The Role of Higher Education Institutions in the Development of Entrepreneurship Competences on the Study Programs other than Economics

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**ABSTRACT**

“Entrepreneurial Croatia” – that is the name for a strategy of education for entrepreneurship, which gives us a framework for a systematic development of educational entrepreneurship. It also supports a more market-oriented way of thinking, and serves as a preparation for the new economic trends in the development of human resources. Through the initiation and development of entrepreneurial way of thinking and the development of entrepreneurial competences, production and exports are increased as well as the overall employment rate in a particular country. Besides its positive effects on the growth of newly founded firms, entrepreneurial competence also acts positively on the more efficient ways of using the existing creative potentials of knowledge and skills in the society. The interest for educational programs that support and develop entrepreneurial competence is on the rise. The research whose results we are presenting was aimed at determining entrepreneurial competence. The research was done using the structured questionnaire and it included 321 students of The University North, enrolled in study programs that do not belong to the economic study programs nor are connected with them. Descriptive statistical method was used to analyze the data. The results of the research have shown that a higher level of entrepreneurial competence increases the affinity towards entrepreneurial behavior. The results of the research have also shown that teaching in higher education institutions does not significantly develop entrepreneurial competences. Entrepreneurial competence is a key for a higher competitiveness, personal development and sustainable employability of an individual i.e. student. It helps in the creation, recognition and use of opportunities and introducing changes. Entrepreneurial competence makes innovation, survival and growth in a dynamic and competitive environment easier.

**Keywords**: higher education institutions, entrepreneurial competences, study programs other than economics, competitiveness.
1 INTRODUCTION

Globalization is characterized by increasingly strict demands of business practice towards employee efficiency and effectiveness, and experience in human resource management has shifted the focus on complete capability of an individual to perform a competitive job.

Constant change in the labor market is an imperative of all organizations. Organizational, technological and process changes require and drive the development of new competences, therefore organizations have the task to enable and empower their employees to continuously develop. Higher education institutions play an important role in all this, by implementing new study programs that will provide their graduates with certain knowledge and skills, based on which they can develop competences in a particular area and thus competitive in the labor market. Competitive advantage of an economy is founded on the development of entrepreneurship. Consequently, education for entrepreneurship is based on the required entrepreneurial competences on all levels of education.

The development and success of any organization begins with understanding what kind of employees the organization seeks and wishes to develop. By developing a system of competences, an organization acquires a clear structure and forms of behavior that are desirable in its operations. The difference between a good and an outstanding employee lies in competences that particular employees have developed and are using in their daily work. Whether company performance is average or highly successful will mostly depend on the competence level of their employees.

2 HIGHER EDUCATION INSTITUTIONS IN THE REPUBLIC OF CROATIA

One of the outcomes of the reform about a decade ago was the reorganization of higher education system. According to the Act on Scientific Activity and Higher Education that came into force in 2003, higher education institutions in the Republic of Croatia are universities, polytechnics, and schools of professional higher education. In this Act it is stipulated that higher education is provided through professional and university studies. The mission of university studies is to train students for work in science and higher education, in business, public sector and other fields, and for implementing scientific and developmental research. The mission of professional higher education is to provide students with an adequate level of knowledge and skills that will enable them to undertake professional activities, thus allowing them to start working immediately upon graduation (ZZDVO, 2003, p. 182). Consequently, the basic task of polytechnics is to provide practice-oriented education, and for this reason students are trained for particular professions from the very beginning, through application of the acquired competences (Hunjet, Kozina, 2014, Kozina, 2011).

Entrepreneurial knowledge acquired by students at higher education institutions should not be limited to theory; rather, it should be practice-oriented and applicable for innovation and
devising new business processes. The basic goals of entrepreneurial education include acquiring knowledge on entrepreneurship, developing competences for creation of opportunities, introducing change in complex circumstances, and encouraging entrepreneurial behavior. The expected outcome of an entrepreneurial program is an increased level of entrepreneurial competences, which in turn ought to increase the employment prospects for young people (Kolaković, 2006, 170).

