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**CULTURE OF EDUCATION FOR ENTREPRENEURIAL COMPETENCES
– THE DRIVING FORCE OF ECONOMIC DEVELOPMENT IN EASTERN
CROATIA**

**KULTURA OBRAZOVANJA ZA PODUZETNIČKE KOMPETENCIJE –
POKRETAČ EKONOMSKOG RAZVOJA ISTOČNE HRVATSKE**

ABSTRACT

Development of modern society based on knowledge in the globalization process creates new needs in the fields of culture, science, technology, economy, social cohesion, the position and role of an individual and his/her individual development. In this context, education and science are gaining bigger importance and are basic driving forces of a society. Entrepreneurship is one of key competences one should gain by education, ensuring for himself/herself the basis for life and work. It is also one of the key competences of European competence framework of lifelong learning and the benchmark for competitiveness of a national economy and the development, too. By the new approach to higher education based on learning outcomes, there are being highlighted the competences a student will gain after finishing his/her studies. Today, entrepreneurial competences are required in every profession. In this paper there were analysed study programmes of six faculties of University of Osijek in relation to learning outcomes, knowledges, skills and course goals aimed at gaining of entrepreneurial competences. The results of the research show that most of the Faculties too little/slightly encourage or don't encourage gaining of entrepreneurial competences by their study programmes. Out of six analysed study programmes in total, only two of them show visible outcomes which encourage entrepreneurial competences. The results of study programmes analysis point at the necessity of introduction of courses by which there will be gained entrepreneurial competences during the course of higher education, and for the purpose of general social and economic growth.

Key words: *entrepreneurial competence, culture of education, higher education, study programmes, learning outcomes.*

SAŽETAK

Razvoj suvremenog društva temeljenog na znanju u procesu globalizacije stvara nove potrebe u područjima kulture, znanosti, tehnologije, gospodarstva, društvene kohezije, položaja i uloge pojedinca i njegova osobnog razvoja. U tom kontekstu, obrazovanje i znanost dobivaju veće značenje i temeljni su pokretači društva. Poduzetništvo je jedna od ključnih kompetencija koje bi pojedinac trebao steći obrazovanjem i osigurati si temelj za život i rad. Također je i jedna od ključnih kompetencija europskog kompetencijskog okvira cjeloživotnog obrazovanja i mjerilo konkurentnosti nacionalne ekonomije, a time i razvoja. Novim pristupom visokoškolskom obrazovanju temeljenom na ishodima učenja, u prvi plan postavljaju se kompetencije koje će student steći završetkom studija. U svakom se zanimanju danas zahtijevaju poduzetničke kompetencije. U radu su analizirani studijski programi šest fakulteta Sveučilišta u Osijeku s obzirom na ishode učenja, znanja, vještine i ciljeve kolegija usmjerenih na stjecanje poduzetničkih kompetencija. Rezultati istraživanja pokazuju kako većina Fakulteta kroz svoje studijske programe premalo/neznatno potiče ili ne potiče stjecanje poduzetničkih kompetencija. Od ukupno šest analiziranih studijskih programa samo su u dva jasno vidljivi ishodi koji podupiru poduzetničke kompetencije. Rezultati analize studijskih programa ukazuju na nužnost uvođenja kolegija kroz koje će se tijekom visokoškolskog obrazovanja stjecati poduzetničke kompetencije, a u svrhu osobnog te općeg društvenog i gospodarskog napretka.

