

Technology-enhanced learners' activities for promoting teaching/learning

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Abstract

The paper deals with two projects focusing on students' activities within the ICT-enhanced foreign language instruction. First, the background and motivation for running the projects are introduced; second, the design of each project is described in detail; and finally, the project results are introduced, including samples of learners' activities. Students involved in the projects were enrolled in the same form of study (part-time study) at two different faculties (Faculty of Education, Faculty of Informatics and Management, both of University of Hradec Kralove), in two different study programmes (Teaching at primary school level; Applied Informatics and Information Management). What is common to their activities is they created two learning aids on CD-ROMs for teaching and/or learning English using the Internet and main sources of information.

In Part 1 the CD-ROM "On-line e-English for primary school teachers" is introduced. The content includes 30 chapters (one chapter per student) in which students designed the lesson scenarios. In the scenarios modern technologies are implemented to support the process of English teaching and learning. The scenarios follow the common template which is structured into several parts and introduces the topic, age (grade) of the targeted group, aids necessary for the teacher and learners and the description of an ICT-enhanced activity. The main objective of the activity is to provide both pre-service and in-service primary (and pre-primary) school teachers a database of activities for foreign language (English, German) teaching.

In Part 2 the CD-ROM "English Reader for IT and Management Students" was presented. The reader contained more than 200 professional texts focusing on informatics and related problems and their recordings in mp3 format. Each student provided two texts of one-A4 page length and translated selected professional expressions which s/he considered difficult for other students using tools Insert, Comments. As students' level of IT English knowledge differed, the provided texts included all levels and each student could choose the appropriate ones to gradually improve their knowledge. Both the texts and recordings worked as tools/means towards increasing the listening comprehension skill.

Keywords

ICT-enhanced instruction, teaching, learning, English, tertiary level, university,

Introduction

Changes in the Czech education system were evoked by the general state of the Czech society within last two decades; and at the same time they supported general development towards information and knowledge society, which caused following shifts and processes:

- the existing structure of the educational system was transformed according to new conditions (bachelor, master, doctoral degrees),
- new relations between elements participating in the educational process were set,
- learner's responsibility for his/her own education creativeness and motivation were supported,
- new teaching methods, organizational forms, approaches to assessment were strongly required,
- new competences were defined and reflected in the learning content, followed by the call for lifelong education appeared,
- new subjects appeared and were emphasized (e.g. Humanities, foreign languages, Informatics, Environmentalistics etc.),
- and last but not least, economic aspects of education were introduced, including competitiveness among education institutions (MŠMT, 2001; MŠMT, 2009).

These features have been slowly but steadily included into the system which currently is hardly to be imagined without the ICT implementation.

The level of technical development, demand for well-prepared and competent professionals, open space for using new possibilities in the educational process – these requirements resulted in increasing numbers of students, widening the offer of study programmes and subjects at universities, especially in combined (part-time) and distance education. The educational process has been substantially supported by ICT which have essential importance in creating and using multimedia study materials, e-communication, in organizing and administering the process, etc.

Under these circumstances the demand for competent university graduates has been strong on one side, and getting a good job has become the main but more and more difficult target to be achieved on the other side. In the current decade the lifelong professions have been disappearing. Within each 10-year period 80 % of technologies have been obsolete, but at the same time there have been working 80 % of employees who got qualification 10 - 40 years ago. In the European Union every year 7 % of positions are cancelled and the same number of new opportunities appears; on average about 17 % of employees change the

job and about 12.5 % of employees change the profession or field of work (Turek, 2002). These numbers clearly show that competences aiming at one profession are useless and non-valuable under these circumstances.

Another situation appeared in the field of foreign languages. As expressed e.g. by Delors (1999) and in numerous European Union documents (EC, 2009; EC, 2001; EC, 1997), communication in at least two foreign languages is required and defined as a key competence. That is why this paper introduces two approaches to teaching and learning foreign languages at two institutions of University of Hradec Kralove: Teacher Training Faculty and Faculty of Informatics and Management. As widely accepted the personal participation and engagement in any activity strengthens motivation and improves study results, students are given possibility to take active part in creating and presenting the educational content. In case of part-time learners (as presented in materials below) they can also share their experience with other students. This is contributive from two views: (1) experience of one student can help another one/other ones, (2) providing own experience boosts professional self-confidence and position within the group. Since 2001 the LMS WebCT (Blackboard) has been used at the Faculty of Informatics and Management, which means lessons are either supported, or completely managed by online courses, and highly computer literate students contribute willingly to this way of instruction. In spite if this fact, outcomes of two learner-centred activities provided by students and running out of the LMS are presented being a result of such a process of foreign language teaching/learning: On-line e-English for primary school teachers (figure 1) and English Reader for IT and Management Students (figure 2).

