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HOLISTIC DEVELOPMENT OF HUMAN RESOURCES THROUGH LIFELONG EDUCATION¹

***Abstract:** The paper deals with the concept of lifelong education in the context of relationship between higher education and needs of the labour market and requirements of future employers of university graduates. The aim of the paper is to identify the demands of business entities and institutions placed on present and future employees, and in this way to present basic information and instructions to educational entities on how to provide for education. This is accomplished via the analysis of demands of selected respondents (employer entities) on their employees. The paper contains two chapters dealing with the subject and philosophy of the present research and with the requirements for job performance as viewed by employers from various industries. The results obtained are related to the problem of employability on the labour market.*

***Keywords:** lifelong education, long-term unemployed, educational environment, European Union, key competences, holistic development, human resources, employer requirements, job performance, labour market, personality traits, Strategy of Lifelong Learning and Lifelong Guidance, Slovak Republic.*

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Motto: When planning for a year, plant corn. When planning for a decade, plant trees. When planning for life, train and educate people. Chinese proverb: Guanzi (c. 645BC) [3]

Qualitative changes in society and in the economy in the 21st century, which may also be referred to as the century of knowledge, are reflected in the importance attached to human factor. In this context, there is a rising need for identifying human resources, selecting suitable human resources for the performance of activities, eliminating moral obsolescence of knowledge and skills, as well as for focusing on the development of lifelong education.

¹ The present paper contains also partial results of the nation-wide basic research project VEGA No. 1/0466/11 “Crisis Management of Enterprise”

Lifelong education/learning is defined in “A Memorandum on Lifelong Learning”, as any target-oriented activity, the purpose of which is an incessant improvement of knowledge, skills, and competences. The concept of lifelong education involves the existence of the system that enables access to education from the early childhood until one’s active life in post-productive age, which includes the area of active operation and inclusion of an individual in society and their internal fulfilment regarding personal interests.

Lifelong learning is viewed by the European Commission in connection with the implementation of the Lisbon Strategy as an umbrella concept encompassing all the systems of education, i.e. both informal and formal education and all the levels of education including pre-school education, primary school education, secondary school education, higher education institutions, and further education.

In April 2007 the Government of the Slovak Republic adopted “The Strategy for Lifelong Learning and Lifetime Guidance” with the prospect of its fulfilment by the year 2015. The main objective of the Strategy is to strengthen an individual’s awareness of the need for permanent learning/education, which will equip them with skills and competences for sustainable employability, for asserting themselves in society, and for the development of their personal interests. One of the 2007 Strategy outputs is Act No. 568/2009 Coll. on lifelong education and on the change and supplement of some laws, adopted in December 2009, which set up several important institutes for further development of the lifelong education system, as e.g. accreditation on the basis of qualification standards, recognition of further education results, monitoring and forecasting educational needs. However, we have not managed to introduce these instruments into practice, mainly due to non-implementation of the systemic project for the support of further education, within which these instruments should be elaborated. Likewise, we have not succeeded in developing adequately concerted and coordinated activities of stakeholders in the system of lifelong education, i.e. citizens themselves, educational institutions, counselling centres, employers, professional associations, but also local and regional self-government, personnel agencies, and non-governmental organisations.

The Government Manifesto of the Slovak Republic for the period of 2010–2014, in view of the growing dynamics of the society and “The National Programme of Reforms of the Slovak Republic from 2011 until 2014” attach an increasing importance to lifelong education, namely to the area of further education. A rational approach of citizens to flexible expanding and increasing their qualifications in order to improve their chances of asserting themselves on the labour market and increasing the quality of life may be secured by an efficiently operating system of further education. The system of further education can only be effective when its content and organisation is adjusted to requirements of society and those of the labour market.

It is a learning individual who is at the centre lifelong education; this individual has access to school education (guaranteed by the Constitution of the Slovak Republic), as well as to further education while the principles of quality and equal opportunities of an individual at any age and regardless one’s previous education are

secured. Since the results required in lifelong education were not achieved, in the year 2011 this situation resulted in resuming the innovation process of the 2007 Strategy. The meaning of the Strategy Innovation was to focus on the development of key skills and competences of individuals, which will enable them to evolve their qualifications and achieve personality growth. The basic requirements shall include employability, inclusion in society, and further personality development. In order to fulfil this objective, the Ministry of Education, Science and Research, and Sports of the Slovak Republic invited in the process of identifying priorities and aims, which the updated strategy (Strategy 2011) is to bring, also chief stakeholders as members of an expert group, which was made up from representatives of employers, personnel and counselling institutions, specialists from schools, and other education institutions and experts from the Ministry.

This expert group gradually identified several key problem areas of the innovation strategy which should be solved by means of instruments set up, namely: attitude and motivation of an individual to lifelong education; bringing the output from education closer to employer needs; system and structure of counselling services with emphasis on adult population; level of an individual's competences for their professional and personality development: financial literacy, entrepreneurial competences, communication in world languages, digital literacy, and active citizenship; and finally financing further education.

Simultaneously, the task of the expert group was to incorporate a system of new and modern elements into the lifelong education, which would enable to develop an individual's educational potential as well as the entire society through systems instruments. The development of the entire society is possible by means of supporting the development of knowledge in its explicit and implicit forms. In this way, the knowledge transfer system would attain the dynamics and scope required by a globalised society.

The capability of finding and keeping employment is connected with the level of human potential, which results from an individual's personality assumptions and qualification requirements, and these, in turn, result from deliberate educational activities. The aim of the paper is the analysis of requirements of selected respondents (employer entities) on their employees (those who perform working activities). This analysis points to drawbacks in personality and qualification readiness of individuals, whose working and personal lives are often influenced by particular facts and assumptions; in this context, it is necessary to analyse not only qualifications but also personality potential as a subjective condition of the performance of working activity.