Ključne riječi: *poduzetnička kompetencija, kultura obrazovanja, visoko obrazovanje, studijski programi, ishodi učenja.*

1. Introduction

The improvement of educational system of the Republic of Croatia in accordance with the requirements of the European Union (curriculum, teacher training, competences of pupils and students, management of educational institutions and universities etc.) requires coordination and structured dialogue between all relevant participants of the Economy of Croatia and educational system aimed at raising entrepreneurial spirit and strengthening of competitiveness (Tafra, 2011). It is being emphasized the need of education for gaining entrepreneurial competence¹ which requires knowledge as the basic hypothesis of action and creation as well as development of adequate skills and opinionss emphasized in the EU documents, especially in the European Charter for Small Enterprises (2000) and Lisbon Strategy (2000). The Economy of Croatia and learning for entrepreneurial competences as a part of initial and lifelong education over the past twenty years is seen in the context of three aspects: 1) over the past twenty years The Economy of Croatia experienced serious structural changes, 2) The Economy of Croatia is being confronted with global economic crisis, 3) The Economy of Croatia should get prepared for challenges of conducting business in the European common market (Kraljić, 2012). The traditional educational system is no longer appropriate for the need of entrepreneurial competences. The Bologna Process by its orientation towards a student demands changes in learning and teacher training, whereas curricula are orientated towards learning outcomes and competences. Mitra and Manimala (2008, according to Gibb 1993) emphasize the changes between the programme that most of universities offer and the real needs of learning for gaining of entrepreneurial and other competences. The results of the research show that the Universities have so far asked students to make their own judgements, to understand and check information, to understand the basic principles of the society, to look for right answers, to learn in the classroom, to ask for information from experts and authorities, to get their knowledge assessed by written exams and to achieve success by passing the exam based upon knowledge. By contrast, the real needs of learning for gaining of entrepreneurial competences rely upon intuitive decision making based on limited amount of information, understanding of values by

¹ Entrepreneurial competences include knowledges, skills and opinions, therefore hereinafter entrepreneurial competences include the above mentioned elements of competence.

people who pass the information, making decisions based on competences, making decisions under time stress, active learning by doing, searching for information from anyone and anywhere and their practical application, achieving success in learning based on solving problems, learning from one's own mistakes and offering products and services of learning at the market. The changes at the Universities are not due to the needs of the very university, but by demands of the market. The main factor starting reforms in Europe today is the desire for more progressive economy and greater competitiveness in relation to world economic powers. Carvalho (2013) thinks that the changing role of a teacher, from a lecturer to a moderator, is of utmost importance, and emphasizes the importance of using interactive methods of learning in order to develop entrepreneurial competences by pupils and students. The European Commission (2008), conducted a research where teachers were asked to indicate teaching methods which are adequate for gaining of entrepreneurial competences through study programmes and courses. The results of the research point at using teaching methods based on team work when creating new business ideas as well as the method of case study. The methods like business plans, inviting visiting lecturers from the world of entrepreneurship, simulation of business situations, practical entrepreneurial skill and brainstorming were mainly not used. Mitra (2008) indicates several methods (*hands-on* methods, creative techniques, case studies, communication training, role playing, business plan writing, development of interpersonal skills, team work, inviting entrepreneurs as well as various practical teaching methods) whereas Wilson (2008) indicates experiential learning, cases from the real world entrepreneurship, project work and writing of internal job competitions.