The Croatian Qualifications Framework has set up clear criteria for acquiring a set of competences that individuals can expect to have on completing their education, which are required for a qualification, i.e. the level and volume of required knowledge. The Croatian Qualifications Framework is based on our tradition in formal education, taking into account the present state of the Croatian education system, the development needs of the economy, individuals and society as a whole, and following the European Qualifications Framework, EU guidelines and international standards. It is important for individuals to recognize how important it is to invest in their education, to understand the advantages provided by higher education, starting from competitiveness in the labor market to improved employability. It can equip them with up-to-date knowledge and skills that can make them competitive internationally. (HKO, 2013)

3 STRATEGIJA RAZVOJA OF ENTREPRENEURSHIP IN THE REPUBLIC OF CROATIA 2013-2020

In October 2013, the Croatian Parliament approved the Entrepreneurship Development Strategy in the Period 2013-2020, which is to replace all other programs and projects by providing support to SMEs (small and medium enterprises) and crafts. This Strategy is aligned with the Europe’s growth strategy Europe 2020, which has prioritized the following economic areas: energy savings and promotion of new environmentally friendly technologies, investments in people and life-long learning projects, investments in research, development and implementation of innovations, and finally, providing easier access to small business funding.

Europe 2020 offers a vision of the social market economy of Europe for the 21st century. It addresses three mutually reinforcing priorities: smart growth – building an economy based on knowledge and innovation; sustainable growth – promoting greener and more competitive economy with more efficient use of resources; inclusive growth – promoting economy with high employment rates, leading to social and territorial cohesion.

Smart growth will strengthen knowledge and innovations, which requires improved quality of education, better innovation and knowledge transfer in the EU, more efficient ICT usage, and turning innovative ideas into new products and services. All this will result in economic growth and high quality jobs.

Sustainable growth means creating a competitive economy with more efficient use of resources; using European leadership to develop new processes and technologies, including green technology; speeding up the development of smart networks through ICT; strengthening competitive advantages by relying on SMEs; preventing further damage to the environment, biodiversity loss and unsustainable resource exploitation.
Inclusive growth means raising employment rates, especially for vulnerable groups, combating poverty, modernizing labor markets, helping people of all ages anticipate and manage change through investment in skills & training, and ensuring social cohesion (Hunjet, Kozina, 2014, p. 27).

The Entrepreneurship Development Strategy in the Period 2013-2020 was formulated in accordance with the 2013 Economic Program of Croatia, to strengthen entrepreneurial potential and improve the entrepreneurial culture. The Croatian economy can be successful in the long term only if most citizens recognize and adopt entrepreneurship as an attractive option for their professional future (SRPRH 2013-2020, p. 2).

3.1. “Entrepreneurial impulse” 2014

“Entrepreneurial impulse” in 2014 was aimed at creating a more favorable entrepreneurial environment and fostering innovation and internationalization in order to increase added value in the small business sector. A prerequisite for competitiveness and growth in this sector is devising new or significantly improving the existing products and services, and finding new markets. It is only by raising the level of entrepreneurial competences and acquiring specific knowledge and skills that economic growth can be achieved, as these can be the crucial factor in creating jobs and realizing sustainable economic development. New competences of entrepreneurs gained through formal and informal education can lead to the emergence of new entrepreneurs, who will set up and run their own businesses. Through promotion of entrepreneurship people can be encouraged to start their own business, especially young people and students. Life-long learning within SME sector is particularly important in order to improve the management of business processes, leading to increased efficiency. Furthermore, there should be incentives for employing more higher education graduates, who are expected to boost the development of new products and services, increase competitiveness, and introduce innovations in marketing and business operations (PI, 2014).

4 ENTREPRENEURIAL COMPETENCES

4.1. Importance of entrepreneurial competences in business operations

In addition to being a catalyst in creating new businesses, entrepreneurial competence fosters the entrepreneurial way of thinking, as well as more efficient use of creative potential and existing knowledge and skills. Both current and prospective EU members have defined the development entrepreneurial competences of their citizens as a priority. In its document European Key Competence Framework, the European Commission has included innovativeness and entrepreneurship among key life competences that need to be developed at all levels of education (König Sedlan, 2011, p. 2).
There is growing concern in Croatia that the education system is not adequately preparing its citizens for the challenges of the knowledge-based society. At the same time, employers in the Republic of Croatia often see the shortage of employees with adequate professional and entrepreneurial knowledge, skills and attitudes as the main problem of the Croatian education policy. They have also pointed out that recent graduates are frequently not prepared for team work, project approach, risk assessment and continuous learning. It has come to the forefront that the main reason for low competitiveness of labor force in Croatia is lack of entrepreneurial competences in an environment that does not foster entrepreneurship. (Bejaković, CCHR, 2004, p. 13)