The role of human resources on the labour market is reflected in the results of statistical indicators; however, demands of employer entities can be directly identified via a monitored survey the purpose of which is to gain primary background materials needed for designing solutions which would orient human resources to education in those fields of study, and those, in turn, would create conditions of the employability of human resources after completion of their study at various levels of education. The school education system securing primary preparation for education as well as the system of adult education has to take into consideration demands of

the labour market. It is up to employer entities to define these demands because it is the employers who secure the realisation of working activities by employing human resources. Partial results of the research oriented to the analysis of employer entities' requirements placed on employees, and carried out under the second stage of the project VEGA 1/0466/11 "Corporate Crisis Management" indicate only some initial problems. We assume that the results of this stage of the research are going to act as an impulse and stimulus for further analyses and enable us to solve demanding and complex contemporary problems, e.g. labour market disproportions, dealing with employability of some groups of population and with lifelong education.

Internal and External Environment of Job Performance

Educational policy is meaningful and sustainable only if it corresponds to the economic and societal development and is flexible enough to react to changes. When determining developmental priorities of a country's education system, an important role is played by the state; on a global scale, this role is played by international institutions (UNESCO, OECD, World Bank, EU, and the like). Systemic instruments should, by their nature, be able to create a genuine educational environment and motivate individuals and diverse social groups.

Erudition (scholarship) in broader educational and philosophical connections can be understood as the share of persons who live in a particular country with a particular level of highest (achieved) level of education. In this connection, erudition is considered as one of indicators of education and is measurable and internationally comparable [16]. Contemporary efforts of European educational systems are directed at supporting citizens in the active application of options and incentives for taking over responsibility for their own development and an effective fulfilment of working targets and personal aims. The aim is to build one's own portfolio of competences made up of required knowledge, skills, abilities, and competences, which enable an active self-development and professional self-actualisation.

The external environment influences which affect man's personality entering the work process are *secondary* in relation to the fulfilment of job tasks at workplace, while the influence of man's personal potential is of *primary* importance. The personal potential of an individual represents a certain individual pool of knowledge, skills, capabilities, psychic energy, properties, attitudes and needs, which determine their psychic capacity and overall performance. The aim of the development of educational activities is the development of one's own potential within formal initial education or further education of adults.

External environment ([6], p. 314–315) affects the job performance and is referred to as an objective determinant of working activity. Objective working conditions are connected with the environment in a wider sense of the word, which includes: political, economic, cultural maturity of society, socio-economic relations between employees and employers, and stimulation aspects of work, etc.; the working environment (environment in a narrow sense), namely physical conditions of the

working environment, working instruments, tools, protective working devices; socio-psychological atmosphere at workplace, conditions resulting from work organization, and other.

An employee's personal potential represents subjective conditions of the performance of working activity and is directly connected with the person and personality of the employee. Personal potential is made up of readiness (maturity) in various respects, namely: professional readiness, performance readiness, personality traits readiness, motivation readiness, and social interaction readiness. The last one expresses the place that an employee has built up within a working group, a rate of the employee's self-actualisation, self-reflexion, social acceptance, and prestige. ([18], p. 61).

The pre-requisite of one's employability is connected on the one hand with personal potential, which is influenced also by the level of education achieved and on the other hand, it depends on conditions created in separate regions. These conditions are determined by the region's development and job opportunities created for job applicants who have achieved the level of education required. A survey of job applicants is given in Table 1, which shows distinct regional differences and compares the state of job applicants at the time when impacts of crisis development on the Slovak labour market were not felt – March 2007 [27] with the period after crisis adaptation – March 2011, when, according to Eurostat data, the rate of unemployment in EU countries and in the eurozone was stabilised. These data point out that while unemployment from the year 2008 to the year 2010 was clearly rising, at the beginning of the year 2011 its rise stopped and stabilised, which is documented in Graph 1. However, Table 1 signals that unemployment in Slovakia did not record a declining trend either in the year 2011, and it was constantly achieving high values. Slovakia (for a four-year period) recorded a 48.36% rise of unemployment in the Bratislava Region, which is more than a twofold increase, i.e. the highest of all the regions. It was significantly influenced by unemployment of men from 3,674 to 9,167, which accounts for the increase by app. 2.5-fold.

Table 1

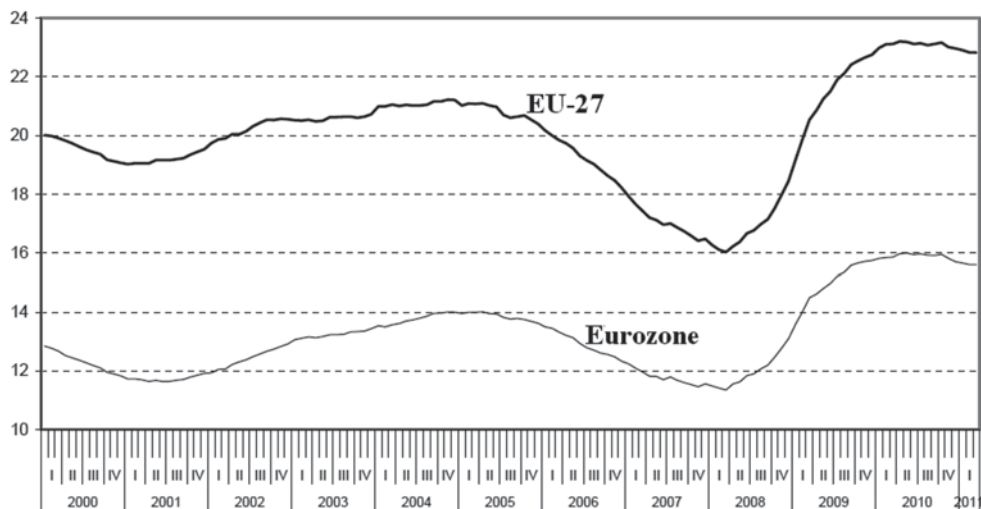
Structure of applicants for employment (jobseekers) in the Slovak Republic

Region	Year	2007			2011		
		Men	Women	Total	Men	Women	Total
Bratislava Region		3 674	4 217	7 891	9 167	8 893	18 060
Trnava Region		7 748	9 090	16 838	14 329	14 281	28 610
Trenčín Region		8 125	8 600	16 725	17 140	15 253	32 393
Nitra Region		15 744	17 794	33 538	23 977	23 628	47 605
Žilina Region		10 363	12 608	22 971	22 910	19 007	41 917
Banská Bystrica Region		26 086	27 748	53 834	36 043	32 458	68 501
Prešov Region		27 334	27 488	54 822	45 168	36 431	81 599
Košice Region		28 916	28 995	57 911	44 188	33 610	73 798
Total		127 990	136 540	264 530	208 922	183 561	392 483

Source: [23]

Graph 1

Unemployment in the EU and in the Eurozone during the last decade (in mill.)



