University Review

social sciences

Alexander Dubček University of Trenčín

Izhevsk State Technical University

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Reviewers

QUALITY CULTURE AND SYSTEMS OF QUALITY MANAGEMENT AT UNIVERSITIES

K. Zgodavová, M. Mečár

Abstract

The paper presents and discusses the issues of applying models of Quality Management Systems that are applicable in the existing organization culture, quality culture, and levels of meeting criteria for a complex accreditation, applicable in a complex level of university maturity including the conditions and potential of the environment in a given/limited period. For the discussion four system models of quality management and for models of organization culture are selected. The models can be applied in universities. The objectives are to suggest criteria and items used in a survey on university quality culture. Conclusions comprise information on principles, ways and stages in development of Quality Management Systems in Slovak universities. The paper is written as a part of work on the research project KEGA 3/6411/08 Transformation of an existing study programme Production Quality Management into a university bilingual study program.

Key words

university, models of quality management systems, organization culture, quality culture

European University Association in its Sector Report on Higher Education Institutions in Slovakia (Jensen, et al, 2007) presents the fact that at Slovak universities there is quite a large space for enhancing quality culture within these institutions. The basic prerequisite of the internal change of the culture at universities is a change in their attitudes towards their quality assessment that universities are advised to make.

Quality assessment of universities is usually affiliated with evaluating certain criteria whether they are met or not. Quality assessment as a tool of development and enhancement at a university absents in Slovak universities. Evaluation results offer a chance of revealing a space for improving university quality and at the same time they function as a tool in knowing the situation and making a plan on utilizing strong points and diminishing weak points in university activities. The assessment can contribute to quality enhancement (Králiková, 2008).

There are bound to be changes in the Slovak system of universities soon as European standards and regulations must be met. The process of approximation shall make universities create

a complex quality enhancement and create a basic quality culture while reducing the controlling systems that have ruled this system yet. Processes of teaching, learning and research are influenced by a slow growth and insufficient funds covering the growth. According to (Jensen et al, 2007) there is a need to resolve the problem of quality in teaching and learning and to enable students to differentiate their needs and requests in their study programmes.

The paper deals with real issues of implementing systems of quality management at Slovak universities from the point of view of organization culture, quality culture, stage of maturity of the institution according to the Lisbon strategy and objectives of the Slovak Ministry for Education.

Possible applicability of models of Quality Management Systems in line with the organization culture is discussed in the paper. Quality culture assessment done at Alexander Dubček University of Trenčín is suggested. All information and recommendations are offered in conclusions.

REAL NEEDS OF UNIVERSITIES AND MODELS OF QUALITY MANAGEMENT SYSTEM AVAILABLE

According to (Jenssen et al, 2007) a (Euro Active, 2008) real needs of universities can be summarized in the following way:

- Funds allocated to Slovak universities, to the fields of science and research shall be raised.
- Higher education shall be adjusted so that requirements of a knowledge economy and society can be met.
- The principle of quality culture in universities shall be supported.
- Developing human resources engaged in research and development and their quality enhancement are advisable.
- Universities are advised to collaborate with each other and with research institutions and private businesses at national and multinational level.

The system of quality assurance at Slovak universities is rooted in their history and in the culture:

- Quality of labour, production and life in Slovakia has always been respected and appreciated. The fact can be proved by history, public and economic development within latest one hundred years (www.dejiny.sk), especially EU and Euro zone accession.
- A breaking point can be considered passing an Act, regulation No.32/1968 by „Úřad pro normalizaci", the „Office for Normalization" on state-supported testing (Act No.30/68 – on testing products that was compulsory and valid till 1999. In that year it was replaced by an Act passed by the National Council of the Slovak Republic No.264/1999 Coll. of Acts on technical requirements for products and assessing identity and on amendments to some acts". The above mentioned acts were of great importance as they had impact on system quality enhancement in industrial production and they initiated also creating some theory in the field of quality assessment and enhancement.
- The process of university teaching and learning in the field of production quality started in former Czechoslovakia, namely at University of Technology in Košice in 70-ies in 20th century. Originally they started teaching the subject "Production quality management", later on the university was offering the programme on production quality within the field of study Engineering Technology. In 1987 first national course book "Quality Management and Engineering Metrology" was published. In middle 90-ies of 20th century universities of technology in Bratislava and Košice, especially their faculties, the Faculty of Materials and Technology in Bratislava and the Faculty of Mechanical Engineering in Košice offered PhD study program – the first one in this field. At that time the University of Technology in Košice was a member of European Foundation for Quality Management and was awarded for teaching and training graduates in master and doctoral programmes.

- At present study programmes on the study field 5.2.57 Production Quality are being offered by four universities: the Slovak University of Technology in Bratislava, University of Technology in Košice, Slovak University of Agriculture in Nitra and Alexander Dubček University of Trenčín.
- Recently at some universities systems of quality management have been launched in line with the ISO 9001:2000 (2008) and some universities or their faculties have been successfully certified. Most faculties have already quit their activities in this field and their certification has not been renewed, extended.
- The Slovak Ministry for Education (MŠ SR) with the Slovak Rectors Conference requested a complex and independent evaluation from international institutions in 2004. In 1998 – 2001 four Slovak universities had already been evaluated. The European University Association and some European experts were invited and evaluated the processes at twenty Slovak public universities during the years 2005 – 2007.
- Since 2006 there has been a mutual framework for quality assessment promoted by the Ministry for Education. The Common Assessment Framework – CAF model assists public universities in rational managing all university parts according to the recommendations given by the EUA evaluators in 2006 and 2007. The CAF should become a tool of continuous quality enhancement in Slovak universities. (Schlosser, 2006).

The chart No. 1 describes models of quality management that, according to the information given in specialized literature, can be considered suitable and very actual, real. The chart gives definitions of quality and its different perception from the point of view of meaning, and strategies of reasoning (Saarinen, 2005).

Models of QMS			
IWA 2:2003 Quality management systems – Guidelines for the application of ISO 9001:2000 in education Revised: IWA 2:2007 **ISO 9001:2008** Quality Management Systems – Requirements Originally launched in: 1987, revised in 1994 and 2000	**ENQA** – European Association for Quality Assurance in Higher Education program Launched: 2007 **IEP** – Institutional Evaluation Programme Launched in: 1993	**CAF** – Common Assessment Framework - Common system of quality assessment Jointly developed under the aegis of the Innovative Public Services Group (IPSG), a working group of national experts set up by the Directors-General (DG) and presented in 2000 **EFQM** – European foundation for Quality Management excellence model Originally presented in 1989	**Six Sigma** – a business management strategy Originally launched by Motorola in: 1991
Definitions of quality			
Extent to what the system of characteristics meet the requirements.	Quality is contextual: its definition must take into account the specific institution and the national context of which it is part. Identical with the objectives.	Extent to which politicians´, scientist´, residents´, administrators, ´expectations are fulfilled in public administration and institutions.	Six sigma quality means that no more than 3.4 failures occur in 1 mil. cases, occasions.
Primary targeted groups			
Industry	Higher Education Institutions	Public administration	Industry (Motorola)

Applicability in processes in higher education institutions			
Some adjustments, amendments: Education process Research process Business process	Direct	Adjustments, amendments: Education process Research process Business process	Adjustments, amendments: Triad of education process – research process – business process
The main characteristics of the Model			

Audits: external (paid); internal by qualified trainers
 	
The quality is limited by customers requirements
Basic principles:
  Customer-oriented principles
  Leadership
  Process attitude
  System attitude
  Continuous improvement
  Facts-oriented attitude to decision making
  Mutually advantageous relations between suppliers and customers
  Recommendations on enhancement: PDCA
 	
Progressive enhancement according to the ISO 9004/2000 a ISO/IWA 2:2007
	Self-assessment External assessment by experts Experts report Peer-to-peer review Benchmarking: equal quality to equal one Standards given by an external institutions
	
	Basic principles:
	Large amount of autonomy characterizes mature and successful quality culture of the institution. Corporate quality culture is more mature and effective when the pressure produced by the external surroundings onto responsibility for meeting standards.
	
	Recommendations on continuous enhancement: Action plan and follow-up
		Self-evaluation Certification
		
		RADAR Basic principles:
		  Results - oriented
		  Customers –focused
		  Leadership and objectives stability
		  Management of processes and facts
		  Employees involvement
		  Permanent enhancement and innovation
		  Mutually advantageous partnership and public responsibility
		
		Network recommended for progressive enhancement: PDCA
			Certificate on personnel knowledge level:
			  Yellow Belt
			  Green Belt
			  Black Belt
			  Master Belt
			Standardized manual
			
			Basic principles:
			  Customer-oriented principle
			  Processes – based principle
			  Employees – focused principle
			  Proactive management
			  Control and improvement based on data, information and knowledge
			  Excellence as a long-term goal
			
			Recommendations to reach excellence: DMAIC

Elements, criteria, standardized network			
Responsibilities of management	Policy and processes of quality management	Leaders, management	**D**efine
Resource management	Proving, monitoring, and assessing and evaluating programmes periodically.	Strategy and planning	**M**easurement
Product realization	Students performance evaluation	HRM – Human Resources Management	**A**nalysis
Measuring, analysing and improving, enhancement	Quality management in academic personnel	Partnership and Resources	**I**mprovement Enhancement
	Resources for teaching and learning and students promotion	Processes and changes management	**C**ontrol Management
	Information system	Customers – Residents	
	Information for public	Customers oriented results	
		Employees focused results	
		Public oriented results	
		Key results of institutions	

Tab. 1: Models of quality management systems applicable

ORGANIZATION/CORPORATE CULTURE AND QUALITY CULTURE

Corporate culture is represented by common ideas, values, attitudes and expectations that people belonging to one company, business have and how they behave. Corporate culture is usually audited by a culture audit.

In line with EUA (EUA, 2004) quality culture is a term having two components: organizational, structural one affiliated with goals, standards and responsibilities of people, with services offered and psychological component represented by understanding, flexibility, sharing, hopes and emotions. Both components are connected to each other via communication and profession. The term culture offers a conceptual framework for both components and accounts for the organization structure/organigram and psychological and motivation features.

Some characteristics of culture given in Fig. 1 often slow down the process of quality management and quality enhancement.

Table No. 2 summarizes commonly known basic classification of stage of maturity in institution used for example in ISO 9004:2000, The EFQM (Europen Foundation for Quality Management) excellence model, CAF (Common Assessment Framework) model etc.

STATE AND POTENTIAL OF EXTERNAL SURROUNDINGS OF SLOVAK UNIVERSITIES

To get the information on the state and potential of the external surroundings of Slovak institutions for higher education within the project KEGA 3/6411/08 we carried out the analysis SLEPT. We have analysed the environment (Social, Legal, Economic, Ethical, Political, and Technological) and got following general conclusions:

■ **Social framework** is quite difficult especially due to the process of globalization, free market and free life style that are offering people large number of possibilities for graduates to find a job at home and abroad

FUNCTONAL	+ Structures and systems that are developed well promote operation effectiveness + Individuals are protected against misusing power + Feeling of confidence, less stressful conditions, - Slow reaction to the need for change - Not using ones inherited talent and abilities of individuals + Administration is overdone + Stabile market, long life cycle of products + A need for confidence with ones decisions	POWERFUL	+ Individuals effort is unified + Using leader's abilities and talent + Employees have a feeling of a clear direction and confidence - Management is isolated from "bad news" - Information is a source of personal power - Powerful people break the rules θ it is suitable in situations where an immediate feedback is needed
PROMOTING	+ Good internal communication and integration + Collaboration at a very top level + Good and sensitive environment/ surrounding - Too many conflicts - Slow process of implementing changes - Low motivation, incentive for people to be very productive and active	RESULTS-ORIENTED CHARAC.	+ maximum applying and utilizing abilities of individuals + low need in control + adaptability and an immediate reaction to change - feeling of being outstanding (mistakes correction) - no feeling for own personal needs - excessive „utilizing" employees θ need for flexibility and reaction to the market needs θ high rate of competitiveness at market, low life cycle of a product

Fig. 1: Positive, negative and neutral characteristics of corporate culture
Legend: + positive characteristics; - negative characteristics; θ neutral characteristics

Stage	Performance	Description of the stage of performance
1	Approach is not created	No evidence of systematic approach, no results or unforeseen results.
2	Reactive approach	Systematic approach based on problem resolving or measures for repairs, minimum information on results is available.
3	Stabile official systematic approach	Systematic approach based on processes, initial stage of systematic enhancement, data on identity with goals are available.
4	Continuous Enhancement is emphasized	Process of enhancement is carried out, good results are obtained and trends for improvement are evident.
5	Performance/outcomes of the best one in the given group	Integrated process of enhancement, benchmarking results are available (the institution is the best one in institutions benchmarked).

Tab. 2: Basic classification of maturity stage in an institution

as well. On the other hand the demographic development and aging population can have an impact on social environment in future. Slovakia does not utilize the possibilities for life-long education if compared to other average EU countries (EuroActive, 2006).

- The **legal framework** has a positive trend as introducing central registers of professors responsible for study programs, university teachers, students and academic funds, the amendments to the act on university education and implementing a list of criteria for university and its study programmes accreditation promote transparency of research and teaching and learning processes in Slovakia.

- **Economic framework** has a positive tendency although there has been an economic crisis in the USA, the economy has been threatened by recession and the economic growth is expected to slow down. Raise in university graduates income has slowed down since 2004 but there are some indications that it will increase (Huncik, 2006). After Slovakia entered the Euro zone a stabile growth in Slovak economy is expected to go up (Konečná, Ševčovic, 2003) (Tözsér, 2004).

- **Ethic framework** within university surroundings is a very hot problem and can be proved by the fact that among 163 countries observed in the index of democracy, Slovakia takes 41st position (Kekic, 2007). The country is defined as a country with some "democ-

racy failures" and in the index of corruption Slovakia takes 49th position (Transparency International). This indicator has a positive tendency, but there has still been a threat of lobbing and no transparency in individuals´ behaviour.

- **Political framework** is tightly connected to the legal one and has a strong impact on strategy of university funding especially research and science funding. From the point of view of these indicators the situation is rather unpleasant as in EU 27 countries Slovakia has 24th position (Eurostat 2006). According to the key scheme given in the report (Jensen, Kralj, McQuillan, Reichert, 2007) Slovakia is a country with the lowest average interim year growth and intensity of research development.

- **Technological framework** is defined by indicators like number of households having PC and the Internet access, number of mobile phones and the rate of using the Internet to make phone calls. Another indicator is whether university research laboratories are equipped with technology. In the first indicator Slovakia reaches 27 per cent to an average of 49 per cent reached in EU 27. The second indicator amounts to 24 per cent in Slovakia and to an average of 47 per cent in EU 27. Slovakia reaches the worst, most negative percentage in the third indicator as the country takes 6th position within EU 27 (Special Eurobarometer). The quality of

university laboratories equipment is getting better slowly and it is expected to be good due to the Regulation passed by the Slovak government No.766 dated on September 12, 2007. Although the regulation outlines tendencies of the government policy on science and technologies till the year 2015 there is still much work to do in this field as there has been a lack of funds to be spent on infrastructure, on technologies, university laboratory equipment for many years. The situation is expected to be better in several years.

Due to the fact that there are no clear boundaries of cultures and Quality Management Systems presented while referring to the level of quality culture especially the optimum quality of labour, production and life of all parties involved, it seems to be necessary to work out a precise Quality Management System individually and precisely for each university.

MAPPING OF QUALITY CULTURE IN UNIVERSITIES

The goal of mapping and assessing the quality culture means to gather and assess conditions in the field of quality culture at a university. The process is based on a survey carried out by respondents who represent all parties that are involved in suggesting and promoting an effective system of quality management. Respondents evaluated the main attributes in quality culture as it follows:

1. Respected values

   a. objectives, visions, values and quality culture at a university
   b. creativity, activity, abilities to create teams and university personnel professional abilities
   c. programmes on research, teaching and learning and results of university activities

2. Systematic approach

   a. form and way of organizing and managing a university
   b. research, teaching and learning activities have been similar in their theme, theory and methodology for a long period
   c. development and application of knowledge management at a university in a systematic way

3. Objectives of universities: to gain the first position in quality:

   a. To articulate goals that are difficult to be reached, to get resources that are needed (average results do not match Slovakia).
   b. To be better than the best world-wide practice.
   c. To reach content and loyalty in all parties involved.

It is advisable to formulate three questions about each of the given subgroups of attributes (9 altogether):

- Is the information on the given topic/theme sufficient?
- Are there any suitable activities concerning the given topic?
- What are the results of activities concerning the topic and what is their quality?

In this way 27 responses are gained and some data are quantified on a suitable scale, then they can be processed in a form of measured arithmetic average and mean quadratic deviations with suitable comments on needs and opportunities of enhancement. The questionnaire can comprise also questions about the importance of some attributes.

While working on the system of quality management the stakeholders' task is to define the appropriate model of the system of quality management and the system of university quality culture enhancement and to develop and utilize it as it is given in Fig. No. 1.