4.2. Types of entrepreneurial competences

Taking into account key entrepreneurial attributes and skills, entrepreneurial competence can be defined as a combination of knowledge, skills, attitudes and capabilities to create and discover opportunities in the environment, to introduce changes, and to direct one’s behavior towards successful creation and management of an organization, whose purpose it is to take advantage of these opportunities and to deal with a high level of uncertainty and complexity in a challenging environment. One of the ways to classify the elements of entrepreneurial competences is to put them in three categories: cognitive, affective and behavioral. The cognitive category of entrepreneurial competences refers to efficient management of reasoning, convictions and expectations. The affective category of entrepreneurial competences refers to the management of emotions and attitudes, while behavioral category includes management of intentions and action orientation (König Sedlan, 2011, p. 4).

4.3. Development of entrepreneurial competences

Competence development should be coupled with the development of a value system and action directions through which competence usage can be orientated towards generally accepted norms and principles in a particular social and cultural context. This is called reflexive learning since there is feedback and intertwining of acquired competences with subjective motives of action leading to responsible usage of competences. Responsible usage of competences should be encouraged, not so much through instruction or moral lectures, but rather by persuasion based on experience regarding the value of certain habits or behavior patterns (König Sedlan, 2011, p. 6). Competence of entrepreneurship is the ability to turn ideas into concrete action. The basic components of entrepreneurial competence as it is defined in the European Key Competence Framework are the following: introduce and foster innovation, show initiative and take risks, be accountable for one’s own actions, be proactive and react positively to changes, set goals and achieve them, be a team player and be motivated to succeed (Marušić, 2014, p. 3).

4.3.1. Entrepreneurial competences through life-long learning
Entrepreneurial competence consists of knowledge, skills and attitudes which are appropriate in a particular economic, cultural and social context. Knowledge encompasses insights regarding available possibilities, and ability to recognize those that are adequate for one’s professional or business activities.

There is a wide range of skills:

- skills of planning, organizing, analysis, communication, performing, reporting, assessment and recording,
- skills related to project design and implementation,
- capability to cooperate and be flexible within a team,
- recognizing one’s own strengths and weaknesses,
- capability to be proactive and respond to changes in a positive way,
- ability to assess and take risks when this is appropriate.

There are several facets of attitudes: initiative-prone, having a positive attitude to change and innovations, ready to recognize areas in which one can show a whole range of entrepreneurial skills, e.g. at home, at work or in the community.

An important entrepreneurial competence which should be constantly developed through life-long learning is the digital competence. Technology allows people to become competent information-seeking users, communicators, problem solvers and decision makers; in a word, well-informed and responsible citizens who contribute to their communities and society as a whole. (Ferk Novaković, Bogdanović, 2011, p. 145)

4.4. Managing employee competences

![Image of competency management diagram]

Figure 1. Managing employee competences

Figure 1 shows different aspects of employee competence management. Each person has a set of competences which are more or less pronounced. When employee competences are managed, this allows organizations to recognize the skills of their employees, and to use them systematically. Being aware of the skills of certain employees can be helpful in designing seminars and training sessions, in presenting or at interviewing potential recruits.

Key competences can be unveiled on the basis of a survey which should be conducted within the organization.
Information can be gathered by means of a questionnaire distributed to as many employees as possible, or through interviews with different employee groups. A critical event interview is the easiest way to identify the key behavior that was decisive in a critical situation, and it is this behavior that represents the desired competence. Interviews with most successful employees help to identify the behavior that sets those employees apart from the average ones, making them exceptional and successful. Again, this behavior represents the sought-after competences. An interview with executives should clarify the vision and future development of the organization, which is then the basis for determining which competences the organization will need in the future.

5 RESEARCH

In the empirical part of the research there was a survey of first-year (20%), second-year (49%) and third-year students (31%) of the following professional study programs: Multimedia – design and application, Mechanical engineering for industry, Technical and business logistics, and Nursing at University North. The survey was conducted in May 2014. The questionnaire was filled by 321 respondents, out of which 70.41% were women (226 female students) and 29.59% were men (95 male students). It consisted of 25 items, with the first 15 being statements, whereas in the second part of the questionnaire there were 10 questions with proposed answers, which the respondents assessed on a Likert scale. The aim of the research was to establish the role of higher education institutions in developing entrepreneurial competences in study programs unrelated to economics. The intensity of attitudes was measured on a five-point Likert scale (1 being the lowest and 5 the highest rating). The Likert scale is an ordered, one-dimensional scale on which the respondent chooses the option closest to his/her view. In this paper, students’ attitudes were examined by analyzing their responses to questionnaire items. Finally, there is a descriptive analysis of the obtained statistical results.