Source: [21]

Increase in unemployment was recorded also in the case of persons with the highest level of education. This makes us reflect on whether the working activities that employer entities need to provide for really require the academic levels of education completed by our graduates. Comparison of the development of job applicants according to the level of education achieved in the years 2007 and 2011 is possible on the basis of Tables 2 and 3, which specify summary indicators of unemployment in Table 1, in terms of achieved level of education. The data presented are for March of the relevant year. The development of the number of job applicants proves that neither tertiary education guarantees employability. We should reflect on what numbers of graduates from separate cycles of education and fields of study can be employed in our economy.

Table 2

**Structure of total number of job seekers in the Slovak Republic
by the achieved level of education in March 2007**

Region	Post-graduate education	School of higher education (HEI)	Post-secondary education	Complete secondary vocational education	Complete secondary general education	Complete*secondary	Secondary/vocational	Apprenticed	Elementary school	No education
Bratislava Region	18	1115	72	1630	559	869	20	2123	1430	55
Trnava Region	9	559	147	2425	663	1174	68	5701	5787	305
Trenčín region	17	731	146	2744	535	1674	39	6503	4269	67
Nitra Region	8	1071	172	4778	1206	2203	533	11302	11690	575
Žilina Region	4	847	144	3452	741	2112	456	8751	6321	143
Banská Bystrica Region	13	1022	228	6445	1413	3617	140	17549	20101	3306

Source: [23]

*Complete: completed with maturita (equivalent to GSE or GSTE)

Table 3

**Structure of applicants for total employment in the Slovak Republic according
to the level of education achieved in March 2011**

Region	Post-graduate education	HEI	Post-secondary education	Complete Secondary vocational education	Complete Secondary General Education	Complete Secondary	Secondary technical/vocational	Apprenticed	Elementary school	No education
Bratislava Region	89	3131	437	3713	1317	2099	28	4536	2592	118
Trnava Region	46	1452	487	4715	1125	2836	54	10529	7101	265
Trenčín Region	30	1996	642	5526	1061	4546	51	12821	5650	70
Nitra Region	54	2299	702	7491	1893	4488	331	17731	12067	549
Žilina Region	34	2319	757	6515	1515	5519	545	16919	7665	129
Banská Bystrica Region	41	2283	684	9167	2028	6419	91	22258	21516	4014
Prešov Region	53	3277	1127	10497	2100	8776	289	24877	22573	8030
Košice Region	46	3096	940	10270	2574	6510	84	21531	22875	5872
Total	393	19853	5776	57894	13613	41193	1473	131202	102039	19047

Source: [23]

A serious contemporary economic and social problem is low employability of some groups of persons on the labour market ([14], p. 436). Individual characteristics of the long-term unemployed can often be described as the accumulation of several handicaps (lower level of education, no experience, worsened health condition, and the like); and these are increasing in the course of working inactivity, while an individual may be found unwilling or even afraid to return to work. Another

serious problem is a constantly increasing group of the unemployed made up from graduates from schools, which also causes serious socio-economic problems. The number of persons who have not been working yet is rising. (Table 4); as a result they have not had an opportunity to develop any working habits, gain work experience, and enrich and increase knowledge and skills acquired in formal education. This kind of existing situation necessitates to analyse requirements on human resources and look for the causes and possibilities of solving the difficult employability of some groups on the labour market.

Table 4

**The unemployed as a result of termination of last employment
(in thousands of persons as at the 4th quarter-year 2010)**

Indicator	Total	Men	Women
Unemployed	377,3	206,9	170,4
Unemployed who have not been employed yet.	83,8	49,0	34,8
Unemployed who have already been employed.	293,5	157,9	135,6
Reason for terminating previous employment:			
termination of business activity	13,4	8,6	4,8
termination of employer business activity	47,6	23,7	23,9
redundancy dismissal	117,4	67,8	49,6
dismissal for other reasons	15,9	8,7	7,2
termination of temporary employment	51,8	28,9	22,9
personal and/or family reasons	31,8	11,4	20,3
health reasons	10,5	5,3	5,2
study	0,3	0,3	-
retirement (old-age, disability)	3,7	2,6	1,1
other reasons	1,3	0,6	0,7

Source: [22]

Figures in Table 4 document that the highest number of the unemployed is dismissed for reasons of redundancy or dissolution of economic activities, either of their own businesses, or termination of their employer's activity. However, these figures cannot reveal the share of qualifications or possibly unsatisfactory working skills or habits, etc. on an employee's dismissal.

The evaluation of impacts of education on society and development of the economy are often based on unqualified statements. Statistics of this phenomenon have been analysed by Keller and Tvrđý [11], who found out that the level of education was neither related to higher economic performance, nor to the rate of business activity, not even to the share of unemployment. It is natural that a higher level of education enables to obtain better job opportunities and offers a holder of this level of education an advantage in comparison with the individual who has a lower level of education. However, unemployment of graduates with the highest education makes us reflect on the causes of this situation and look for solutions. Despite the fact that many highly qualified persons cannot find jobs, education is a decisive factor in securing further social and economic development. Without the support of science,

research, development of explicit and tacit knowledge, it is not possible to ensure further social development.

Formal qualification covers professional competences acquired by completing a particular level of education and key competences (a frequent topic of today's discussions). General educational programmes for separate levels of education (pre-primary, primary, secondary, and tertiary) describe key competences required ([25], p. 109). The paper does not deal with the problem in this broad scope; we shall restrict our attention only to basic characteristics of key competences. Key competences represent the target category expressed in the form of outputs. These are "sets of assumed knowledge, skills, capabilities, attitudes, and values necessary for personal development and self-realisation of an individual". Key competences stand for target states, while every education should be directed to the fulfilment of these states. Description and content of competences is based on the values adopted by society and on the general ideas about what kind of competences contribute to employees' self-realisation at work, to education, and to satisfactory and successful life. Competences are sets of activity-oriented outputs that can be applied in practice and the attainment of which is a long and complex process.

