

[DOI: 10.20472/TEC.2019.007.006](https://doi.org/10.20472/TEC.2019.007.006)

AGNIESZKA HERDAN

University of Greenwich, Business School, , United Kingdom

MAGDALENA MARIA STUSS

Jagiellonian University, Institute of Economics, Finance and Management , Poland

SHAPING THE COMPETENCES OF GRADUATES OF HIGHER EDUCATION FOR THE NEEDS OF THE EU LABOUR MARKET - CASE STUDY OF BUSINESS SCHOOL STUDENTS

Abstract:

It is a well-known fact that undergraduate students have to be equipped with relevant types of key competencies in order to be successful in the job market. Complex challenges that companies face in today's world and the fast development of technology shift employer's expectation for knowledge towards competency and abilities to use skills and talents (European Commission, 2010). Higher Education Institutions need to create a curriculum that will support students to develop a correct set of life long competencies. However, in many cases students struggle to recognize the importance of developing key competencies during their time at University and only focus on key knowledge. That is why Higher Education Institutions struggle to convince students of the value of certain activities which take place within the curriculum.

The aim of this paper is to investigate the perception of Business School Students of key competencies of lifelong learning. The applied research procedure combines analysis of the literature with empirical research and is based upon searching for the answer to the questions about how Business School students view the importance of lifelong learning competencies.

The research shows that the most desired lifelong learning competencies by business programme students are experience, industry expertise, certificates, awards confirming completion of studies/programs/skills, followed by technology competencies and cultural awareness.

Keywords:

higher education, competences, employment, unemployment, job market

JEL Classification: A23, E24, J24

1. Introduction

In recent years higher education systems have faced growing pressure and various challenges about how to prepare students for the labour market not only with discipline-related knowledge but also with competencies that will allow them to embark on successful and lasting career (Orr, Gwosc, & Netz, 2011, Arnove, Torres & Franz, 2013, Braun & Brachem 2015). One of the main goals of the higher education system is to develop professionally competent, service-oriented, principled and productive citizens. Students during their degree should have the opportunity to develop competencies to be employable in the labour market (Jackson & Hancock, 2010, Polymeropoulou & Kameas, 2012, Rožman & Koren, 2013). The continuous and dynamic changes in the labour market impact on employers' expectation as to what competencies they should expect from graduates. This factor needs to be considered when designing a programme curriculum (European Commission, 2010).

The Higher Education Institution needs to develop talented graduates who will be able to adapt to the changing conditions of the job market resulting from global competition. Therefore, it is important that Higher Education Institution identifies key competencies required in the workplace and provides the environment to develop them (Braun & Brachem, 2015, Hwang & Kwon 2019). Highly skilled and competent graduates are perceived as a key factor for driving industrial development and innovation for all companies. Universities need to identify skills that will be useful for their graduates for a lifetime and allow them to succeed in the labour market for different industries (Bratianu & Avramenko, 2015; Bratianu & Vătămănescu, 2017).

There are a lot of factors influencing the possibility of undertaking rewarding jobs by students and graduates that are related to their degree. Supply and demand for business-related jobs plays a important factor in the process. Nevertheless, the quality of education and meeting the expectations of employers play a very significant role and this is the focus of research. A good programme should prepare graduates not only for a good performance when entering a labour market but most importantly for the successful career in the longer term. That is why more attention has been paid in recent years to the importance of various types of competencies required in the labour market.

The rapid development of new technology changes the way we work and requires development of new sets of skills. Some of the competencies become less important and less relevant as the importance of others increases. Although personal characteristics such as talent, education and experience influence how well a person performs in the labour market, the Higher Education Institution can significantly contribute to the development of a successful career and lifelong learning. There are several concerns about how well Higher Education prepares students for graduate employment (Busato et al 2000, Heijke, Meng & Ramaekers 2002, Jackson&Hancock, 2010, Braun & Brachem, 2015). Firstly, what are the key competencies are for lifelong learning and then whether and how these competencies can be developed through higher education systems (Dolton & Makepeace 1990; Leckey & McGuiga 1997,

Belfield, Bullock & Fielding 1999). It is rather difficult to get a straight answer to these two questions due to the heterogeneity of various industries and rapid changes in the nature of the business operation. Students need to be provided with the opportunity to develop key competencies such as the ability to use tools interactively, solve authentic problems, behave professionally, make ethical judgments, interact in heterogeneous groups, communicate effectively, and act autonomously (Karim et al., 2012).

In recent years there are a growing number of high school leavers who enter Higher Education (WEF 2014). So, the quality of Higher education and its ability to provide the necessary skills to find gainful employment is under constant scrutiny. It goes beyond independent and critical thinking (WEF 2014). It has been indicated that embedded ('dual') learning should become part of Higher Education making sure that students acquire the right skills and attitudes for the future (ERT 2017). There are over 400,000 business degree students, over one hundred universities and hundreds of thousands of employers in Poland. The analysis of degree programs, the views of working students, graduates and employers followed by relevant recommendations may have a beneficial effect on the profile and quality of education and future of graduates. The main contribution of this paper is gaining an understanding of the perception of business school students of the key competencies of lifelong learning. What lifelong competencies categories do they regard as crucial for their successful career and which are the most important lifelong learning sub-factors. Finding answer to those research questions can help better understand the professional competencies of graduates and enhance the business school/faculties curriculum.

2. European Union Job (labour/labour) Market

In today's economy, one of the most important determinants for the growth of a business are high skilled employees. The labour market determines the possibilities of acquiring these necessary human resources (Branine & Avramenko, 2015). The competitiveness of the EU economy depends on the availability of a highly trained workforce to whom the properly functioning labour market ensures appropriate incentives. Economic productivity is seen to be maximised when the most demanding positions will be occupied by the most capable and best-educated individuals (WEF 2014).

European labour markets differ in terms of the size and dynamics of change, but the progress of the European Union integration processes results in the unification of employment regulations, personnel policies and workforce practices (Branine & Avramenko, 2015).

On 1 February 2019 Eurostat reported that unemployment in Euro area was at the level of 7.9% (Eurostat, 2019). In addition, the detailed analyses indicate that there are 16.306 million men and women in the EU-28, of whom 12.919 million in the euro area (EU-19) were unemployed in December 2018. In comparison with November 2018, the number of unemployed decreased by 75,000 in both the EU-28 and the euro area.

When compared with December 2017, unemployment fell by 1.533 million in the EU-28 and by 1.174 million in the euro area. The Youth unemployment rates are generally much higher (double or even more than double) than overall unemployment. The youth unemployment rate in the EU-28 sharply declined between 2005 and 2007, reaching its minimum level of 15.1 % in the first quarter of 2008. The economic crisis, however, severely hit youth employment. From the second quarter of 2008, the youth unemployment rate has taken an upward trend peaking in 23.9 % in the first quarter of 2013, before receding to 16.2 % at the end of 2017. The EU-28 youth unemployment rate was systematically higher than in the Euro area between 2000 and mid-2007. Since then and until the third quarter of 2010 these two rates were very close. Afterwards, the indicator moved more sharply in the EU-19 than in the EU-28, first downwards until mid-2011, then upwards until the end of 2012. In the middle of 2012, the euro area youth unemployment rate overtook the EU-28 rate, and the gap increased until the end of the year. The gap became even larger in the second part of 2013 and during 2014 and 2015 when the rate for the euro area went down less than the rate for the EU-28. The gap remained at a relatively high level during 2017 (Eurostat, 2018).

