Abstract. The ever escalating pace of civilizational changes in the social and economic fields, as well as in science and technology triggers a change of employers’ expectations with respect to employees’ competences. Thus, a need has arisen for enterprising and creative employees with the ability of critical and at the same time, creative thinking, with high interpersonal competence, who can obtain and effectively process information and based on that make decisions, and who are real team players, understanding the need for lifelong learning. Such competences have a significant impact on an independent, responsible and auspicious life. The changes led the European Parliament and the Council to adopt a key competence framework to which entrepreneurship and initiative have been, among other competences, classified.

The aim of the article is to define conditions related to creation of entrepreneurship as a key competence in the process of education in Poland, both among students of upper-secondary schools and tertiary education students. The article uses the findings of research conducted in Poland regarding evaluation of acquired key competences and identification of competences and qualifications sought by employers.

Keywords: key competences, entrepreneurship, initiative, education process.

Introduction

Expectations of employers with respect to competences have been rising over the last few years along with clear changes in adaptation of the education system to such expectations. The beginnings of the notion of competences trace back to the early 1970s in the United States. At that time the subject of interest of the American Association for Adult and Continuing Education were skills that an adult person finishing their education was expected to have and translation of such skills into competences (Baraniak, 2009, p.104).

Literature provides us with various definitions of the term of “competences”. In a general sense competences are the ability to act in order to achieve a pre-set goal under given conditions using certain means. In a broader sense, competences are a combination of knowledge, skills, experience, attitudes and readiness to act under certain conditions, as well as the ability to adapt to changeable conditions. The definition of competences can neither be treated as a synonym of qualifications nor as an equivalent of education (Luczak, 2011, p. 81).

Competences are a broader concept than qualifications. They embrace general properties of a human being, which together with the work effect
achieved by that person form a cause and effect relationship. Therefore, competences consist of a few levels of human properties, such as: motives, characteristics, attitudes and values, knowledge and skills (Pocztowski, 2007, p. 118).

An important role in promotion of competences was played by the European Parliament and the Council which introduced the concept of key competences defined as “a combination of knowledge, skills and attitudes appropriate to a particular situation”\(^{11}\). Key competences are necessary for self-fulfillment, personal development and being an active citizen, social integration and employment. All key competences are equally important, since each of them can contribute to a successful life in a knowledge society. Key competences include: communication in the mother tongue and in foreign languages, mathematical competence and basic competences in science and technology, digital competence, learning to learn, social and civic competences, cultural awareness and expression, as well as sense of initiative and entrepreneurship.

Entrepreneurship and initiative are defined as “the ability to turn ideas into action. It involves creativity, innovation and risk-taking, as well as the ability to plan and manage projects in order to achieve objectives. The individual is aware of the context of his/her work and is able to seize opportunities that arise. It is the foundation for acquiring more specific skills and knowledge needed by those establishing or contributing to social or commercial activity. This should include awareness of ethical values and promote good governance”\(^{12}\).

Analysis of the status of key competences in Poland

In 2012 - within the framework of the Rinascimento II project – a study concerning key competences in Poland was completed. The study involved telephone and personal interviews, as well as paper and online questionnaires. It was conducted in four stages, each of them regarded two competences. The first one concerned language competences, the second stage - mathematical and IT competences, the third stage was related to the skill of learning as well as social and civic competences, whereas the fourth stage concerned entrepreneurship and culture-related competences. The study involved 20 adults above the age of 20 with elementary, secondary, high-school and tertiary and post-doctoral education.

The results of the study\(^{13}\) conducted in the fourth stage (it is particularly interesting due to discussion included herein) show that the knowledge of respondents concerning operation of a business activity in the field they are interested in is rather average (54% of respondents). More than 42% of


\(^{12}\) Ibidem

respondents showed an average ability of risk-taking. The study participants do not have bigger problems with adapting to a new situation, but they do not have the theoretical knowledge of business management or practical application of management theories (low and very low scores achieved by 59% of respondents). Another problem is also drawing up a business plan - around 30% of respondents showed low or very low scores in this scope. One of the skills mentioned by the European Commission is the team-working skill. The respondents assess their willingness to cooperate in a team at an average (28%), high (29%) and very high (11%) level. Only 5% of respondents showed a low and very low level of flexibility during teamwork. Another skill included in the recommendation is assessment and identification of one’s strengths and weaknesses. Only 6% of respondents showed a very low and low level, whereas only 20% of respondents described their skills of assessment and identification of strengths and weaknesses at a high and very high level. An indispensable skill mentioned by the Commission is also the ability to assess risk and take it in justified cases. Based on the study results from the Rinascimento II project, we can easily notice that more than half of the respondents (around 66%) described their ability of risk-taking at an average and above average level. 19% of respondents show high and very high willingness to take risk, whereas low and very low willingness is displayed by 15% of respondents.