2. Learning for gaining entrepreneurial competence in Eastern Croatia

The basis of solving the problem of slow economic development in Eastern Croatia is competitiveness. The premise is creating terms for development of entrepreneurial spirit of every individual by means of initial and lifelong learning starting at an early age (Tafrá, 2011). The Faculty of Economics in Osijek recognized this need by introducing master's degree programme in entrepreneurship in 2000 and it ensured entrepreneurship researchers, as well as a teacher, who are today teaching entrepreneurial competences (Singer, Delić, 2011). The above mentioned proves the need of early gaining of entrepreneurial competence at preschool, primary and secondary school level of education, which has been implemented at all levels of education by projects in recent years, connected with institutions of higher learning and economy. The fact how important is education for gaining of entrepreneurial competence can also be seen in the strategies, programmes and legal acts of The Ministry of Entrepreneurship and Crafts as a wider concept which assumes creating of possibilities for development of entrepreneurial competences starting at the lowest educational level through formal and informal education and learning. The need for lifelong education and training for entrepreneurial competences are mentioned in the following documents: Poduzetnički impuls [The Entrepreneurship Impulse] 2015, Program poticanja poduzetništva i obrta [The Programme of Entrepreneurship and Crafts Stimulation], Strateški plan Ministarstva poduzetništva i obrta [The Strategic Plan of The Ministry of Entrepreneurship and Crafts] 2015 – 2017, Strategija razvoja poduzetništva u Republici Hrvatskoj [The Strategy of Entrepreneurship Development in the Republic of Croatia] 2013 – 2020 and Strategija učenja za poduzetništvo [The Strategy of Learning for Entrepreneurship] 2010 – 2014 (The Government of the Republic of Croatia, 2010). The core document of the educational system in the Republic of Croatia, adapted to European standards and educational paradigms, is *Nacionalni okvirni kurikulum za predškolski odgoj i obrazovanje te opće obvezno i srednjoškolsko obrazovanje 2011*. [The National Framework Curriculum for Preschool Education and General Compulsory and Secondary School Education 2011], with the emphasis on competence system and students' achievements as learning outcomes at the end of every cycle of education. As core learning outcomes The Document mentions eight competences, among which initiative and enterprising spirit competence is being emphasized, and it is being defined as the capability of an individual to turn ideas into action and it is the basis for gaining of specific knowledges, skills, abilities and opinions needed for starting social and market

actions. In Strategija obrazovanja, znanosti i tehnologije (2014) [The Strategy of Education, Science and Technology], The Republic of Croatia recognizes education and science as its developmental priorities, the only ones being able to bring about longterm social stability, economic development and cultural identity, and foremost in the creation of an innovative society and the economy adaptable to future challenges.

3. Entrepreneurial competence and learning outcomes

The starting point in curriculum planning based on learning outcomes is competence determining of graduates (Lončar-Vicković, Dolaček-Alduk, 2010). The term competences implies knowledges, skills and opinions which enable an individual to do some work. Competences represent a combination of knowledge and its application (skill), opinions and responsibilities which are being described by learning outcomes of educational programme. Key competences one should acquire through education are the ones which give an individual basis for life and work. They imply professional and technical competences, social and individual skills, which enable people to work in a group, as well as success and happiness in life. The countries of The European Union recognize key competences from the following fields as their common goals of compulsory education system and professional training in the field of economics based on knowledge: functional literacy in mother tongue and foreign language, numerical literacy, information and communication technology competences, entrepreneurship, mathematics and natural sciences, interpersonal and social competences, learning for learning and general knowledge (2003). The learning outcome Lončar-Vicković and Dolaček-Alduk (2010) define as group of abilities describing what a student will know, understand or be able doing after finishing educational process. New approaches to educational process highlight the competences a student will have after completing a study programme. By acquiring of defined learning outcomes through process of studying, a student develops and acquires competences needed for employment. Students develop competences during learning process. Learning outcomes represent one of the bases for transparent higher education and higher education qualifications. They are applied at three levels: (1) local level at some institutes of higher learning; (2) national level through qualification framework and quality maintenance systems; (3) international level for wide programme recognition and their transparency. Learning outcomes are important for providing information to potential students and employers as well on knowledge and understanding level a graduate will have after graduation. The aim of this work is the analysis of study programmes of six faculties, parts of J.J. Strossmayer University of Osijek as well as to determine learning outcomes, knowledges, skills and course goals oriented towards gaining of entrepreneurial competences.

4. The method

The method of data collection concerning existence of entrepreneurial competences in the existing executive study programmes at the chosen Faculties (6), parts of J.J. Strossmayer University of Osijek for academic year 2014/15 was content analysis of certain courses within the existing executive study programmes. Through web pages of the chosen Faculties there were gathered publicly accessible data on learning outcomes and goals of certain courses at the Faculties. On basis of gathered information it was created a database containing the following information: name of the faculty, name of the study programme, total number of courses, courses by goals and learning outcomes oriented towards gaining of entrepreneurial competences. Subsequently there were analyzed learning outcomes, goals, knowledges and learning skills of each course, thereby establishing which courses are oriented towards gaining entrepreneurial competences. Applying the method of descriptive statistics, subsequently it was made a comparative analysis.