The highest employment rates, for people not in education or training alongside their employment, in 2017 were recorded for those who had graduated with a tertiary education (ISCED levels 5–8), while lower employment rates were recorded for those with an upper secondary or post-secondary non-tertiary education (ISCED levels 3 or 4). Note that recent graduates with a vocational upper secondary or post-secondary non-tertiary education (hereafter referred to as ‘vocational graduates’) systematically recorded higher employment rates than those with a general upper secondary or post-secondary non-tertiary education (hereafter referred to as ‘generalist graduates’). As such, it appears that apprenticeships, internships, industrial placement and other kinds of education programmes and initiatives that equip students with the knowledge, know-how, skills and/or competencies required for a particular occupation increase the likelihood of recent graduates being able to find a job (Eurostat, 2019).

The proportion of recent graduates¹, who are undertaking education or training alongside their employment varies depending on their level of educational attainment and this may influence the employment level of recent graduates. The EU-level of graduate employment those who left education or training during the last three years (2015-2017), shows that for those with a tertiary education it was 82.8 % in 2017, while the corresponding rate for vocational graduates was 6.7 percentage points lower. By contrast, the employment rate for all graduates (regardless of the type and level of study)² was considerably lower, at 63.8 %, or some 19.0 percentage points below the corresponding figure for tertiary graduates (Eurostat, 2018a).

¹ It should be noted that the indicator ‘employment rate of recent graduates’ presented in this paper refers to students who have graduated within the last one to three years and meeting two criteria, namely:

- being in employment, and;
- not in any further (formal or non-formal) education or training (during the four weeks preceding the survey).

² This include undergraduate, MA, MSC and MBA students

Factors determining youth unemployment can be divided into two groups. The first group includes aspects related to the economic condition of the region, the professional activity of young people in the labour market and their exposure to economic policy or the demographic situation. The other factors are of a subjective nature, associated with the attitudes and activity of young people themselves in the labour market, its relation to unemployment and professional aspirations (Pasternak-Malicka, 2014). Most often, it is indicated that the main reason for difficulties in finding a job is lack of the opportunities on the domestic market. This is due to the high overall unemployment rate. It applies to all professional groups, ages and people with different levels of education, although to a different degree. Problems with finding a job result from the aforementioned bad situation in the labour market where features such as a high level of unemployment, lack of relevant professional experience, lack of relevant employability skills, a small level of work discipline; significant mobility of young people, manifest, inter alia, in a high disposition to change jobs, thus exposing employers to additional costs. This has been confirmed by REED (2018a) research. They identified the number of factors that prevent students from obtaining graduate employment and one of the most important as lack of relevant lifelong competencies and lack of experience.

3. Competencies and skills

Skills and competencies play an integral role in a successful professional career. However, the literature shows that this is a polysemic concept, the definition of which is difficult and not consensual.

‘Competence’ is usually understood as ‘the ability to do something that is needed, skills’ (Longman Dictionary, 1989). In this case, competence is an equivalent of skills. In turn ‘ability’ should be associated with ‘the fact of having the skills, characteristics or other qualities needed to do something’. Based on these definitions, it is difficult to define a clear line between these concepts. Hartog (1992) describes competencies as the talents, skills, and capabilities of graduates that contribute to productivity gains and are a key element for sustainable economic growth and development of the economy. Lee and Park (2017) defined competence as the basic ability required to perform the necessary actions to solve a particular problem. Competence can also be described as the individual ability to adapt to changes in society (Kim & Kim 2016).

Competencies relate to the integrated use of abilities, personality traits, as well as acquired knowledge and skills in order to achieve the successful completion of a complex mission within the enterprise (Lévy-Leboyer, 1999). On the other hand, they can be seen as worker's ability to act to achieve the intended purpose under the given conditions by means of ‘specific measures’ (Thierry et al, 1994, Filipowicz, 2004). They are not, therefore, synonyms of qualifications in the ordinary sense or equivalent to formal education or diploma. Competencies are the characteristics of a person, which

she/he uses in an appropriate and consistent way to achieve the expected results. These qualities include knowledge, skills, certain aspects of self-perception, social behaviour, and character traits, thought patterns, attitude and way of thinking. Competencies are more strategic than operative and support achieving the strategic goals of the organisation (Bratnicki, 2000).

It can be stated that competence is a set of knowledge and skills used to achieve specific goals and it depends to a large extent on a specific context. It should, therefore, be described as accurately as possible, taking into account this context, and in particular, the resources, means, and conditions for the implementation of the action, the practical use and the expected results.

Masten and Coatsworth (1998) indicate that competencies have a `dual` meaning. Firstly, there is a track record of achievement (competent performance) and secondly, the individual has the capability to perform well in the future when understood as good adaptation and not necessarily superb achievement. Overall there is no one general classification of competences. In addition, as there are many factors influencing competencies it is extremely difficult to measure them with means of traditional procedures (Heijke et al., 2010).

Generic competencies consist of skills needed in a range of contexts, positions, and functions which can be used in an interdisciplinary way to apply and to transfer knowledge as well as to manage unanticipated requirements (Green, 2009; Heijke, et al 2003b). They are seen as central learning outcomes of higher education, which graduates, and job holders must possess to master the modern working environment (OECD, 2013b)

Jin (2013) stress that in Higher Education context competence is a student`s ability to secure graduate jobs as well as the capability to perform tasks in specific fields. It is, therefore, the responsibility of the Universities to create a curriculum that will enhance students` competence, knowledge, and skills needed in today's business environment. Universities must support and boost students` competencies that will help them embark and succeed in their chosen career pathways.

Becker (1964) suggested that in the context of higher education, competencies should be divided into two categories. The first group – generic competencies that are a combination of competences providing a strong basis for further learning including learning abilities, problem-solving and analytical competencies. And the second group - specific competencies that consist of vocational or field-specific ones. Bunk (1994) indicated four groups of competencies: specialised, methodological, participative and socio-individual. On the other hand Kellermann (2007) classifies competencies according to five groups, featuring an academic personality, general–academic (represented through the competence broad general knowledge), scientific–operative (represented through accuracy, attention to detail), personal–professional (represented

through field-specific knowledge of methods), social-reflexive (represented through leadership) and physiological-handicraft (represented through manual skills). In addition, competencies are often classified according to specific setting such as industry, job, company. (Heijke et al., 2003a, Heijke et al., 2003b).

Graduates need to be given opportunities to gain not only knowledge in the field of specialization but should also be provided with the opportunity to develop skills that will allow them to succeed in the graduate job market. The effectiveness of University programmes can be measured through the competencies of its graduates, the knowledge and skills the graduates acquired and can apply in the workplace (Plantilla, 2017). The knowledge and skills that the graduates possessed can be determined through the feedback from employers of the graduate's performance in the work situation. The outcomes of any educational programs can be best measured in terms of how well the graduates applied their university acquired knowledge and skills in real work situations.

4. Importance of lifelong learning competencies

Lifelong learning competencies are both formal and informal learning opportunities in people's lives in order to foster the continuous development and improvement of knowledge and skills needed for employment and personal fulfilment (Collins, 2019). In the aspect of education lifelong learning `is conducted beyond school with the main goal being to improve personal or professional development` (REED, 2018b).