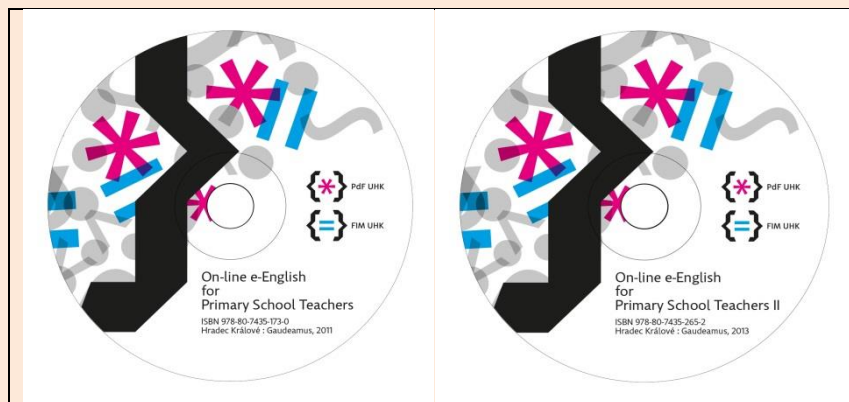


Figure 1 CD-ROM Online e-English for Primary School Teachers, I, II

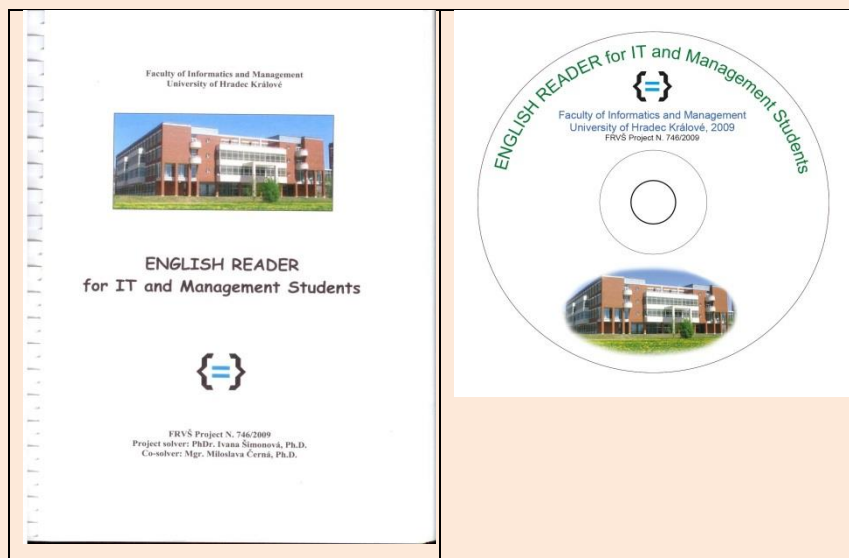


Figure 2 English Reader for IT and Management Students, printed and e-version

The created materials relate to English language but the process can be applied to any other foreign language teaching/learning. Both materials were published on CD-ROMs, the second one is also available in the printed version.

On-line e-English for primary school teachers

This electronic teaching/learning aid on CD-ROM (e-book) contains didactic materials – scenarios in which modern technologies (mainly the Internet and interactive whiteboard) are used. The scenarios were designed by part-time students (who usually work as teachers during their university study) of the Teacher Training Faculty within the subject of Teaching English.

Both volumes of the e-book contain approximately 50 scenarios focused on various topics which are included in curricula in different grades of elementary and lower secondary school. Each scenario follows the identical template which is structured in several compulsory parts (figure 3).