The European Commission defined eight areas of key competences in the European Framework of Reference, namely: communication in mother tongue, communication in foreign languages, mathematical competences and basic competences in the area of science and technologies, competences for the work with digital technologies, learning competences, societal and civic competences, sense of initiative and business spirit, cultural awareness and expressing ideas, experiences and emotions.

The aim of all the cycles of education is to equip each individual with a set of key competences on the level that the individual is capable to achieve. It is desirable, therefore, for key competences to form part of education at all levels and create a supplement to the content of vocational education, become an essential part of the content of further education and accomplish a holistic readiness of human resources. Employers need human resources whose level of qualifications and personality traits ensure a high quality performance of individual types of job.

2 Human Resource Readiness for Job Performance

Employee work performance depends on the qualification level achieved and other personal properties, abilities, and skills. Contemporary changing conditions for job performance and its intellectualisation cause the need for further education is moving to the forefront. This process leads to permanent adjustment of professional preparation of human resources in the area of job requirements.

Requirements of employer entities on the qualification readiness of employees are affected by: a) assignments and requirements of the job and its place in a company's hierarchy of functions; b) working conditions of the job and overall environment of the job performance may impact in various ways on the job holder.

The objective of the research carried out was to identify the needs and requirements of practice on professional and personality readiness of employees.

2.1 Subject and Philosophy of Research into Human Resource

It was a complex character of relationships between demand and supply and the existence of long-term and increasing disproportions that necessitated carrying out of this research ([19], p.173). The aim is to identify the demands of business entities and institutions placed on present and future employees, and in this way to present basic information and instructions to educational entities on how to provide for education.

2.1.1 Description of Research Sample

Within the project we monitored opinions of respondents selected as representatives of business and non-business entities within selected branches of the national economy of the SR according to “Industry Classification of Economic Activities”. The selection of businesses was made by deliberate choice, in order to secure some proportionality. The research sample consisted of employer entities from 14 industries (given in Tab. 5); these industries were represented by 90 businesses of various sizes. Our purpose here was to capture the spectre of organisations from the following aspects:

Size composition – made up of micro-businesses, small, medium-sized, and large enterprises, where the criterion for including was the number of employees;

- Proprietary relations – state, cooperative, and private;
- Sources of capital – foreign, Slovak, mixed;
- Methods of funding – contributory/subsidizing, budgetary and other;
- Area of business – production, offer of services and other;
- Space localisation on the territory of the Slovak Republic.
- Within the survey, we tried to capture a broad range of typical representatives of economic life in Slovakia. We addressed either workers of personnel departments, education sections or managers in charge; in the case of small and micro-businesses we approached owners.

2.1.2 Method of Research

The entire survey was carried out by means of the questionnaire method. Primary data collection was carried out via questionnaires, distributed in person and electronically. The questionnaire method was chosen as it enables a relatively easy way of obtaining a great deal of data. The questionnaire consisted of four parts:

- Basic data about an organisation – size of entity, number of employees, composition of employees, qualification level of employees, fluctuation, job content, sources of capital, and the like;

- Characteristics of respondents – their position in organisation (owner, official for education, and human resource manager);
- Demands on employees – method of recruitment organisation, recruitment area, method of implementing employee, course of adaptation process;
- Requirements necessary for job performance from the aspect of professional and qualification readiness, key competences, evaluation of physical fitness, psychic assumptions, social skills, and specific claims on the performance of job. Likewise examined were personality traits and character features of individuals, the need for intelligence and emotional properties as well as the importance of motivating elements in job performance.

2.1.3 The Focus of Research

The focus of our research was on qualification and personality potential of employees, which was investigated in terms of four significant aspects:

1. **Technical/professional readiness** – represents a sum of professional knowledge and skills for job performance, while key competences constitute its component. General education programmes for separate levels of education (pre-primary, primary, secondary, and tertiary) specify the key competences needed ([26], p. 109). Key competences are target states, towards the fulfilment of which every education should be oriented. Their characteristics and content are based on the values accepted by society and on general ideas about what competences contribute to personal fulfilment at work, to satisfactory and successful life. The aim of all the cycles of education is to equip each individual with the set of key competences on the level which is achievable by them. Therefore, we should try so that key competences formed part of education at all levels, and they formed a complement to the content of technical education and created a holistic readiness of human resources.
2. **Performance readiness** – is determined by psychic and physical prowess of employees, their resistance to disturbing influences occurring in work activity – fatigue, flatness, stress, frustration, psychic burden ([18], p. 84), and claims related to social skills and specific claims on job performance.
3. **Personality readiness** – is made up of a set of features of character and personality traits and capabilities of an employee, quality of psychic processes (sensory perception, attention – high concentration, memory, thinking – strategic, creative, flexible), and emotional properties;
4. **Motivation readiness** – is given by an employee's needs, interests, aspirations, and ambitions.

Quantity and quality of job performance of individual employees depend on several elements, which make up an employee personality potential. The personal employee potential consists of subjective conditions of the performance of working activities, and it is closely connected with the employee's person and personality. Another element of personal potential is also social readiness, which is an expression

of an employee's position within a work group, rate of employee's self-actualisation, self-reflection, social adaptation, and prestige. Social readiness was not in included questionnaire questions that constituted the primary source of research.

Demands on employees should be formulated in the scope that reflects requirements on theoretical knowledge and practical skills, features of character, intelligence and emotional properties and other properties, which constitute the basis of job performance and good interpersonal relationships at workplace.

2.2 Analysis of Assumptions (Qualification) for Job Performance from the Aspect of Selected Employer Group

Analysis of personal potential of internal and external offer of human resources has to be always performed in relation to working activities implemented and tasks of a given organisation entity. In view of extensive results within a given stage of research the purpose of this paper is to present partial results.

