

**A FELSŐFOKÚ GAZDASÁGI SZAKKÉPZÉSEKBEN
REJLŐ LEHETŐSÉGEK A KOMPETENCIAFEJLESZTÉS
TERÜLETÉN**

**THE POTENTIAL OF HIGHER-LEVEL VOCATIONAL
TRAININGS IN BUSINESS IN THE AREA OF
COMPETENCE DEVELOPMENT**

KÁRPÁTI-DARÓCZI Judit

Kulcsszavak: *kompetencia, felsőfokú gazdasági szakképzés, munkaerőpiaci elvárások,
munkaerő*

Keywords: *competence; higher-level vocational training in business; labour market demand;
workforce*

JEL kód: *A23, O21, M21, L26, J23*

<https://doi.org/10.33565/MKSV.2022.01.02>

ÖSSZEFOGLALÓ

A gazdasági felsőoktatási intézményeknek a hallgatóik képzése során egyrészt meg kell felelniük a munkaerőpiaci igényeknek, másrészt a Képzési és Kimeneti Követelményekben szereplő kompetenciáikat is fejleszteniük kell.

Ez a tanulmány a gazdasági felsőfokú szakképzésre összpontosít. A tanulmány célja annak bemutatása, hogy a munkaerő-piaci elvárások tükröződnek-e a képzési és kimeneti követelményekben. Ez a publikáció szekunder és primer kutatások alapján mutatja be, hogy a munkaerő-piaci elvárások tükröződnek a Képzési és Kimeneti Követelményekben. Az eredmények azt mutatják, hogy a megkérdezett vállalkozások vezetői a következő kompetenciákat várják el a pályakezdő, gazdasági végzettséggel rendelkező jelöltektől: pontosság, megbízhatóság, teljesítményorientáltság, szorgalom, fejlődőképesség és problémamegoldó készség.

A külföldi tulajdonú vállalatok munkaerőpiaci tudatossága magasabb, mint a magyar vállalatoké.

SUMMARY

When higher education institutions for business and industry train their students, they both must meet the needs of the labour market and develop the competences set out in the Learning and Skills Framework.

This publication focuses on higher-level vocational training in business. The aim of this study is to show whether the labour market expectations are reflected in the Training and Output Requirements. Based on secondary and primary research, this publication presents that labour market expectations are reflected in the Training and Output Requirements. The results show that managers of the enterprises surveyed expect from candidates with a business degree who are starting their careers the following competences: to be punctual and accurate, reliable, performance-oriented, hard-working, and able to work under pressure and have problem-solving skills.

The labour market awareness of foreign-owned companies is higher than that of managers in Hungarian companies.

INTRODUCTION

Challenges of globalisation have put the European Union at a crossroads. The EU responded to these challenges in 2008. First, the European Council formulated the main guidelines in the Copenhagen Declaration. These are: investment into human resources and Life Long Learning (LLL), promoting the creation of high quality education, thereby achieving a knowledge-based society and the paradigm shift. Later on, even more emphasis was placed on the guidelines listed above, and education has become one of the five most important objectives of the Europe 2020 strategy. Specifically, to reduce the early school leaving rate by 10% and to achieve at least 40% of EU residents aged 30-34 with tertiary education (Hungary has committed to 30.3%) (Europe 2020). Yet higher education still plays a subordinate role in convergence efforts and attempts to improve EU competitiveness (Török, 2006).

Education is important for companies because it is the returns on human resources that really determines the performance of an organisation (Drucker, 1992), and it is therefore essential to understand the role of the human factor. Furthermore, the need to adapt to a changing world, to ensure a competitive supply and to launch R&D and innovation projects are among the most important reasons for unlocking the institutional knowledge assets (Bognárné, 2011).

However, the question arises as to what kind of workforce companies need to achieve these goals.

Thus, this study seeks to answer the question of what kind of workforce with the right competences is needed by enterprises. The focus of the research is on students of higher-level vocational training in economics.

The research examines what the job market expects from these recent graduates.

THEORETICAL BACKGROUND

In order to examine the labour needs of firms, it is essential to first analyse the accumulated knowledge and experience of companies (Stiglitz, 1999).

According to Sveiby (2001), human capital consists of knowledge, skills and competence. He also uses the term competence instead of knowledge, as there are different interpretations of the concept of knowledge in the literature (Klimkó, 2001).

