contribute for writing development.

If we use websites created originally for other purposes (advertising, information on society as an economic unit, etc.) for education we approach the texts prepared according to habits of the relevant country and indicate so its cultural and civilisation specifics that maybe are not so obvious when we use traditional schooling facilities. In this way we enter the authentic environment made available by computer and get into real communication (7).

. Via information technologies a teacher can prepare study materials, tests, presentations and hypertext documents published on webserver. Effective teaching aids can also be created by teachers themselves. The presentation software packet MS PowerPoint which is a part of MS Office, doesn't require professional knowledge or skills of computer art. MS PowerPoint serves recently mainly for preparation of information materials and their presentation via a data projector, e.g. during lectures or presentations of discussion papers at conferences and various professional events. Such presentations have a high information and presentation value and reflect the present trends of information technologies. Multimedia programs are often a result of cooperation between educationists and IT people that means a team work enriched by a bright spectrum of views of the issues being solved. A multimedia classroom (one computer with a video-data projector or LCD panel) enables to the teacher to manage easier the class or a group of students.

A big quality difference for a present school is represented by introduction of interactive boards and textbooks the so called i-textbooks into the educational process. These textbooks in regard to their content, visualization and navigation system set up a brand new quality in the textbook market. They contain a rich video and sound material, video-sequences, 2D & 3D animations but also the whole scale of interactive exercises. Interactive boards and textbooks signalize a substantial turning point in the education system that enables to multimedia to enter the everyday teaching.

In the autonomous study of a foreign language (8) it is possible to use MP3 players with sound records, to watch DVD movies in original version, to chat and surf on foreign-language websites or to make use of on-line language training and testing. Electronic media represent a „boom“ in the foreign-language education and as such attract attention. Their advantages consist in space minimalization (possibility of learning at home, or anywhere), time selection (any day, at any time, optionally long and with an optional frequency and tempo of learning), increase of personal comfort (outside or inside, sitting in the chair or at the table, etc.), in their easy availability and simple manipulation. Several on-line education programs on Internet are free of charge and learning with them is more dynamic than with

a textbook only. Another advantage consists in a possibility to create an authentic foreign-language background at home without perturbing influence from outside (repeated error fear, mockery, castigation, negative non-verbal communication, etc.).

However apart from strong points of electronic media there are also certain weak spots. They emphasize especially the visual and phonetic form of the language supporting thus mainly receptive skills of understanding of the read and heard text. Training of dialogical skills is limited. Last but not least in the autonomous study a certain obstacle can be in higher demandingness for the student exacting full self-activity and responsibility and of course at least basic computer literacy from him. But overall the mentioned strong points of electronic media are head and shoulders the mentioned weak spots.

As it follows from the above mentioned review utilization of ICT in the assisted foreign-language teaching is very varied. ICT application in the educational process depends on knowledge, abilities and skills of teachers. That's why it is so necessary for them to keep on learning to be able to implement new information in teaching, to make use of hardware available and to choose suitable software applications for their subject considering at the same time the potential of students (9).

### 3 Conclusion

For the teacher to be able to use new information and communication technologies and multimedia in the educational process or its preparation these must be available and the teacher must be proficient at treating them. As for the information facilities and background in the educational system we are far from the situation when a notebook or a good-class computer including peripheral devices is available to each teacher for working. This fact determines skills of educationists in working with ICT since the more frequently they use it the better skills acquired. Forasmuch as the new information society necessitates a general information literacy of each teacher it is essential to go on with improving not only in his/her specialization but also in accordance with the interests of social practice. It is a long-term process of further education, raise and innovation

of the professional qualification and acquisition of new competencies what should be included in the lifelong education of each of us.

In: **Multimédiá vo vyučovaní cudzích jazykov**, Nitra: Slovenská poľnohospodárska univerzita, 2002, pp. 68-71. ISBN 80-8069-067-7.

## References

- [1] RUSKOVÁ D, CAGÁŇOVÁ D: **Aplikácia informačných technológií pri práci na projekte vo vyučovaní cudzích jazykov**, 1.vyd. Nitra: SPU, 2004. pp. 134-137, ISBN 80-8069-307-2.
- [2] STOFFOVÁ V: **Algoritmy v tvorbe inteligentných počítačových programov na podporu vyučovania cudzích jazykov**, 1. vyd. Nitra: SPU, 2002, pp. 89-92, ISBN 80-8069-067-7.
- [3] REHÁKOVÁ A: **Informačné a komunikačné technológie v príprave učiteľa cudzích jazykov (Analýza výsledkov prieskumu)**. In: *Retrospektíva a perspektíva v edukácii*, Nitra: PF UKF v Nitre, 2005, 2.diel, pp.203-209, ISBN 80-8050-918-4.
- [4] KALINAYOVÁ A: **PowerPoint v tvorbe multimediálnych učebných pomôcok**. In: *Multimédiá vo vyučovaní cudzích jazykov*, Nitra: Slovenská poľnohospodárska univerzita, 2002, pp. 55-58, ISBN 80-8069-067-7.
- [5] KOZMOVÁ J: **Využití počítače při skoumání akustické stránky řeči**, 1. vyd. Nitra: SPU, 2002, pp. 59-62, ISBN 80-8069-067-7.
- [6] HORVÁTHOVÁ J: **Masmédiá vo výučbe cudzích jazykov**, 1. vyd. Nitra: SPU, 2002, pp. 39-42, ISBN 80-8069-067-7.
- [7] JEŽKOVÁ S: **Internet jako prostředek individualizace a personalizace výuky francouzštiny**, 1. vyd. Nitra: SPU, 2002, pp. 51-54, ISBN 80-8069-067-7.
- [8] REHÁKOVÁ A: **Informačné technológie v odbornej jazykovej príprave vysokoškolského učiteľa**, Dizertačná práca. 2008, Nitra, PF UKF v Nitre, pp.117-118.
- [9] MALÁ E, MALÍKOVÁ, M: **Smery v počítačom podporovanej výučbe jazykov**,