The basis of personal potential is a formal qualification, which stands for the knowledge acquired within a systematic study. It is supplemented with skills acquired in the course of job performance as well as with certain interests and ambitions of a given individual. Motivation readiness affects theoretical preparation in various life stages, as well as the approach to job performance and method of job performance. For this reason, the research focuses on opinions of respondents (Tab. 5) of theoretical knowledge, practical skills and motivation readiness in the division by industries in the national economy, which may vary according to the nature of industry. Opinions of respondents characterise assumed requirements placed on performers of the job, which are significant not only in the selection of employees and the preparation of adaptation process, but also in the organisation of further professional education in organisations.

The research result consisted of 90 respondents' opinions from several industries (including the opinions of those respondents who do not come from a given industry). In Section S – Other activities, research was organised only in divisions 95 – Repair of computers, personal utensils and household utensils and 96 – Other personal services. Not all the sections included in the Industry Classification of economic activities, sections belonging to the group of natural monopolies were included, and well as those in which respondents were not interested in answering, or in the case of industries that were of little relevance to our research.

Theoretical knowledge and practical skills were studied in mutual connections and represent certain preference of respondents in the performance of working activities in industries monitored. Opinions of respondents about their preferences concerning theoretical knowledge and practical skills make up the total of 100%. Motivation readiness was examined separately, with respect to the importance of employees' needs, interests, aspirations, and ambitions in the course of performance of specific activities. Survey activities show that there are activities whose quality performance very much depends on the attitude of the job performer, their empathic

capabilities and communication skills, and on overall interest in job performance. There are various needs of motivation readiness in various industries, and according to opinions presented they differ considerably. The lowest motivation assumptions are expected in agriculture, which is connected with a great deal of routine and manual activities. A less favourable phenomenon is also a declining share of agricultural workers' wages in the national economy on average wage in the national economy, which can be only partially explained by stagnation of production ([7], p. 905).

Table 5

Basic qualifications requirements for the job performance in %

Industries(branches) \ Requirements	Theoretical knowledge	Practical skills	Motivation readiness
Agriculture, forestry, fishing	28	72	6
Industrial production	30	70	32
Building and construction industry	38	62	36
Wholesale and retail sale	66	34	42
Transport and warehousing	20	80	18
Accommodation and catering services	13	87	96
Information and communication	61	39	88
Financial and insurance services	78	22	94
Real estate activities	40	60	91
Professional, scientific and technical activities	89	11	100
Administrative and support activities	24	76	27
Education	89	11	100
Health service and social assistance	76	24	94
Other activities	62	38	41

Source: research carried out under conditions of the SR

Key competences are the capabilities necessary for the performance of each job and are inevitable at all levels of education. ([12], p. 23). It only depends what level of individual key competences ([26], p. 109) can be achieved in each cycle of education. The focus of our research (Tab. 6) was on six key competences out of eight, which were described by the European Commission in the European Framework of Reference, while a special attention was paid to competences significant for employability. Social and civic competences as well as cultural awareness were separately investigated and analysed within the research. To some extent, these competences are examined in the part dealing with demands on social skills.

Table 6 characterises average preferences calculated on the basis of the weighted arithmetic mean. Respondents arranged in the order (1-6) by separate key competences in terms of their importance for job performance in individual industries (branches). Data calculated on the basis of the weighted arithmetic mean indicate the average need of a given key competence within a given industry.

When analysing key competences we focused on communication in foreign languages and on applying computer programmes (softwares). Communication in foreign languages:

the level of language proficiency in foreign languages specifies that an individual should be capable to understand, express and transfer ideas and opinions in written and spoken discourse in relevant social and cultural situations and settings in education and professional preparation, in the course of job performance, but also in their spare time activities. A sound foreign language proficiency is often a decisive factor as early as in the recruitment process, but it is also an important part of further education. Our respondents have admitted feeling substantial drawbacks in this area: 87% employees claim to be proficient in English; 62% employees in German; 48% of employees claim to have Russian language proficiency; and 13% claim they are proficient in French. 19% employees claim to be proficient in Hungarian and describe their active and passive knowledge of the Hungarian language as excellent; usually it is their mother tongue. Lower age groups of respondents indicate the knowledge of other languages; these respondents are employees who come from the countries where these languages hold the status of official language, or our citizens who spent some time in the countries where a particular foreign language is spoken. For this reason, in some languages listed in Tab. 7 there is recorded a 100% level of the language proficiency in word and writing. Tab. 7 denotes the achieved qualitative level of language proficiency of employee by age categories.

Table 6

Opinions of respondents regarding the need of key competences in separate industries

Industries (Branches)	Requirements	Key competences					
		Communication in the mother tongue	Communication in foreign languages	Mathematical competences and basic competences in science and technology	Digital competences	Learning to learn (competences)	Sense of initiative and entrepreneurship
Agriculture, forestry, and fishing		1,90	4,54	4,15	3,90	1,93	2,90
Industrial production		2,82	3,55	3,85	3,91	3,38	3,86
Building and construction industry		4,15	4,02	1,90	3,86	3,57	3,47
Wholesale and retail sale		1,94	2,90	4,32	4,07	3,21	4,54
Transport and warehousing		3,90	4,54	3,11	3,91	2,90	1,90
Accommodation and catering services		3,30	1,85	4,84	4,20	3,90	2,90
Information and communication		3,97	3,60	2,55	1,95	4,25	4,65
Financial and insurance services		3,60	2,90	4,54	4,15	1,90	3,90
Real estate activities		3,70	3,10	4,54	4,11	3,64	1,90
Professional, scientific and technical activities		4,18	3,50	3,83	3,31	2,63	3,53
Administrative and support activities		3,41	1,92	4,15	4,06	2,90	4,54
Education		3,50	2,90	4,15	3,96	1,87	4,60
Health service and social assistance		1,90	4,13	4,54	3,90	3,60	2,90
Other activities		3,12	4,54	3,72	2,07	4,04	3,48

Source: own calculations based on from research outputs (weighted arithmetical mean of the order of individual key competences)

Table 7

**Respondents' opinions of achieved (qualitative) level of employee
language proficiency in %**

Foreign languages	Foreign language proficiency by respondents' age		
	Up to 35 years	35-50	50+
English language	70	50	20
German language	60	40	25
French language	50	20	10
Russian language	5	50	80
Hungarian language	90	90	100
Other	100	100	5

Source: research results

Proficiency level and the number of employees who have mastered some language vary. Percentage figures describe the achieved active and passive levels of proficiency in these languages. The category of "Other" includes the following languages: Spanish, Dutch, Swedish, Arabic, Ukrainian, and Turkish. The knowledge of these languages was described as *excellent* despite the minimum percentage of their speakers. When the users claim they have mastered some language, they assess their level of proficiency for practical purposes at 100%. These foreign languages are used by respondents in solving projects and in business activities. Recently employers have reported a low number of job applicants who are proficient in English.