The concept of 'lifelong learning' has been the subject of discussion since 19th century. Firstly, as 'lifelong education' and then replaced in pedagogical theory with the term 'lifelong learning' (Karamatić Brčić, Perin, 2014). The importance of lifelong learning has been advocated by UNESCO, who was the major force in encouraging global discussions on the subject (Popescu, 2012). In 1998 European Council emphasised the importance of the concept of lifelong learning and clarified the aims of the existing notions of lifelong learning. It identified four pillars of lifelong learning for the EU: employability, entrepreneurship, adaptability and equal opportunities (European Commission, 1999).

The concept of lifelong learning was indicated as one of the key instruments for realising the objectives of Lisbon Treaty as a response to rising globalization, the growing importance of Information and Communication Technologies (ICT) and therefore changes in the expectation of job market (The Lisbon Special European Council, 2008). It also called for reforming the education system in Europe to embed lifelong learning skills in the curriculum. The Commission set up a Lifelong Learning group to contribute to enhance innovations and build knowledge across Europe (EACEA, 2003).

In 2006 the European Council presented a framework of key competencies for lifelong learning (EU, 2006). It provided a common European reference framework on key

competencies for policymakers, education and training providers, the social partners and learners themselves and provides support for other related policies such as employment and social policies affecting youth (EU, 2006). In June 2016 the Commission launched the Review of the 2006 Recommendation on Key Competencies for Lifelong Learning with the aim to update them and further support key competences development across Europe. The Review led to the adoption of the new Recommendation on Key Competences for Lifelong Learning in that was adopted in May 2018 (EU 2018a). It describes Recommendations on Key Competences for Lifelong Learning, Commission Staff Working Document on Key Competencies for Lifelong Learning and Factsheet on Key competences for lifelong learning. The European Reference Framework of Key Competences for Lifelong Learning defined eight key competencies (Hozjan 2009, EU 2018a):

- Communication in the mother tongue;
- Communication in foreign languages;
- Mathematical competence and basic competencies in science and technology;
- Digital competence;
- Learning to learn;
- Social and civic competences;
- Sense of initiative and entrepreneurship; and
- Cultural awareness and expression.

As a result of the above activities, Higher Education Institutions need to integrate into the curriculum delivery `lifelong learning skills`, the one that go beyond specific knowledge or occupational areas. Developing transferable skills are essential to an individual's success regardless of occupation or life role and acquiring lifelong learning competencies should happen in parallel to learning core content, basic skills as well as more advanced analytical and thinking skills (Silva 2008). Some of the core lifelong learning skills are critical thinking, effective communication, collaboration and community contribution (WIDS, 2019).

5. Research Methodology

The starting point for the conducted research was the Eurostat (2018b) analysis form, which shows that:

- The most common reasons respondents give for not completing their education or training courses is their wish to start working or their lack of interest in the chosen course,
- Only 15 % of those who recently started to work received any help from the public employment office to find work,
- The most common method of finding a job is to ask friends or relatives,
- Only about a quarter (23 %) of young people are either willing to move residence or have done so in order to find or have a job,
- Having work experience while in education correlates with higher employment rates, but not with higher job quality.

On the other hand, the Institute for Employment Studies (BIS, 2015) indicates that:

- The graduate labour market affects employers in different ways.
- Employers want graduates who fit their business-specific definitions of 'quality'.
- Attracting suitable applicants and/or numbers of applicants is a key challenge.
- Targeting universities for attraction is helpful however practice between institutions differs.
- Effective screening and shortlisting are a key challenge.
- Work experience is of high interest to employers.
- Finding applicants with relevant competencies and skills proves quite a challenge

The conducted literature review demonstrates that there is an omission of investigation of job competency standards for young people indicated by the EU. The previous research covers only the generic population of member countries. Although, it is well known that a significant group of business degreed graduates every year enter the labour market, the aspects of employing Business School Graduates were not investigated yet.

Based on the above the research gap has arisen around what type of competencies will allow business graduates to secure the preferred graduate job and have a successful career in the selected discipline. This indicates the main objectives of this research - to explore the perceptions of Business School Graduates of key competencies of lifelong learning that should be included in the programme curriculum to help graduates to be more employable. This objective lead to the following research questions:

- What is the most important group of lifelong learning competencies that should be in the curriculum?
- What are the top 3 specific lifelong learning competencies that are essential in the delivered programmes within Business School?
- What are the least regarded lifelong learning competencies within Business School programmes?
- What are the most essential competencies in each of the group of lifelong learning competencies?

The adopted research strategy allowed for the investigation of the current understanding and perception of lifelong learning competencies by Business School Graduates and can lead to the development of good practices in education programmes of Business Schools. The outcome of the research can indicate the improvement directions for curriculum customised according to the students' needs.

The starting point was a literature review and comparative analysis of the results of similar studies. Next, during the research process, new questions arise, and new research approaches have been created or old adopted to the new needs. In addition, data collection included the aspect of joint participation, the inductive bottom-up analysis and the interpretation of the collected data. These assumptions made it possible to conduct the collection of thoughtful and complete data as they originate from numerous sources and make triangulation possible. The validation of the accuracy of information

(approach proposed by Creswell, 2013) consisted of a several stages. In the beginning, the data for analysis were prepared by ordering the data from the selected lifelong learning competencies, and afterwards dividing them into a specific category, depending on the characteristics. The second step was to review all results to acquire general information and reflect upon the common meaning of individual information. This has been followed by detailed analysis, which had been preceded by explaining the information obtained in the context of previously posed research questions and the presentation of individual lifelong learning competencies. The above-mentioned procedure increased the accuracy of results because, it combined information from various sources, and leads to the allocation of data to specific categories of competencies. The last stage of the analysis of data was the interpretation of the results. The adoption of the above-mentioned methodology made it possible to create a set of recommended good practices for the Business Schools curriculum design³.

Data collection was based on a questionnaire consisting of closed questions. Questionnaires were distributed using an offline method. It was assumed that there are no good or bad answers and filling out the questionnaire will allow the respondents to understand their own strengths, competencies, and expectation of the labour market and areas of developing key competencies. The adopted method allowed a numerical description of trends, attitudes, and opinions in a selected group of participants who correctly filled in the questionnaires.

The core key competencies of lifelong learning measurement tool were selected, modified, and reconstructed according to the current students' characteristics. Each item was structured for evaluation using a 7-point scale to evaluate the usefulness of specific competencies. Where one point for 'not needed,' two points for 'not very useful,' three points for 'somehow useful,' four points for 'useful,' five points for 'very useful,' six points for 'extremely useful' and seven 'necessary/essential. Based on European Reference Framework of Key Competences for Lifelong Learning 9 key competencies categories of lifelong learning has been selected (see Figure 1) and relevant sub-factors were reconstructed.