DISCUSSION ON MODELS SUITABILITY IN SYSTEMS OF QUALITY MANAGEMENT REFERRING TO THE ORGANIZATION/CORPORATE CULTURE

The basic point in discussing models suitability in the systems of quality management referring to the corporate culture is the analysis SLEEPT. The maturity level and the quality culture are assessed and mapped.

Criteria for assessing the level of suitability of the QMS model for Slovak universities are following:

- EUA recommendations (Jensen, et al, 2007);
- Results gained according to the complex accreditation criteria;
- Information on university culture gained as a result of an audit;
- SWOT analysis and its results;
- The level of organization maturity;
- The level of a long-term similarity of the topic, theme, theory, and methodology of the research, teaching and learning processes and business activities (Zgodavová, 2008).

NOTE: The power and strength of connections is given by the discussion held within the team work on the project KEGA 3/6411/08 and for a real application it should be adjusted by the project team according to the level of maturity of the institution and in line with the results gained in own mapping of the quality culture of university.

CASE STUDY

Alexander Dubček University of Trenčín (ADUT) was established on 1 July 1997 as a state funded university and belongs to the group of youngest universities in the Slovak Republic.

The first complex accreditation was carried out in the year 2002 in line with the Act No. 131/2002 Coll. of acts on universities as ADUT at that time was a young institution. The university was reaching good results in its processes so after five years it was honoured and could bear the name of an outstanding Slovak politician Alexander Dubček.

EUA evaluation was carried out in the line with ENQA four stage model in the year 2007.

In the year 2008 ADUT has to come through self-evaluation for the process of complex accreditation as all Slovak universities must be re-accredited in the year 2009 in line with amendments to the Act No. 131/2002 Coll. on universities and schools and in line with the regulation No. 104/2003 Coll. on accreditation commission.

In academic year 2005/2006 ADUT started to plan and develop a Quality Management System according to the model ISO 9001:2001. While analysing the current conditions, identifying the level of maturity of university processes and according to the results offered by the EUA commission in year 2007, which evaluated the university according to the ENQA model, we can conclude that the standard ISO 9001:2000 is not a suitable model or only particularly applicable according to ISO/IWA 2:2007.

CULTURE					
	Functional	●	◉	◉	○
	Powerful	○	○	○	○
	Promoting	◉	○	●	◉
	Results-based	●	●	●	●
	● - strong connection	ISO 9001	ENQA	CAF	Six sigma
	◉ -middle connection	MODEL OF QUALITY MANAGEMENT SYSTEM			
	○ - weak connection				

Fig. 2: Discussion on basic models suitability in systems of quality management referring to the corporate culture

In 2008 when the complex accreditation was prepared, ADUT processes start to be rationalized in line with a new vision adjusted, new policy and in line with a strategy of quality culture enhancement. At this point recommendations given in the EUA report implemented and ENQA model for regular self-evaluation was prepared.

Based on the EUA report and its results, on the results achieved in assessing the level of education process, research process and business process, and according to the results achieved in mapping the quality culture at ADUT, it can be concluded that more appropriate approach is continuous development of university quality culture that is based on a model of Quality Management Systems with intersected structure given in picture No. 3 and planned until 2015.

The Quality Management System at ADUT has been launched by a team consisting of the Commission for Internal Evaluation and Quality (IEQ). Team are created from the university management, professors and docents who guarantee study programmes and representatives of students' senate.

CONCLUSIONS

Recently European universities have applied the conception of quality based on the fact of meeting minimum standards. The standards used to have a very brief definition: there is a need to create a large definition of knowledge, skills and experience requested. Standards guarantee only minimum quality and minimum comparison of fields of study or study programmes offered by the education system. The conception assumes that all participating institutions and programmes offered shall go over the requirements and shall form their own specific objectives and goals. Achieving their goals the institutions shall improve their quality (EUA, 2006).

At present European universities are defending their point of view that quality of a university and its learning outcomes can be achieved only when there is a link between outcomes and objectives, achieving university objectives, that outcomes fit the objectives ("fitness for purpose"). The idea of quality culture stems from the above mentioned conception. National systems of quality assurance have started using the quality conception based on enhancement
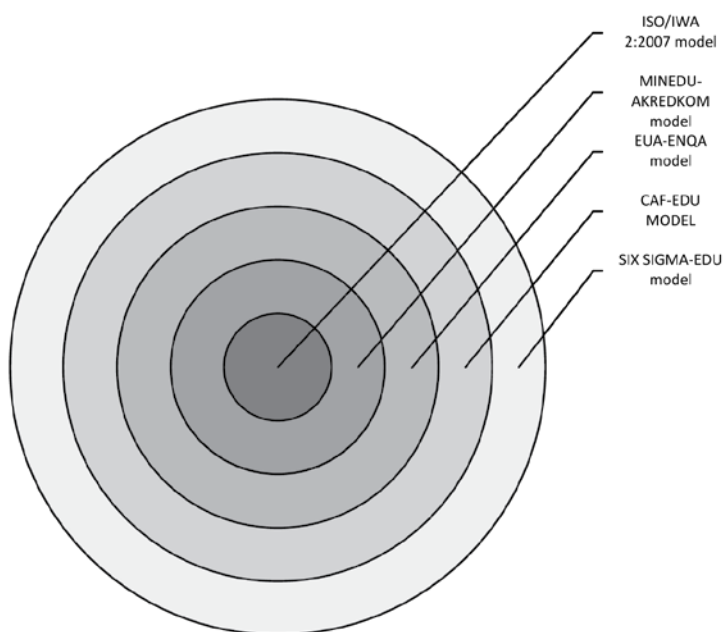

Fig. 3: Developing the ADUT Quality Management System

ISO/IWA 2:2007 model

MINEDU-AKREDKOM model

EUA-ENQA model

CAF-EDU MODEL

SIX SIGMA-EDU model

in university processes. They have shifted from the conception "fitness for purpose" to the conception of „quality enhancement/improvement" and thus having impact on current situation in quality culture in European universities.

Forming the system of quality management at Slovak universities has moved through several stages and nowadays it still seems to be a difficult issue due to following reasons:

1. The academic staff does not believe that the system of QM is successful in line with standardized samples and activities.
2. No reliable information, experience and knowledge on transparency, bureaucracy in formal developing and certifying the system and university accreditation.

3. Results achieved in improving university research, education and business activities by means of the system of quality management seem not to be persuasive.
4. Strong teams and strong individuals achieve good results and are successful independently on the system of quality management.

The situation can be changed only when the quality culture is promoted in every day work, when there is a long-term similarity in theme, theory and methodology of research, teaching and learning and business activities, when the programme on university excellence is proved as a long-term, complex goal based on European standards and regulations.

Literature

1. Králiková, R. (2008): O kvalite vysokých škôl trochu inak. Čo hovoria výročné správy o činnosti verejných vysokých škôl, eTrend, 12.5.2008.
2. EUA (2006): Quality Culture in European Universities: A Bottom-Up Approach, Report on the Three Rounds of the Quality Culture Project 2002 – 2006, EUA Publications
3. EuroActive (2008): Universities urged to identify full costs of their activities, Published: 13 February, 2008
4. Jensen, H. T., Kralj, A., McQuillan, D., Reichert, S. (2007): The Slovak Higher Education System and its Research Capacity EUA Sectoral Report
5. Paulová, I. (2007): Aplikácia manažérstva kvality pre proces vzdelávania na Slovenskej technickej univerzite, Dialógy o manažmente podnikania a vecí verejných, 3.číslo, jún 2007 ISSN 1337-0510 Vydáva Slovenská akadémia manažmentu.
6. Saarinen, T. (2005): „Quality" in the Bologna Process: from 'competitive edge' to quality assurance techniques, European Journal of Education, Volume 40 Issue 2, Pages 189 - 204.
7. SRK (2005): Inštitucionálne hodnotenie vysokých škôl v slovenskej republike, verzia II., EUA
8. Wagner, J. (2008): Systém manažérstva kvality na vysokých školách, In: Zborník z konferencie Controlling a manažérstvo kvality v podnikoch´2008
9. Zgodavová, K. (2008): Critical Success Factors of Research and Education Process at Slovak Universities, in: Proceedings of the 11th Q-MOD Conference, Helsingborg Sweden
10. Zgodavová, K. Slabeycius, J., Wagner, J. (2007): Alexander Dubček University of Trenčín Self Evaluation Report, TnUAD Janury 2007.
11. Schlosser, F. (2006): Spoločný systém hodnotenia kvality, Common Assess ment Framework (CAF model): <http://www.stuba.sk/new/docs//stu/pracoviska/rektorat/odd_vzdelavania/
12. SMKV/vykonavaci_predpis_he3.pdf> on line: 6.10.2008
13. EUA, 2004: Developing an Internal Quality Culture in European Universities Report on the Quality Culture Project, Round II – 2004
14. Plavčan, P. (2007): Vedomostná spoločnosť v Slovenskej Republike, Merkury, spol. s r.o., ISBN 80-89143-32-6

GLOBALISATION AND ITS IMPACTS ON EDUCATION

I. Turek, R. Dubovská

Abstract

The authors discuss a movement from a national to a global economy – changes with tremendous influence on all parts of life. They focus on those changes which will most affect the nature of education. They also consider trends and requirements for education.

Key words

permanent innovation, key competencies, information and knowledge, professional education

The movement from a national to a global economy – the globalisation of the economy and of the world have brought about many changes which have had a tremendous influence on all parts of life: economy, policy, culture, social life, education etc. The changes that will occur in the 21st century will probably outrun the changes which have happened over the entire past millennium in terms of implication, speed, extent and significance. From the huge amount of changes and developmental trends mentioned by prominent world prognosticators (e.g. Naisbitt 1990; Toffler 1990, Drucker 2001), we will mention only on those changes which in our view will most affect the nature of education. Any such predictions are probably risky, but we hope that our ideas will at least give some food for thought and spark discussion among those who are concerned with improving the educational process. In our point of view, education should evolve to keep pace with these trends. What are these trends and what requirements can result from them for education?

- **World market competition intensifies.** According to the European Commission's Industrial Research and Development Advisory Committee (IRDAC) Report, if the EU economy is to keep up its competitive ability and ensure citizens' prosperity, then the only solution appears to be innovation and quality. The main responsibility therefore lies on the EU educational systems that must flexibly and appropriately respond to the changing economic environment (Kvalita vzdělání – odpověď na výzvy budoucnosti, 1998/ Quality of Education - Answer to Challenges of Future, 1998). Success in the competitive world market is possible only by means of permanent innovation and top quality production and products with the highest value

added, i.e. including a highly qualified and humane workforce. The economic survival of EU states will more and more depend especially on the creativity of citizens, their originality, and ability to innovate. Only quality research and development can bring high quality production and products. But quality research and development cannot exist without quality education, which will **develop students' creativity, their creative thinking, and ability to solve problems.** To keep pace with permanent changes a quality system of lifelong education should become an integral part of the school system.

- Our current world is characterised by **information explosion and a rapid rate of innovation**, and this trend is continuously accelerating. Within ten years approximately 80% of the technology used today will become obsolete. But in the same ten years 80% of the labour force (professionally trained between ten and forty years ago) will still be working. Lifelong jobs are actually disappearing. Therefore, instead of qualification requirements for a lifelong job, lifelong employability – the ability to be employed and succeed in various situations and conditions in the job market, and during different life periods – will become a more and more pressing need. Knowledge and skills that are aimed at one particular situation will rapidly grow obsolete and become useless (Turek 2004). Therefore, the world's developed countries must try to find, define, and develop such competencies (skills, abilities, knowledge, and attitudes) that are the most usable at the most occupations (even those not yet existing). These competencies will allow individuals to carry out various work positions, functions, and perform different jobs which will be suitable for large scale solutions of mostly unpredictable problems, allow individuals to successfully deal with rapid changes in their jobs, and in their personal, professional, and social lives. These competencies are called key competencies. The following are considered to be the most important (Turek, 2004):

- **Information competencies:** (information and computer literacy).
- **Learning competencies:** (knowledge and positive influence – the use of knowledge and positive influence on students' learning styles; meta-cognition; learning skills acquaintance; acquiring relevant information sources; time management; motivation to learn; stress management; optimum learning conditions creation; effective lesson and self-study note taking; effective textbook study; effective ways of memorising subject matter; and effective preparation skills passing an exam).
- **Cognitive competencies:** Problem solutions - problem identification; problem solution proposals based on critical and creative thinking; optimum problem solution choice and implementation. Critical thinking – independent thinking; open to new ideas; formulation of suitable questions; facts, opinions, and judgements differentiation; reading stereotypes, clichés, prejudices, emotional factors, propaganda, and distortion; various value systems and ideologies; setting the suitability and relevancy of information; using upper thinking processes; using intellectual standards of quality thinking evaluation. Creative thinking – sensitivity; fluency; flexibility; originality; an ability to produce transformations; and elaboration.
- **Communication competencies:** written and oral communication skills adequate to the situation (in three EU languages); comprehensive reading skills; careful listening; optimum forms and ways of communication; understandable ways of creating written material; effective information presentation; communication by means of ICT.
- **Interpersonal competencies:** living and working with other people in an effective way, learning with them and from them; being able to understand the spirit of other people (empathy); non-violent conflict solutions; respect of values; acceptation and toleration distinction of other peoples; helping others in situations of need; ethical and responsible behaviour to other people;

maintaining harmony in human relations; creation of intercultural systems based on constructive negotiation, tolerance and compromise; building up a civil society; and developing a socially democratic system with a permanently stable economy and encouraging social development of the country with responsibility to the environment and maintaining life on the Earth.

- **Personal competencies:** self-evaluation, knowledge, and evaluation of one's own emotional life, including personal advantages and disadvantages; real estimation of one's own possibilities, abilities, trust, and self-confidence; control of one's own emotions; behaviour self-control; decision freedom; stress resistance, peace keeping, overcoming obstacles and failure; reliability; maintaining etiquette rules; fair performance and conscientiousness; being responsible for one's own behaviour and work; adaptation to change and flexibility; organising one's life in accordance with ethical principles (behaviour auto-regulation); auto-motivation, initiative and enterprise; positive thinking; involvement and assertiveness; civil spirit and courage; sociable character.

According to EU recommendations, student acquisition of these key competencies should be one of the main aims and the core component of educational curricula of all school types. Key competencies are abilities that have to be developed continuously, by activities within any subject matter (history, mathematics, natural science, social science, technology – there are simply no limits). Key competencies are beyond subjects, they do not combine with particular content, and they can be acquired within any subject (although only some of them). Mastering these competencies is connected especially with the procedural aspects of the subject matter, methods, organising forms, and conceptions of teaching. Skills, abilities, and also key competencies, can be acquired only within an activity.

Most experts in the field of education agree on the fact that **the best professional education is a good general education**, which allows people to adapt to permanent changes better than specialised training. Professional training and specialisation is now happening later, after finishing secondary school study and even after graduating from university, and it becomes a part of lifelong education.

- Although prognoses can be controversial, they agree on one fact: **information and communication technologies will occupy a crucial role in future society.** Even today ICT influences our everyday lives. These technologies could cause a revolution in education comparable to the one influenced by the invention of printing press. ICT developments are so turbulent that their current use in education represents only a fraction of their potential possibilities. Very soon people will be able to learn at home, and terms like *classes, timetable, classroom, grade, school year, and school or compulsory school attendance* in their current understanding will become out-of-date. Schools have never before had such an aid like the computer, which has been met in such a natural, active, and positive way by students. **ICT based education, or e-learning**, will enable the everlasting dream of pedagogy – the individualisation of teaching, where each student will have his/her own teacher. Although this teacher will not have a human appearance, the teaching methods offered through e-learning will allow for more patience, fairness, and more knowledge. E-learning will provide constantly improving learning results, cost savings, and time-related benefits in education and training. E-learning offers profitability and flexibility benefits to its users and organisers. This is due to the fact that it enables learning to take place faster, cheaper, and with higher quality results. Thus, ICT based education can have a direct influence on an organisations' competitiveness. E-learning will enable companies to carry out the thesis that every person can successfully learn upon certain conditions. We cannot forget, however, that a computer can deliver knowledge, but people must provide emotions

and love. Only an authority can educate a personality, and character can be created through character.

- **Transition from an industrial society to information and learning-based society.** While in an industrial society the main strategic source of development is capital, in an information society the strategic source of development becomes information and knowledge. Education, which must help people in orientating the information boom, in understanding and in utilising information, will become a decisive factor in the information society's performance. Thus, the following educational goals will need to be met: to develop creativity, to utilise information, to orientate within information sources, and to know how to apply information. In other words, it is necessary **to develop an interest in learning, the ability to learn effectively (or rationally) for one's whole life, and to adjust flexibly to rapidly changing life conditions.** Thus, the following statement by P. Drucker (2001) becomes more topical: "We will redefine what it means to be an educated person. Traditionally an educated person was someone who had a prescribed stock of formal knowledge. Increasingly, an educated person will be someone who has learned how to learn, and who continues learning throughout his or her lifetime."

