

**Anka Mašek Tonković, PhD.**

Faculty of Economics in Osijek  
31000 Osijek, Gajev trg 7  
Phone: +385 91 224 4045, Fax: +385 31 211 604  
E-mail: masek.efos@gmail.com

**Katica Križanović, univ.spec.oec., PhD. candidate**

Credere, Centre for research, development and reengineering  
31000 Osijek, Gornjodravska obala 84  
Phone: +385 91 535 6162  
E-mail: katica.krizanovic@sb.t-com.hr

**Helena Miličević Lubar, univ.spec.oec.**

Ministry of Finance, Tax administration  
Regional office Osijek, Branch office Đakovo  
31400 Đakovo, V.K.A. Stepinca 10  
Phone: +385 91 535 5585  
E-mail: helena.milicevic.lubar@gmail.com

**THE IMPORTANCE OF LIFELONG LEARNING IN CREATION OF  
SOCIAL CAPITAL - CASE STUDY: FACULTY OF ECONOMICS IN  
OSIJEK**

**ZNAČAJ CJELOŽIVOTNOG UČENJA U STVARANJU DRUŠTVENOG  
KAPITALA – PRIMJER EKONOMSKOG FAKULTETA U OSIJEKU**

***ABSTRACT***

*Concept of lifelong learning should allow an individual country, i.e. its population, sustainable economic development and certain competitive advantages. Considering the emerging significant changes in the labour market, security and longevity of employment is becoming questionable. Global economy forces us to permanently adapt to changes, to accept the concept of lifelong learning and education, to develop potentials for further advancement. In fact, lifelong learning and education has become a necessity, not an option. Permanent education and improvement is necessary for adapting to changes and requirements of the modern society. Lifelong learning and education, i.e. the intellectual capital, is an essential actuator of economic, social and cultural progress. This paper describes professional development programmes which are organized at the Faculty of Economics in Osijek and which answer to the labour market needs for knowledge and skills necessary to adapt to the market changes. The methodology of the paper is based on relevant literature and case studies.*

*The objective of this paper is to point to the importance of lifelong learning and education as a basic prerequisite for competitiveness in the national labour market, and thereby in the labour market of the European Union (EU).*

**Key words:** *lifelong learning, lifelong education, labour market, competitiveness, intellectual capital*

## SAŽETAK

*Koncept cjeloživotnog učenja treba omogućiti pojedinoj zemlji, odnosno njenim stanovnicima održivi ekonomski razvoj i određenu konkurentsku prednost. S obzirom da dolazi do bitnih promjena na tržištu rada, sigurnost kao i trajnost zaposlenja postaje upitna. Globalna ekonomija prisiljava nas na neprestano prilagođavanje promjenama, cjeloživotno učenje i obrazovanje, te razvijanje potencijala za daljnje napredovanje. Zapravo, cjeloživotno učenje i obrazovanje postalo je nužnost, a ne potreba. Permanentno obrazovanje i usavršavanje je nužno zbog prilagodbe promjenama i zahtjevima suvremenog društva. Cjeloživotno učenje i obrazovanje, odnosno intelektualni kapital osnovni je pokretač gospodarskog, društvenog i kulturnog napretka. Ovaj rad opisuje programe stručnog usavršavanja koji se provode pri Ekonomskom fakultetu u Osijeku i koji su odgovor na potrebe tržišta rada za znanjem i vještinama koji su nužni za prilagodbu promjenama tržišta. Metodologija rada se temelji na relevantnoj literaturi i primjerima iz prakse. Cilj ovog rada je ukazati na važnost cjeloživotnog učenja i obrazovanja kao osnovnog preduvjeta za konkuriranje na nacionalnom tržištu, a samim time i na tržištu rada Europske Unije (EU).*

**Ključne riječi:** cjeloživotno učenje, cjeloživotno obrazovanje, tržište rada, konkurentnost, intelektualni kapital

### 1. Introduction

A modern idea of lifelong learning is formed more pronouncedly since the 1970s. The following definition of lifelong learning is mostly used today (EU, 2000): All learning activity undertaken throughout life, with the aim of improving knowledge, skills and competence, within a personal, civic, social and/or employment-related perspective.

The notion of lifelong learning and lifelong education are not synonyms; while education embraces only organized (formal) learning, the notion of learning is wider and it includes non-intentional, unorganized and spontaneous acquisition of knowledge and skills, and it can be conducted non-formally and formally throughout the whole life. Therefore, formal education should not be the only criterion based on which an individual would be evaluated. Non-formal and informal learning, as a part of the lifelong learning process is an even more important factor; since only those individuals who will continuously learn after their formal education will be able to respond to a challenge of new economic and technological changes, contribute to stimulation of economic development, common social prosperity and social cohesion. Therefore, we could define the notion of intellectual capital as an assembly of all the individual's investments into education, knowledge, skills and other competences acquired through the formal, non-formal or informal learning.

The objectives of lifelong learning and education are:<sup>105</sup>

- raising the general education level,
- personal and social development of an individual,
- individual's social responsibility,
- adapting an individual to variable conditions in the labour market, and
- higher level of employability.