As the study shows there are considerable deficiencies in education of the society in terms of practical aspects of business management or preparation of business start-up and development plans.

Skillful use of entrepreneurship competences developed in the course of education as well as combining them with acquired professional qualifications should be one of the factors determining success in the job market.

Employers’ expectations towards employees

Flexible adaptation to changes taking place in the professional environment is determined by an entrepreneurial attitude, defined by the European Commission in the following way: “An entrepreneurial attitude is characterized by initiative, pro-activity, independence and innovation in personal and social life, as much as at work. It also includes motivation and determination to meet objectives, whether personal goals, or aims held in common with others, including at work” (Drozdowski, 2006).

Development of an entrepreneurial attitude is possible through introduction of appropriate solutions in the scope of educational activities at various stages of education. Becoming familiar with the mechanisms that shape economic, social and political processes is crucial in the period of school education (primary schools, secondary schools and upper secondary schools), since at this time a young person undergoes dynamic personal, mental and physical development. He or she also develops appropriate moral and ethical attitudes as well as
realizes the responsibility for risk-taking and its consequences. Development of a young person is a very complex process that takes place through various sources of information, such as, for example: family, education system, role models followed by friends and acquaintances, mass media, state institutions or a company they work in. It is from those sources that a young person derives knowledge, ideological content, patterns of behavior and action, as well as principles of personal life or the ability to co-exist in a family and a society.

The interest in entrepreneurial attitude began to grow as a result of intensified competitiveness of the economy and its development capacity. Also achieving competitive advantage by a company through development of personnel strategies based on entrepreneurial attitudes of employees gained significance. Employees are now treated as owners of unique competences, which are essential for an enterprise (Drozdowski, 2006).

In February and March 2012 the Warsaw School of Economics, the American Chamber of Commerce in Poland as well as Ernst & Young conducted research in Poland (Budnikowski et al, 2012) concerning competences and qualifications sought by employers. The study included 33 most important competences and qualifications, which were divided into four categories: personal skills, interpersonal skills, intellectual abilities and skills as well as general skills and knowledge. Out of 33 competences and qualifications we will analyze those that refer to the key competence of entrepreneurship and initiative. They include, among others: ethical conduct as a basis for action, responsibility, commitment, openness to learning and continuous development, pursuit of results, independence, proper self-esteem - understanding of one’s own strengths and limitations, flexibility and adaptability, the skill of decision-making; effective communication, teamwork skills, negotiation skills (interpersonal skills); creativity, the skill of formulating and solving problems, the ability to identify and justify priorities (intellectual abilities); the skill of organizing work as well as effective time and project management.

All of the above-mentioned competences and qualifications are highly valued by employers. A significant majority of them are of universal nature and can be formed at every stage of education. For comparison, the general and general-vocational knowledge is vital for employers, but not the most important (average score of 3.86 on the scale of 1 - unimportant to 5 - very important). We can assume that having the competence of openness to learning and constant development (evaluated by employers at 4.61) allows to compensate any possible gaps in knowledge and develop it into more advanced knowledge required in a given position. The communication and team-working skills also received high values (4.69 and 4.5), as nowadays, companies mostly operate based on teamwork. Changes, in turn, constantly taking place in developing companies or markets on which the company operates have resulted in employers paying more attention to flexibility and adaptability (4.42), decision-making (3.97) and responsibility for decisions made by employees (4.46).
The present-day economy functions with a dominating role of the market-based mechanism. Every person who wishes to adapt to it, be able to “function” in it, must have the minimum universal knowledge and skills that allow to better understand market rules, their own place as an active participant in the economy-related processes. It is necessary for everyone, regardless of their profession.