- There will be **rapid scientific and technological development, where the dominant position of physical sciences will be substituted by the wide application of biology, biotechnology, and ecology.** The development of biotechnology, genetic engineering, and artificial intelligence will increasingly make the borderline between humans and machines non-transparent. It will therefore be necessary to solve a whole string of ethical problems, to redefine terms like *life, consciousness*, and others. It is expected that with the development of nanotechnologies (mini-appliances working on a molecular base), the space industry (production located at space stations, extracting minerals from other planets), and the exploitation of new energy sources, etc, much of engineering will move more and more toward the molecular level. As a result, all types of education, e. g. engineering education should **include biology**, along with the traditional chemistry and physics courses, as a basis for the practice of engineering.

- An enlarging European Union and the rise of united Europe expect that educating future European citizens, who besides their current native country, will consider Europe as their second homeland. It is thus necessary to include a so-called **European dimension of education** into teaching at all types of schools – i.e. teaching about Europe, from Europe and for Europe, with expectations of active communication in at least three EU languages. Exceptionally important are teachers' and students' EU mobility (Socrates, Leonardo...), their active involvement into EU programmes, and the collaboration of schools.

- World globalisation also brings **social, worldwide, and global problems**. There are especially the problems of war and peace, disarmament, ecology, violations of human rights and liberties, mass population growth in some areas, misery, hunger in many regions, the inequality of economic development, the intensification of differences between rich and poor countries, ethnic and religious intolerance, extreme nationalism, terrorism, increased violence, criminality, drug abuse, aggressive behaviour, and suffering from diseases (AIDS, etc.). Unfortunately, even after hundreds of years, people are neither better, more satisfied, or happier, as is characterised in the known sayings of Rogers, "*We are educated but bad*," and Fromm, "*Our brains are in 21st century, bur our hearts in Stone Age*'". The future contains elements of necessity, fortuity, and eligibility. Besides choices that can bring spiritual and material prosperity, there are also choices leading a person to ecological disaster, nuclear war, permanent ethnic or religious conflict, famine, or a repetition of Auschwitz or Hiroshima, and in every case human behaviour can prevail to lower instincts, e. g. egoism,

greediness, covetousness, aggressiveness, intolerance, hostility, hatred, envy, and group interests, etc. To avoid such problems it will be necessary to **develop upper motives and form noble-minded values**, such as love, respect, equality, brotherhood, liberty (but not at the detriment of others), goodwill, tolerance, trust, honesty, mutual help and collaboration, non-violent solutions to problems, and to develop emotional intelligence. To reach these, schools should become humanistic and creative; they should contribute to the people's political maturity and their development to be able to participate actively and responsibly in public life, to consider problems not only from personal and national points of view, but from a global perspective as well.

- Globalisation has brought an increase in wasting of the environment and a lack of food and clean water for a considerable part of the population. **Nature's capacity for tolerance has nearly run out and natural resources are close to exhaustion**. A permanently sustainable development - development which meets our current requirements without limiting future generations in their abilities to secure their needs – is a strategy of development that has no other reasonable alternative. In spite of this principle requirement, for example the majority of engineering education takes a prevailingly technocratic approach, aimed especially at maximizing production and economic efficiency. All types of education should be purposefully oriented towards environmental production and safety, and on a reasonable decreasing of the harmful impacts of technology. Students should acquire respect for nature and the environment; and they should strive to achieve professional ethics, a part of which is duty, an obligation to contribute to **a permanently sustainable development, and a responsibility for preserving a healthy environment**.

- Globalisation is linking national economies in new ways. In today's world, no country can remain isolated or impose barriers to international talent migration and trade.

More and more, global work teams are becoming commonplace as people are being assigned to projects that have international components. To be successful in this global environment, students must **develop cultural global literacy**, that means mainly being able to analyze other cultures' needs, and to design products and services to fit those needs; understanding the business environment of the countries where products and services are made, bought, or sold; being aware of the customs, laws, and ways of thinking in other countries; understanding and accepting other cultures' attitudes and beliefs without compromising one's own; and understanding local negotiating strategies, etc.

- Before the 1970s, large corporations were the dominant phenomenon in the economies of developed countries. In connection with world globalisation and increasing world market competition, **small companies and micro-companies have started to play a decisive role in economy**. These small and micro companies can very flexibly change production, rapidly introduce innovations, and they are very competitive. The need to increase the number of small companies includes a need to increase the number of entrepreneurs, people who want and are able to establish and successfully manage these small enterprises. School systems were (and still are) aimed at staff training, rather than preparing entrepreneurs (how to become self-employed, how to establish and manage an enterprise, how to develop a spirit of enterprise). A Eurobarometer survey on entrepreneurship in the EU and the USA did not show encouraging results (Flash Eurobarometer 160: Entrepreneurship, 2004). Americans are more venturesome than Europeans; there is a better entrepreneurial environment in the USA, and this is one of the reasons why the EU lags behind the USA. The European commission is aware of the fact that venture and entrepreneurship are keys that will enable the EU to become the most competitive economy in the world,

and therefore **entrepreneurship education at all levels and types of schools is one of the main targets set by the EU in the area of education** (Achieving the Lisbon goal: the contribution of VET: Final report of the European Commission 1-11-04,. 2004). The EU commission for enterprise recommends introducing undergraduate training in how to establish and manage a business, including the ability to identify entrepreneurial opportunities and to propose a real entrepreneurial intention and plan. This kind of training should be offered at all types of universities and higher education (not only at those oriented on the economy and services!). Students should have the chance to found and conduct a real mini-business (including the possibility to receive student loans), capable of competing on the market (Helping to create an entrepreneurial culture....., 2004).

Literature

1. Achieving the Lisbon goal: the contribution of VET : Final report of the European Commission 1-11-04, [online]. (2004). Available from: <http://europa.eu.int/comm/ education/ policies/2010/ studies/ maastricht exeen.pdf.> [18 August 2005].
2. Drucker, P. F. (2001). Management Challenges for the 21st Century. Paperback, Harperbusiness. ISBN 0887309992.
3. Education for Entrepreneurship. (2004). European Commission, Brussels.Flash Eurobarometer 160 : Entrepreneurship [online]. (2004). Available from:<http://europa.eu.int /comm/enterprise/entreprisepolicy/survey/ rapporten2004pdf.> [21 November 2005].
4. Green Paper : Entrepreneurship in Europe [online].(2003). Commision of the European Communities, Brussels. Available from: <http://europa.eu.int/comm/ enterprise/ entrepreneurship/ green paper/ green_paper_final_en.pdf.> [22 November 2005].
5. Helping to create an entrepreneurial culture : A guide on good practices in promoting entrepreneurial attitudes and skills through education [online]. (2004). Office for Official Publications of the European Communities, Luxembourg. Available from: <http://europa.eu.int/comm/enterprise/ entrepreneurship/support_measures/ trainingeducation/ doc/ entrepreneurialcultureen.pdf> [22 November 2005].
6. Kvalita vzdělání – odpověď na výzvy budoucnosti.(1998) [Quality of Education - Answer to Challenges of Future]. Ústav pro informace ve vzdělání, Praha. ISBN 80-211-0285-3.
7. NAISBITT, J. (1990). Megatrends 2000. Wiliam&Morrow Company, Inc.
8. TOFFLER, A. (1990). Powershift: Knowledge, Wealth and Violence at the Edge of the 21st Century. Bantam Books. ISBN 0553292153
9. TUREK, I. (2004). Inovácie v didaktike [Innovations in Theory of Education]. MPC, Bratislava. ISBN 80-8052-188-3.
10. TUREK, I. (2005). Základy didaktiky vysokej školy [Foundations of Higher Education Theory]. Slovak University of Technology, Bratislava. ISBN 80-227-2573-0.

CITIZENS AND THEIR HEALTH

O. Bocakova, F. Vojtech

Abstract

The authors are discussing the development of health in Slovak population. They have focused on environment that seems to be a very important factor influencing human health. They are emphasizing healthy life style and describing the health policy of the country. They offer some results of a survey that was carried out as a Europe Barometer on the public policy issues.

Key words

health, citizens, environment, European Union

A variety of political decisions have an impact on the public health. The decisions that are made are not usually connected to the issues of health care but they are concerned also by the issues of industry, agriculture, electric power, education. The existence of a culture is based on a healthy population.

The governmental public health policy represents a set of short-term and long-term activities and decisions focused on improving health conditions and public health promotion. The conception of quality improvement in the public health care has been developed in line with the WHO declaration called „Health for everybody in 21st century" and it comprises changes in demography, socio – economy, environment, control in epidemic situations and new medical technology employment.

Human life and health are the two most important gifts that have been granted ho a human being. A man was created to enjoy his/her life and not to suffer from diseases. Health conditions of the Slovak population are poorer than the ones in developed countries population. Slovak citizens live on average by six – eight years less than the population of some of the EU countries do. Since the time the above mentioned report was worked out, the life expectancy has been growing slowly although the symptoms of being diseased and death rate have not been acceptable. The death rate in coronary and oncology diseases belongs to the top rate in the middle Europe. Some specialists say that this negative development can be caused by life style factors as:

- eating habits – in spite of a low consumption of fruit, vegetables, fish and in spite of a decreasing rate of milk and milk products

consumption, the composition of food has been improving due to changes in the food pricing and due to entering the agricultural market.

- smoking – smokers share including the heavy smokers share represents one third in adult population and this share has been increasing; this is an alarming fact.
- alcohol consumption – its percentage is still very high especially in population with a low education level.
- The situation in alcohol abuse is similar to the situation in tobacco abuse – the share of teenagers consuming alcohol regularly has been increasing.
- Insufficient physical activity – half of the population admits the fact that they do not do exercise at all or they seldom do any physical activity.

Non-infectious diseases occur as a consequence of aging population. The increasing number in aged population is a contributor to morbidity and mortality.

Screening is the method that promotes early detection of the disease. The medical effect of screening is based on minimizing the risk of the disease, soon recovery, slowing the disease progression down, lowering the number of complications including the death rate decrease. The economic effectiveness represents the lower costs spent on treatment, medical doses and hospitalization. It also means a soon recovery and coming back to work.

Slovak population prefers being treated due to poor health conditions to preventing them by health friendly behavior. Slovaks are not aware of the fact that prevention is better than cure and that they themselves are responsible for their good health.

Greek and Roman physicians knew well that there is a relation and a link between human health and environment. To live healthy and have a healthy life of a quality means to be physically active, to have good eating habits and a healthy diet and healthy environment. The issue of ecology can contribute to the community

health improvement and it can serve as a clue to changes of environment and to a healthy life style. Following factors are the most important ones that have an impact on a long and healthy life:

- clean air;
- clean water with the lowest content of mineral and chemical substances;
- not processed food, raw in its substance (fruit, vegetables, salads, nuts and corn – grown in natural conditions).
- If people have a chance to grow plants by themselves, let them do it. It is necessary.
- Our health, its quality, the length of our lives depends on biological characteristics, life style, on the environment a man lives in. Of course it depends on the quality a man cares about his/her health.

Recently people have been interested in the period of their old age that is a very important stage in an individual's life as there are many people entering this period in good conditions and being healthy. This is the fact resulting in an offer to spend leisure time effectively and in many ways. Physical activity and intellectual and social opportunities to be active can prevent the process of physical and intellectual ageing.

Third Age is a wonderful period especially for those ones who can explore this period in an effective way. It is a stage in human lives when people usually have enough time to do various activities, they have time to fulfill their dreams they never had time before. The Euro barometer studies have the goals to improve and enhance the knowledge on monitoring the public health development. The survey that was carried out last year aimed at four issues:

- health conditions in European Union citizens, long-term diseases and their rate;
- consequences of everyday health problems;
- number of European citizens that undergo medical prevention check up;
- specific problems – high blood pressure, high cholesterol level, hormonal impairment.

MAJORITY FEELS HEALTHY

The survey encompassed one of the basic questions inquiring about health conditions, how people feel about their health. Almost three forth of EU citizens (75%) have indicated that they consider their health conditions to be good; one fourth out of the above mentioned quantity has a feeling of having excellent health. Only seven per cent of the EU citizens consider their conditions to be poor and only every one hundredth respondent sees his/her health rather poor. Every fifth respondent (20%) has neither positive nor negative opinion about his/her health.

Irish people feel positive about their health. Almost nine out of ten respondents consider their conditions good or very good and only three per cent of citizens have indicated that their health is poor. Similar optimistic results have been gained in Denmark, Netherlands

Country	GOOD	Neither good nor bad	BAD	Do not know
Belgium	81	14	5	0
Bulgaria	60	26	14	0
Czech Republic	71	23	6	0
Denmark	82	12	6	0
Estonia	51	36	13	0
Finland	72	22	6	0
France	76	18	6	0
Ireland	89	8	3	0
Italy	72	25	3	0
Cyprus	79	16	5	0
Lithuania	44	42	14	0
Latvia	50	39	11	0
Luxemburg	80	15	5	0
Hungary	55	30	15	0
Malta	75	22	3	0
Germany	74	19	7	0
Holland	82	14	4	0
Poland	59	28	12	0
Portugal	66	25	9	0
Austria	73	22	5	0
Rumania	63	26	10	0
Greece	80	15	5	0
Slovakia	68	24	8	0
Slovenia	73	20	7	0
Spain	75	18	7	0
Sweden	80	14	6	0
Great Britain	77	15	8	0
EU 27	**73**	**20**	**7**	**0**

Tab. 1: EU citizens and their health conditions (in %)

(82%), Belgium (81%) and Greece (80%). The lowest number of citizens enjoying their good health lives in Lithuania (44%), Latvia (50%), Greece (51%) and Hungary (55%). Hungarians (15%) consider their health poor; Bulgarians and Latvians (14%) see themselves in poor health conditions. Czechs have reached the position below the European average as 71 per cent of Czechs consider their health to be good one, 23 per cent have spoken out their neutral attitude and the six per cent left see their health poor.

The survey has proved that there are slight differences in men's and women's health assessment although the assessment results depend on the respondents´ age and the level of education they have achieved.

The best results have been achieved in students who feel positive about their health; more than nine out of ten respondents (91%) have the opinion that their health conditions are good. Only a small percentage of students knew for sure that their health is poor. On the other hand less than half of senior citizens (46%) consider their health conditions to be good.

RISKS AND RISK PREVENTION

In the terms of demography more women suffer from long-term health problems (31%) than men do (26%). Every second citizen aged above 55 has reported health problems if compared to the group of young people aged between 15 and 24. It presents only eleven per cent. High blood pressure has been reported in most citizens (36%) and besides, European population has been suffering from joint disease (24%) as well. Total 15% out of the percentage who undergo a long-term treatment represent citizens who have been diagnosed with diabetes and the other 10% suffer from depressions.

THE MOST COMMON MEDICAL CHECKS

A part of the survey has been devoted to the issues of health insurance. We have been interested in the type of medical checks the EU citizens regularly and most frequently undergo and whether they have these regular checks on their own or they have them while following a medical program. It has been proved that people have appointments with dentists most frequently, then they make appointments with ophthalmologists and the least percentage of checks has been reached in appointments with otolaryngologists. Total 62 per cent of respondents have reported that they see the dentist at least once a year, 38 per cent of population have a sight check and only 16 per cent of the population have reported having an appointment with the otolaryngologist. In the above mentioned three cases the medical checks were initiated by citizens.

Slovaks and Dutch people have reached the largest percentage (82%) in dentists' appointments and they are followed by people of Luxemburg, Denmark and Germany. In Sweden, also in the Czech Republic and in Slovakia more than a forth of the population has dentists checks as a part of medical programs recommended by health insurance companies. (In Slovakia the health insurance agencies cover is conditioned by having prevention checks at a dentist's once a year). The largest percentage of Luxemburg people (58%) has sight checks once a year.

SITUATION FORESEEN IN SLOVAKIA SINCE JANUARY 2009

Slovakia can implement the exchange rate for the Euro amounting 30.126 SKK when the Euro is launched in the country. When Slovak salaries and pensions are calculated in Euro they will be the lowest ones within the EU countries. The Slovak population will earn the lowest salaries and average pensions will be the lowest ones as well. Within the Euro zone Luxemburg population has the top position among sixteen countries in their average earnings. The amounts of earnings vary from country to country within the European Union. Slovak salaries are five times lower than the ones of other European countries are. The Slovak population will have to get used to this fact when the Euro is launched in the Slovak economy on 1 January 2009.

Country	Pay in €	Pension in €	Pay in SKK	Pension in SKK
Belgium	2, 799	2, 099	84, 333	63, 249
Cyprus	1, 775	853	53, 480	25, 709
Finland	2, 873	2, 666	86, 563	80, 315
France	2, 935	1, 502	88, 431	45, 276
Greece	1, 710	1, 636	51, 522	49, 306
Holland	3, 222	2, 693	97, 078	79, 506
Ireland	2, 412	783	72, 673	23, 618
Luxemburg	3, 880	3, 426	116, 904	103, 226
Malta	1, 344	416	40,494	12, 532
Germany	2, 951	1, 177	88, 913	35, 476
Portuguese	1 253	451	37, 752	13, 590
Austria	2,801	1, 288	84, 349	38 ,802
Slovakia	678	311	20, 443	9,368
Slovenia	1,381	341	41, 609	10, 274
Spain	1,617	1,318	48, 720	39, 716
Italy	2, 346	1,593	70, 684	47 994

Tab. 2: Salaries and pensions in some selected EU countries

320 million people share the same EU currency and since January 2009 this number of people will be enlarged by five million of Slovaks.