<p>Topic</p> <p>Learning objective:</p> <p>...</p> <p>Target group:</p> <p>...</p> <p>Classroom equipment:</p> <p>...</p> <p>Teaching aids:</p> <p>...</p> <p>Course and description of activities:</p> <p>... (including URK and other e-sources)</p> <p>Additional materials, comments:</p> <p>...</p> <p>Author, e-mail:</p> <p>Date:</p>	<p>Colours, numbers, feelings</p> <p>Select the colour, produce a puppet, draw the feeling.</p> <p>Provide information about the colour and feeling of your puppet (write the words on the board and in your exercise-book):</p> <p>How many puppets of the same colour/feeling are in the classroom? (total amount, amount of a certain colours, dark/light colours, subtract a type from total amount, ...)</p> <p>Play a role with your puppet using the above introduced vocabulary.</p>
	

Figure 3 Scenario template and example of “Colours, numbers, feelings” topic



There are two main objectives of the e-book: (1) to provide colleagues (both graduate and pre-graduate teachers) with materials which have been prepared by other teachers and successfully applied in their lessons; (2) to inspire the teachers if the materials do not suit their teaching objectives.

In the section Course and description of activities the links to interesting and useful materials are provided, mostly covering pictures, songs, movies, e-games for educational purposes etc. The materials are primarily focused on teaching/learning English but for elementary level the learning content may cover several topics within one scenario. Activities for higher grades usually take longer time period (or several lessons) while those for small learners or beginners are usually designed for a few minutes.

The scenarios cover a wide range of topics, e.g. Family, People and professions, Animals, Vegetables, Days of the week, Festival days, Greetings, Sports, Hobbies, Toys, Transport, Numbers, Seasons ... but also Monsters, Puppets, Fairy tales etc. Several of them appeared in various versions, being designed for learners of different age.

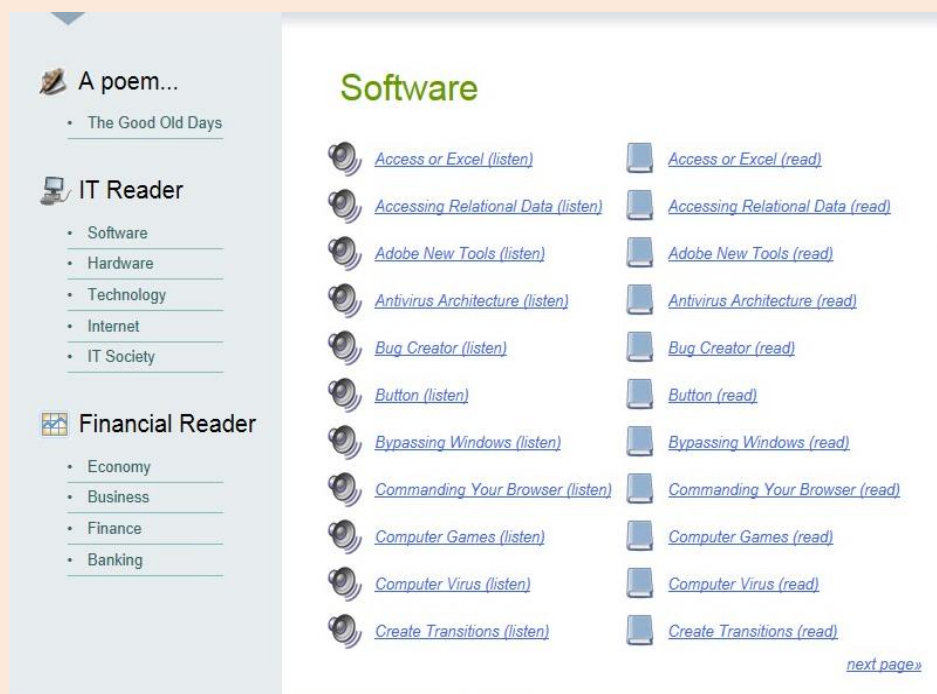
English Reader for IT and Management Students

Following the above described learner-centred learning/teaching focus on pregraduate teachers, this activity aims at part-time students of the Faculty of Informatics and Management in the bachelor study programme of Applied Informatics, Financial Management and master study programme of Information Management. They studied six terms of ESP (English for specific purposes). i.e. IT English using online courses in LMS WebCT/Blackboard designed for the distance education, or Business English having 24 face-to-face lessons (45 minutes each) per one term and also using online courses (other than the IT students), these were designed to support the Business English lessons. Despite students were taught by different teaching methods and used various learning strategies, in the 5th and 6th terms all of them participated in creating the Reader – a set of professional texts for educational purposes, as the main learning objectives in those terms focused on developing professional reading and listening comprehension skills. The work with professional texts is considered useful and appreciated by all students because this activity was closely connected to their everyday work and experience, they had a wide range of sources they could search professional texts from.