It is assumed that in the information phase of civilization development, human capital resources will have the most decisive role in competitiveness of a person, and subsequently, of the entire economy. The challenges of the present-day economy can only be met by people and societies allocating increasing outlays to human skill and knowledge development (Borowiec, Rachwal, 2012).

**Implications for entrepreneurship education at various stages of education**

The Europe 2020 strategy emphasizes the need to include creativity, innovation and entrepreneurship in school curricula and training activities at all levels of education.

When analyzing the literature on formation of entrepreneurial attitudes, various opinions can be noticed and at the same time, interesting conclusions of practical nature can be drawn.

- Entrepreneurial attitudes can be shaped by selecting such a set of reinforcements that will strengthen inner direction and pursuit of success.
- Entrepreneurship, interpreted as a human characteristic depends on a personality (this problem is analyzed in more detail by Wilsz, 2004)
- A significant role in forming entrepreneurship is played by intellectual skills which determine the possibilities of self-creation;
- An entrepreneurial attitude is established based on a national culture (basic personality) and is therefore subject to limitations or reinforcements;
- Formation of a personality and entrepreneurial attitudes is easier in the case of young people, however, it is possible throughout the whole life. For this reason, the right system of reinforcements should be chosen to allow it to develop (Strojny, 2006);
- A person who wishes to be enterprising should be able to show their successes, since they mobilize to further activity;
- A very important aspect from the perspective of entrepreneurship skills is positive thinking, which offers higher possibilities of pursuing set objectives;
- An enterprising person should continue to learn all the time. People who study have a more optimistic attitude to life and a higher willingness to pursue their goals;
What is crucial is to equip young people with appropriate knowledge, but also teach them to search for information. The education system should be more integrated so that the knowledge young people have is not “pigeonholed” and they are able to use it (Wachowiak, 2007).

Over the last years, we have observed a wide range of initiatives that contribute to the development of education in the scope of entrepreneurship. Those actions have been particularly intensified since the introduction of the subject called Introduction to Business to the curriculum of upper secondary schools, which is intended not only to equip students with the knowledge of how the market economy works in the conditions of increasing globalization and EU integration processes, but also to develop skills that will be indispensable for students in their adult, active professional life. In accordance with the record of the core curriculum and with reference to statements of numerous participants of Polish entrepreneurship conferences, during realization of this subject, students’ attitudes, openness, creativity, and risk-taking in pursuit of one’s professional career should, among others, be shaped in students, taking into account ethical values. Such bases constitute entrepreneurial attitude in a broad sense [Ziolo, 2005, p. 9-16).

We should not forget that acquisition of entrepreneurial features should be shaped indirectly during all subjects, by encouraging young people to solve problems on their own, ask difficult uncomfortable questions, encouraging them to read optional literature and develop their interests. It depends on the attitude and ambitions of a given teacher, as well as the atmosphere of working with students. Furthermore, entrepreneurship education involves a change in the role of a teacher whose task is to facilitate acquisition of competences by students by means of active work methods, e.g. searching and finding information by a student, which allows them to turn and idea into actions (Wilsz, 2004). Effectiveness of entrepreneurial education depends on the enthusiasm of teachers. A network of cooperation among teachers should be built in addition to contacts in the local community, organization of informative events, sharing of good practices, as well as involvement of businessmen in the process of learning. The importance of extracurricular activities should also be noted. In some schools there are career centers and simulation companies are created. Nowadays, every school employs a counselor who among other responsibilities, is also a career advisor.

In accordance with the new core curriculum in Poland, as of the school year 2012/2013 apart from the subject of Introduction to Business a new complementary subject called Practical Economics was introduced in upper secondary schools.

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The aim of Practical economics is for students to acquire skills of complete implementation of an undertaking: from an idea, through preparation of a plan, its implementation to an analysis of effects (Ziolo, 2005, p. 132). The subject aims at familiarizing students with the reality of economy and preparing them to enter the job market. Recommendations presented by the Ministry of National Education, concerning the conditions and methods of teaching the classes suggests that they should enable students to use the knowledge of economics in practice. Young people can, for example, operate a student company, take part in simulation games related to economics, conduct an analysis of a selected market or implement other projects of economic nature. The practical attitude to economic aspects enables a student to independently acquire the knowledge and skills that are conducive to formation of entrepreneurial attitudes, as well as teaches them cooperation and collaboration, at the same time integrating a team of students (Ziolo, 2005).