According to Mihály (2010), the definition of competence and then of key competence was especially justified by the continuous aging of the European population, increasing migration, the growing importance of individual life paths and the high level of unemployment. Competence is a good way to describe the requirements for corporate and organisational success. The competences required in the company can also be used to derive the expectations of individuals.

The concept of competence is first discussed in a 1965 study by structuralist linguist Noam Chomsky. According to him, competence can be interpreted as a complex system of learned, acquired 'skills', innate (inherent) 'abilities' and motivation. In his view, it is more complex than the sum of ability, skill, motivation and performance.

Some authors approach the concept of competence from the perspective of the individual (student, pupil, employee, manager, etc.), others from the perspective of the organisation (or the daily work schedule, the subject matter to be taught). Two basic types of approaches to competence are summarised by Martin and Staines (1994) in their work *Managerial Competences in small firms*. Competency approaches from the perspective of the individual are referred to as *income approaches*, while approaches focusing on jobs, tasks and areas of competence are referred to as *outcome approaches*.

As the concept of competence has been widely used since the 1990s, yet there was no single definition of competence, the Organisation for Economic Co-operation and Development (OECD) launched the DeSeCo (Defining and

Selecting Key Competencies) programme in 1997 to standardise the concept. This programme provided both an interpretation of the concept of key competences and a list of key areas in addition to the definition. According to the DeSeCo interpretation, a competence is the ability to successfully solve complex tasks in a given context (Mihály, 2010).

The 2006 Recommendation of the European Commission and the Council on 'Key Competences for Lifelong Learning' sets out a European reference framework identifying the key competences that all people need for personal fulfillment and employability in a knowledge-based society.

The Framework identifies the following key competences (2006/962/EC: 13):

- 1) Literacy competence;
- 2) Multilingual competence;
- 3) Mathematical competence and competence in science, technology and engineering;
- 4) Digital competence;
- 5) Personal, social and learning to learn competence;
- 6) Civic competence;
- 7) Entrepreneurship competence;
- 8) Cultural awareness and expression competence.

Although the European Qualifications Framework integrates all these skills, Mihály (2010) argues that the European Union's catalogue of competences does not fully cover labour market requirements. This makes it difficult for higher education institutions to decide what to include in their training portfolios.

According to Krisztián (2010), the concept of competence has been defined in Hungary as the ability to perform a job task in Hungary. Therefore, two dimensions have been created to it: competence expectations related to the occupation / job (as a task profile) and a set of competences related to the employee's personality (as a characteristic competence profile) (Henczi, 20006).

The task profile contains a list of work tasks (task groups, activities, operations) that an employee must be able to perform with a professional qualification. The tasks formulated in this profile have been determined by the experts after a detailed job analysis based on professional conventions, standards and legislation. The attribute competence profile defined the professional, personal, social and methodological competences expected as a result of learning.

General and specific knowledge and skills required to perform the essential functions of the profession / job are included in the category of professional competences.

The concept of personal competences includes the personal qualities that help to carry out work activities efficiently and effectively. It includes two further categories: aptitudes and traits. Aptitudes include the physical, physiological and psychological abilities required to perform the tasks of the occupation. The category of competences consists of personality traits that motivate and organise valuable and effective work.

The components of the personal competence category are: commitment, development, responsibility, perseverance, risk-taking, reliability, tolerance of monotony, autonomy, decision-making, self-discipline, punctuality, flexibility, stress tolerance and resilience, organisation, diligence, and patience.

Social competence consists of those characteristics that describe the direct relationship with the participants in the work activity, the actions related to them, in particular the nature of cooperation, communication and conflict management. Elements: communication and maintenance skills, politeness, decisiveness, initiative, persuasiveness, consensus, helpfulness, motivation, motivation skills, feedback skills, controllability and management skills and tolerance, communication flexibility, presentation skills, effective questioning skills, listening skills, listening skills, drafting skills, grammatical accuracy, conciseness, communication flexibility, comprehensibility, presentation skills, effective questioning skills, listening skills and appropriate metacommunication skills.

Methodological competence is something that characterises the person's working method and style, problem solving and thinking during work activities, and the criteria that describe the person's role in determining the work process, his or her relationship to the activity and the quality of the activity.

The category of methodological competences can be divided into three groups of competences: thinking, problem solving and working methods and style.

The Thinking group contains the cognitive competences required to perform frequently changing, novel and specific tasks, i.e. abstract thinking, recognising connections and contradictions, inventiveness, and the acquisition and application of new knowledge.