How did the whole process run? Each student found two English texts and their recordings per one term, then they selected several items of professional vocabulary (about 10 – 15 items per text) and translated them into Czech language using Insert, Revisions, New Comment tools. The texts and recordings were to meet following requirements:

- Topic: text on any topic connected to the field of study. At the beginning there were four main topics (IT personalities, hardware, software, latest news and products). During the process new topics appeared.
- Extent: 3/4 – 1 page of A4 format.
- Language: the language level reflects student's knowledge, so texts of different levels were included in the Reader.
- Recordings: text recordings are provided in mp3 format.

Both the texts and recordings were presented in online courses for the 5th and 6th terms of each study programme as IT Reader and Financial Management Reader. The content covered several topics: Software, Hardware, Technology, Internet and IT Society in the IT Reader; Economy, Business, Finance, Banking in the Financial Managements Reader, as displayed in figure 4.



A poem...

- The Good Old Days























IT Reader

- Software
- Hardware
- Technology
- Internet
- IT Society

Financial Reader

- Economy
- Business
- Finance
- Banking

Software

 Access or Excel (listen)	 Access or Excel (read)
 Accessing Relational Data (listen)	 Accessing Relational Data (read)
 Adobe New Tools (listen)	 Adobe New Tools (read)
 Antivirus Architecture (listen)	 Antivirus Architecture (read)
 Bug Creator (listen)	 Bug Creator (read)
 Button (listen)	 Button (read)
 Bypassing Windows (listen)	 Bypassing Windows (read)
 Commanding Your Browser (listen)	 Commanding Your Browser (read)
 Computer Games (listen)	 Computer Games (read)
 Computer Virus (listen)	 Computer Virus (read)
 Create Transitions (listen)	 Create Transitions (read)

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Figure 4 English Reader content

Students used the Readers to prepare for final exams which covered reading and listening comprehension of two texts and discussions on the topics with the



teacher. Depending on the level of knowledge each student could devote an individual time period to the exam preparation. And one more thing was motivating: students provided their names under each text so that everybody could know who the author was and evaluate the quality of work. Students carefully protected their professional image and avoided sending texts which did not meet the given requirements. Despite the “serious” work students had done, a funny song (for motivation) was included at the beginning of CD-ROM. The lyrics is displayed in figure 5.

Conclusions

The e-society and i-society produced crucial changes. The process of defining both students’ and teachers’ key competences towards meeting requirements of today’s and future life have been finished, ways to develop and reach them have been set. Putting the whole process into effect is a task we are facing now and in the future. The above described activities are neither new, nor revolutionary but they aim at gaining the required skills, and this is the most important output. They are based on J. A. Comenius didactic principles and if applied under the described conditions they will result in the required competence. Above all, both students’ participation in creating the course content and using their professional experience in the field of ICT support their motivation to study.

Acknowledgment

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The Good Old Days



[*The Good Old Days \(listen\)*](#)

A computer was something on TV
From a science fiction show of note
A window was something you
hated to clean
And ram was the cousin of a goat.

Meg was the name of my girlfriend
And gig was a job for the nights
Now they all mean different things
And that really mega bytes.

An application was for employment
A program was a TV show
A curser used profanity
A keyboard was a piano.

Memory was something you lost
with age
A CD was a bank account
And if you had a 3-in. floppy
You hoped nobody found out.



[*The Good Old Days \(read\)*](#)

Compress was something you did to
the trash
Not something you did to a file
And if you unzipped anything in public
You'd be in jail for a while.

Log on was adding wood to the fire
Hard drive was a long trip on the road
A mouse pad was where a mouse lived
And a backup happened to your
commode.

Cut you did with a pocket knife
And paste you did with glue
A web was simply a spider's home
And a virus was just the flu.

I guess I'll stick to my pad and paper
And the memory that's in my head
I hear nobody's been killed in a
computer crash
But when it happens they'll wish they
were dead.

Anonymous author

Figure 5 The Good Old Days



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