CONCLUSION

Although there has not been a community health policy that can be mutual for the EU countries, the European Commission has been paying a lot of attention to the health care of EU citizens. In this way the Commission has been promoting the health improvement of the EU population indirectly and has been trying to prolong the population age. A positive trend in the health care of the EU population has been proved also by the Euro barometer.
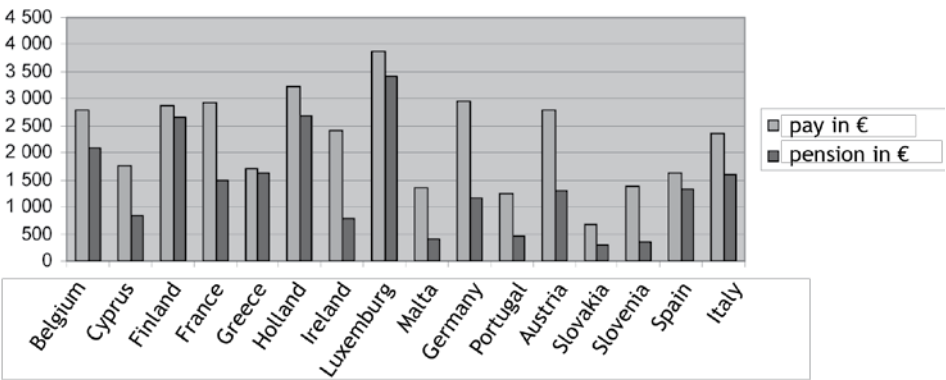

Fig. 1

Literature

1. Červená, D., Červený, K.: Liečba výživou, Neografia, Martin, 2007, ISBN 80-88892-48-1
2. Egnerová, A., Guliš, G.: Epidemiológia neinfekčných chorôb, Trnavská univerzita, FZ, 2001
3. Kaplan Robert M. et. al.: Zdravie a správanie človeka, SPN, Bratislava, 1996, ISBN 80-08-00332-4
4. Kol. autorov, Ottova všeobecná encyklopédia M – Z, Agentúra Cesty, Bratislava, 2006, ISBN 80-969159-4-0
5. Michio Kushi: Potraviny – liek náš každodenný, Eugenika Pbl., Bratislava, 2007, ISBN 978-80-89227-95-2
6. Peters, D. et. al.: Rodinná encyklopédia zdravia: Nová medicína, Ikar, Bratislava, 2007, s. 511, ISBN 978-80-551-1383-8
7. Verejná správa, číslo 14, denník vlády ČR, 12/2008, str.18-19

TRANSPARENCY IN THE ACQUIRED LANGUAGE COMPETENCES

E. Delgadová, H. Šajgalíková

Abstract

Globalisation and state-of-the-art ICT open the opportunities for the world-wide contacts. Language diversity one familiarizes oneself daily with and the necessity of communicating across language boundaries have almost naturally fostered a desire to learn the languages of one's neighbours, the languages of the playground, work and/or the languages of the marketplace. This process continues to increase with internal and international migration, urbanization and exogamous marriages, leading to changing language demography where language shift and language learning are constant and ongoing processes. They necessitate new and creative ways of language management at any level of education and training. The part of the shift lies in the communication competence (instead of language competence) that has become a critical success factor of individuals as well as institutions and companies. Indeed, it is important to view communication more broadly and see it as a function that cuts through and involves everyday activities at an individual or institutional level. Of course, this is not confined to a monolingual world. Communication starts being perceived as an intangible asset – communication capital. There is no doubt that communications capital belongs into the field of interest in intellectual capital.

The following paper describes the methodology and the results of the international research project TALC (Transparency in the Acquired Language Competences, SK/05/B/F/LA-177427; within Leonardo da Vinci scheme) that was aimed not only at identification of language competences, but also at publicizing the findings to ensure their transparency. The research focuses on language competences of the students in management, business and engineering at C1 CEFR level. The resulting lists of competences are described in published manuals for students, teachers/language programmes deliverers and employers to ensure that each of the involved parties understands the needed competences as identified within the research and enhances their acquisition.

Key words

language competence, C1 CEFR level, linguistic audit, transparency in the language competences, standardisation in language competences, benchmarking in language competences, field-specific language competences

EUROPEAN UNION LANGUAGE POLICY

At the Lisbon European Summit in March 2000, the European Union set itself the goal "…to become the most competitive and dynamic knowledge-based economy in the world, capable of sustainable economic growth with more and better jobs and greater social cohesion…" (Lisbon European Council 2000: 2) by 2010. Making a reality of this commitment includes a raft of initiatives to encourage people to move around the European Union in order to maximise their studying, working and lifestyle opportunities. Competitiveness can be reached only by putting skilled people where the jobs are. Since free movement of persons is one of the fundamental freedoms guaranteed by Community laws, every citizen of the European Union has a right to live and every citizen will have a right to work in another Member State without being discriminated.

It is true to say that whatever one's experience and skills are, the knowledge of foreign languages is the most important requirement to find a good job throughout the European Union. Speaking other European languages is the key to real mobility because "The Union needs a mobile workforce."(Promoting Language Learning and Linguistic Diversity 2002: 6).

Of course, benefits of language learning do not lie exclusively in employability. Everybody should be encouraged to carry on learning foreign languages for pleasure, personal development, for travel abroad and way of making new friends, or simply as a way of keeping the brain active. After all, language learning can be fun and it can be an ideal approach to learning about other cultures. Finally, it is generally true that competence in foreign languages is an indicator of social status throughout the European Union. The higher a person's level of education, the more likely one speaks one or more foreign languages.

The main objective of language policy of the European Union lies in language learning and linguistic diversity and was promoted mainly the Action Plan 2004-2006: Promoting Language Learning and Linguistic Diversity: an Action Plan 2004 – 2006 launched by European Commission in July 2003.

The message of the Action Plan resulted from the Barcelona European Council in March 2002: "…to improve the mastery of basic skills, in particular by teaching at least two foreign languages from a very early age…" (Barcelona European Council 2002: 19). It means that learning two foreign languages in addition to mother tongue is taken for optimum and the younger one starts, the better.

STANDARDISATION OF LANGUAGE SKILLS

In the context of language learning promotion, the heads of States and Governments in Barcelona in March 2002 noted the lack of data evaluating citizens' actual language skills and demanded the establishment of a European indicator of language competence. Such an indicator was intended to provide valuable information for decision-makers in the education as well as training systems. There is a great variety of tests and certificates of language skills throughout Europe constructed in different ways. These differences make the comparison of language skills between individuals difficult and do not enable to determine the objective level of proficiency. For that reason, it is hard for employers to assess the language skills of the applicants for a particular position, for schools and universities to decide on mobility participants etc. This naturally leads to reduction of credibility and portability of language examination results that may hinder the free movement of workers and students between Member States. Since one of the aims of the European Commission is to increase mobility of working force and thus contribute to creation of the most competitive knowledge-based economy in the world.

The endeavour to standardise language competences, two significant documents published by the Council of Europe contributed to standardised assessment of language skills: Common European Framework of Reference for Languages (A-C levels of language command) and the European Language Portfolio.

While A and B levels are permanently completed by new analyses, C levels analyses relatively fall behind with the detailed descriptors of language competences.

TRANSPARENCY AND BENCHMARKING IN LANGUAGE COMPETENCES

The above information provides a necessary insight into the issue of language competences. When referring to HEI level and employability, it is obviously C level of CEFR we talk about. In addition, mastering 2+ languages at "working" level (i.e. for purposes of studies and employment) requires the language learning and teaching to be systematic, structured and efficient to allow for quick and focused acquisition of the needed language competences. And thus, all involved parties – learners, language programmes deliverers, in-class language teachers, language policy makers as well employers must understand what language competences should and can be acquired in a time period. Not only standardisation of language competences is crucial in this respect then, but also the transparency of the descriptors and indicators of the competences in question must be secured.

The last, but not least, aspect to the acquisition of language competences lies in benchmarking. How can language programmes be improved? Sound competition, learning from best practices embodies the only way of achieving progress. Without standardisation (to know what we compare) and transparency (to understand what we compare) no development can be achieved.

THE TALC PROJECT METHODOLOGY AND THE RESULTS

The Department of Languages belonging to the Faculty of Social – Economic Relations of Alexander Dubcek University of Trencin was involved in the research of field-specific language competences. The research areas were academia, management, business and engineering. Four European universities participated in the international research project: the University of Economics in Bratislava, Slovakia, Alexander Dubcek University of Trencin, Slovakia, the University of Tubingen, Germany and the University of Navarra in Pamplona, Spain.

The international research project TALC (Transparency in the Acquired Language Competences, SK/05/B/F/LA-177427 within Leonardo da Vinci scheme) was aimed not only at identification of language competences, but also at publicizing the findings to ensure their transparency. The research focused on language competences of the students in management, business and engineering at C1 CEFR level.

Linguistic audit was used to identify the language competences in both the academic and professional spheres in the above mention fields of studies. However, the novelty of the TALC approach lies in its 2-faceted character. Based on the experience of their own, the research team decided for primary needs analysis.

Interviews with open-ended questions were used in the first phase. The respondents were field-lecturers, course coordinators and student exchange coordinators as well as the employers.

Based on the analyses of the responses, two questionnaires (one for academic and one for professional spheres) were drawn up to gain wider number of responses. Here, the analyses of the questionnaires were expected to prove or modify the results of the interviews. In addition, ranking of individual competences was also envisaged.

To make the survey respondent-friendly, the genre approach was used in the research, i.e. the respondents referred to individual genres and described individual competences within the genres (here we take a genre for a text type or form of communication associated with a social purpose and occasion). The analysis of the responses resulted in two thesauri of language competences in the above mentioned fields, one for academic sphere (i.e. for academic purposes) and one for professional sphere (i.e. for working environment).

The results show that wider variety of genres is used in the professional sphere than in the academic one. While 12 genres (plus various genres within arrangements of mobility) with 62 descriptors of language competences (*can do* statements) were identified for the academic sphere, there were 22 genres (plus miscellaneous arrangements, such as arranging for stays abroad, visits from abroad etc.) with 93 descriptors of language competences for the professional sphere.

When applying the genre approach, language competence descriptors may appear identical or similar in individual genres. In reality, however, they represent different competences. Elementary example might instantiate the difference: *to be able to take notes* while listening to a theoretical lecture embodies a competence (conceptual level of processing information), *taking notes* while listening to a short practical presentation of a product (practical assessment of applicability in wider context) embodies another competence and requires a different quality of the language skill in question.

CONCLUSION

The situation of a few years ago anticipated the new needs and led to the boom of language courses based on the analyses of language components (vocabulary, grammar and stylistic means) and the identification of the most frequently used languages. Thus, the language courses provided stemmed from the features of the languages taught. Vast financial means invested by the educational institutions as well as companies did not, however, result in the expected results. The reality suggests more and

more that the communication practices (materialized in genres) are identically important as the features of the language in question. The genres of informal or formal communication practice follow particular rules of the culture they are idiosyncratic of. This may range from quite clear-cut rules for highly structured and ritualised occasions to less formalized occasions in which generic choices may be wide. While genres provide frames for social interaction, and constraint the ways in which this proceeds, they can never entirely control or predict how meanings will be made in a context. This is because genres are never entirely single or pure.

The TALC project results showed the complexity of the C1 level language competences identification. Without systematic needs analyses, however, the language learning and teaching of the nations' elite will never improve. Leaving language competences development with the students and employees is unconceptual, unsystematic approach and, what is clear, pure waste of their potential and capacity.

The implications of the TALC project for language teachers and course designers are clear. Courses for graduates in the fields of business/management or engineering who have already attained a B2 level of general language competence need to be organized with a view to promoting C1-level competence (competent user) within the specific professional target area. The competences described should serve as guidelines in two important senses. First, these competences should underpin the basic functional, lexical and structural syllabus of the course, determining what kind of language is taught and learnt. Second, our heightened awareness of the crucial role of these competences in the professional and academic world should influence the methodology used in course delivery: teachers and course designers should place the emphasis on practising and acquiring skills in the specific contexts of business/management or engineering, rather than on de-contextualized language practice. Such an approach will maximize the possibility for learners to build up a solid basis of transferable skills that can be applied across a range of academic and professional situations.

Thus, move from theoretising on language competences importance to systematic identification of standards, introduction of transparency and thus pressure on language programmes quality, change of in-class language teacher profile based on the identified needs (the teacher must be capable to teach what practice needs) and realistic expectations of the employers related to the applicants and recruits' language competences becomes the obvious next step. TALC approach is the right answer to the next phase of the European Union language policy.

DISCLAIMER

Literature

1. Action Plan for Languages. [online] http://ec.europa/education/policies/lang/policy/index_en.html
2. Common European Framework for Languages, European Language Portfolio. [online] http://www.coe.int/t/dg4/linguistic/CADRE_EN.asp
3. Presidency Conclusions – Barcelona European Council, 15-16 March 2002. [online] www.fondazionecrui.it/eracareers/documents/research/policy/Barcelona%20EUCouncil%202002.pdf

4. Presidency Conclusions - Lisbon European Council, 23/24 March 2000 [online] http://europa.eu.int/ISPO/docs/services/docs/2000/jan/march/doc/00/8/en.html
5. REEVES, N. Y WRIGHT, C. 1996. Linguistic Auditing: A Guide to Identifying Foreign Language Communication Needs in Corporations. Adelaide: Multilingual Matters Ltd.
6. ŠAJGALÍKOVÁ, H. DELGADOVÁ, E. 2007. ELP and its potential. CercleS Seminar University College Dublin 7 – 9 june 2007 www.cercles.org/en/elp/seminar/papers.html#sajgalikova
7. ŠAJGALÍKOVÁ, H.: Transparentnosť v nadobudnutých jazykových kompetentnostiach. Zborník z medzinárodnej konferencie "Kompetence v cizích jazycích jako důležitá součást profile absolventa vysoké školy". Univerzita obrany. Brno 13 – 14 septembra 2007, s. 234-239. ISBN 978-80-7231-261-0
8. BREEZE, R.: TALC: Manual for Teachers. Bratislava. EKONÓM 2007. ISBN 978-80-225-2512-1
9. DELGADOVÁ, E. a kol.: TALC: Manual for Employers. Bratislava. EKONÓM 2007. ISBN 978-80-225-2517-6
10. DUTTLINGER, C. a kol.: TALC: Manual for Students. Bratislava. EKONÓM 2007. ISBN 978-80-225-2515-2
11. ŠAJGALÍKOVÁ, H. - BREVENÍKOVÁ, D.: TALC: Manual for Researchers. Bratislava. EKONÓM 2007. ISBN 978-80-225-2520-6

TERMINOLOGY AND TRANSLATION

M. Igazová

Abstract

Translation is a process of changing something into what it is not so that it will be itself – but for another audience. When translating we should stop using our mother tongue as a system of reference and use the rules of the foreign language independently of the mother tongue.

Easier said than done! Translation may be tricky especially in situations when the terminology used in one language system does not have counterparts in the target language.

Key words

translation, terminology

We have been witnesses to the period of revolutionary changes in our national culture, in the society, technology and in all other parts of our social lives. The new political situation after the year 1989 has triggered some movements in economics and technologies that initiated and resulted in some other changes that had to be made in the so called super-structure in the national culture. Translation or the process of translating belongs to this super-structure of our lives and of course it had to undergo the above mentioned changes. We have to admit that the scheme and theory of translation have been changed as well.

In the past years in Slovakia so called literary, artistic translation had been developed; there used to be great translations from the Russian, German, Latin languages; and hand in hand with the translation, theory of translation continued to develop as well. Nowadays in our market-oriented economy, most specialized texts are translated and this type of translation – translation of non-literary, specialized texts carrying some information   is being developed. In the past the Slovak economy, industries, banking system, and every sector of our economy were oriented towards the East, towards the former Soviet Union, so most materials or, one must say that all materials, were written in the Russian language. After the changes that had been implemented after 1989 and after Slovakia became a member of the European Union, our doors to Slovakia opened and there is a need to speak, read, and write in some other languages not the Russian one only. This brings, of course, the necessity to translate specialized materials into and from the Slovak language. The theory of translation in Slovakia has not been prepared for such an explosion of the need in translating. It has happened that non-professionals, amateur translators simulate the work of professionals and many translations have been done with a lot of mistakes especially in specialized texts.

The experience I have gained through many years as an interpreter and translator and as a teacher of the English language have led me to the decision to gather all the experience, some knowledge and materials on translation.

TRANSLATION

Translation works best when the translator knows connotations and context as well as the dictionary meaning of words.

According to the "Learner's Dictionary of Current English"

/1/ translation is the process of changing something that is written or spoken into another language;

/2/ it is a text or work that has been changed from one language into another". And accordingly to translate is "to express the meaning of speech or writing in a different language; to be changed from one language to another" (Oxford Advanced Learner's Dictionary, 2000).