The elements of the Thinking competence group are: logical thinking, critical thinking, ability to organise and review, abstract (theoretical) thinking, creativity, inventiveness, application of knowledge, trying out new ideas and solutions, general learning ability, perceptiveness, memory (retention), numerical thinking/mathematical skills, information gathering and reasoning.

Factors in the problem-solving competence group: factors that facilitate the identification of relevant problems, the identification of causes, the successful and planned solution of problems, and the control of their implementation. It is composed of: problem identification and analysis, troubleshooting (diagnosis), planning of solutions, recognition, evaluation and control.

The work method and work style competence group includes the systemic and methodological elements of the competencies typically associated with the occupation, which promote goal-oriented, practical, standard-compliant and environmentally aware work behaviour. These include systems thinking, systematic working, practical task interpretation, intensive work, caution, carefulness, attention sharing, open-mindedness, results orientation and environmental awareness.

The components of methodological competence can be summarised as: abstract thinking, mathematical skills, logical and critical thinking, insight, organisation,

creativity, learning ability, memory, perception, information gathering and reasoning, intelligence, systems thinking, practical task interpretation, attention and point opening, results orientation, and environmental awareness (Zachár, 2010).

Higher-level vocational training

The focus of the research is on higher-level vocational training in economics. It is a highly labour market-accepted practical programme and acts as a bridge between secondary and higher education in most European countries. According to the literature, this role is generally not to help the disadvantaged to catch up, but to open up higher education and demanding jobs for those with and without qualifications (Gibson, 1998; Mihály, 2010, Krisztián, 2010). In contrast, Hungarian higher vocational education has not really succeeded in integrating into the Bologna education structure. This is perhaps due to the fact that this training has a dual purpose. The first is to prepare students for a BA, the second is to acquire knowledge that can be put into practice and is demand-driven, i.e. the acquisition of the necessary competences.

Employers' expectations of competences are best known from job advertisements. The conclusion of the research is that job advertisements present a very mixed picture of the perceptions of competences in different organisations. Most companies do not interpret the concept of competence correctly and consider it too abstract. (Gaál et al., 2013). In addition, HEIs have difficulties in adapting to employers' expectations of competences because they can only tell them about their current competence needs and not about their future competence expectations.

However, higher education institutions need to organise their activities in such a way that the students they train have the competences defined in the training framework (and in the Training and Output Requirements for each degree programme) at the end of their studies.

Overall, therefore, the higher education system needs to adapt both to the labour market expectations and to the Training and Output Requirements set out in the European Framework.

This research examines whether these expectations are met.

METHODS

The variables were collected and the questionnaire was compiled during the pre-research period. Then to verify the assumptions summarized in the research model and formulated in the research hypotheses.

The research seeks to answer the following questions:

To what extent does higher-level vocational training in economics meet the needs of labour-market?

How conscious is the human resource management in enterprises?

The aim of the research is to support the theoretical ideas in the references with empirical data and to collect empirical data on the expectations of the Hungarian workforce in terms of competences.

Two hypotheses were formulated in the research:

Hypothesis 1: In the determination of the output requirements of higher-level vocational training in economics the authors took into account the requirements of the labour market.

Hypothesis 2: There is a relationship between the organisational structure of enterprises and their strategies for staff supply and development.

The study consisted of secondary and primary research. The secondary research examined whether the competences expected by the labour market are reflected in the output requirements of higher education in economics. This involved analysing training and output requirement documents for higher-level vocational training in economics and processing statistical data. The qualitative research was based on the 'Grounded Theory' method. This is a content analysis in which a

triple coding method (open coding, data processing, selective coding) consisting of defined.

The first step of the 'Grounded Theory' method is open coding, which involves searching for and identifying keywords and topics, and exploring their properties and meaning. As many categories as possible should be identified. This dense coding ensures that processing at this stage is truly open to any content that has been captured in the text of the training and output requirements.

The second step is data processing. This involves finding answers to the 'why, when, where, how' questions that will help to develop the concept. This is done using axial coding. The process involves re-reading the text of the training output requirements, highlighting the main messages in each section. The codes appear next to the paragraphs.

The third phase is selective coding. The aim is to explore the relationship between key categories. This process requires a combination of the previous two coding procedures. From the text, key terms are assigned to the categories highlighted in the second step. Since a single term occurs in several key categories, this provides an opportunity to reduce their number and to explore the relationships between them (Schwartz, 2008). The analysis concludes with a test of the relationships that emerge through the exploration of the connections between the key content.

The primary research explored the competence expectations of entrepreneurs. Quantitative, questionnaire-based research was conducted, which provides quantifiable results and allows for statistical processing of the data.