³ Further studies are currently carried within a parallel work in progress that will form a monography

Figure 1 Key competencies of lifelong learning

categories	Sub-factors
Communication in the mother tongue	Active listener
	Ability to be influential/persuasive
	Ability to provide feedback
	Ability to communicate effectively
	Negotiation skills
	Good self-presentation skills
Ability to communicate in foreign languages	English language
	Other foreign languages
Mathematical and science competencies	Analytical skills
	Ability to identify key information within information overload
	Numeracy skills
Technology competencies	Ability to use technology/computer/network, MS Office
Ability to learn	Quick learner
	Problem-solving
	Ability to draw conclusions
	Quick decisions maker
	Clear career path
	Participation in courses and training (CPD)
Social and civil competencies	Human resource management
	Ability to build relationships with customers
	Ability to be team player
	Interpersonal skills
	Ethics
Initiative and entrepreneurship	Empathy
	Ability to organize work and effective time management
	Flexibility and adaptability
Cultural awareness	Entrepreneurship
	Ability to work with people from different backgrounds, countries, cultures
Additional competencies	Industry expertise and directional expertise adequate to the current needs of enterprises
	Certificates, awards confirming completion of studies, programs, specific skills
	Experience

Source: EU (2006)

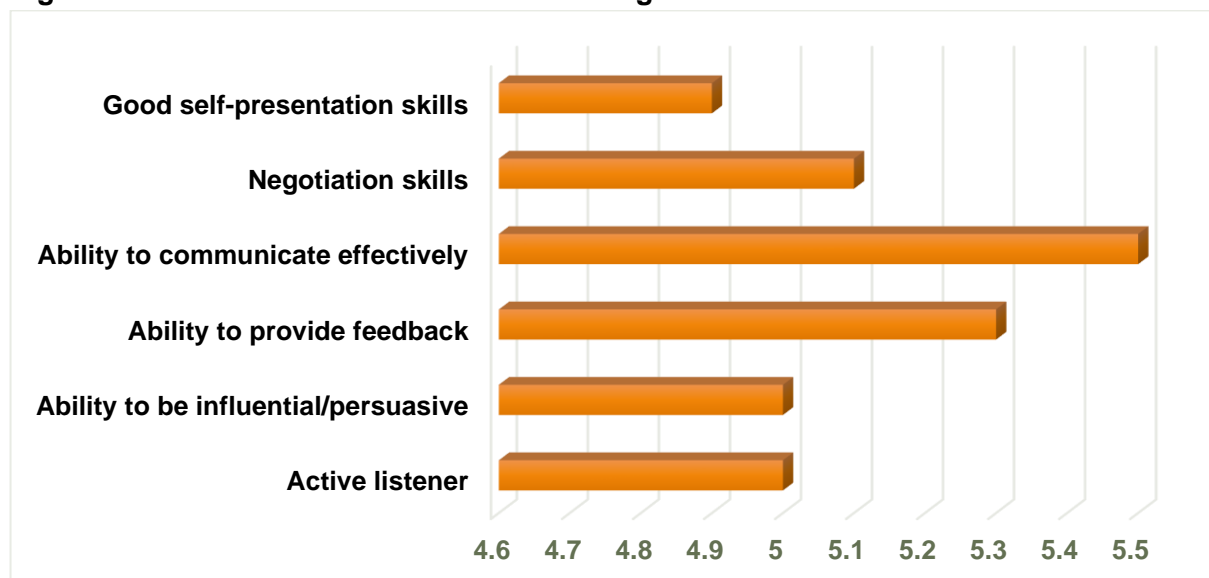
During research probability sampling techniques have been used, as it can specify the probability that a participant will be selected from a population. Obtaining this sample with probability techniques gives reasonable confidence that a sample is representative

of the population. 54 students of the last semester of business studies took part in the research. They were both full-time and part-time students between the ages of 23 and 25.

6. Results

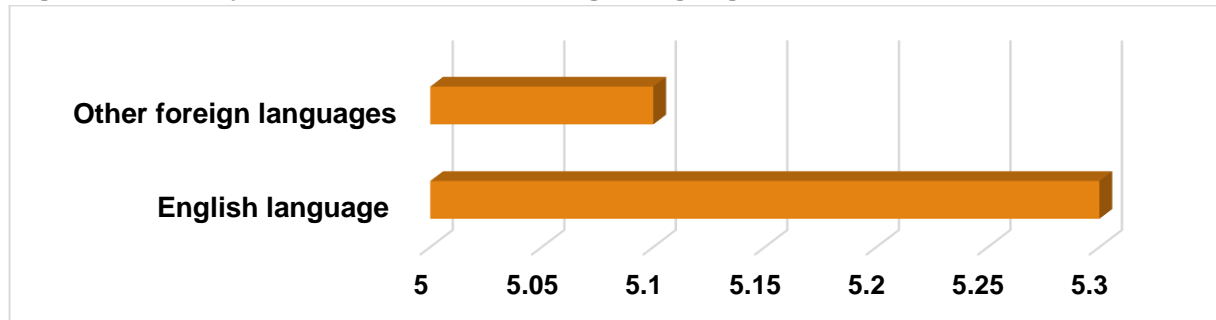
For the analysis of **Communication in the mother tongue** competencies (Figure 2) has been divided into Active listener, Ability to be influential/persuasive, Ability to provide feedback, Ability to communicate effectively, Negotiation skills, Good self-presentation skills. The average significance for this category was 5.1, with Ability to communicate effectively being rank as a most important skills (5.5 with median of 6), flowed by ability to provide feedback (5.3 with median of 6) and negotiation skills (5.1 with median of 5).

Figure 2 Communication in the mother tongue



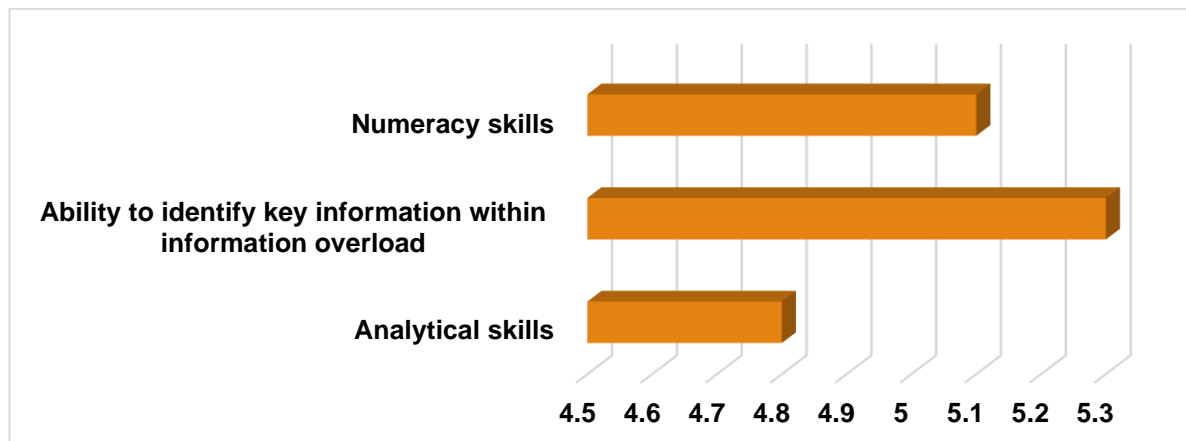
Source: Own calculation

For the analysis of **Ability to communicate in foreign languages** competencies (Figure 3) has been divided into English language and Other foreign languages. The average significance for this category was 5.1, with English language being rank as most important skills (5.3 with median of 5), flowed by Other foreign languages (5.1 with median of 5).