Newmark, P. gives following definition of translation: "It is rendering the meaning of a context into another language in the way that the author intended the text. Common sense tells us that this ought to be simple, as one ought to be able to say something as well in one language as in another. On the other hand, you may see it as complicated, artificial and fraudulent, since by using another language you are pretending to be someone you are not. Hence in many types of text (legal, administrative, dialect, local, cultural) the temptation is to transfer as many SL (Source Language) words to the TL (Target Language) as possible. The pity is, as Mounin wrote, that the translation cannot simply reproduce, or be, the original" (Newmark, P., 1995:5). Translation is a process of changing something into what it is not so that it will be itself – but for another audience. When translating we should stop using our mother tongue as a system of reference and use the rules of the foreign language independently of the mother tongue. Easier said than done!

Translating has always been a necessary activity not only in Western cultures but in other countries as well. Nevertheless, it is only after the Second World War that translation started to be considered as a professional activity in Slovakia.

Multilingual settings are becoming the norm in a globalized society as more and more people coming from different social and cultural backgrounds are able to take part in second language communication. The approach to the problems of dealing with more than one language in professional settings has become a multidisciplinary one. In multilingual settings there is usually a need for materials that are written in two languages or have to be translated from one language into another one. While translating specialized texts from the source language into the target language one can speak about a non-literary translation. The literature and our experience say that translation can be divided into two groups: literary and non-literary. The term 'non-literary translation', umbrellas the former notion 'technical' because you can affiliate the term "technical" only with something what concerns technology only. Non-literary translation comprises all translations of specialised texts that can belong to the areas of technology, commerce, medicine, politics, finance etc. A non-literary text and its translation can be any text that belongs to neither poetry nor it is a paragraph of a novel. Newmark, P. gives following definition: "Technical translation is one part of specialised translation; institutional translation; the area of politics, commerce, finance, government etc., is the other. I take technical translation as potentially (but far from actually) non cultural, therefore "universal"; the benefits of technology are not confined to one speech community" (Newmark, P., 1995:151).

We can discuss translation as a process of communication. The translator communicates some information written or spoken in the source language to the addressee in the target language. The translator producing a new text is a medium in this process. The translator reads, hears and receives the information/text, interprets it and creates the translated text/information.

According to Reiss and Vermeer (1984), any text may be considered as an ´offer of information´ (Reiss, Vermeer, 1984:72); faced with this offer, each receiver chooses the items he regards as interesting, useful or adequate for the desired purposes. The translator represents a special type of receiver who chooses the information elements he deems necessary to achieve a given purpose and transfers them, constructing a new text for the target culture. The target text represents information offered on some information provided in the source text.

Translators are advised to translate/interpret/speak/write in a way that enables the text/translation to function in the situation in which it is used and with the people who want to use it and precisely in the way they want it to function.

Translation is always a part of the global communication effort within a discipline. The process of translation should reflect a more cognitive, knowledge-oriented semiotic approach.

Specialized writing is the production of non-literary, pragmatic texts designed for use in a specific field or discipline, such as science, technology, healthcare, business, administration or tourism. The purpose of the specialized text is primarily informative, and the translator's concern is for clarity, precision and effectiveness in the transmission of information. Certain specialized text types follow different conventions in source and target languages.

Specialized texts, that are the subject of our translation, usually bear some signs distinguishing them from the other type (literary) of texts. They contain vocabulary, terminology designed or developed for a particular purpose or area and they are written in a style. They are designed to convey information to its audiences which means the author of a text would be well aware of who the audience is, who is the receiver of the information conveyed, if the text is designed for a specialized or no-specialized readership. Unfortunately no helpful literature and references are usually available. We must assume that our receivers, listeners, readers have for sure particular knowledge. Even if we know that they do have knowledge of something about which we

wish to speak, we may need to introduce it or recall what they already know. We should not introduce familiar things as if they were new. This is often what our Slovak authors of texts, our specialists often, forget about. Sometimes they forget completely about the fact that the others, the receiver of the information encoded in the text, do not know exact processes that take place in the writer's mind. Bohuslav Ilek (2003:15) states that specialized terminology is often spoilt by a lot of colloquial words that the translator has to unscramble.

TERMINOLOGY

Terminology should be a useful and functioning tool. The writer, author of the text and the translator should use the same terms in the text. In some cases in terminology there are various terms denoting one subject, the translator must refer to the context, to the field the text and its translation are concerned with. In some cases it is true that in the field of terminology it is not necessary to adhere to the terminology used and to force the terms to fit exact patterns in the text.

The current conditions in the field of terminology are not ideal especially in the field of business, banking, public administration, etc. Many English expressions have still appeared in the texts written in Slovak that have their own Slovak equivalents, e.g. billing division, invoicing department, (some Slovak companies use them) but for any unknown reasons they are given in English. Of course, there are English terms that have never had Slovak equivalents due to the global boom of technology, and the process of globalization, e.g. software, hardware, management, etc. and they were implemented by a special commission into the Slovak language, e.g. 'softvér, hardvér, tím, manažment'. A large group of people, specialists representing various fields, usually forms the terminology. Except for specialized commissions, it should be university that prepares specialists that should follow the latest trends in the current development in various sectors of economy and public life and should agree and be responsible for implementing new terminology. To illustrate this sugges-

tion we can mention an example from the field of public administration. In the period of implementing changes and reforms into this field the new Slovak terms 'vyšší územný celok, samosprávny kraj' were translated as 'higher territorial unit', 'higher territorial whole' or 'self-governing unit'. People responsible for translating the Slovak material completely forgot about the receiver of this information. They translated, transformed the Slovak terms into the English language and no English-speaking people or native speakers can understand these terms.

In the following part let us discuss some other English terms that have not been translated into the Slovak language properly.

Sustainable development, trvaloudržateľný rozvoj (šetrný rozvoj)

"Sustainable development is a pattern of resource use that aims to meet human needs while preserving the environment so that these needs can be met not only in the present, but in the indefinite future. The term was used by the Brundtland Commission which coined what has become the most often-quoted definition of sustainable development as development that "meets the needs of the present without compromising the ability of future generations to meet their own needs" (Wikipedia). The term 'trvaloudržateľný' has been derived from the meaning of the word 'sustain'. The Slovak expression seems to be a sort of tautology – the word 'udržateľný' could express exactly what is meant by the English term. The word 'sustainable' has another meaning: 'involving the use of natural products and energy in a way that does not harm the environment' that describes exactly what is meant by the English word sustainable. The English term is affiliated with the first meaning of the word describing the way of using natural resources but the Slovak translation is connected with the other meaning of the word. This can be an example of 'inference' or it is a sort of misunderstanding the cultural competence. Unfortunately, the Slovak translation 'trvaloudržateľný' has become a wide-spread expression although it does not reflect what is meant behind that term in the English language. From the pragmatic point of view it would be

more probable that while speaking about development of technologies and using natural resources 'sustainable development' might have the meaning of using natural products and energy in a way that does not harm the environment.

Energy, energetika
"Pokiaľ ide o energetiku a zmenu klímy – With respect to energy and climate change, the European council reiterates the importance …………'

energetika -y ž. priemyselné odvetvie vyrábajúce energiu, najmä elektr.; energetik -a mn. -ci m. odborník v energetike; energetička -y -čiek ž.; energetický príd.: energetické zdroje, energetická situácia (Slovník slovenského jazyka).

"Energy – noun 1/ the ability to put effort and enthusiasm into an activity, work, etc; 2/ the physical and mental effort that you use to do something; 3/ a source of power, such as fuel, used for driving machines, providing heat, etc: solar/nuclear energy; 4/ the ability of matter or radiation to work because of its mass, movement, electric charge, etc: kinetic/potential energy" (Oxford Advanced Learner's Dictionary, 2004). Referring to the third meaning of the word ‚energy' that is what the author of the original text really meant, the English term energy should have been translated into Slovak as "**energia**" and not ‚energetika' as the latter one means a branch or field or sector producing energy, especially electric energy.

An example of ambiguity can be the word "**supply**" - an amount of something that is provided or available to be used: 'water supply' – 'dodávka vody' but in the field of economics 'supply and demand' (labour supply) means something different from its original meaning. In the Slovak language it is "**ponuka**" and not 'dodávka práce'. From the point of view of ambiguity it is necessary and advisable for the translator to consult the term with a specialist involved in the field the translation is concerned with.

"Treatment" is what most people know as the word which means something that is done to cure an illness or injury, or something done to

make somebody look and feel good. Only those who work in the field of water management know that the word is used in the collocation water treatment: 'drinking water treatment' or 'waste water treatment plant' (čistička odpadových vôd), purification is not used in this meaning, although purify, purification mean to make something pure by removing substances that are dirty, harmful or not wanted.

"Plant = technologické zariadenie"
According to the Oxford Advanced Dictionary „plant" is a factory or place where power is produced or an industrial process takes place: a nuclear reprocessing plant; Japanese car plants; a chemicalo/manufacturing plant, so no one would translate the term like it is translated in the guidance. To be more thorough the translator uses the collocation "technologické zariadenie".

Here we go with some English terms translated into Slovak by a translator who is not a linguist. The translator except for his/her professional competence has language competence and by means of applying a pragmatic approach he/she managed to translate the text well.

"Drawings = projektová dokumentácia"
The Slovak term is based on the translator´s knowledge and experience. The usual term used for the Slovak term „projektová dokumentácia" is technical drawings, technical plans. The translator´s pragmatic approach has resulted in this term.

"Engineer = stavebný dozor"
Supervisor or Construction supervisor is usually used for the Slovak term "stavebný dozor" but the translator knew exactly who the engineer is and how to call this job, position in Slovak. According to the definitions of Engineer's responsibilities the translator was able to judge the title of the position in the Slovak language.

"Final Payment Certificate = potvrdenie konečnej faktúry"
According to the terminology used in the field of accountancy the author of the Slovak version used the term that is commonly used in this field although the term „certificate" stands

for confirming, certifying something. From the semantic respect the terms „payment „and „invoice" denote the same subject.

"Tender = ponuka"
„a formal offer" denoting the same fact in the Slovak language

"Specification = technicko-kvalitatívne podmienky"
The translator intends to transfer basic information for the Slovak receiver. Pragmatics is playing its important part also in this case. Methods of interpretation a text are very clear: to be identical, to preserve the substance although other term is used in the target language.

"Bill of Quantities = súpis položiek"
Neither the term bill nor the term quantity would lead us to the correct Slovak terms.

The Slovak version uses terms that are in line with Act No. 523/2003 Coll. On Public Procurement, Commercial Code, Building Industry Act in wording that is valid pursuant to the Slovak Legislation and terms used in construction and building industry and practice.

Slovak translators often have the tendency to use **„enterprise, entrepreneur, entrepreneurial" for "podnik, podnikanie, podnikateľský"**. The English word „entrepreneur"means a person who makes money by starting or running businesses, especially when this involves taking financial risks. (Oxford Dictionary, 2000). "An entrepreneur is someone who starts or founds or establishes their own company. An entrepreneur may found a series of companies or start/ups. Entrepreneurial is used in a positive way to describe the risk-taking people who do this, and their activities. Some entrepreneurs leave the companies they found, perhaps going on to found more companies" (Mascull,B. 2002:28). Reading some English language materials has proved that the terms business, businessman, businessperson are widely used for people who run their own business, are employed by themselves, or by companies.

"Zmluva o dielo – Contract Agreement"
A translator could have named it „Contract for Work" – the term that might seem more precise

semantically than the English term „contract agreement". The term „contract agreement" is given in the FIDIC material and is used in cases when the contract on labour or services is made. The difference in these two terms is based on the context and the connotation of both terms.

The statutory representative of the party of the client has the title "**konateľ**". One may ask: „Where did this term come from?". From the point of view of translation we can assume that it might be a result of a wrong translation of the American term **CEO**, chief executive officer denoting the chief/general company manager. In the period before 1948 when all Slovak industries and companies were nationalized, and became the property of the national government a company would be represented by a „prokurista" who would act on behalf of the company. It was a person that was empowered to represent the company and act on behalf of it. Nowadays people, of course, do not know anything about the position that had existed before and being influenced by the term „executive" and its connotation they translated the term as „konateľ", as the term „executive" in the English-Czech Dictionary denotes výkonný (Osička, A., Poldauf, I., 1970). From the pragmatic point of view one can assume that if the translator had looked the term up in a monolingual dictionary he/she would have learnt that the „executive" denotes „a person who has an important job as a manager of a company or an organization" (Oxford Dictionary, 2000).

According to the terms given by Muscull, B. „The top position may be that of chairman, chairwoman or president. This job is often combined with the position of chief executive officer or CEO" (Muscull, B,. 2002:26).

"Communication and Information Technology" – "Komunikačná a informačná technológia" instead of "technika"

"Computer Technology" - The term has its Slovak equivalent ‚počítačová technológia'. There are many other terms where the English term „technology" has its Slovak equivalent technológia. It is an example of interference based on formal similarity of the word technol-

ogy. Slovaks who did not know the connotation of the term "technológia", implemented the term as the right one. They did not know the fact, that the English language uses technology to denote the Slovak terms "technika" a „technológia". And vice versa, the English term ‚technique' means something different from the Slovak term.

„**technológia**" -ie ž. 1. náuka o výrobe postupe pri spracúvaní suroviny: chemická technológia ; 2. výrobný postup: zaviesť novú technológiu vo výrobe; technológ -a mn. -ovia m. odborník v technológii; technologička -y -čiek ž.; technologický príd.: technologický proces, postup (www.slex.sk/).

"**Technology**" 1/ scientific knowledge used in practical ways in industry, for example in designing new machines; 2/ machinery or equipment designed using technology" .

"**Technique**" „a particular way of doing something, especially one in which you have to learn special skills.;2/ the skill with which sb. is able to do something practical" (Oxford Dictionary, 2000).

"**Stakeholders**" – the term usually used in the business terminology as a synonym to shareholders. But what does it denote in the „project terminology"? Who are stakeholders in a project? The context will help us to find the Slovak term. According to the Oxford Dictionary, stakeholder is a person or company, that is involved in a particular organization, project, system, etc., especially because they have invested money in it Slovak as the target language lexis does not offer similar one-word equivalent so we must create a collocation in the target language so that everybody can understand who are the people mentioned in the source text. The pragmatic approach where the context of a term plays an important part will explain us that the person can be "účastník", účastník konania, projektu, zainteresované strany, atď.

"**Problém – „Problémové učenie"** je organizované v malých skupinách s jedným inštruktorom, fakultným učiteľom alebo asistentom. Pri problémovom učení by študenti mali sa zaoberať problémami/úlohami, definovať, čo vedia a by mali vytvoriť hypotézy, odvodiť ciele učenia sa a by mali vedieť organizovať ďalšiu prácu. Následne by sa mali výsledky prezentovať väčším skupinám (pod vedením asistenta). Celý cyklus problémového učenia by sa mal uzatvoriť vyzdvihnutím toho, čo bolo dobré v tomto procese (Prípadová štúdia, 2008).The term „problémové učenie" has been derived from an authentic English text where problem means a task or a model and students have to find their own solutions how to resolve it. It would have been more effective to use the term modelové učenie.

The term „problémové učenie" has been derived from an authentic English text where problem means a **task** or a **model** and students have to find their own solutions how to resolve it. It would have been more effective to use the term modelové učenie.

The Slovak terms **problém, problematika –"problém ekonomického rozvoja**", „problematika vybraných matematických tém a javov časti matematickej analýzy" do not have anything to do with problem. It means **issue, point, topic** or some other terms are advised to be used so it should be translated as it follows: „the issue of economic development"., „the issue of selected mathematical topics and phenomena....." "**Interview**" The English word interview is often used in Slovak job advertisements although there is a Slovak equivalent „**pohovor**". The term "interview" used in Slovak texts has had the connotation of an interview given by a famous person.

"**Personálna agentúra**" It is a Slovak term denoting an agency that is responsible for recruiting people, finding jobs for unemployed people. In very many cases the name of the agency is translated as „personnel agency", what is quite unprofessional as people should know that the term „personnel" stands for the people who work for an organization or one of the armed forces. The term denoting the agency is **employment agency or recruitment agency**, in American English it is **hiring agency** (Muscull.,P. 2002:14). The word personnel seems to be misleading for Slovaks as there is the Slovak word

„personálna" denoting different thing. The words interference is based on the fact, that the words are formally similar but each one means something different. "**Generálny riaditeľ**" as both terms exist also in English as the target language, so the title of the position is often translated as „General Director" although the term is wrong. According to the "Business Vocabulary in Use" by Mascull, P., (2002:26) someone in this position is called **general manager, managing director**.

"**Learning society/community/university**" This term has been used in many academic papers and resources and it is wrongly interpreted as „učiaca/ci sa". The collocation in the target language originates from the primary meaning of the term „learning". The term „learning" is misinterpreted and Slovak term učiaca sa spoločnosť/univerzita might be confusing for the receiver/adresser of the information. The Slovak equivalent of the English collocation learning university is based on „vzdelanie" – „vzdelanostná" that is the product you gain via studying and learning. „The art and learning of Greece and Rome" means in the Slovak language „umenie a vzdelanosť Grécka a Ríma" (Gromová, E, 2003:149) by analogy „learning university" should denote a university where information and education via teaching and lerning is offered to be gained, so the Slovak translation „vzdelanostná univerzita", „vzdelávacia univerzita" shall be used.