Process-oriented technical knowledge: includes mathematical competences including ability and willingness to use mathematical methods of thinking and presentation (patterns, models, figures, graphs, and diagrams), competences in science and technology, working with digital technologies, using modern office technologies and information systems, PC operation/service and other devices. Capability of using the Internet or the Intranet is currently the basic requirement of not only job performance, but it is also taken for granted in everyday life.

Based on the information from employers, the use of computer programs during job performance is given in Tab. 8. The subject of the study was managerial, economic and technical job positions; manual workers' positions have not been pursued.

Table 8

Application of selected software according to employers

Softwares	Application at work in percentage
Word	96
Excel	98
Power Point	56
Outlook	48
Access	20
Other	73

Source: research results

Office packages of MS Office Standard and MS Office Professional are the most frequently applied softwares. The category of “Other” includes special business softwares, namely various graphic programs and programs for project designing, accounting programs, developer programs for technical projects, e.g. AUTOCAD in the building and construction industry and various other applications software used in engineering. The survey shows that the most frequently used types of programs in business are the graphic program Corel Draw, Acrobat Reader program (by Adobe), Lotus Notes by IBM as an alternative to Office packages MS Office; programming languages C, C++, information systems, e.g. SAP, etc.. Their usage is linked to some job positions, but the application of this group of programs is relatively large, which is indicated in percentage expression. These data document the need for high computer literacy of all employees as well as the necessity to further develop this level.

A certain amount of technical knowledge and skills is an important requirement for job performance; however, employers require also other abilities and competences as necessary for the job performance. The following skills and abilities can be included here: teamwork abilities, ability to communicate, problem-solving skills, critical and independent thinking, self-development and capability to encourage peers’ development, reasoning and evaluation abilities, learning abilities, creativity, capability of taking over responsibility, independence, performance, etc., which are studied and analysed in the research. The number of employees in separate businesses was significant from the aspect of preferences of these demands; consequently, also the results are presented according to size of business (Tables 9 and 10). The data have been calculated from the sample of respondents’ opinions, which represent the relevant size category of businesses investigated. In each group of businesses it is the same number of opinions, represented by 30 entities in each size group. Cognitive research was oriented to recording the requirements that are considered by employer entities to be of the highest importance, or which are rated highest in the recruitment process. Each skill or property was examined separately, and each respondent was able to indicate as important also several properties, skills, and competences.

Table 9

Level of employees’ performance readiness achieved in %

Type of enterprise	Classes of requirements related to performance readiness			
	Psychic prowess	Physical fitness	Social skills-related requirements	Specific requirements placed on job performance
Micro- and small enterprises	60	43.3	40	46.6
Medium-sized enterprises	50	23.3	30	56.6
Large enterprises	56.6	46.6	33.3	53.3

Source: research results

Our analyses focused on four classes of requirements by enterprise size: *Physical fitness* is represented by somatic properties. Employers – respondents find current physical assumptions of most of their employees acceptable. Physical fitness features are assigned a special importance only in some kind of jobs which involve

specific disciplines for the assessment of job physical fitness of a job applicant and job performer. In general, demands on the employee's physical fitness decline with the rising role of technology and new technologies.

Psychic prowess is influenced by the development of man's psychic. Psychology differentiates biological and social determination of psychic development. Our initial assumption here is that the basis and condition of every individual's development of is their psychic. *Important factors shaping man's psychic are heredity, environment and upbringing.* The concept of heredity is understood as the tendency of organism to maintain and carry over features and properties from parent generation to descendents. *Heredity information* (anatomic and physiological assumptions and intellectual properties) is transferred as early as in the pre-natal stage. Development and shaping of man's psychic is determined by *environment*. Except prenatal environment, important factors in the development of psychic is exogenous environment, which is divided into: material (natural environment, climatic conditions, nourishment conditions, etc.), social (these are crucial conditions because man's psychic could not develop and shape without human society), and cultural environment (level of culture refers to material and social environment). Important factors are for example, social origin, parents' employment, their mental and cultural level; these factors also affect upbringing in the family.

Social skills-related requirements include the following: capability of self-cognition, getting to know other people, success in the system of working with people, competitiveness in work team, leading a work group; assertive behaviour, increasing empathic assertiveness; persuasion (manner of influencing by means of persuading or indoctrinating/preaching); creative action [17]; psycho-hygiene, coping with stress and conflicts, ability to deal with conflicts, and creative problem solving.

Specific job performance requirements include extraordinary sensory perception abilities, physical movement properties, prompt and accurate communication, representative behaviour, knowledge of managerial techniques, knowledge of legislation, country and international law, etc.

Demands connected with social skills and specific claims on job performance are becoming part of in-company employee further education, because required skills are not developed by formal education. Employers indicate substantial drawbacks in their employees' courteous and polite behaviour in dealing with each other and with clients; moreover, they often record a low level of loyalty of their employees to the institution. Decisive features of character in the process of (recruitment and) selection are intelligence and emotional properties. Tab. 10 demonstrates properties which employees should possess.

