

## ICT for Technical English Education at FEI VSB-TUO (II)

Monika Koslova  
VSB-Technical University of Ostrava  
Department of Foreign Languages  
[monika.koslova@vsb.cz](mailto:monika.koslova@vsb.cz)

### Abstract

*The objectives of the project and the needs it is designed to meet are drawn up based upon the promotion of Open and Distance Learning ( ODL ) and Information and Communication Technologies ( ICT ) in the field of education.*

*They are designed to promote European( global ) cooperation and better understanding among teachers, learners, decision-makers and the public.*

*The project supports the development of innovative practices which will increasingly influence teaching and learning.*

*The methods used are to determine the most appropriate way of applying computer-assisted instruction in technical education.*

*The target group are also people with Special Needs ( Learning Without Frontiers ).*

*As for pedagogical approaches, those facilitating learners' autonomy, lifelong-learning, team work, development of analytical skills and creative thinking are to be promoted.*

### 1. Introduction

The Faculty of Electrical Engineering and Computer Science at the Technical University of Ostrava ( FEI VSB-TUO ) started to apply study programmes of the so-called modular form. The idea is based on the needs analysis of the labour market. More and more employees in the Czech Republic in e.g. PLC companies have sufficient work experience, but inadequate education. There is a lack of university educated people. We can expect an increasing demand for this kind of education, as new electrotechnically oriented industrial complexes are being built in our euroregion ( e.g. Philips ). The modular form enables employees to study and work at the same time.

The so-called structured model of university studies ( three years of bachelor studies followed by two years of magister studies ) is part of a long-term goal of FEI. The anticipated changes connected with implementation of this model mean first of all incorporation of ICT into teaching and the creation of on-line study materials for distance education. The materials aim to be cost and time effective, and used by more than one university.

One of the very positive factors for the development of FEI can be considered present and future cooperation between graduates of our University and internal students. This might take the form of direct tutoring, of working towards a diploma or of Doctorate work in which the graduates can pass on their expertise.

Another goal is improved education of students as far as quality of the whole educational process is concerned. They need to be well prepared for the future society, that is why we aim to ensure:

1. improvement of their foreign language ( English ) competence together with specialised technical subject knowledge
2. innovation of language teaching in relation to
  - a) cultural context
  - b) integration of ICT into language learning
  - c) ODL support for students with special needs

### 2. Survey

In this paper I would like to outline the survey carried out during the summer semester of the academic year 2000/2001 at the Language Department of VSB-TU Ostrava. The survey is part of the overall framework of the project described above ( Part 2c ). It was conducted partly because I experienced an increasing number of students with special needs ( SEN ) in my study groups, and partly because it is a highly discussed issue at present ( see UNESCO recommendations concerning ICT in education ) which needs proper research, investigation, development of the preliminary design and experimental checking, and last but not least the exchange of results between international expertise.

I was inspired first of all by three journal articles ( in Cizí jazyky - Foreign Languages, regularly published in the Czech Republic ) dealing with theoretical and also practical features of foreign language didactics in relation to students with special needs.

As was mentioned earlier, there are more and more students in my study groups from various faculties who have some problems in oral as well as in written forms of communication. That is why I consider it important to help them minimize their

learning and “output” difficulties and educate myself more in the area of special needs education.

On the basis of my personal involvement ( e.g. studying relevant literature ) and discussions with teachers from elementary schools, secondary schools, and tertiary level institutions or consultants and community workers, I came to the conclusion that this area in the present Czech Republic has not been fully explored ( researched ) yet. It needs to be viewed from the “new” perspective, the “new” approach towards the integration of special needs students into the society.

I asked my colleagues from the Language Department to cooperate when conducting the survey. The task was to calculate the approximate number of students with SEN in their groups, and possibly also to find out the type of difficulty. I gave the colleagues copies of the journal articles mentioned above with the explanation of what I would like them to tell their students.

The main goal is to express the experience and especially *inner feelings* the students experienced in childhood, later when growing up and in adulthood.

I wanted them to do it in writing – the students could underline, highlight or mark in a different way individual words, phrases or the whole sentences and paragraphs which struck a chord with them. Then they could make notes e.g. on the other side of the paper about their opinion. They could make a choice – whether to sign what they have written or do it anonymously.

When designing this study ( survey ) I kept in mind that both students as well as teachers will learn more about the reason for their difficulties and what might be their consequences. The information can be used in practice.

The evaluation of written materials followed by interviews is being done in cooperation with a team of experts ( specialists ) in the given field. Namely the consultancy organization RaD (Family and Child) in Havirov, Czech Republic, headed by Mgr. Kveta Stankova who very closely cooperates with Christopher Dyer, the author of the book *Teaching Pupils with Severe and Complex Difficulties – Back to First Principles*. He has over 36 years of experience as a teacher, inspector and teacher trainer in both mainstream and special schools. He worked in the Advisory and Inspectorate service of the pioneering London Education Authority of Newham for many years and is now a tutor for the University of Birmingham distance learning course on special educational needs of pupils with autism.

The evaluation of results will serve as the basis for modification of the organization of students’ study programmes, i.e. creation of individual study plans. Also, the results will be published in journals and presented at conferences and seminars with the intention of initiating open discussion and getting valuable feedback.

I am also preparing a set of small-scale ( pilot ) projects incorporating ICT into the creation of study materials. The working team will consist of academic staff with multidisciplinary experience/knowledge ( one of the tasks of pedagogues is to *show the way* to the students – how to apply theory into practice ), and will include the particular students with learning difficulties. I hope that the students will make a valuable contribution to facilitating and supporting the development of the younger pupils who may encounter similar problems, and thus they will help to diagnose concrete cases and to minimize the consequences of wrong behaviour ( **prevention is better than cure** ).

### 3. References

1. A.Podhajska, P. Necasova, “ Specificke poruchy uceni a vyuka cizich jazyku I,II “ , *Cizi jazyky*, Fraus, Plzen, 2001, pp. 39-41, 79-81.
2. Dyer, Ch., *Teaching Pupils with Severe and Complex Difficulties-Back to First Principles*, Jessica Kingsley Publishers, London, 2001.
3. Socrates-Minerva Guidelines for project proposals, 2000.
4. UNESCO Institute for Information Technologies in Education( IITE ), “ Information and Communication Technology in Special Education “ - Analytical Survey, Moscow, 2001.