"**Knowledge Society, Economy – Vedomostná spoločnosť/Znalostná spoločnosť**" The Oxford Dictionary (Oxford Advanced Learner´s Dictionary, 2000)) defines knowledge as the information, understanding and skills that you gain thrugh education or experience or the state of knowing about a particular fact or situation. According to Wikipedia in „knowledge economy", knowledge is a product, in knowledge-based economy, knowledge is a tool, what makes the essential difference. This difference is not yet well distinguished in the subject matter literature. The both are strongly interdisciplinary, and involve together economists, computer scientists, software engineers, mathematicians, as well as cognitivists, psychologists and sociologists. The Slovak equivalent of the term knowledge society/economy has initiated some arguments between the Slovak scientists, specialists and linguists on the other hand. There is again some inadequacy in the Slovak term as it has more connotations "vedomosti, znalosti" than the term has in the source language. „Vedomosti" and „znalosti" are synonymic expressions in the Slovak language although one can feel a slight difference between the word „vedomosti" and „znalosti". From the point of view of pragmatics one can understand the Slovak term „vedomosti" as a mixture of information and also the experience that can be gained. On the other hand the word "znalosti" can denote something what we studied, learnt and stored in our memories studied, while not having the chance of proving it in practice. According to the Krátky slovník slovenského jazyka (1987) poznanie is defined as gaining knowledge or it can be a summary of gained knowledge.

"**Samosprávny kraj**" New 'organization diagram' of our society, of public administration has brought some changes and challenges in terminology. The translation of following terms really needs more than terms by alone themselves. They need also the context of the terms. A translator must take into account what the term denotes, what connotations it brings. The translator must always be aware of the fact what connotations the term has in the source language and what connotations it has in the target language if there are some. The Office of the Slovak Government has worked out the material and it should serve as a sort of information for people living abroad or for native speakers. That means the addresser and receivers of the information are or will be all people and some specialists who want to know about public administration in Slovakia. Following terms „vyšší územný celok" a „samosprávny kraj" cannot be translated without relating these terms to the reality and to the fact how the public administration is organized in the country. There have been materials translated by some Slovaks who worked in the Office of the Slovak government who seem to ignore the existence of similar

terms in the target language, in the English language. Both Slovak terms are synonyms and for someone they can represent a word game or a sort of invention. „Higher Territorial Unit" or „Higher Territorial Whole" are English terms used in some governmental materials for the Slovak equivalent „vyšší územný celok". They sound vague and if we asked an English native speaker, most would not understand what is meant by these terms in English. The comparative form of and adjective is always given if we compare two adjectives, hence the term comparative. Based on this approach the term higher unit cannot exist in a collocation. Neither „unit" nor „whole" are the right terms that can describe what is meant in the Slovak language as a source language. The word 'region' has the connotation of a large area of land. The Oxford Dictionary (2000) says that a region is one of the areas that a country is divided into, that has its own customs or its own government. When translating this Slovak term „vyšší územný celok" or „samosprávny kraj" we must refer to the fact, how is the Slovak country divided into. The pragmatic outcomes are that there are regions that form the country of Slovakia and a region has its own parliament, its own government. Studying other sources we have found another term „............ the chairman of the Banska Bystrica regional parliament, Milan Murgas:............" (The Slovak Spectator, XIV,2008, No.21 p.9). While applying the pragmatic approach in translation we could also suggest using the term of regional government, regional council. I would like to point at the wrong use of the word 'chairman'. In this case the term 'head' would be more appropriate, as the term 'chairman' is usually used in the collocation 'chairman of the supervisory board' or of a 'board of directors' Another Slovak term 'samospravny kraj' often translated as Regional Self-administration seems to inform the reader or receiver of the information about the substance of the term. Slovak translator tries to translate the term word by word so hence the term 'self-administration' in the English language. The Oxford Dictionary gives only the term ‚self-government' so the term self-administration seems to be a calc formed by

the Slovak translator. Pragmatics has proved its importance in translation especially of this term and similar ones. Without applying pragmatic approach we will not be able to translate and to understand what the term denotes in the real life. When translating such terms the translator should concentrate on the meaning of the term and not only on the lexical units. The readers, receivers of the information should understand what the speaker, author, writer of the text intends to communicate. In this respect the terms 'unit' or 'whole' cannot provide true information. Based on the fact that the author of the information published in The Slovak Spectator is a native speaker, Tom Nicholson, we should consider using following terms Regional Office, Regional Parliament, Regional Administration or Regional Self-government for the Slovak 'samospravny kraj'. These lexical units and their collocation can make the receiver of the information perceive and understand the term in a right way.

Due to the boom in computer technology and to the fact, that there are many global, international companies, that have started their business in Slovakia, and they offer types of services that have never existed here before, there are many terms that have been implemented into the Slovak language as a target language, e.g. 'manažment, manažér, kalkulačka', 'SWOT analyza', 'faktoring', 'marketing', 'benchmarking'. They are calks of English origin, as they do not have equivalents in Slovak. These words have become standardized Slovak terms.

Of course, there are some terms that exist in the target language, Slovak, but they have been used as calks. If we open textbooks on banking system, management, financial system, marketing that have been written by Slovak university teachers for university students, we will find a lot of English terms as calks. One must admit, that some of these terms have their Slovak equivalents but still they have been used in the source language English. We, Slovaks, should be more precise and use Slovak equivalents instead of calks in our translations.

1. ASHLEY, A. A Handbook of Commercial Correspondence. Oxford: Oxford University Press, 2000. 297s. ISBN 0 19 457206 4.
2. AUSTIN, J.L. How to do things with words. New York: Oxford UP. 1962
3. BACH, KENT The Semantics-Pragmatics distinction: What is it and why it matters. In: The Semantics/Pragmatics Interface from Different Points of View, 1999,l s.65-84
4. BARDOVI-HARLIG, K. Evaluating the empirical evidence: Grounds for instruction in pragmatics? In K. Rose & G. Kasper (Eds.), Pragmatics and language teaching. Cambridge: Cambridge University Press.2001
5. BEAVER, D. Presupposition in DRT. In: David Beaver, Luis Casillas, Brady
6. ELASHMAWI, F., HARRIS, P.R. Multicultural Management 2000: Essential Cultural Insights for Global Business Success. Houston, Gulf, 1988.
7. GROMOVÁ, E, HRDLIČKA, M. Antologie teorie odborného překladu. Ostrava: Repronis. 2003. 104 s. ISBN 80-7329-026-X.
8. GROMOVÁ, E. Teória a didaktika prekladu. Nitra, 2003. ISBN 80-8050-587-X.
9. ILEK, B. Odborný překlad. In: Antologie teorie odborného překladu. Nitra-Ostrava 2003. s.12-17
10. Krátky slovník slovenského jazyka. Bratislava: Veda, 1987. 592 s.
11. LEECH, G.N. Principles of Pragmatics. New York: Longman, 1983. 250 s. ISBN 0582 551102.
12. MASCULL, B. Business Vocabulary in Use. Cambridge: Cambridge University Press, 2002, 172 p. ISBN 0 521 77529 9.
13. MORRIS, Ch. Foundations of the Theory of Signs. In: International Encyclopaedia of Unified Science I, Chicago: University of Chicago Press s.77-138
14. NEWMARK, P. A Textbook of Translation. Hemel Hempstead, Phoenix ELT, 1995. 291 s. ISBN 0-13-912593-0.
15. OSIČKA, A., POLDAUF, I. Anglicko-český slovník s dodatky. Praha: Academia. 1970. 644 s.
16. Oxford Advanced Learner's Dictionary. Sixth Edition. Oxford: Oxford University Press. 2000. 1540 s. ISBN 0 19 431 673 4
17. PERRY, J. Reference and Reflexivity. Standford: CSLI Publications, 2006.
18. REISS, K., VERMEER,H. Grundlegung einer allgemeinen Tranlationstheorie. Tuebingen, Niemeyer. 1984:72.
19. SEARLE, J. Spech Acts. An essay in the philosophy of language. Cambridge: Cambridge University Press, 1969.
20. The Slovak Spectator (XIV,2008, No.21 p.9).
21. http: www.consilium.europa.eu/ueDocs/cms_Data/docs/pressData/SK/ec/97685.pdf
22. http: www.uvo.gov.sk/vestnik
23. http: www.konstrukta.sk
24. http://www..gxnv.edu.cn/Personal/sz/iu/definition/html
25. http://exchanges.state.gov/education/engteaching/pragmatics.htm
26. http://ww.accurapid.com/journal/33edu.htm, 05.01.2007
27. http://en.wikipedia.org/wiki/Pragmatics
28. http://www.wikipedia.org/wiki/Sustainable_development - 76k –
29. http://www.universalteacher.org.uk/lang/pragmatics
30. http:www.plato.stanford.edu/entries/pragmatics
31. http: www.slex.sk

32. http://www.amazon.com/Pragmatics-Discourse-Routledge-Language-Introductions/dp/04, 21.12.2006
33. http://cultura.gencat.net/llengcat/noves
34. www.mgmt.purdue.edu/centers/ciber/publications.gbl/GBL%20%202001/1j-Yunxi-aZhu-140-154.doc.
35. http://www.amazon.com/Pragmatics-Oxford-Introductions-Language-Study/dp/01943720, 21.12.2006
36. http://www.amazon.com/Pragmatics-Oxford-Introductions/dp/04, 21.12.2006
37. http://www.amazon.com/Discourse-Analysis-Cambridge-Textbooks-Linguistics/dp/0521, 21.12.2006
38. http://www.amazon.com/Pragmatics-Discourse-Routledge-Language-Introductions/dp/04, 21.12.206
39. www.amazon.co.uk/Pragmatics.Translation-Topics/dp/1853594040
40. http://www.accurapid.com/journal/33edu.htm 01.05.2007
41. http: www.elegenda.sk/engine

THE NEW HISTORY OF EMISSION AIR AND CLIMATE CHANGES IN SLOVAKIA

I. Kvasnica, P. Kvasnica

Abstract

There are many methods of emissions systems which do not involve simulation but which involve the solution of a closed-form system. Another important aspect of the history is trend in emissions of nitrogen oxide and carbon monoxide emissions. When one uses the closed-form approach, the history is the last 100 years, there has been recorded an increasing trend in the average annual air temperature, and reduction in annual precipitation. Over the last 7 years, there was a significant increase in the occurrence of extreme daily precipitation figures. For example, consequently produced a significant increase in local floods in various regions of Slovakia. The emissions of greenhouse gases reached their highest level in the late 80-ties, while in 2004 their levels. This is important values, is often very effective for future.

History of particulate matter emissions and sulfur dioxide emissions is young. Records show a steady reduction in **particulate matter emissions (PM)** since 1990. Decreasing trend in SO_2 emissions since 1996 was caused by reduction in brown coal, lignite, and heavy heating oil consumption, use of low-sulfur heating oils, and installing desulfurization equipment at large energy sources. Slight fluctuation in the SO_2 emissions in 2001 and 2003 was caused by their partial or complete operation, quality of used fuels, and volume of production. SO_2 emissions decreased in 2004 as a consequence of increasing burning of low-sulfur heating oils. Slight increase in particulate matter was caused by increased consumption of wood by small sources (households) [1].

EMISSION SITUATION IN SLOVAK REPUBLIC

In next part we will present some important types of emissions with their reduction in defined years.

Trend in emissions of nitrogen oxides

Final Papers are to be written such that the text (including title, figures etc.) covers when printed an area of height 257 mm and of width 160 mm on DIN A4 page (with margins of 25 mm at both sides and 20 mm on top).

Nitrogen emissions (NO_x) showed a slight reduction in 1990 – 2004. This trend was partly interrupted in 1995, when a slight increase occurred, due to increased consumption of natural gas. Another reduction in nitrogen oxides emissions was recorded in 1996. The result of a change to the emission factor that reflects the existing situation in incineration equipment and technologies [2]. Reducing the consumption of solid fuels led to a further decrease in NO_x emissions since 1997. In 2002 – 2003, emissions were significantly reduced due to denitrification at large energy sources. Since 2004, the trend in emissions has seen no major changes.

Trend in carbon monoxide emissions

Carbon monoxide emissions (CO) since 1990 have shown a falling tendency, which was caused mainly by reduced consumption and change in fuel composition in the sphere of retail consumers. Trend in reduced CO emissions from large sources was not significant. Iron and steel-producing and processing industry has been the major contributor to total emissions. Reduction in CO emissions in 1992 was caused by decreased volume of production in this type of industry. In 1993, after the mentioned production reached the level of 1989, CO emissions increased correspondingly. In 1996, there was again a slight reduction in carbon oxides emissions, as a consequence of CO emissions reduction measures in the most significant production area (iron and steel production) [3].

Fluctuating trend in emissions in 1997 – 2003 relates to the volume of produced iron, together with fuel consumption. Although in 2004 CO emissions increased, especially at large sources, they dropped in the area of road transport. Reduction of emissions in the area of road transport relates to decreased consumption of petrol types, as well as to an on-going renewal of vehicles, and introduction of those with three-way operated catalyzer.

CLIMATE CHANGES OF AIR IN COUNTRY

In Slovakia, over the last 100 years, there has been recorded an increasing **trend in the average annual air temperature** by 1.1 °C, and reduction in annual precipitation balance by 5.6 % (south of the SR showed a reduction by more than 10 %, while the north and some sporadic northeast locations showed an increase up to 3 % over the whole century). Significant reduction in **relative air humidity** (up to 5 %) and **reduction in snowcap** almost in the whole of Slovakia were recorded. Characteristics of the potential and actual evaporation, soil humidity, global radiation and radiation balance also prove that the south of Slovakia is gradually drying up (potential evapo-transpiration rises and soil humidity decreases; however, no substantial changes were detected in solar radiation characteristics (with the exception of temporary reduction in the years 1965–1985) [4].

Special attention is given to characteristics of climate variability, especially **precipitation balances**. Over the last 7 years, there was a significant increase in the occurrence of extreme daily precipitation figures, which con-sequently produced a significant increase in local floods in various regions of Slovakia. On the other hand, mainly in the years 1989-2008, there was a more frequent occurrence of local or overall drought. This situation was caused mainly by long periods of relatively warm weather patterns. Especially harmful were droughts in the periods of 1990-1994, 2000, and 2002.
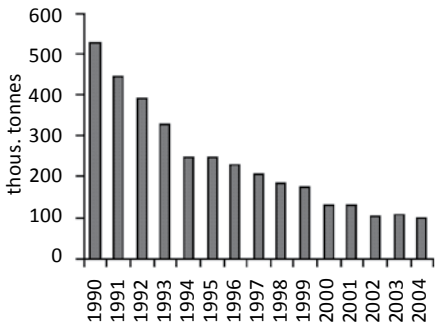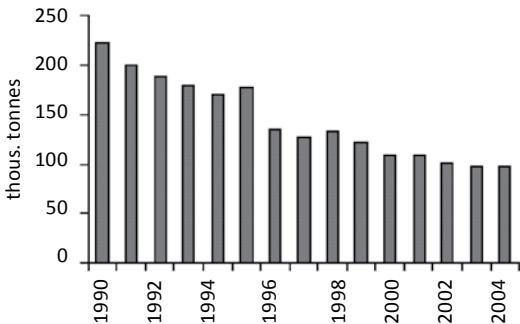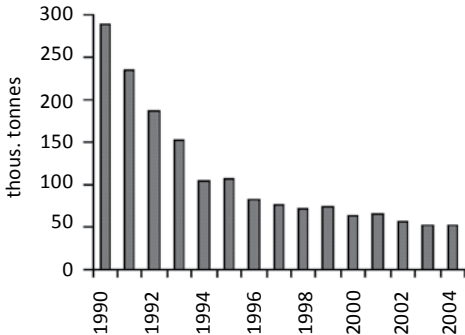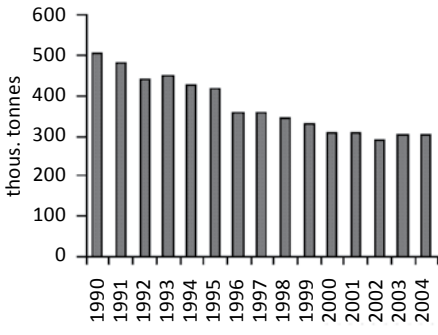

Fig. 1: Trends different emission

International obligations in the area of climate changes

At the UN Conference on Environment and Development (Rio de Janeiro, 1992) was adopted **framework Convention on Climate Change** – basic international legal instrument for protection of global climate. The convention became effective in the Slovak Republic on November 23, 1994. Slovakia accepted all obligations stemming from the Convention, including the obligation to decrease greenhouses gases emissions by the year 2000 to the level of 1990.