6 RESULTS

The data were processed statistically by means of the software package Statistica (StatSoft), and shown in graphs below.

In Graph 1 there is a pronounced grouping of responses; namely, about 70.00% of respondents believe that the competitive advantage of economy is based on the development of entrepreneurship. Still, 35.00% of respondents is completely certain of this, rating this item with the highest grade of 5, the rating of 4 was given by 34.06% of respondents, 25.63% of them opted for the rating 3, whereas 1.56% of respondents gave no answer.
Graph 2. The development of entrepreneurial competences improves employment prospects for young people

Graph 2 shows that students’ expectations were met. The responses to the item ‘the development of entrepreneurial competences improves employment prospects for young people’ indicate that our students feel that people with acquired entrepreneurial competences have better chances of getting a job. The largest percentage of respondents, i.e. 40.00% believes that employment prospects for young people increase with the development of entrepreneurial competences, giving the highest rating of 5. The rating of 4 was given by 35.94% respondents, 17.81% of them opted for the rating 3, whereas 1.25% of respondents were uncertain, giving no answer.

Graph 3. Assessment of entrepreneurial knowledge acquired during studies

The item ‘Assessment of entrepreneurial knowledge acquired during studies’ received the average rating of 4.00. The largest number of respondents (101 i.e. 31.56%) chose the highest rating of 5, the rating 4 was given by 99 respondents or 30.94%, 23.75% of them (76 respondents) decided on the rating 3, the lowest rating 1 was given by 3.13% of respondents, whereas 2.81% gave no answer.

Graph 4. How much emphasis is put on gaining theoretical
entrepreneurial knowledge at the University

Graph 4 shows that 32.19% of respondents decided on the highest rating of 5, the largest number of respondents (107, i.e. 33.44%) opted for the rating 4, 21.25% of respondents chose the rating 3, the lowest rating of 1 was given by 2.19% of respondents, whereas 4.06% of respondents gave no answer.

Graph 5. How much emphasis is put on gaining practical entrepreneurial knowledge at the University

As can be seen in Graph 5, the largest number of respondents (97), or 30.31% of them chose the highest rating 5, the rating 4 was given by 28.13%, the rating 3 was chosen by 24.06% of respondents, the lowest rating 1 was the choice of 4.38% of respondents, whereas 4.06% respondents gave no answer.

7 CONCLUSION

The development of entrepreneurial competence is the development of an entrepreneurial individual who has been trained to notice opportunities in which his or her ideas can be turned into an activity or a venture. This can happen in any situation or environment, such as work, education, or life in general. Higher education institutions should strive for a culture that fosters initiative and taking more responsibility for one’s own future. Through interdisciplinary study programs higher education institutions can create new or additional roles for themselves by developing entrepreneurial competences in their students and by assuming more responsibility for the technological, economic and social growth and development. Furthermore, there is a need for projects that would enable people to continue learning and to build upon entrepreneurial skills. Entrepreneurial impulses and the strategy of learning for entrepreneurship can be of great help in achieving the ambition for Croatia to become a truly “entrepreneurial” country.

In addition to helping companies grow, entrepreneurial competence promotes the entrepreneurial way of thinking and efficient use of the creative potential of the existing knowledge and skills. In terms of individuals, entrepreneurial competence is very important, since it is a key to becoming more competitive and to achieve personal growth, and finally, the key to sustainable employability. Entrepreneurial competence helps in recognizing and creating opportunities, introducing changes, and dealing with increasing levels of uncertainty and complexity in the environment. It is to be expected that more complete knowledge and more developed skills will have a positive impact on perceptions of own competence.

The intention of this survey was to provide an insight into the role of entrepreneurial training at higher education institutions. It is hoped that these institutions will help in solving the
problems in its environment and ultimately contribute to a knowledge society by producing competent, entrepreneurial professionals, who are employable in the labor market. Our survey has shown a growing interest for entrepreneurial education and acquisition of entrepreneurial competences among students in study programs unrelated to economics. It is recommended to continue conducting similar surveys in order to raise the awareness and positive attitudes of students towards entrepreneurship, so that expected learning outcomes can make them more competitive in the labor market.

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