Variables were developed and the questionnaire was designed during the preliminary research. Then, in order to test the hypotheses formulated in the research hypotheses, descriptive and mathematical statistical tools were used to examine the characteristics of the research sample. The following statistical methods were applied using the SPSS software package: absolute and relative frequency series, descriptive statistical indicators (mean, mode, standard

deviation), and hypothesis testing procedure (correlation analysis) to characterise the relationship between the criteria.

SAMPLE OF RESEARCH

To examine the labour market demand, the primary research was carried out by means of a quantitative questionnaire survey among middle and senior managers in Hungarian enterprises.

The first version of the entrepreneur questionnaire, which was compiled on the basis of a literature analysis, was tested by a pilot survey. Middle and senior managers of 12 small and medium-sized enterprises were involved in the testing. The managers were asked to list the key competences expected from a recent economics graduate. Thus, the range of competences listed in the theoretical part was narrowed down in the light of the results of the testing and only the 22 most frequently mentioned competences were asked in the final questionnaire.

Based on the responses, clarifications and corrections received, the questionnaire was evaluated and modified in terms of research methodology.

Respondents were asked yes/no questions, given the opportunity to provide additional textual comments on their opinions/comments, and asked to rate their opinions/comments on a seven-level Likert scale.

Respondents were selected randomly. The response was voluntary. A total of 631 evaluable responses were sampled and processed.

RESEARCH RESULTS

The secondary research was used to describe the competences included in the outcome and examination requirements for higher-level vocational training in economics.

The aim of the secondary research is to show what competences are included in the outcome requirements of this training and how these competences have changed with changes in education. The competences were analysed in the

Borbély (2006) structure. The personal, social and methodological competences in each module were collected and compared with each other.

Based on the study, it can be concluded that the Training and Output Requirements of higher-level vocational training in economics contain the key competencies recommended by the European Commission and the Council, but the structure is not the same.

Table 1. The order of the average of the competencies evaluated by the interviewed company managers

Actual employer expectations	Group of competence ¹	N Valid	Mean	Std. Dev.	Variance	Mode
Ability to work accurately	P	391	5,45	0,785	0,617	6
Reliability	P	434	5,42	0,88	0,775	6
Load capacity, working capacity	P	371	5,12	0,869	0,756	5
Developmental ability, learning skills	P	376	5,11	1,048	1,098	6
Skills of solving a problem	M	391	5,09	1,037	1,074	6
Performance and result orientation	M	396	5,08	0,957	0,915	6
Humility at work	P	400	4,99	1,123	1,26	6
Independence	P	384	4,95	1,052	1,107	6
Stress tolerance	P	397	4,92	0,993	0,986	5
Flexibility	P	440	4,92	0,985	0,971	5
Relationship building, ability to keep in touch	S	378	4,88	1,151	1,324	6
Communication skills	S	358	4,85	1,082	1,17	5
Creativity	M	338	4,71	1,244	1,546	6
Theoretical expertise, preparedness	PR	419	4,68	1,163	1,354	5
Ability to teamworking	S	400	4,67	1,41	1,988	5
Applying expertise in practice	M	372	4,66	1,159	1,342	5
Computer skills, IT skills	PR	380	4,62	1,335	1,781	5
Proactivity, initiative	M	360	4,45	1,225	1,502	5
Organizational skill	S	361	4,33	1,253	1,571	4
Foreign language skills	PR	352	4,06	1,579	2,492	5
Analytical approach, analytical skills	M	357	4,04	1,381	1,908	4
Ability to motivate other people	S	345	3,74	1,461	2,134	4

¹ Group of competence: PR: Professional, P: Personal, S: Social, M: Methodological

Source: Own calculation based on the primary research entrepreneurial questionnaire

Primary research was used to identify the characteristics of the demand side of the labour market and to present their expectations.

The results of the primary research therefore provide an indication of the competences that business managers expect from graduates in higher-level vocational training in economics.

Managers were asked to evaluate the competences listed on a Likert scale from 0-6 according to how important they consider them to their expectations of new graduates (0: not important at all; 6: essential (Table 1.).

The average scores/values indicating the importance of each competence were generally high.

Table 1 shows that the differences between the means are not very large, i.e. there is not much difference in the importance of each competence, with each competence being considered more important than average, with the lowest mean score being 3.74 (ability to motivate others). However, despite the relatively compressed scale, it is clear that the importance of soft skills is clearly the most important for the business leaders surveyed.