5. The results of the research

Representation of entrepreneurial competence in learning outcomes, knowledge and course goals at graduate and undergraduate study programmes of the chosen faculties of J.J. Strossmayer University of Osijek are shown in tables (1-6) and qualitatively interpreted, and finally, the results are compared.

Table 1 *The Faculty of Electrical Engineering in Osijek - courses oriented towards gaining of entrepreneurial competences in executive study programmes*

THE NAME OF STUDY PROGRAMME		TOTAL NUMBER OF COURSES	COURSES-ENTREPRENEURIAL COMPETENCES
UNDERGRADUATE STUDY PROGRAMMES	Electrical Engineering	30	5
	Computer Science		
GRADUATE STUDY PROGRAMMES	Communications and Informatics	41	5
	Electrical Energy Studies	41	8
	Data Processing Computer Science	19	2

Source: <http://www.efos.unios.hr/studiji/sveucilisni-preddiplomski-studij/>, retrieved on 11.2.2015. and <http://www.efos.unios.hr/studiji/sveucilisni-diplomski-studij/>, retrieved on 7.2.2015.

By analysis of goals and learning outcomes in the courses of study programmes at The Faculty of Electrical Engineering it was determined which courses were oriented towards gaining entrepreneurial competences according to their goals and outcomes. At undergraduate study programmes of Electrical Engineering and Computer Science, in five (5) out of 30 analysed courses there were identified by analysis knowledges and skills concerning training for concrete problem solving, successful application in engineering practice and concrete application.

At graduate study programmes of Electrical Engineering and Computer Science (graduate programmes Communications and Informatics, Electrical Energy Studies and Data Processing Computer Science) there were analysed in total 101 courses, goals and learning outcomes oriented towards gaining entrepreneurial competences being: stimulation of entrepreneurship, gaining of project leading skills, preparation for lifelong learning and use of the learned as a tool in application, practical skills, application of technology in the field of entrepreneurship, gaining abilities for independent work as well as team work. Management, a compulsory course for all students of graduate study programmes, enables students to get to know all elements of company management, application of technical knowledge as well as ability for independent entrepreneurship and running a company or single organization units.

Table 2 *The Faculty of Economics in Osijek - courses oriented towards gaining of entrepreneurial competences in implementation study programmes*

THE NAME OF STUDY PROGRAMME		TOTAL NUMBER OF COURSES	COURSES-ENTREPRENEURIAL COMPETENCES
UNDERGRADUATE STUDY PROGRAMMES	Financial Management	37	17
	Marketing	38	19
	Management	39	18
	Entrepreneurship	38	24
	Business Informatics	39	20
	Financial Management	22	6
GRADUATE STUDY PROGRAMMES	Marketing	21	10
	Management	26	12
	Entrepreneurship	39	39
	Business Informatics	-	-

Source: <http://www.efos.unios.hr/#>, retrieved on 7. 2. 2015.