Table 10

Level of employees' personality readiness in %

Requirements Enterprise size	Personality readiness			
	Character traits		Intelligence traits	Emotional traits
	Activating traits of personality's character	Human features of character		
Micro- and small enterprises	40	43.3	76.6	46.6
Medium-sized enterprises	36.6	30	76.6	43.3
Large enterprises	33.3	23.3	66.6	50

Source: research results

We have recorded employers are mainly interested in those traits of character which are even more significant than knowledge or skills. These character traits are the very properties that employers considerably miss in their employees, as well as in job applicants, including graduates. However, neither the role of intelligence and emotional properties can be neglected. For the sake of completeness, we present here a short description of the features/properties analysed:

Character traits, which may be divided into two groups, namely:

Activating traits of a personality's character, which reflect the attitude of human beings to activities performed by them. It is a power of will to be active, which includes industriousness, perseverance, purposefulness, promptness, initiative, independence, consistency, prudence, discipline, etc.

Human features of character, which express man's relation to the world and determine their basic value orientation, relation to other people and to themselves (attitude, morality, and consciousness). This group includes integrity, sincerity, honesty, tolerance, morale, kindness, generosity, accommodating attitude, honesty, thoughtfulness, faithfulness, commitment, dignity, etc.

Intelligence traits – are intellectual powers of an individual, important to perception and remembering facts. Intelligence is identified with the system of logical operations, with the style and method of problem solving, with the effectiveness of individual approach to situation; all of these require cognitive activity.

Emotional traits – express one's temper or emotionality and one's intensity and speed of responding to various stimuli, resistance to strong and long-lasting stimuli, emotionality, moodiness, and expression. These are hereditary conditioned traits, which develop throughout one's life and are suppressed under the influence of conscious and subconscious regulatory mechanisms; in this way these traits shape a personality profile.

Opinions given by employer entities indicate the need for strategies in education oriented to developing a holistic personality, i.e. one who has the right qualities needed for designing innovations, capable of facing fast changes in production, technology and science; a personality that is assertive, decisive, adaptable, and flexible. Apart from technical/professional knowledge and skills, which are important for job

performance, also the importance of those capabilities and competences needed in all job positions as well as in the performance of most occupations is increasingly rising. Last but not least, there are elements which are needed for a successful adaptation process.

3 Educational Environment and Needs for the Development of Educational Activities in Accordance with the Labour Market

Job analysis and monitoring demands of employer entities have to be carried out continuously, so that human resources may be directed to those educational activities that offer high probability of succeeding on the labour market.

Under conditions of the Slovak Republic, formal education represents the most elaborate system of education; it has a clear organisation structure; it secures follow-up in education and creates conditions for a systemic approach to education. On the basis of various statements we can conclude the following opinions are widespread in the world of economic practice:

- Schools continue preferring encyclopedic knowledge to developing creativity at all cycles of education. Graduates' theoretical knowledge is on a high level, but their ability to apply the knowledge in practice is low, and they find it difficult to use this knowledge in diverse situations.
- Graduates from secondary schools, and also higher education institutions suffer from a considerable shortage of practical skills; there is need for arranging more excursions and provide more opportunities for taking short placements in businesses in accordance with the study specialisation.
- Graduates from individual types of school have little motivating zeal for job performance, for improving their work, for reflecting on the inventiveness in the course of performing their jobs. Their willingness to do anything at all depends on material stimuli; their personal interests are missing, and so are aspirations and aims.
- There appears a distinct shortage of healthy assertiveness and entrepreneurial spirit in university students, who tend to resort to speculation instead.
- Education in the formal system pursues mainly cognitive aims, while upbringing and development of social skills is largely absent; the development of character traits is largely unsatisfactory, which, in turn, is manifested also in undergraduates' behaviour; an important role here is also played by family upbringing.
- Likewise emotional traits are inadequately developed in formal education, except traits of character.
- The level of intelligence traits depends on the type of school completed; schools of technical education enable a relatively greater development of these traits.

Apart from technical knowledge and skills, it is the competences and capabilities needed in all job positions and in the performance of most occupations that are increasingly becoming significant for the performance of one's job. These elements facilitate the adaptation process, which includes mainly:

- ability to learn;
- ability to justify and evaluate;
- ability to cooperate and communicate;
- ability to accept responsibility;
- ability to solve problems;
- independence, performance, and creativity.

On the basis of research carried out we can conclude that as a rule these abilities and competences are the ones whose development is underrated in vocational school education and training. That is why this role is taken over by further education, and many other personal dispositions mentioned are developed within the products of further education. It is our intention to shift the acquisition of skills required into the designing and development of educational programmes.

Differences arising from the monitoring of the readiness of human resources on the one hand and requirements of employer entities on qualification and personality readiness on the other hand, make us reflect on the organisation of informal education and further education. Educational institutions of further education are oriented usually to short-term educational activities. So far it is not possible to speak about some follow-up of the study and an all-round approach in further education. Further education is often understood as supplementary education: it lacks in a systemic character, and with the exception of some sophisticated educational activities, e.g. language education, the education in the area of computer literacy it tends to be oriented to spare time activities and promoting active citizenship rather than to professional education. Since it is not linked to issuing official certificates of education, most people are more interested in formal education even when they are adults. Institutions securing further education cooperate with employer entities and secure for them some jointly prepared educational activities. It is here that a direct relationship arises between education and employability, which is connected with the use of new knowledge, skills and competences. A disadvantaged group on the labour market is made up from job applicants who do not work for various reasons. These job applicants can be briefly described as follows:

- They are highly qualified human resources who are equipped with high standard of practical skills and abilities, and so they are in great demand on the labour market;
- They are human resources who are either unemployed or even long-term unemployed, or their job careers may have been interrupted. As a result of their working inactivity they lack adequate theoretical knowledge and have no practical skills. If they are long-term unemployed, they have already lost working habits and ability to work; they are unable to find employment again due to the level of their theoretical knowledge and practical skills.
- The third group is made up from job applicants who have never worked and have developed neither working habits nor the willingness to work. This group includes large masses of unemployed graduates who have exchanged school desks for unemployment or occasional temporary jobs. Many times these

people are graduates who may have completed also several schools of the same level. It is obvious that dealing with the issue of unemployment via taking another organised study is connected with the need for self-actualisation and expectations of better opportunities for asserting oneself after finishing some other type of school.