Aggregated emissions of greenhouse gases in 2000 (48.625 Gg CO_2 equivalent) did not exceed the level of 1990 (72.107 Gg CO_2 equivalent). Next internal goal that Slovakia set to achieve was to reach the „Toronto Objective" i.e. 20 % reduction in emissions by 2005, compared to 1988. At the conference of signatories to the UN Framework Convention on Climate Change in Kyoto, Japan, in December 1997. Slovakia bound itself to reduce the production of greenhouse gases by 8 % by 2008, compared to 1990, and to continue keep the same level until 2012 [4].

The Protocol became effective after its ratification by the Russian Federation, on February 16, 2005, which is the 90th day after its signing by at least 55 countries. That contributes by at least 55 % to total CO_2 emissions for the year 1990, accompanying the article 25 of the Kyoto Protocol [5].

Balance of greenhouse gases emissions

On the basis of **greenhouse gases emissions** assessed under the IPCC methodology (Intergovernmental Panel of Climate Change) in 2004, total anthropogenic CO_2 emissions, without deducting detections in the LULUCF sector (Land use, land use change and forestry), reached the value of 42.498 Gg (Table 1). Sink of carbon dioxide in forest ecosystems in 2004 was 4 230.16 Gg (appr. 2 388.48 Gg in 1990). Total CH_4 emissions in 2004 reached the value of 203.9 Gg (306.9 Gg in 1990), while total NO_2 emissions in the same year reached 13.15 Gg (19.76 Gg in 1990) [6]. Anthropogenic emissions of greenhouse gases reached their highest level in the late 80-ties, while in 2004 their levels dropped by 30 %, compared to the reference year of 1990.

Aggregated greenhouse gases emissions constitute total emissions of greenhouse gases expressed as the CO_2 equivalent, calculated through the GWP 100 (Global warming potential). In 2004, CO_2 emissions represent more
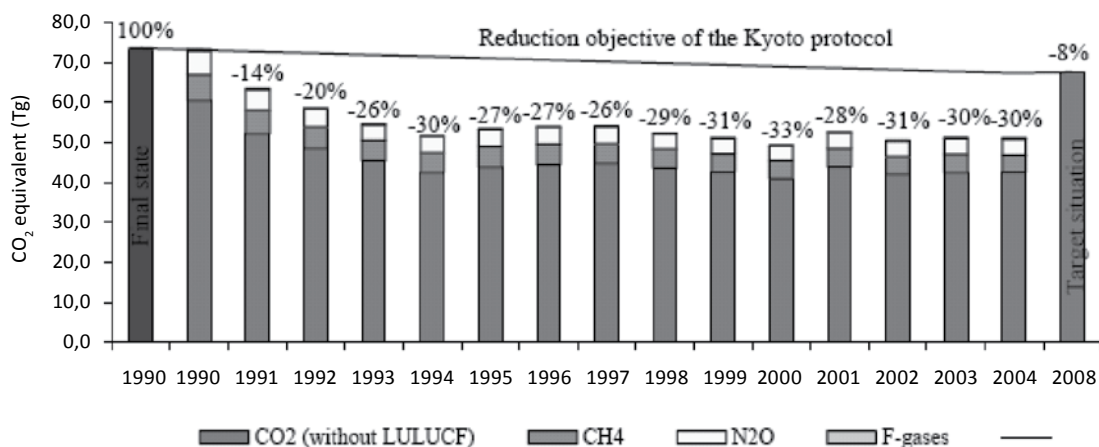

Fig. 2: Climate changes emission of greenhouse gases under compliance the Kyoto protocols outcomes (Source SHMI)

Tg (CO_2 equivalent)	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Net CO_2	58.1	48.6	44.2	41.1	39.1	41.1	42.0	43.3	41.7	41.0	38.5	38.7	36.7	37.5	38.2
CO_2*	60.5	52.1	48.4	45.4	42.4	43.8	44.4	44.7	43.6	42.6	40.9	43.9	41.9	42.4	42.5
CH_4	6.4	5.9	5.5	5.1	5.0	5.2	5.2	5.0	4.7	4.6	4.5	4.5	4.6	4.6	4.3
N_2O	6.1	5.2	4.5	3.9	4.1	4.2	4.2	4.3	3.9	3.8	3.8	4.1	3.9	4.0	4.1
HFCs, PFCs, SF_6	0.27	0.27	0.25	0.16	0.14	0.15	0.08	0.11	0.08	0.09	0.10	0.11	0.13	0.17	0.19
Total (with CO_2)	71.0	60.0	54.5	50.3	48.4	50.7	51.5	52.6	50.5	49.5	47.0	47.3	45.3	46.3	46.8
Total*	73.4	63.5	58.6	54.6	51.7	53.4	54.0	54.0	52.4	51.2	49.4	52.5	50.5	51.1	51.0

Tab. 1: Aggregated emissions of greenhouse gases (Tg) in CO_2 equivalent (Source SHMI)

than 81 %, CH_4 emissions are on the level of 9 %, while N_2O emissions contribute by approximately 9 %, and the share of the F-gases (HFC,PFC, and SF_6) is less than 1 % [4].

Share of individual industries on the production of greenhouse gases remains very similar to the year 1990. The area of agriculture shows the most significant difference, with the reduction in emissions by 3.1 %, compared to 1990. This change was caused mainly by a reduced use of industrial fertilizers and reduced numbers of livestock.

HETEROGENEOUS IN MATHEMATICAL MODELS

The most important greenhouse gas in the atmosphere is **water vapor** (H_2O) which contributes to total greenhouse effects by two thirds. CO_2 emissions are responsible for more than 30 % share on the greenhouse effect, CH_4, N_2O and O_3 emissions make up approximately 3 %. The **HFC, PFC, and SF_6** group of substances is not as important in terms of their total volumes, by which they contribute to greenhouse gases. It is more important in terms of their occurrence in the atmosphere, caused mainly by the human activity. The most important CO_2 emissions sources include incineration and transformation of fossil fuels, which represent more than 95 % of total anthropogenic emissions of CO_2 in Slovakia [4]. Technological processed related to cement, lime, and magnesite production, as well as limestone use are the second most significant emission sources. The share of Slovakia on global anthropogenic emissions of greenhouse gases is approximately 0.2 %. Annual CO_2 emission corresponding to one inhabitant is currently around 7.7 tons/year per capita and places Slovakia among the leading European countries.

The goal is to ensure and make available environmental information on the state environment and involve the public in decision-making process. This is in line with Act. No. 205/2004 Coll. on gathering, maintaining and disseminating information on environment.

1990   2004
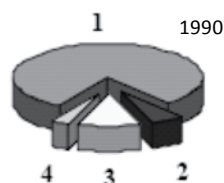
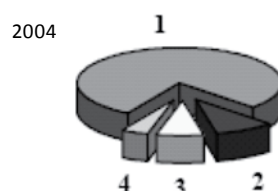| 83.1 %	1. Power Industry	85.8 %
6.0 %	2. Industry Processes	10.3 %
11.3 %	3. Agriculture	8.2 %
2.9 %	4. Waste	4.4 %

Fig. 3: Climate changes share of individual sources on greenhouse gasses emissions under compliance the Kyoto protocols (Source SHMI, 2006)

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Power Industry*	59	51.2	47.4	44.5	41.5	42.8	43.4	43.6	41.9	40.8	39.4	42.3	40.2	40.8	40.2
Industry Processes**	4.26	3.37	3.35	3.04	3.36	3.56	3.59	3.74	4.36	4.47	3.91	4.11	4	3.99	4.85
Using solvents	NE	NE	NE	NE	NE	NE	NE	NE	0.01	0.01	0.01	0.03	0.06	0.06	0.08
Agriculture	8.06	6.89	5.87	5.13	4.94	5.1	4.89	4.76	4.33	4.1	4.14	4.22	4.14	4.02	3.86
LULUCF	-2.4	-3.5	-4.1	-4.3	-3.3	-2.7	-2.4	-1.4	-1.9	-1.6	-2.4	-5.2	-5.2	-4.8	-4.2
Waste	2.09	2.03	1.99	1.91	1.92	1.93	2.11	1.93	1.8	1.82	1.92	1.86	2.13	2.22	2.08

Tab. 2: Aggregated emissions of greenhouse gases (Tg) by sectors in CO_2 equivalent (Source SHMI)

CONCLUSION

The system environment monitoring is an indispensable toll to know the environment and ensure environmental care. The information monitoring system with the goal to care a homogenous, interconnected information unit consisting of partial. The unit is able to provide most objective report on the actual state of components of environment and due to interconnected databases is generally accessible through internet.

A fixed size problem is used as the focus is on industrial applications and the intention is to reproduce the situation in the design process. When the problem is realized over internet two parts will influence the performance results more than the other. Environmental information system integrates information from environmental monitoring, information from environmental assessment, and spatial information of territory. Other generated information support activities of environment authorities and subjects than enforce legislation within the Slovak environmental laws. These include many organizations.

Literature

1. Hrušková, M. 2008. Programy národnej spolupráce na podporu životného prostredia. In Enviromagazín, Number 13/2008, vol. 2, pp. 14-16.
2. Kozová, M. Et al. 2007. Landscape Ecology in Slovakia. Ministry of the Environment of the Slovak Re-public, ISBN 978-80-969801-0-9, pp. 127-131.
3. Ministry of the Environment of the Slovak Republic [CD-ROM]. (Bratislava): State of the Environment Report Slovak Republic, 2005. Ident. part : Air.
4. Ministry of the Environment of the Slovak Republic [CD-ROM]. (Bratislava): State of the Environment Report Slovak Republic, 2005. Ident. part : Climate Change.
5. Šašková, K. 2008. Podpora environmentálnych projektov z fondov Európskej únie. In Enviromagazín, Number 13/2008, vol. 2, pp. 6-7.
6. Škorňa, A. Klimatické zmeny. [online]. August 2008. [cit. 2009-01-19]. Dostupné na internete: <http://enviroportal.sk/dpsir/dpsir_kapitola.php?>.

CONSTRUCTIVE WAYS AND TOOLS FOR EFFECTIVE PERSUASION IN CRISIS MANAGEMENT

P. Loptám, Z. Rosická

Abstract

Communication interpersonal skills are paid more and more attention in the crisis manager preparation. Balance of speech skills, listening skills and situation estimation are basic fundamentals. Speech and communication skills are necessary prerequisites for effective persuasion; therefore it is important to learn how to communicate with people from other cultures in the crisis situation. Knowledge ability of the socio-cultural environment is usually a highly significant element for the efficient execution of the assignment and positive persuasion result.

Key words

security, human factor, inter-personal skills, crisis management

Communication is the basis of the life of every society and it is the necessary prerequisite not only of its existence but also of its organization and development. We communicate without realizing it. All that we "say" in the area of verbal communication as well as in the non-verbal area, serves towards including the individual in the society, creates the conditions for his/her life, creates relationships with other individuals, groups and teams. Good communication is very important, above all, during dealing with the crisis situations, and during the preparation for them.

While studying the literature with a concentration on communication, we discover that almost 70% of the conscious state people spend communicating by dialoguing with their surrounding, reading, writing, receiving visual clues, listening, monologues… Communication has, therefore, become a significant instrument of the organization culture, instrument of elucidating of intentions, positions, values, the means of persuading, guiding people and their motivation. Feedback and active listening is even more important than speech brilliance itself.

CRISIS SITUATION

The world is now closely connected, but at the same time, also closely interdependent. Partly because of this interdependence, the international organizations and teams are called upon to intervene during the handling of extraordinary or crisis situations. The rescue teams

are being sent to work with the units of other countries, sometimes even the countries about whom they know only very little.

A multinational team is a complex of organism of cultures, systems and groups. The teams must be adaptable to be able to function. The most recent research has shown that the lack of experience in the multinational team cooperation is a significant obstacle to adaptability. The means to improve the abilities of the multinational teams to better function in a variety of situations are being searched for. One of the options is a good knowledge of the jointly used language (in most cases this is English), unified expert standardized terminology and a deeper understanding of the cultural differences. If we effectively utilize these findings, both the ability to function and flexibility of such heterogeneous teams will increase. The knowledge of terminology, the ability to communicate and work in a different environment will be not only the key factor for the decision making, but will also become the basis of the adaptability, stability and productivity of the team.

As a problem there also appears the fact that in the Czech Republic, the vocabulary concerning the problems of the emergency situations, crisis situations – in general, the sphere of the crisis management is still not entirely uniformly specified. The expression "crisis management" alone can be, according to the opinion of the experts, understood in various ways. This situation is not current in the world and if we give Canada as an example for comparison, or other English-American states everybody understands there what is means by the definition. The shortcoming of the term "crisis" characterizes the situation which concerns the state-wide level or situation between several states. Here it is possible to describe, by this term, almost every extraordinary situation. Therefore it is necessary to create a certain group of terms allowing just one interpretation in standard use and being understood unambiguously.

HUMAN FACTOR AND INTERPERSONAL SKILLS

The term "communication skills" is one of the most frequent words in the requirements of the advertisements for applicants for managerial, particularly crisis manager positions. Organization capabilities are considered as one of the key presumptions of a successful crisis manager. Inherent in it is determination of specific competencies and responsibilities and the aim of organizing is to accomplish the workload and coordinate all participating elements.

Human factor is increasingly understood as a crucial force of an organization and therefore so much time and means are expended for staffing. Who is not able to manage himself, cannot manage the other and basis for self-management is an ability of organizing his/her own time. Current theory of crisis management pinpoints some basic, critical aspects of managerial activity, known as 7S: Strategy, Structure, Staff, Systems, Shared values, Style and Skills.

Communicative interpersonal skills of a crisis manager are gradually paid much more attention and we can remind the words of Benjamin Disraeli – Men govern with words. The origin of the word communication comes from Latin communis – common. The essence of communication is communication, sharing, and not only mere notification. In technology, a word communication is used in the meaning of communication or exchange and transfer of information. Communication is a relationship developed between a communicator and a message recipient. Communication skills are very complex process; it is a kind of art, often a source of misunderstanding and conflicts, which may be effectively prevented. A part of communication skills and human skills is:

- speech skills (communication and speech skills),
- listening skills (active listening, feedback),
- keep silence skills (estimate of situation, selectivity of communication).

A crisis manager often plays a role of a negotiator. He/she acts with senior colleagues from other sections, representatives of the public and commercial partners... A good crisis manager "tries to identify barriers harmful for good communication as it is a tool which can cause changes encouraging a proper function of a firm" [2]. He/she can never lean only on formal authority and giving commands, he must naturally negotiate many problems even with his subordinates. An ability to negotiate indicates communication capabilities of a manager, a will to listen to arguments of the other side and arrive at consensus. Negotiating is a tendency to influence the other by exchange of views or by negotiating and an effort to satisfy own needs with those who may affect an accomplishment of our goal. The aim of negotiating is always to arrive at a certain compromise. Therefore, it is necessary, in negotiating to know the limits we are ready to accept and which could be also acceptable for the other side. In negotiating, each crisis manager should realize that negotiating, same as each dialogue must have a dramatic structure, sequence of individual phases, starting from introduction to determination of goals and objectives through conflict and collision to re-assessment, compromise and agreement. Important principles for successful negotiating are:

■ thorough preparation,
■ clear specification of objectives and possible concessions,
■ good knowledge of a partner in negotiating,
■ knowledge of potential objections and contra-arguments,
■ effort for a positive approach even during not easy negotiation,
■ listening and feedback,
■ respecting the principle „give – receive",
■ adequate self-confidence,
■ self-control and patience,
■ firmness but at the same flexibility and empathy.

So-called principled negotiation is a method that recommends solving issues and problems by analyzing their inside, not by conjecturing what which party has ever said that it would do or would like to do. Principled negotiation is open; it does not use any tricks or hypocrisy. However, in everyday commercial negotiations these tricks are usually used. An example of such tricky procedure is fainting. A negotiator pretends an impression that something is more important for him/her than it really is. Then concession seems as a great sacrifice though it is not. Principled negotiation is hard on the merits and soft on the people. Principally, it employs principles of constructive conflict and assertiveness. General principles to be always employed by a crisis manager in negotiating and covered V. Kheler into several points are as follows:

■ focus on main topic and arguments,
■ have some arguments in reserve,
■ prepare possible concessions that do not cost too much but are important for a partner; for each concession a counter-value is required and again to create a reserve,
■ prepare conditions for submittal of proposal,
■ have a team that pulls well together,
■ raise questions,
■ make continuous summaries and confirm that we understood everything well,
■ build on what we have in common with a partner,
■ listen actively and let know that the other party feels heard,
■ strive for win/win negotiation; not only one side is to win, but also a partner; having finished negotiation, evaluate conclusions and the entire negotiation.

CONFLICT ROLES

Conflicts are a natural part of our existence, and consequently, in practical enforcing of individual managerial functions a crisis manager cannot avoid them. In planning, organizing, assessing, checking, conflicts are to be taken account of. A conflict is to be understood as a dispute or collision between controversial tendencies. Conflicts can be divided according to several aspects: length of duration (short-term vs. long-term) and internal (intra-personal) and external (interpersonal). External conflicts can be further

divided into conflicts between two individuals (own interpersonal conflicts), between an individual and a group and conflicts between groups. A crisis manager is assigned a task to prevent all these types of conflicts or solve them effectively. Due to his/her working position, he/she may get into a conflict with a subordinate, work fellow on the same level or with a superior. He may encounter a resistance of a whole group or most of its members who, on principle, resist to all what is new and unknown. A crisis manager should know how to prevent conflicts between often basically different approaches and interests since different views often result in tough conflicts. A crisis manager is a person who should be able to overcome the views of individual groups and co-ordinate different pressures of individuals and groups and direct them to a joint goal.