At The Faculty of Economics there were analysed goals and learning outcomes of the courses accessible at web sites and brochures containing the information about undergraduate and graduate study programmes. Study programmes of The Faculty of Economics offer 147 courses oriented towards gaining of entrepreneurial competences. The analysis doesn't include facultative courses of study programmes, because there are no information in the above mentioned brochures about the goals of these courses, nor does it include courses of graduate study programme Business Informatics, for which there are no information in the accessible used brochures. At undergraduate study programme there are 27 compulsory courses, 12 of which are by their goals and learning outcomes oriented towards gaining of entrepreneurial competences as follows: abilities of doing research in the field, developing and application of knowledge which will be used in practice, learning of economic and critical way of thinking, creating professional thinking, getting to know problems concerning development of entrepreneurial capacity, showing practical examples in the form of seminar papers. At the undergraduate study programme Financial Management, in the compulsory and facultative courses occur goals and learning outcomes oriented towards gaining of entrepreneurial competences: training for understanding of financial statements from the position of management, learning the importance of decision making in a company, creating professional thinking when analysing financial reports of entrepreneurs and independent organization and application of information technologies in practice. At the undergraduate study programme Marketing in the compulsory and facultative courses as goals and learning outcomes by which are gained entrepreneurial competences it is being mentioned acquisition of knowledges which will be applied in practice connected with various fields of marketing. At the undergraduate study programme Management in the compulsory and facultative courses of the graduate programme, entrepreneurial competence is being oriented by means of inviting famous economists as visiting lecturers, discussion about business processes, sensibilization of students to necessary factors which are to be paid attention to in the business environment, understanding of different methods when solving complex business problems and increase of individual productivity. At the undergraduate study programme Entrepreneurship all the compulsory and facultative courses of the graduate programme have these goal and learning outcomes: understanding of entrepreneurial organization culture through cases of good and bad examples of business systems, gaining of decision making skills, rationalization of decisions, problem solving, stimulation to search for individual sales style, understanding of importance of entrepreneurial strategy choice with the aim of achieving various goals. At the undergraduate study programme Business informatics the goals and outcomes stimulating entrepreneurial competence are as follows: to enable connecting of economic knowledges with skills for new conditions of economy and society management, to learn how to increase the quality of managerial decisions, to develop specific knowledges concerning systematic analysis of business structure.

At the graduate study programme Financial Management, in six (6) courses are mentioned goals stimulating entrepreneurial competences: to teach students economic feasibility of investment, acquisition of professional skills and knowledges concerning the complexity of tax system, the knowledge which can be used when making good business loan decisions, creating professional opinion about balance sheet, understanding different methods when solving complex financial problems. At the graduate study programme Marketing ten (10) courses are oriented towards gaining of entrepreneurial competence by their goals and outcomes: acquisition of knowledge about possibilities of business cooperation between economic subjects, development of knowledge about the factors which determine competitiveness of a company, mastering the knowledge how to manage a company by means of quality management, acquisition of specialist knowledges about ways of implementation of marketing strategies in economic subjects. At the graduate study programme Management there are twelve (12) courses having goals and learning outcomes oriented towards gaining of entrepreneurial competence: knowledge and skills enrichment about management and entrepreneurship, which knowledges and skills could be made use of as independent carriers of entrepreneurial activity or as parts of some organization, examples of functioning of different development stage companies, knowledges about risk protection in order to

avoid ruin of a company, developing of students' entrepreneurship sensibility. At the graduate study programme Entrepreneurship all the courses are oriented towards gaining of entrepreneurial competence by their goals and learning outcomes, with emphasis on knowledge acquisition which will enable a student to be an entrepreneur and understand the growth process of a business venture based on knowledge and innovations i.e. to be trained to run business systems with growth potential.

Table 3 *The Faculty of Education - courses oriented towards gaining of entrepreneurial competences in implementation study programmes*

THE NAME OF STUDY PROGRAMME		TOTAL NUMBER OF COURSES	COURSES- ENTREPRENEURIAL COMPETENCES
INTEGRATED UNDERGRADUATE AND GRADUATE UNIVERSITY STUDY PROGRAMME	Teacher Education	123	8
UNDERGRADUATE STUDY PROGRAMME	Early Childhood and Preschool Education	58	0
GRADUATE STUDY PROGRAMMES	Early Childhood and Preschool Education	22	1

Source: http://web.fozozs.hr/index.php?option=com_content&view=article&id=62&Itemid=255&lang=hr, retrieved on 3.2. 2015

By learning outcomes analysis in the courses (123) of implementation study programme Integrated undergraduate and graduate university study programme of Teacher Education for academic year 2014/15 of The Faculty of Education, eight (8) courses have goals and learning outcomes oriented towards gaining of entrepreneurial competence: acquisition of theoretical/methodological framework for validation of different pedagogies, concepts or projects concerning developmental needs of an individual, the demands of society and labour market, knowing specific nature of team work, capability of decision making and ability of deciding, capability of adjusting to new and unexpected situations, to plan and understand the importance of research work based on partner relationship, independent writing of an application- business letter, abilities of interpersonal communication in private and business communication, self-regulated learning for the needs of lifelong development, willingness to pass thoughtful and founded decisions.