Figure 3 Ability to communicate in foreign languages

Source: Own calculation

For the analysis of **Mathematical and science** competencies (Figure 4) it has been divided into analytical skills, ability to identify key information within information overload and Numeracy skills. The average significance for this category was 5.1 (median 5), with Ability to identify key information as a most important skills (5.3 with median of 4), followed by Numeracy skills (5.1 with median of 4) and Analytical skills (4.8 with median of 4).

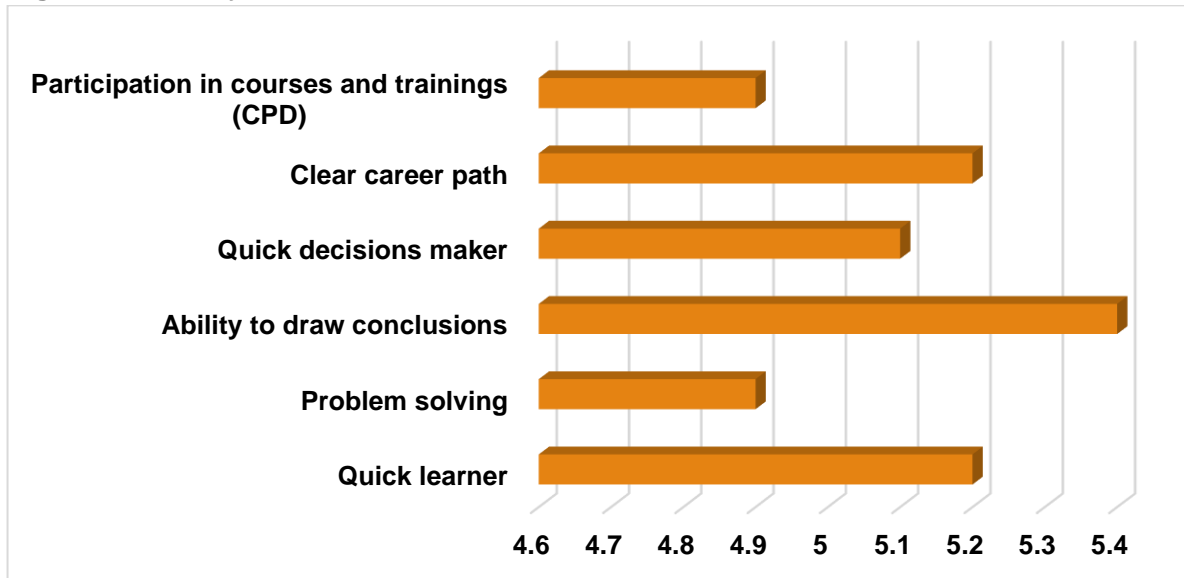
Figure 4 Mathematical and science competencies

Source: Own calculation

With the **Technology competencies** significance of the ability to use technology/computer/network, MS Office was rank at 5.2 and median 5.5.

Ability to learn (Figure 5) has been evaluated by 6 sub-factors Quick learner, Problem solving, Ability to draw conclusions, Quick decisions maker, Clear career path and Participation in courses and trainings (CPD). The average significance for this category was 5.1 (median 5), with Ability to draw conclusions being rank as a most important skills (5.5 with median of 6), followed by quick learner (5.2 with median of 5) and Clear career path (5.2 with median of 5).

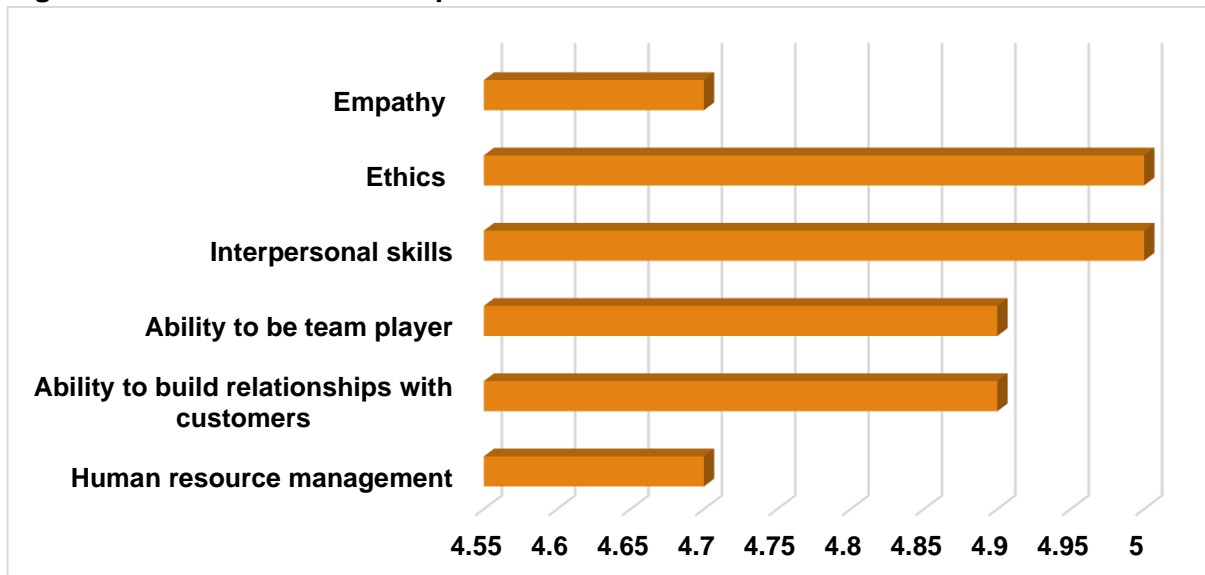
Figure 5 Ability to learn



Source: Own calculation

Social and civil competencies (Figure 6) has been evaluated by 6 sub-factors Human resource management, Ability to build relationships with customers, ability to be a team player, Interpersonal skills, Ethics and Empathy. The average significance for this category was 4.9 (median 5), with Interpersonal skills and Ethics being ranked as a most important skills (5.1 with median of 5), followed by Ability to build relationships with customers, Ability to be team player both rank at 4.9 (with median of 5).

Figure 6 Social and civil competencies

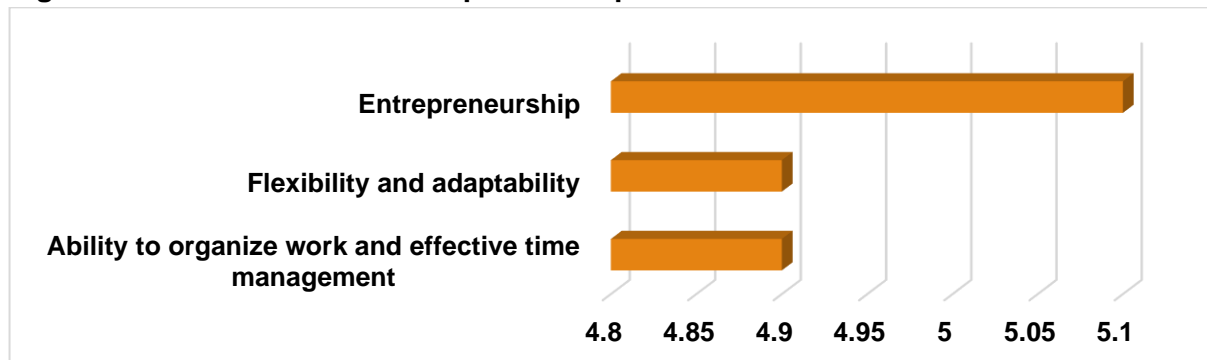


Source: Own calculation

For Initiative and entrepreneurship (Figure 7) by 3 sub-factors Ability to organize work and effective time management and Flexibility and adaptability and Entrepreneurship. The average significance for this category was 5 (median 5), with Entrepreneurship being ranked as a most important skill (5.1 with median of 5), followed by Ability to

organize work and effective time management and Flexibility and adaptability both rank at 4.9 (with median of 5).