The importance of language skills, at 4.06, is a striking result, given that it is always at the forefront of employers' expectations, both in job advertisements and in the literature. One reason for the low score is perhaps the over-representation of micro and small enterprises in the sample. For them, the problem is generally that most are less open to foreign markets than medium-sized or large companies. The importance of foreign language skills is therefore neglected.

Labour market awareness of the leaders surveyed

The labour market awareness of the executives was also explored in the analysis of the labour demand of the companies.

The survey revealed that a quarter of managers (26.3%) prepare a recruitment and workforce development plan (Table 2.).

Table 2. Distribution of responses according to their workforce replacement and development habits and ownership structure

Ownership structure	Preparation of the recruitment and development plan		Sum
	No	Yes	
Hungarian owner	78,3%	21,7%	100%
Foreign owner	53,4%	46,6%	100%
Sum	73,7%	26,3%	100%

Pearson's $\chi^2=30,713$ Level of significance= 0,000 Cramers's V= 0,221

Source: Own calculation based on the primary research entrepreneur questionnaire

The analysis did not show a correlation between firm size indices (number of employees and turnover size) and the preparation of workforce replacement and development plans, so firm size categories do not differ significantly between groups that prepare and do not prepare workforce development plans.

In contrast, significant differences are found between ownership structure and the level of development of the replacement strategy. The Cramer V-index is 0.221, indicating a weak but significant relationship between ownership structure and the propensity to prepare a workforce reallocation and development plan. Thus, with 99% confidence, it can be concluded that foreign-owned firms are more likely to prepare a plan than Hungarian-owned firms. Thus, the emergence of foreign ownership has increased the likelihood of preparing a replacement plan. It means, Hypotesis 2 is partly confirmed.

DISCUSSION

Comparing the results of the primary research with the secondary sources, it can be concluded that the competences most frequently mentioned by employers were reliability, punctuality and autonomy, but not workload, learning and development, organisation and stress tolerance. However, leadership, flexibility and decision-making (which are included in the Training and Output Requirements) are not important requirements for employers.

The gap between employers' expectations and the Training and Output Requirements for social competences is even greater. The ability to maintain and build relationships was the only common element. In addition, the competency elements of proficiency, conciseness and clarity identified in the training and output requirements were not mentioned by employers, who preferred communication, teamwork, proactivity and the ability to motivate others.

Creativity, analytical skills, as well as the ability to apply expertise in practice, are among the methodological competences mentioned in both employers' expectations and Training and Output Requirements.

The ability to think logically appears as a requirement in the Training and Output Requirements, while humility at work is only a requirement of employers.

Overall, it can be concluded that the majority of the competences required by the labour market are found in the Training and Output Requirements. Thus, Hypotesis 1 is confirmed.

The difference in wording and the level of detail of the competences is most noticeable for the different competences. Thus, it can be concluded that labour market expectations have been taken into account by professionals in the formulation of the Training and Output Requirements. In many cases, the problem is more pronounced in the accountability of training, where competences are also indicated, but this is difficult to follow, especially in the oral examination.

CONCLUSION

The study of Training and Output Requirements showed that they reflect the competences expected by the labour market.

The responses from enterprises showed that a quarter of enterprises prepare recruitment and development plans. However, foreign and majority foreign-owned enterprises are over-represented among enterprises that prepare

workforce development plans, while Hungarian and mainly Hungarian-owned enterprises are significantly under-represented.

The labour market mainly requires training institutions to develop the practical applicability of professional skills. To this end, internships should be given a prominent role and much more attention should be paid to the preparation of internships in enterprises. This requires closer cooperation between the labour market and higher education.

It is possible that those organisations that maintain closer links with higher education institutions, thereby gaining a deeper knowledge of the competences of new entrants to the labour market and, where possible, participating in their training, will be successful in their workforce development and supply activities. In order to explore this, it is worth exploring in the future the existence of cooperation between enterprises and higher education institutions and the possibilities of expanding it.