Learning outcomes analysis in the courses (58) of the undergraduate study programme Early Childhood and Preschool Education showed no visible goals and learning outcomes connected with gaining of entrepreneurial competences. When analysing the courses (22) of the graduate study programme Early Childhood and Preschool Education, one course (1) shows visible goals and learning outcomes connected with gaining of entrepreneurial competences: strategic planning, operative planning, network planning and decision making.

Table 4 *The Faculty of Civil Engineering Osijek - courses oriented towards gaining of entrepreneurial competences*

THE NAME OF STUDY PROGRAMME		TOTAL NUMBER OF COURSES	COURSES- ENTREPRENEURIAL COMPETENCES
UNDERGRADUATE STUDY PROGRAMME	Civil Engineering	52	0
GRADUATE STUDY PROGRAMMES	Hydrotechnics	42	2
	Bearing Structures	42	2
	Organization, Technology and Management of Construction	42	5
	Transportation Facilities	42	2

Source: <http://www.gfos.unios.hr/portal/index.php/nastava/studiji.html>, retrieved on 13.3. 2015.

By analysis of the courses (52) at the undergraduate study programme Civil Engineering there are no courses which would be oriented towards gaining of entrepreneurial competences by their goals and learning outcomes. By analysis of the courses at graduate study programmes Hydrotechnics, Bearing Structures and Transportation Facilities there were found two courses (2) oriented towards gaining of entrepreneurial competences by their goals and learning outcomes: mastering all marketing activities in order to, having technical skills and competences, be able to deal also with commercial domain in their professional career successfully, marketing mix, distinguishing between operation expenditures and end expenditures market, research and positioning at the market, implementation of marketing strategy, understanding the importance of all aspects of capital, capital inflow and capital outflow and time money value, making investment, financing and stock decisions, analysis of basic financial reports, feasibility evaluation of investments, analysis of basic investment principles. The graduate programme Organization, Technology and Management of Construction (42) by its very name points to orientation towards gaining of entrepreneurial competences with five (5) courses in total with corresponding goals and outcomes: construction projects organization and management, investment projects management, preparation of tender documents, learning the factors for calculation of unit price, calculation of offer prices for construction works, company management.

Table 5 *The Faculty of Agriculture in Osijek - courses oriented towards gaining of entrepreneurial competences in implementation study programmes*

THE NAME OF STUDY PROGRAMME		TOTAL NUMBER OF COURSES	COURSES-ENTREPRENEURIAL COMPETENCES
UNDERGRADUATE STUDY PROGRAMME OF AGRICULTURE	Agricultural Economics	32	7
	Plant Production	33	1
	Horticulture	32	1
	Mechanization	31	0
	Zootechnics	32	0
GRADUATE STUDY PROGRAMMES	Agricultural Economics	10	1
	Plant Production	40	0
	Organic Agriculture	10	0
	Mechanization	10	0
	Zootechnics	30	0
	Vegetable Growing and Floriculture	10	0
	Fruit Growing, Viticulture and Enology	10	0

Source: <http://www.pfos.unios.hr/index.php/studiji>, retrieved on 5.3. 2015.