Figure 7 For Initiative and entrepreneurship

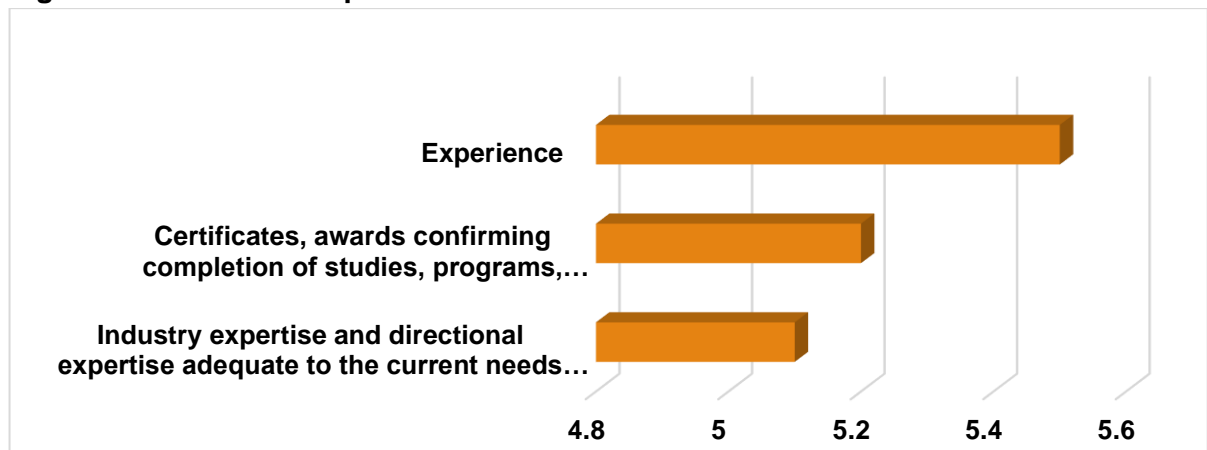


Source: Own calculation

The **Cultural awareness** has been defined as the ability to work with people from different backgrounds, countries, cultures. The significance of this competence was rank at 5.1 and median 5.

The last category was **Additional competencies** (Figure 8). Consisting of 3 aspects Industry expertise and directional expertise adequate to the current needs of enterprises Certificates, awards confirming completion of studies, programs, specific skills and Experience. Experience has been regarded as the most important competency (5.5 with median of 5), followed by Certificates, awards confirming completion of studies, programs, specific skills (5.2 with median of 5) and Industry expertise and directional expertise adequate to the current needs of enterprises (5.1 with median of 5)

Figure 8 Additional competencies

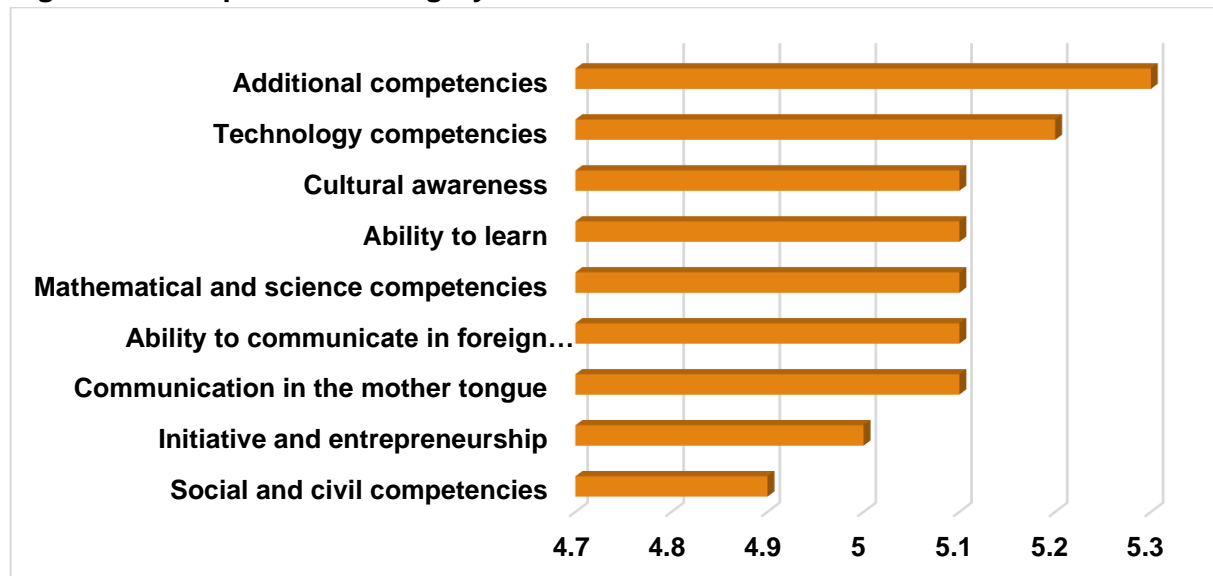


Source: Own calculation

Out of the 9 categories (Figure 9) the highest significance has been given to Additional competencies followed by Technology competencies. As per specific competencies the highest regarded are experience, ability to communicate effectively and Ability to draw

conclusions. As the least important competencies Human resource management and empathy has been indicated.

Figure 9 Competencies category



Source: Own calculation

7. Conclusions and discussions

Universities face challenge of design and implement curriculum that allows students to develop competencies that not only allow graduates to secure their first job but most of all will provides them with good foundation for successful lifelong careers. On one hand it is essential to build students awareness of lifelong learning competencies on the other hand to enhance curriculum by embedding activities that will allow students to develop those competencies during their time at the University. In this study we investigated the perception of business school students of lifelong learning competencies. Conducted research indicates that business school students have an a good awareness of lifelong learning competencies. Out of 9 competencies groups Business School Graduates value the most additional competencies group which includes experience, industry expertise, specific certificates, awards confirming completion of studies, programs, specific skills. This are also the top 3 sub-factors competencies indicated by students. The fourth and fifth competencies sub-factors are Technology competencies and cultural awareness. The least valued are social and civil competencies. The activities that can help develop the top ranked competencies should be embedded in the university degree programmes. Programme leaders need to consider what activities within curriculum would be most suitable to develop those competencies and how to incorporate them within the program. In addition, programme leader should also take into consideration the finding of 'The Future of Work Jobs and skills in 2030 report (UKCES, 2014). It clearly mentions that low-skilled workers will be the most vulnerable and in addition there will be less public funding available for training and upskills due to fiscal constraints. Certain skills need to be developed for high-tech and innovative

business. There will be greater needs and attractive opportunities for high-skilled graduates. More project-based job will arise for which Higher Education Institution will need to help develop specific lifelong skills in addition to the core curriculum. Wide integration of cost-efficient ICT technologies will also mean that some currently existing professions will disappear and new will arise. This gives the opportunity for further research into skills development.