Similarly as at stress and frustration situations, a conflict can play a positive role. Such conflict is known as mobilizing. A great number of conflicts or grave conflict will cause demobilizing, i.e. contrary effects. A requirement for prevention of conflicts is especially focused on to elimination of demobilizing, destructive conflicts, to exclude them from inter-personal relations. A crisis manager is to strive to eliminate them from places of work. Demobilizing conflicts are destructive, they ruin climate, and are not aimed at addressing the problem, they do not cope with it, but on the contrary, they deepen problems or worsen them. The objective is to override an opponent, beat and humble him. One side does not listen to the other; emotions overcome common sense, they attack using every possible mean that can offend or hurt an opponent, they draw out old problems, speech contains an aggression and abusiveness. This conflict communication usually does not respect any regulations; everything serves for a defeat of the other side and fictitious victory.

A part of conflict prevention is to avoid disputes with conflictogenic persons who often provoke conflicts by their behavior; they themselves actively pick quarrels or deliberately or subliminally welcome them. Conflictogenic persons are especially:

- disharmonic, unbalanced or even anomalous individuals,
- aggressive, significantly dominant, egocentric, extra-punitive people,
- neurotic, miffy, ill-tempered, hysteric, moody people, etc.

More conflicts can be found where more frustration is found and where an aggression brings advantages. A key to prevent useless interpersonal conflicts and eliminate conflict situation as much as possible is just in the hands of a crisis manager. A selection of employees itself, their placing, elimination of conflict individuals and groups is very important. The best prevention is to follow elementary principles of management, i.e. to clearly identify working rights, obligations, responsibilities, be objective, unprejudiced, communicate openly, disseminate simple, clear information and instructions, foster activity and creativity of individuals as well as of a team, listen to the opinions of subordinates, respect feedback, criticize objectively, tactfully and preferably face to face, do not forget recognition and prefer positive approach, serve as a model of behavior which we ask from the subordinates.

Unfortunately, experience shows that these principles are not observed, as they should be. Poor interpersonal relations are relatively often frequent causes of dissatisfaction at the places of work. Job satisfaction is connected with a number of conflicts either apparent or hidden. More factors and a number of specifics influence satisfaction or dissatisfaction with a job. Dissatisfaction will lead to conflicts that can never be fully avoided. There are a number of recommendations and possible approaches, solutions and procedures how a crisis manager can effectively cope with conflicts and improve their process.

RHETORIC

Ancient Greece eristic (disputation skills) that was popular among the Sophists already dealt with argumentation skills. Of course, it cannot do without elocution – rhetoric. No doubt, a crisis

manager should have very good rhetoric skills, without them persuasion – persuasive skill cannot make without. We can remind Holland and his persuasive modal orientation of individuality characterized by a tendency to dominance and persuasion skills. Crisis managers and politicians are the very representatives of this orientation. Rhetoric and communication skills are necessary precondition of effective persuasion that should be able to utilize not only rational arguments, but also influence emotions. If the negotiation is not to be an ultimatum or unrealistic effort to gain all advantages for only one side, then it must take into account certain acceptable concessions. Submittal of proposals, their appraisal, negotiation and road to agreement follow after argumentation. Principled negotiation is characterized by an effort of the partners to address a common problem. Negotiators do not negotiate from strength, are in equivalent position. Crucial is a feedback, willingness to see a problem by eyes of the other side and active listening. Listening plays perhaps much greater importance than the speech itself. So, principled negotiation leads to an acceptable compromise, to an agreement useful for both. This method is known as win-win method. Win that brings defeat of the other party can – and often is also a future defeat for an initial winner. For a crisis manager, a win-win method that takes into consideration the interests of the partner in negotiation and strives to find negotiable constructive way acceptable for both parties is one of the possibilities how to solve or prevent conflicts.

CONCLUSION

Skills of persuasion and inspiration are especially important in motivating to change. Creativity demands intuition, uncertainty, unconventionality and individual expression. Most of us know individuals at work, in the community who capture our imagination with a passion for an idea – a vision of the way the future could be. When they speak we are drawn by their sense of urgency. They seem to possess a certain indescribable energy that inspires and motivates; they touch our emotions more than our rational mind.

We should always remember that communication is a process where participating parties have to develop general skills which will help them to adapt.

Literature

1. Belbin, M.R.: Management Teams – Why they succeed or fail? 3rd Ed., Butterworth Heinemann, 2003.
2. Bednarova, D., Molek, J.: Význam komunikace v práci manažera. In Collection of Scientific Papers. Faculty of Agriculture in České Budějovice: Series for Economics, Management and Trade. České Budějovice 2000, volume 24, no. 2, pp. 91. ISSN 1212-5598.
3. Rosicka, Z.: Sociology and Psychology Management. UO Brno, Czech Republic, 2006. ISBN 80-7231-180-8.
4. Naisbitt, J.: Megatrends. New York: Warner Books, 1984.
5. Mullins, L.J.: Management and Organizational Behavior. 3rd Ed. London: Pitman Publishing, 1993.
6. Wikipedia – free encyclopaedia. Wikimedia Foundation, Inc. GNU Free Documentation Licence, 2006.

APPLICATION PPP IN THEIRS SPATIAL RELATIONS

J. Betáková

Abstract

The projects of PPP have a few common characteristics. First of all the main priority is a assecuration of public infrastructure and public services through the help of private companies and theirs utilization of their own resources and abilities, while the private company gains permanent flow of public money.

In today´s world of dynamic changes, the spatial development in the regional macro-environment and micro-environment is becoming more dependent on the activities of all involved persons, as well on their abilities of explicitness and their ability of react new trends and new conditions as the result of new tendency of globalization, integration and increased competition. The approach to the European standards brings necessity of realization of reforms and arrangements in all aspects. In this connection there is also very important to resolve the integrated management of spatial development of territory which is happening as a phenomenon complex of interactions between socio-economic, socio-ecologic and socio-cultural dimensions. The increase of the competition contributes highly to the globalization of economics relations which goes towards globalizations and

extension of markets, destruction of obstructions and restrictions which were in a way of free trade. There are a new opportunities and new markets for towns and regions, which are not restricted anymore on direct environment but also any town can compete for capital within international space and all this process is also expanding on all Central-European space.

The developing processes are applying on the environment unevenly and throughout the current circumstances the development potentials of territory are not fully used. One of the most important changes is the increase of the space for the unlimited movement of capital which would improve conditions for free competition of regions. Because of that is necessary to create to new regional disparities which do not have to have only bad impacts. As a result there is a formation of new positional poten-

tials, redistribution of hierarchy in centres and also a change in spatial relations together with social polarization, fragmentation of territory and creation of new transport flows and corridors. With increasing and intensive economic development increases a pressure on even faster development and transformation of spatial and urban structure which are characteristic for slower changes. Maier (2000) shows on fact that urban did not get into competitive conduct because of the activity of globalization trends, neither because of indigence by restricted arrangements.

The deficiency of public sources and decrease of investment activities of private sector has another reason of changing the situation of planned development of residential units. Instead of regulate and restrict private interests in these days they have to try to lure private capital. Eastern Europe has experienced these changes already in 1989 when the era of planning economy finished.

The fact that the authorities of the public administration must provide a public infrastructure and also provide a quality public services, however at the movement they haven´t got enough money to provide it, the pressure to decrease the debt of the public administration and the effort of using the resources creates a space for a private sector. The towns which were used to get a help from a state which usually decided about allocation of state´s investments are now in the position where they have to change from passive approach to the active one and have to look for opportunity for a new development. In these situations there is a very convenient opportunity, and PPP projects, which can be use in any aspects of public services. For these type of projects, know us Public-Private Partnership is also used more titles as Projects of public-private partnership, Projects of prosperity, Projects with private partnership and others.

According to European Committee (The Green Book on PPP) the PPP is defined as form of cooperation between public administration and private sector, its purpose being funding, building, reconstructing, servicing and main-

taining infrastructure and providing services via this infrastructure. The PPP is a method how public sector provides public service via private company. This can include undertaking existing running assets, building, servicing and often financing new infrastructure.

In practice using the form PPP usually means that certain public investment or public service is not built, serviced and provided directly by public sector (state, region or commune), but by private sector (private company or a group of companies), whereas the PPP is characterized mainly by long-term cooperation, sharing the risks of the project, economical benefit of project and last but not least focusing on crucial competencies and using the experiences of public and private sector. Importantly the PPP is not a method suitable for all kinds of projects as it comes with considerable hazards. Therefore it is important thoroughly consider whether using the PPP is better than usual public order/contract or other form of cooperation.

The main reasons for using the PPP include economical benefit of project, effective payments for public services, increasing quality of services provided, focusing on crucial competencies and deriving benefits from private sector, budget restrictions, accelerating putting into operation, firm definition of financial resources, the price of the project established in advance, maintainable distribution of the investment in the process of usage, better allocation of the risks, keeping the stabile position of the public sector, which is not loosing control over the realization, maintenance and functional usage of the realized project.

The PPP are long-term, complex, financially demanding projects. They are usually financed by project/planned investments realized from different sources such as very own sources of the private investor, own sources of the partner from a public sector, bank credits/loans, EU funds, whereas the main target of application of the PPP is obtaining "better value for money" under the condition of creating perfect contract relationship between the project partners that is different from the regular public acquisition

Common public order	
Strong aspects	Weak aspects
Experience of the public sector in public orders; Less demanding in administrative preparation for the project; Shorter period of preparation and realization of the project; Higher flexibility with regard to short term contract relationships.	The period of building is often prolonged compared to the plan and the financial budget for building and running is often overdrawn; The necessity to organize selection procedure in order to choose supplier for reconstruction, innovation; All the risks connected with premises are carried by the public sector; The need of dative financial budget for covering the project investments in its first period.

PPP	
Strong aspects	Weak aspects
One partner covering the whole project; Distribution of the investments through the period of time; Strong motivation to adhere to the high quality standards; Significant take over of the risks by the private partner; Better foreseeing of the expenses and time period needed for realization.	Lower flexibility during the project; More complex managing of the long term contract; The preparation of the project and the selection of the partner is more demanding and more expensive; Overpricing the project because of the costs of private partner.

Source: Public-private partnership, Association PPP, Bratislava 2009, www.asociaciappp.sk

by integrating private partner. In comparing the effectiveness of the PPP and usual public acquisition it is necessary to result from comprehensive analysis and objective consideration of the positives and negatives of both methods.

The integration of the private sector providing the effectiveness of the project, creativity and usage of the innovative solution of the technical problems, maintaining the cost budgets, adhering to the scheduled terms, is working in favour of the PPP.

One of the dominant factors of the success of the PPP is distribution and consequent sharing of the risks. The risk can be characterized as a factor that can possibly jeopardize fulfilling the public order. It is very important to identify and distribute the risks correctly because these are long term partnerships and dividing the risks between public and private partner is completed in the preparation period of the project.

The basic rule of the effectiveness of the PPP says the risk should be carried by the partner who is most eligible of dealing with it. Sharing the risks with the private partner is the main tool by which it is not only possible to include the investments into the public administration deficit, but also to achieve the effectiveness of the whole project for the public sector, what is creating the crucial factor of the investment success. The method of categorizing the risks of the PPP differs depending on the attitude of the particular country. The Eurostat defines main risks for the PPP (see the table). Consequently the risk management, their identification, risk assessment, allocation between public and private sector, diagnosis and attendance and of course monitoring and control of the managed process of the controlled risk play the great role.

The risk categories	The groups of the risks
Building-technological and projective risks	Constructive and projective risks; Risks of the location Risks of the inappropriate technology, infrastructure and corresponding services
Credit risks	Risk of the ability to pay Risk of the unfulfilled commitments Risk of availability
Market risks	Risk of the demand/query Risk of advantaging the competition Other market risks
External risks	Political risks Superior power Other external risks
Operation risks	Risks related to machinery/risks related to the man power
Strategic risks	Contract risks Other strategic risks

Source: Attitude towards the risks in the PPP projects, www.mfsr.sk

Regarding this and in a context of sustainable progress the state and public administration are putting in the fore of their interest not only their own space structures of the dwelling systems and processes progressing within, but also the tools and methods of their building, let us say regulating their development. Greater attention is paid to space and cultural contexts of their evolution, possibilities to adapt to changing conditions of their existence, possibilities to define the rules and patterns of their evolution. In the context of obtaining the progress as a long term process of the quantitative and qualitative progressive evolution changes the additive integrity of the individual factors is not dominant, but mainly their mutual influence/cooperation in eventual synergistic quality in time and space with emphasis on the moments of revolution changes and their space impact. This evolution must be accompanied by identification of danger that comes with collisions between private and public sector in changing time, whereas its risk assessment and corresponding management are integral parts of practical application of the principles and criteria of the sustainable progress into the space development and consequent kinds of planning.

According to the declaration by Dušan Kozlovský with implementation of the PPP (2008), even though we implicitly assume that effective allocation of the risk between both partners will contribute to higher value, there are still some crucial questions. One of them is how to measure the risk and how would its eventual valuation influence quality of the final investment decisions. It can be assumed that the risk would increase the social value of the PPP project if all the subjects involved would have positive inclination towards the risk and the risk for them would mean the estate with positive value. In this context the necessity of deep analysis of the commercial-legal, administration-legal, financial-legal, criminal-legal, economical-legal but also territorial-spatial aspects of the PPP is shown in coherence with identification of the risks resulting from that and consequent possibility of their elimination, and not only by public administration. Regarding the long period of this process and effective using of the territorial-spatial potential of the dwelling organization, in this development it is important to characterize group of emergency situations that appear as the culmination of the risk, result of the unsolved or not solved problems that in practise usually evoke chain reaction. Their classification

can be accomplished on the basis of aspects such as the speed of their progress, possibility of their generation or their consequences. Rational management of the development of the dwelling organization must build on knowledge and coordinating of the proceeding of the observed phenomenon. Potential risks of the application of the PPP are inevitable subjects of the solution in sequence on individual kinds of planning, its time horizons, where these activities must be fundamental in coordination of the sustainable progress. In this process territorial planning is playing the crucial role as preventive tool of the crisis management of the territorial development of the Slovak Republic.

The vision of integrated development of society as a whole is very difficult to push through. It is mainly because these suggestions demand change of hitherto way of making decisions, change of priorities of decisions and change of using the space, what interfere with problems of simple misunderstanding and even in those chases where the good will to achieve is not missing.

As the government of the Slovak Republic is planning to apply the PPP projects in huge scale within existing anti crisis acquisitions/precautions, these questions are more than actual. According to prime minister to retain economic growth the most important is to continue supporting significant public investments in form of the PPP projects. Through such projects the government could, as he says, reinvest 1,33 billions euro (40 billions Slovak crown) or 2 percent of the gross domestic produce. In the form of the PPP projects the new railway or telecommunicate infrastructure could contribute to already existing motorways, Bratislava airport terminal or cyclotron centre. It is more than certain that realisation of such a great financial investment is carrying a lot of risks, but they are however opening the door for new opportunities of development.

Literature

1. European PPP report, DLA Piper Rudnick Gray Carry, Londýn, február 2006
2. Kódex riadenia prípravz PPP projektu, Ministerstvo financií SR, www.mfsr.sk
3. Osnova projektového zámeru a kritériá pre výber projektového zámeru, Ministerstvo financií SR, www.mfsr.sk
4. Politika pre realizáciu projektov verejno-súkromných partnerstiev PPP, ministerstvo financií SR, Bratislava, 9. november 2005
5. Prístup k riadeniu rizík v PPP projektoch, Ministerstvo financií SR, www.mfsr.sk
6. Public-Private Partnership a Slovensko, Municipalia,a.s., Žilina, 2006
7. Public-Private Partnerships, DG REG, marec 2003
8. Smernica pre úspešné verejno-súkromné partnerstvá, Guidelines for successful
9. Verejno-súkromné partnerství alebo public private patrnerships, Asociácia PPP, Bratislava 2 OO9, www.asociaciappp.sk
10. Zelená kniha o verejno-súkromných partnerstvách – PPP COM (2004) 237 y 30.4. 2004
11. Kordoš, M.: Systém regulácie zahraničnoobchodných vzťahov USA. Vedecká monografia Trenčianskej univerzity Alexandra Dubčeka v Trenčíne, Trenčín. 2008. AH 13,32 - 204 stán. ISBN 978-80-8075-307-8
12. Kordoš, M.: K postaveniu ekonomiky USA vo svetovom hospodarstve. In: Sociálno-ekonomická revue: – vedecký časopis Fakulty sociálno-ekonomických vzťahov Trenčianskej univerzity Alexandra Dubčeka, Roč. 5, č. 2 (15) (2007), FSEV TnUAD, Trenčín. 2007. s. 95-101. ISSN 1336-3727