REFERENCES

1. Bognárné L. K., 2011. A felsőoktatási könyvtárak szerepe a tudásmegosztásban. *Tudományos és Műszaki Tájékoztatás* 58.(9). Elérhető: <https://tmt.omikk.bme.hu/tmt/article/view/869/10650>
2. Borbély, T. B., 2006. A kompetencia fogalma a szakképzésben és a foglalkoztatáspolitikában. *Munkaügyi Szemle* 2006. 05/0304 Budapest. Elérhető: http://www.munkaugyiszemle.hu/sites/default/files/Borbely_Tibor_Bors.pdf
3. Chomsky, N., 1965. *Aspects of the Theory of Syntax*. Cambridge: The MIT Press
4. Drucker, P. F., 1992. *Managing the Non-Profit Organization*. New York: Harper – Collins

5. Gaál, R., Diósi, E. and Benedek, Sz., 2013. Mindenki a kompetenciáról beszél. *Munkaügyi Szemle*, 57(3) 32-40. Elérhető: <https://www.munkaugyiszemle.hu/mindenki-kompetenciarol-besz-el>
6. Gaskó, K., 2010. Autonómia és felelősségvállalás. Áttekintés az Országos Képesítési Keretrendszer számára. OFI TÁMOP-4.1.3-08/1-2008-0004. A felsőoktatási szolgáltatások rendszerszintű fejlesztése. Budapest, 2010. Elérhető: https://ofi.oh.gov.hu/sites/default/files/ofipast/2010/04/3_1_7_gasko.pdf
7. Gibson, R. (ed.), 1998. Rethinking the Future. London: Nicholas Brealey Publishing. Rethinking the Future. Elérhető: https://books.google.hu/books?hl=hu&lr=&id=igR9DAAAQBAJ&oi=fnd&pg=PT12&dq=Gibson+Rethinking+the+Future&ots=e8PbGr_wHe&sig=2vBIQU3I9RtWH1ytKxbz5fPZK6Q&redir_esc=y#v=onepage&q=Gibson%20Rethinking%20the%20Future&f=false
8. Henczi, L., 2006. A kompetenciamodell – szakértői szemmel. *Szakképzési Szemle* 22(4), 37-50. Budapest. Elérhető: <https://szaklapok.nive.hu/index.php/szaklapok/article/view/115>
9. Kárpáti-Daróczi, J., 2017. Possibilities of non-university higher vocational trainings in competence development. In: Berényi, László (ed.) *Management Challenges in the 21st Century*. Volume IV: Focus on PhD Studies Saarbrücken, Germany: Lambert Academic Publishing (LAP), (2017) pp. 57-84., 23 p
10. Klimkó, G., 2001. *A szervezeti tudás feltérképezése*, PhD értekezés, Budapesti Közgazdaságtudományi és Államigazgatási Egyetem, Budapest.
11. Krisztián, B., 2010. A tanácsadói kompetencia körül, *Tudásmenedzsment*, 11(1), 10-18.
12. Martin, G. & Staines, H., 1994. Managerial Competences in Small Firms. *Journal of Management Development*, 13(7), 23-34. Elérhető: <https://doi.org/10.1108/02621719410063396>

13. Mihály, I., 2010. Nemzetközi tapasztalatok az Európai Képzési Keretrendszer munkálatai közben. Budapest: *Iskolakultúra*, 2010(5-6) 11-32. Elérhető: <https://ojs.bibl.u-szeged.hu/index.php/iskolakultura/article/view/21023>
14. Stiglitz, J. E., 1999. Knowledge in the Modern Economy, London: The economics of the knowledge driven economy, Department of Trade and Industry and the Centre for Economic Policy Conference, 27 January 1999.
15. Sveiby, K. E., 2001. Szervezetek új gazdagsága: a menedzsel tudás. Budapest: KJK – KERSZÖV Jogi és Üzleti.
16. Török, Á., 2006. Az európai felsőoktatás versenyképessége és a lisszaboni célkitűzések. Mennyire hihetünk a nemzetközi egyetemi rangsoroknak? *Közgazdasági Szemle*, 53(4), 310-329. Elérhető: <http://epa.oszk.hu/00000/00017/00125/pdf/02torok.pdf>
17. Zachár, L., 2010. A szak- és felnőttképzési alrendszer OKKR - adaptációjának táblázatos összefoglalása és értelmezése. OFI TÁMOP-4.1.3-08/1-2008-0004. A felsőoktatási szolgáltatások rendszerszintű fejlesztése. Budapest, 2010. Elérhető: <http://www.epa.oszk.hu/00000/00011/00148/pdf/2010-05-06.pdf>
18. 2006/962/EK: Az Európai Parlament és a Tanács ajánlása az egész életen át tartó tanuláshoz szükséges kulcskompetenciákról. *Az Európai Unió Hivatalos Lapja*, 2006.12.30., Brüsszel. Elérhető: <https://eur-lex.europa.eu/legal-content/HU/TXT/PDF/?uri=CELEX:32006H0962&from=DA>