The findings of this research should be considered in the context of several limitations. The data represent only students from one Business School and were collected only for one set of students. There was no distinction between full time and part times students, which could have significant impact as part time students are usually in full time employment and their perception might differ from those who never had a job. Also, the study doesn't distinguish between mature and non-mature students. Further studies should explore these potential differences and investigate the consistency of this effects. In addition, this research can be further expanded by investigating the perception of lifelong competencies by students from other Business Schools not only in Poland but across the whole European Union, It would be also interesting to explore the employers view on lifelong competencies of graduates they decide to employ.

References

- Arbove, R.F., Torres, C.A. Franz, S., (2013) *Comparative Education: The dialect of the global and the local*, 4th Edition, Rowman & Littlefield Publishers
- Becker, G.S. (1964), *Human Capital: A Theoretical and Empirical Analysis, with Special Reference to Education*, University of Chicago, Chicago, IL.
- Belfield, C. R.; Bullock, A. D.; Fielding, A. (1999) *Graduates' Views on the Contribution of Their Higher Education to Their General Development: A Retrospective Evaluation for the United Kingdom. Research in Higher Education*, vol. 40, no 4, pp.409-38
- BIS (2015) *Understanding Employers' Graduate Recruitment and Selection Practices: Main report*, BIS RESEARCH PAPER NO. 231 NOVEMBER 2015, Department for Business, Innovation and skills, http://publications.aston.ac.uk/29398/1/Employers_graduate_recruitment_and_selection_practices.pdf (accessed 19 January 2019).
- Branine, M., & Avramenko, A., (2015). *A comparative analysis of graduate employment prospects in European labour markets: a study of graduate recruitment in four countries*, *Higher Education Quarterly*, vol. 69, issue 4, pp. 342-365.
- Bratianu, C., and Stanciu, Ș. (2010). *An overview of present research related to entrepreneurial university*. *Management & Marketing*, vol.5, issue 2, pp.117-134.
- Bratianu, C., and Vătămănescu, E.M. (2017). *Students' perception on developing conceptual generic skills for business: a knowledge-based approach*. *VINE Journal of Information and Knowledge Management Systems*, vol. 47, issue 4, pp.490-505

- Bratnicki, M. (2000) *Kompetencje przedsiębiorstwa*, Agencja Wydawnicza Placet Warszawa
- Braun, E. M. P, Brachem J.C. (2015) Requirements Higher Education Graduates Meet on the Labor Market, *Peabody Journal of Education*, vol. 90, issue 4, pp. 574-595
- Bunk, G.P. (1994), `La transmisión de las competencias en la formación y perfeccionamiento profesionales en la RFA`, *Revista Europea de Formación Profesional*, Vol. 1, No. 1, pp. 8-14.
- Busato, V.V., Prins, F.J., Elshout, J.J. & Hamaker, C. (2000). Intellectual Ability Learning Style, Personality, Achievement Motivation and Academic Success of Psychology Students in Higher Education, *Personality and Individual Differences*, vol. 29, issue 6, pp. 1057–1068.
- Collins (2019) Collins Dictionary, <https://www.collinsdictionary.com/dictionary/english/lifelong-learning> (accessed 19 January 2019).
- Creswell, J.W.L. (2013), *Qualitative inquiry and research design, choosing among 5 approaches*, Sage Publication
- Dolton, P., Makepeace, G. (1990), Self-employment among graduates, *Bulletin of Economic Research*, vol. 42, issue 1, pp.35-53
- EACEA (Education, Audiovisual & Culture Executive Agency), (2003) Lifelong Learning Program 2007 2013, https://eacea.ec.europa.eu/sites/2007-2013/lifelong-learning-programme_en (accessed 20 January 2019).
- Braun, E.M.P., Brachem, J.C, (2015) Requirements Higher Education Graduates meet on Labor Market. Vol 90, issue 4, pp. 574 - 595
- ERT (2017) European Competitiveness and Industry Benchmarking 2017 European Round Table of Industrialists Competitiveness Working Group, <https://www.ert.eu/> (accessed 13 January 2019).
- EU (2006) EU recommendation of the European Parliament and The Council on key competences for lifelong learning, *Official Journal of the European Union* vol 18, December 2006, L 394/1, <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A32006H0962> (accessed 13 January 2019).
- EU (2018a) Council recommendation on Key Competencies for Lifelong Learning, https://ec.europa.eu/education/education-in-the-eu/council-recommendation-on-key-competences-for-lifelong-learning_en, (accessed 13 January 2019).
- EU (2018a) Commission Staff working document, accompanying The Document Proposal for a council recommendation on Key Competencies for Lifelong Learning, <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=SWD:2018:0014:FIN>, (accessed 13 January 2019)
- European Commission (1999) The European Employment Strategy, Investing in people, <https://ec.europa.eu/social/main.jsp?catId=101&intPagelId=3427>, (accessed 13 January 2019)
- European Commission (2010) Employers` perception of graduate employability, http://ec.europa.eu/commfrontoffice/publicopinion/flash/fl_304_en.pdf, (accessed 20 January 2019)

- European Commission (2016) Key competencies for Lifelong Learning, Recommendation of the members of The European Parliament and The Council, https://ec.europa.eu/education/education-in-the-eu/council-recommendation-on-key-competences-for-lifelong-learning_en, (accessed 20 January 2019)
- Eurostat (2018a) Employment rates of recent graduates, https://ec.europa.eu/eurostat/statistics-explained/index.php/Main_Page, (accessed 23 February 2019)
- Eurostat (2018b) Young People on the labour market -statistics, https://ec.europa.eu/eurostat/statistics-explained/index.php/Main_Page, (accessed 23 February 2019)
- Eurostat (2019) Unemployment statistics, https://ec.europa.eu/eurostat/statistics-explained/index.php/Main_Page, (accessed 23 February 2019)
- Foresight (2017) Future of skills and lifelong learning, Government Office for Science, <https://www.gov.uk/government/organisations/government-office-for-science>, (accessed 23 May 2018)
- Filipowicz, G. (2004) Zarządzanie kompetencjami zawodowymi, Polskie Wydawnictwo Ekonomiczne, Warszawa
- Gale, F., Wojan, T., & Olmested, J. (2002) Skills, Flexible manufacturing technology and Work Organisation, *Journal of Economy and Sociaty*, Vol.41, issue 1, pp. 46-79
- Green, F. (2009) The Growing importance of generic skills, beyond current horizons. https://www.researchgate.net/profile/Francis_Green2/publication/255413713_The_growing_importance_of_generic_skills/links/55686cbe08aec2268301931c.pdf (accessed 23 May 2018)
- Hartog, J. (1992). *Capabilities, Allocation and Earnings*. Boston: Kluwer.
- Heijke, H., Meng, C. & Ramaekers, G. (2002). An Investigation into the Role of Human Capital Competences and Their Pay-Off, Research Memorandum, ROA, Maastricht.
- Heijke, H., Meng, C. & Ramaekers, G. (2003a), `An investigation into the role of human capital competences and their pay - off`, Working Paper ROA-RM-2002/3E, Maastricht University, Research Centre for Education and the Labour Market, available at: <http://arnop.unimaas.nl/show.cgi?fid716> (accessed 15 January 2015).
- Heijke, H., Meng, C., & Ris, C. (2003b). Fitting to the job: The role of generic and vocational competencies in adjustment and performance. *Labour Economics*, vol. 10 issue 2, pp. 215–229.
- Heijke, H., Meng, C. & Ramaekers, G. (2010), `Activating learning environments, student time use and competence acquisition. A study among European Economic and Business Administration students`, in Jürgen, R. and Eerma, D. (Eds), *Economics of Education: Issues of Transition and Transformation*, LitVerlag, Berlin, pp. 75-111
- Hozjan, D. (2009) Key competencies for the development of lifelong learning in the European Union, *European Jaournal of Vocational Training*, No 46 – 2009/1, pp.186 -207