Formation of entrepreneurial features in the young generation also requires the development of modern methods of teaching that are based on cooperation, creativity and communication. To this end we have to depart from traditional lecture-based classes and turn towards classes taught in small groups, as well as develop and popularize such methods of teaching as: workshops, simulation games, project tasks and use teamwork as often as possible. What is also crucial is supporting the methods of teaching that develop media competences, enabling the use of digital materials, e.g. patent information that is the source of information on the newest technical solutions (Nowacka, 2011).

Interesting classes during which young people learn how to be independent, react in difficult situations and communicate can for many of them be the beginning of success in their adult life.

Introduction of the National Qualifications Framework to the system of higher education oriented the education system in institutions of higher education towards the effects of the education process pertaining to three elements: knowledge, skills and social competences. Acquisition of social competences aims at building social capital characterized by communication skills, creativity, mobility, cooperation with others, responsibility for the local community, responsibility for decisions taken. Participants of the education process will often become leaders and initiators of actions in their private, professional and social environment.

As part of entrepreneurial attitude development at tertiary education, entrepreneurship concepts should first and foremost be introduced at each year of Bachelor and Engineer studies through a special subject, such as “Innovative Entrepreneurship” and at second-degree studies, e.g. through “Corporate Entrepreneurship” (this topic is managed mainly by J. Cieślik who is responsible for the functioning of the Innovative Entrepreneurship Network15). Within the

above-mentioned Network, objectives have been developed for education in an integrated support model for innovative entrepreneurship, which can be presented by the following chart:

**Fig. 1. Education in an integrated support model for innovative academic entrepreneurship, own study based on (http://www.seipa.edu.pl/index.php/ida/459/ (Accessed 14 December 2014)**

Unfortunately few institutions of tertiary education in Poland fully implement the objectives presented in the above-mentioned model.

Furthermore, it should be noted that one of the aspects of academic entrepreneurship development is enabling entrepreneurs to conduct classes to a higher extent than so far, as well as engage students in projects implemented by companies, use stimulating teaching methods such as: educational games, projects, educational discussions and team work (based on ready-made teaching aids for teachers of entrepreneurship, e.g. examples of case studies in order to familiarize students with real problems).
Conclusions

Knowledge-based entrepreneurship treated as an important resource (provided that it is properly managed) may significantly contribute to achieving a competitive advantage, as well as become the prerequisite for sustainable economic development on a national and regional scale, whereas for Poland, it constitutes a chance for reducing the developmental distance in the fields of economy and innovation in relation to more developed economies.

Instilling the entrepreneurial spirit in young people will significantly increase their opportunities for finding a satisfying job or self-employment, enable active participation in the environment they live in, allow for better understanding of mechanisms functioning in that environment, which, in turn, will create an opportunity for better adaptation to and influence on it.

The requirements related to formation of entrepreneurial attitudes defined in the National Qualifications Framework for Tertiary Education are not, however, reflected in majority of universities. It is observed that measures taken to promote entrepreneurship at institutions of higher education are often only of a declarative nature. Furthermore, there are no academic teachers of entrepreneurship and research programs focusing on entrepreneurship as a theoretical problem (entrepreneurship is not considered an academic science in Poland).

What should also be noted is that participation in an educational process of persons other than academic teachers - entrepreneurs - is still relatively rare, which undoubtedly weakens the link between the education process and the needs of the labor market or region (including needs for original research and development works). One of the causes of such a situation is undoubtedly low budget expenditure on education and a still low interest in research on the part of companies.

Activities aiming at providing active support for academic entrepreneurship through educational institutions should also be implemented, e.g. Academic Business Incubators or Technology Transfer Centers in the scope of an academic spin-offs and spin-outs establishment process. Currently, the support refers mostly to the pre-incubation stage instead of provision of comprehensive help in establishment and initial development of a new company.

One of the ways of winning a competitive game is to begin learning before new skills are necessary, making competent diagnoses and investing in the future as it is forecast. In times dominated by changes that are difficult to predict, everyone should have the skills and attitude that will allow to meet the needs of a human being in all conditions that will be created by the environment. Let me conclude with the words of economist Michel Santi who said that “entrepreneurship is not an innate trait, yet a certain characteristic of the spirit and actions that are the privilege of many, yet shaped and strengthened by so few”.
References