At the undergraduate study programme of agriculture graduate programme Agricultural Economics, seven (7) courses out of economics subject group have goals and learning outcomes oriented towards gaining of entrepreneurial competences: acquisition of managerial knowledges and skills aimed at successful organization of plant and animal production, preparation of a financial plan, analysis of company business or production, independent entrepreneurial behaviour, planning and entrepreneurial farm management. At the undergraduate study programme of agriculture graduate programme Plant Production, one course (1) shows goals and outcomes for gaining of entrepreneurial competences: practical examples for solving of plant production problems. At the undergraduate study programme of agriculture graduate programme Horticulture one course (1) stimulates entrepreneurial competences by its goals and learning outcomes: marketing process management in horticulture. The undergraduate study programme of agriculture graduate programmes Mechanization and Zootechnics don't have goals and learning outcomes connected with entrepreneurial competences.

At the graduate study programmes no facultative moduls were analysed. At the graduate study programme Agricultural Economics one course (1) has goal and learning outcomes for stimulation of entrepreneurial competences.

The graduate study programme of agriculture graduate programme Plant Production has four (4) specializations (Plant Production, Plant Nutrition and Soil Science, Plant Breeding and Seed Science and Plant Protection) with 40 courses in total where no goals and learning outcomes connected with entrepreneurial competences are visible. The situation is the same at other graduate study programmes: Zootechnics (specializations: Nutrition of Domestic Animals, Hunting and Apiculture and Special Zootechnics), Vegetable Growing and Floriculture and Fruit Growing, Viticulture and Enology.

Table 6 *The Faculty of Food Technology Osijek - courses oriented towards gaining of entrepreneurial competences in implementation study programmes*

THE NAME OF STUDY PROGRAMME		TOTAL NUMBER OF COURSES	COURSES- ENTREPRENEURIAL COMPETENCES
UNDERGRADUATE STUDY PROGRAMMES	Food Technology	40	1
	Food Engineering	38	2
GRADUATE STUDY PROGRAMMES	Process Engineering	24	2
	Food Science and Nutrition	34	1

Source: <http://www.pfos.unios.hr/index.php/preddiplomski>, retrieved on 27. 2. 2015. and <http://www.pfos.unios.hr/index.php/diplomski>, retrieved on 28. 3. 2015.

At the undergraduate study programme of Food Technology out of 40 analysed courses in total, only one course (1) stimulates gaining of entrepreneurial competences by its goals and learning outcomes: to define management, to describe main managerial functions as well as code of ethics in company management, to define and describe management in the field of food industry, to define the term brand as well as to mention the steps in its making, to define administrative marketing as well as to define and to adopt the methodology of S.W.O.T. analysis.

At the graduate study programme Food Engineering out of 38 analysed courses two courses (2) are connected with gaining of entrepreneurial competences by their goals and learning outcomes: to define basic skills, role and function of a company's management and to analyse business performance of a company, to interpret properly and to distinguish between legal regulations concerning technological design and food engineering. At the graduate study programme Process Engineering two courses (2) contain goals and learning outcomes stimulating entrepreneurial competence: to analyse possible project solutions connected with process ecological engineering as well as to define project task. At the graduate study programme Food Science and Nutrition out of 34 analysed courses, one course (1) has goals and learning outcomes connected with entrepreneurial competence.

6. Discussion

The aim of this work was to determine learning outcomes, knowledges, skills and course goals oriented towards gaining of entrepreneurial competences by analysis of study programmes of six faculties, parts of J.J. Strossmayer University of Osijek. The analysis results show that in the analysed study programmes of six faculties, parts of J.J. Strossmayer University of Osijek, it is being very little stimulated gaining of entrepreneurial competence by their goals and learning outcomes, except at the Faculty of Economics, and to much lesser extent at the Faculty of Electrical Engineering. At other four faculties in their study programmes a very little number of courses is oriented towards gaining of entrepreneurial competence by their goals and learning outcomes. As one of eight key competences of the Council of Europe, entrepreneurial competence hasn't fully been worked out and implemented into study programmes. As could be expected, the exception is the Faculty of Economics in Osijek having 98 courses at five undergraduate study programmes and