- Hwang S.W., Kwon Y.A. (2019) An Exploration of Curriculum Development Directions Through an Analysis of University Students' Awareness of Core Competence, *The Asia-Pacific Education Researcher*, DOI:10.1007/s40299-018-00429-x
- Jackson D., Hancock P. (2010) Non-technical skills in Undergraduate Degrees in Business: Development and Transfer, *Education Research and Perspectives*, Vol.37, No.1 , pp. 52-84
- Jin, M. S. (2013). An exploratory study on inequality of core competence of college students in Korea. *Educational Sociology*, vol. 23, issue 1, pp.105–127.
- Karamatic Brcic, M., Perin, V. (2014) Reflection on key competencies for lifelong learning, A structural analysis of teachers' study programmes in the Republic of Croatia, *Andragorska Spoznanja*, vol. 20, issue 2, pp, 23-40
- Karim, A. M. Abdul, Abdullah, N., Rahman, A. M. Abdul, Noah, S. M., Jaafar, W. M. Wan, Othman, J., Borhan, L., Badushah, J. & Said. H. (2012). A nationwide comparative study between private and public university students' soft skills. *Asia Pacific Educ. Rev*, vol. 13, issue 3, pp. 541-548.
- Kellermann, P. (2007). Acquired and Required Competencies of Graduates. In U. Teichler (ed.), *Careers of University Graduates: Views and Experiences in Comparative Perspectives*. Dordrecht: Kluwer.
- Kim, S.Y, Kim, Y. K, (2016) A study of the classification of nursing management competencies and development of related behavioural indicators in hospitals, *Journal of Korean Academy of Nursing*, Vol. 46, issue 3 pp. 375 -289
- Leckey, J. F., & McGuigan, M. A. (1997) Right tracks wrong rails: The development of generic skills in higher education. *Research in Higher Education*, vol. 38, issue 3, pp. 365 378.
- Lee, H. W., & Park, S. H. (2017). Analysis of academic competency and development of support program for undergraduate students at Seoul National University. *Core Competency Education Research*, vol. 2, issue 1, pp. 87–105
- Lowden, K., Hall, S., Elliot, D., Lewin, J. (2011) Employers` perception of the employability skills of new graduates – analytical report, University of Glasgow SCRE Centre and Edge Foundation, https://www.educationandemployers.org/wp-content/uploads/2014/06/employability_skills_as_pdf_-_final_online_version.pdf, (accessed 23 May 2018)
- Levy-Leboyer, C. (1999) *La Gestion des competences*, Paris, Editions D`organisation
- Longman Dictionary (1989)
- Masten, A. S., Coatsworth, J. D. (1998). The development of competence in favourable and unfavourable environments. Lessons from research on successful children. *American Psychologist*, vol. 53, issue 2, pp.205–220.
- OECD. (2013a). *OECD skills outlook 2013. First results from the survey of adult skills*. Retrieved from <http://skills.oecd>. (accessed 13 January 2019).
- OECD. (2018b). *Technical report of the survey of adult skills (PIAAC)*. Retrieved from [http://www.oecd.org/site/piaac/Technical%20Report 17OCT13.pdf](http://www.oecd.org/site/piaac/Technical%20Report%2017OCT13.pdf), (accessed 13 January 2019)

- Orr, D., Gwosc, C., Netz, N. (2011) Social and Economic conditions of students life in Europe, Synopsis of Indicators, Final Report, Eurostudent IV 2008 – 2011, Bielefeld, Bertelsmann Verlag
- Pasternak-Malicka M., (2014) Aktywność zawodowa młodych osób na rynku pracy i ich skłonność do podejmowania nieformalnego zatrudnienia.. Economics and Management – 3/2014, pp.127-143
- Plantilla, A. M. (2017), Graduates Performance in the Workplace: Employers" Perspective, Asia Pacific Journal of Multidisciplinary Research Vol. 5 No.2, pp. 186-198
- Polymeropoulou, K., & Kameas, A. (2012). Assessing Non Formal skills through e-portfolio: the VAB project. Procedia-Social and Behavioural Sciences, vol.31, pp. 685-689.
- Popescu, A. (2012) Lifelong learning in the knowledge economy, consideration on the lifelong learning system in Romania from a European Perspective, Revista de Cercetare si Interventie Social, vol, 37, pp. 40 - 76
- Reed (2018a) Young people and employment, Reed in Partnership <http://www.reedinpartnership.co.uk/media/174597/young%20people%20and%20employment%20-%20reed%20in%20partnership.pdf>, (accessed 13 January 2019)
- REED (2018b) What is lifelong learning? <https://www.reed.co.uk/CAREER-ADVICE/WHAT-IS-LIFELONG-LEARNING> (accessed 23 January 2019)
- Rozman, L., Koren, A., (2013) Learning to learn as a key competencies and setting learning goals in active citizenship by knowledge management and innovation, International Conference on Management, Knowledge and Learning , 19 - 21 June 2013, Zdiar, <http://www.toknowpress.net/ISBN/978-961-6914-02-4/papers/ML13-388.pdf> (accessed 20 January 2019)
- Silva E., (2008) Measuring skills FOR THE 21st Century, Education Sector Report, www.educationsector.org, (accessed 13 January 2019).
- The Lisbon Special European Council (2008) Towards a Europe of Innovation and Knowledge, <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=LEGISSUM%3Ac10241> (accessed 10 January 2019).
- Thierry, D., Sauret, C., Monod, N. (1994) Zatrudnienie i kompetencje w przedsiębiorstwie w procesach zmian, przeł. H. Bełżecka, M. Egeman, Poltext, Warszawa
- UKCES (2014) The Future of work, jobs and skills in 2030, <https://www.gov.uk/government/publications/jobs-and-skills-in-2030> (accessed 10 January 2019).
- WEF (World Economic Forum) (2014) The Europe 202 competitiveness Report – Building a more competitive Europe in the Framework of The Global competitiveness and benchmarking Network, http://www3.weforum.org/docs/WEF_Europe2020_CompetitivenessReport_2014.pdf (accessed 10 March 2019).
- WIDS (2019) Lifelong Learning skills in curriculum, Worldwide Instructional Designing System, <https://www.wids.org/RESOURCES/RESOURCE-LIBRARY/ARTMID/1668/ARTICLEID/96/LIFELONG-LEARNING-SKILLS-IN-CURRICULUM>