- Nowadays not even higher education is a guarantee of a problem-free finding a suitable job. Many people are motivated by the expectation and hope to gain education. However, in many cases the problem is an inadequate creation of job opportunities, which would have to be filled with graduates at a particular level and of type of education. This is the only way to creating a system of continuous consultancy, so that the scope and structure of graduates corresponded to the needs of the national economy and job opportunities in each industry.

Keller and Tvrđý describe the development of relationship to education in the following three stages:

1. *School as a cathedral*, where the starting point is the experience of past centuries, when schools operated on the principles of ecclesiastic teaching and later as preparation for ecclesiastic or political mission or service for the state. The highest education was designed exclusively for élites and for the chosen.
2. *School as a lift/elevator*, the idea was connected with the period after the Second World War, where attitude to education was radically changing. School systems were becoming more democratic and education started to be accessible to large masses of citizens. The number of graduates who filled job positions was rising, which gave them security. Some authors claim that education serves as a lift towards the middle class.
3. *School as an insurance company*; the society is undergoing radical changes; advantageous jobs have already been occupied, and the lift no longer operates. Graduating from some school stops being an advantage: it does not guarantee advancement, instead it is becoming a practical necessity, which should protect school graduates against the risk of declining into lower strata of society ([11], p. 23-25).

The development of knowledge society and its building necessitates a high level of education on the part of all strata of society, which ensues from significant international documents. Key competences are important not only for finding a job, but they are an inevitable part of life. In education it is necessary to apply the kind of models that lead to acquiring inevitable competences, i.e. the qualities which will enable to adequately face the constantly rising requirements in professional and other areas.

Increasing the flexibility of job applicants by means of improving their qualification preparation can be carried out in two ways: via innovating existing study programmes and designing new study programmes; by developing further education within lifelong education and designing the kind of educational products matching the requirements of the labour market.

The aim of solving this problem is increasing job applicants' flexibility by means of educational activities within lifelong education. We have to start from the assumption, that lifelong education, either in traditional educational institutions within educational system, or outside it has to be viewed as a single interlinked whole, which enables diverse and numerous transitions between education and employment, and which will enable to acquire equal qualifications and competences in various ways and any time during one's lifetime. The possibility of passing between education and employment in the course of one's entire life must be understood as an alternative to costly prolongation of school education.

The target output from education has to be formulated in accordance with the demands of individual professions and tasks, which graduates will have to master in practice after completing their education. For each cycle of education learners have to have a specific target (objective), which defines their competence to perform some activities after the completion of a particular educational course. An important step in the course of preparation of educational programmes is the analysis of graduates' opportunities on the labour market. It is necessary to secure better access to information and counselling activities, which will enable participants to assert themselves on the labour market, so that applicants for study were fully aware of potential job opportunities after they have finished their studies. Institutions offering formal education should support cooperation of the private, state and public sectors and employment offices, in order to encourage education in the scope required and with regard to the need of the number of specialists in a given area.

In order to provide educational services on an adequate level, educational institutions should take into consideration, in the course of creation of education programmes and processes securing their implementation, a wide range of external and internal factors and their interconnection with the achievement of integrated prospects. Therefore development of an educational programme should be a team affair, since only a high performance team is able to encompass a great deal of factors and carefully project them into educational programmes. Designing new educational activities as well as looking for new forms of education, securing distribution of education services can be implemented only in the long-term prospect.

The preparation of training/education programmes that meet the needs of the labour market has to be secured by means of applying the standardisation and differentiation strategies. The reason for applying standardisation is in the first place the fulfilment of educational objectives recognised by society. Specific requirements of target groups need to be taken into account in the course of differentiating educational strategy and applying marketing tools so that specific features of qualifications preparation could be considered in the product, namely those that reflect output requirements on professional knowledge, skills, social competences. Moreover, in the case of education we have to realise that the period of participants' preparation does not coincide with the period of using their expertise: there is a time lag, which may range from several months to years, depending on the level and type of education.

Job analysis and monitoring requirements of employer entities have to be carried out continuously, so that the preparation of human resources could be secured as an all-round process, which fulfils essential developmental priorities, namely promoting active citizenship and support of employment.

Conclusion

In the present paper education is understood in its entirety, i.e. as a holistic process: its economic and social aspects, in particular social inclusion as well as environmental and ethical features, need to be emphasized. In the *Strategy of Lifelong Education Development in the European Union* education is not considered only from the aspect of education process itself: it is monitored in connection with employment and human resource development. Education should enable people to gain access to wider job opportunities, because those with a broader outlook are able to adjust to requirements of their environment better and faster. Irrespective of its form and the period of lifetime when it is taken, education is the most significant factor of an individual's personal development, and the level of education achieved protects their holders against unexpected ups and downs, and this way enables them to enjoy full life.

It has been stated in the present paper that schools tend to prefer factual knowledge to developing creativity at all cycles of education, which results in a high level of graduates' theoretical knowledge but low ability to apply this knowledge in practice. On the other hand, employer entities' opinions recorded in the research indicate the need for strategies in education oriented to developing a holistic personality: i.e. one that is assertive, decisive, adaptable, and flexible. Research outputs show that employers find serious deficiencies in their employees' courteous and polite behaviour when communicating with each other and with clients, and showed dissatisfaction with a low level of their employees' loyalty to the institution. On the other hand, desirable features of character in successful applicants for jobs include intelligence and emotional properties outlined in Table 10.

On the basis of research we have concluded that the abilities that are vital for job adaptation, namely ability to learn; ability to justify and evaluate, ability to cooperate and communicate, ability to accept responsibility, ability to solve problems, as well as features of characters as independence, performance, and creativity are the ones whose development is underrated in vocational school education and training. These personal dispositions could be developed in the course of further education.

The target output of education has to be specified in terms of demands of separate professions and tasks that graduates will have to cope with after completing their studies. This kind of information is the basis for determining educational standards, which will stand for an official norm, while each cycle of education will be oriented towards its fulfilment. This is a demanding process, especially in terms of designing standards and their continuous improvement and updating. But it is the only way to ensure the kind of educational products that meet the needs of the labour market and educational aims of society.

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