49 courses at five graduate study programmes which are oriented towards gaining of entrepreneurial competence by their goals and learning outcomes. Considering the fact that by starting the doctoral study programme Innovation and Entrepreneurship in 2010, the Faculty of Economics at J.J. Strossmayer University of Osijek has become the only institution of higher learning in Croatia having the whole vertical of higher education for entrepreneurship (from undergraduate, graduate, specialist to doctoral level). Furthermore, the Faculty of Economics offers 165 courses in total being connected with entrepreneurial competences. The share of courses containing goals and learning outcomes oriented towards gaining of entrepreneurial competence in the total number of courses by individual graduate programme of study programmes at the Faculty of Economics is ranging from 27,27% to 100%, and the average share taking into consideration all graduate programmes of study programmes equals 53,60%. At the Faculty of Electrical Engineering the share of courses containing goals and learning outcomes oriented towards gaining of entrepreneurial competence in the total number of courses by individual graduate programme /study programme is ranging from 10,53% to 19,51%, and the average share taking into consideration all graduate programmes of study programmes equals 15,12%. The Faculty of Electrical Engineering in Osijek offers 20 such courses, which points to the fact that they are aware of the need for entrepreneurial contents. The Faculty of Civil Engineering in Osijek offers 11 such courses in total. The share of courses containing goals and learning outcomes oriented towards gaining of entrepreneurial competence in the total number of courses by individual graduate programme of study programmes at the Faculty of Civil Engineering is ranging from 0 to 11,6%, and the average share taking into consideration all graduate programmes of study programmes equals 5,4%. The graduate programme Organization, Technology and Management of Construction stands out with the share of 11,90%, which prepares students for construction projects organization and management, investment projects management, preparation of tender documents, learning the factors for calculation of unit price, calculation of offer prices for construction works, company management. The Faculty of Education offers nine courses in total by which are gained entrepreneurial competences with the average share of courses by individual study programme in the amount of 3,68%. It is certainly recommendable to introduce more of such courses, considering the fact that The National Framework Curriculum gave a formal framework to educational institutions (kindergartens, primary and secondary schools) to include entrepreneurship learning as an inter-subject topic into existing curricula. Entrepreneurial competence is referring to students' development as enterprising, creative and independent individuals willing to take changes and assumption of risk, i.e. as individuals with developed social and communicative skills and basic knowledges in the field of economy and trades as well as running business (NOK, 2010). The Faculty of Agriculture in Osijek offers ten courses with the average share of courses by individual study programme in the amount of 3,17%. The exception is undergraduate study programme of agriculture, the graduate programme Agronomics with the share of courses in the amount of 21,88%. A part of the courses from economic group have as their goal creating of entrepreneurial competences relating to gaining of managerial knowledges and skills aimed at successful plant and animal production organization. Also, having taken the courses, students are able to prepare a financial plan, to analyse business of certain company or product production, but most importantly, they will be trained for independent entrepreneurial behaviour, planning and entrepreneurial farm management. The Faculty of Food Technology offers six such courses, mostly oriented towards business management. The average share of courses by individual study programme equals 4,76%.

7. Conclusion

By implementation of entrepreneurial education as well as training into higher education curricula, students will be enabled to find first job faster by interaction with the society, based on gained knowledges, skills and opinions through their education, and the time of their working environment introduction and adjustment will be much shorter. The experiences of highly developed economies of the European Union and the USA stimulate such attitudes. Certain higher schools and faculties,

being aware of the need for entrepreneurial contents, are introducing more facultative subjects and modules having economic and entrepreneurial contents. The aim of this work was to initiate further entrepreneurial education and training researches in order to get continuous insight into knowledges, skills and opinions of higher education population which represents future enterprising work force and future entrepreneurs of the Republic of Croatia. Also, it is necessary to stimulate all relevant institutions/factors participating in creation of educational policy, in order to pay adequate attention to learning and training for entrepreneurial competence for the purpose of successful development of economy and the whole society.

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