Globalization trends that are present in the EU territory are also embracing Croatia, so we meet with new challenges in the global labour market. One of the challenges refers to a change in organization of educational system and creating a perception of a profile of a man preferably educated for the following decades. Just as Ohmae (2005) says:

---

<sup>105</sup> *Smjernice za strategiju odgoja, obrazovanja, znanosti i tehnologije (Guidelines for Education, Science and Technology Strategy)*, MZOS (Ministry of Science, Education and Sports), 2012;  
<http://public.mzos.hr/fgs.axd?id=18632> (17<sup>th</sup> March 2013)

*“ ...Employees in all aspects of economy, which includes professional sectors, should be taught to expand their horizons and raise their own adaptability. They should realize the education is not a closed process, which starts and ends in a point in time (and maybe lasts for years), and whose objective is to occupy a vacant position, but it is a permanent process that lasts whole life. Employees have to be prepared to change careers due to oscillations in demand.”*

Many authors have shown that in developed economies of knowledge, the main development factors are education and science (Barić, Raguž, 2008). Therefore, in such countries, their greatest wealth is their population. Their education improves the quality of which depends the success of using natural resources, technology and capital. In analysis of post-capitalism society Drucker (1993) determined that the productivity of knowledge is increasingly a decisive factor in the competitive position of some country, industry or company (North, 2008).

Modern manufacturing is increasingly taking an intangible form and becomes more based on the use of ideas, information and knowledge. According to Baruch Lev the companies that invest intensively in the knowledge will have higher market value than their real physical assets of those who do not (Lev, 1996). Thus, for example, the gap between the value of Microsoft's physical assets and its market value is significantly higher than in a traditional manufacturer. The added value is a measure of the Microsoft's potential to create wealth in the future. Therefore, there are authors (Stevens and Weale, 2003) who consider that the process of education can be analysed as an investment decision, taking into account what is delivered from spending on education comparing to spending on fixed capital.

Authors Pulić and Bornemann (2006) in their study of the physical and intellectual capital of Austrian banks concluded that *"increasing the efficiency of intellectual capital is the simplest, cheapest and safest way to ensure sustainable success"*. In the last decades in Europe, as well as in Croatia, a special attention is given to lifelong learning and education, i.e. intellectual capital as an essential actuator of the whole society's progress. We can say that the intellectual capital is a basis for development of developed societies where investments into intellectual capital as a priority is growingly put onto first place in strategic development projections. Investing into intellectual capital is given an advantage even in relation to investing into financial capital, since the knowledge, skills and innovativeness of each individual are crucial for competitive society (which is expressed as *goodwill* in the balance sheet of the society).

When revising objectives achieved by the Bologna Declaration, at the conference held in Prague on the 19<sup>th</sup> of May 2001 - Prague Communiqué, a need was recognized to implement strategies for lifelong learning into the Bologna process. Among others, a conclusion was made that lifelong learning is a key element in development of European Higher Education Area: *In the future Europe, built upon a knowledge-based society and economy, lifelong learning strategies are necessary to face the challenges of competitiveness and the use of new technologies and to improve social cohesion, equal opportunities and the quality of life.*<sup>106</sup>

In 2004, the European Parliament and the Council of Europe have started building an integral action programme within the area of lifelong learning which should include various programmes – general education programmes for secondary schools, higher education, vocational education, and education of adults, all within the framework of lifelong learning concept (Proposal for a Decision, 2004.).

## **2. Strategic framework for promotion of development of lifelong learning in the Republic of Croatia**

Lifelong learning and education is one of the strategic objectives of the Republic of Croatia. Strategy for Sustainable Development of the Republic of Croatia, from 2009, states one of the key challenges for achieving sustainable development of the country, which is achieving social cohesion

<sup>106</sup>[www.azvo.hr/images/stories/visoko/PRAGUE\\_COMMUNIQUE.pdf](http://www.azvo.hr/images/stories/visoko/PRAGUE_COMMUNIQUE.pdf), (17<sup>th</sup> March 2013)

and justice. As a main objective it states: *Achieve a socially inclusive society that is characterised by solidarity within and among generations and where differences are respected within a framework of democratic values, in which any individual, regardless of gender and origin, has equal rights and opportunities to actively and responsibly participate under conditions which advance or ensure social security, human health and legal protection*<sup>107</sup>, and one of the key measures for achieving the stated objective is investing into lifelong education. Document issued by the Ministry of Science, Education and Sports named Guidelines for a strategy of education, science and technology (2012) states that *the essential role of education and research system is to provide every individual an opportunity to develop which will consequently allow them to achieve their abilities in the society of today and tomorrow. Second fundamental reason to set up a coherent and effective system of lifelong learning and education is the necessity of permanent directing, i.e. adapting, of the working-age population to variable conditions in the labour market*. Namely, directing and promoting human resources enables their complete and effective usage in order to adapt to changing conditions in the labour market, as well as to achieve personal aspirations of individuals for knowledge.<sup>108</sup>

When defining prerequisites for sustainable development of Croatia (Strategy for Sustainable Development of the Republic of Croatia, 2009), one of the key challenges is to increase the number of participants in lifelong education, because in the Republic of Croatia only 0.2% of persons older than 35 participates in adult education programmes, although this is of special significance for a modern labour market. Namely, *“experience shows that growth of knowledge results in growth of employment which would, apart from reducing unemployment, help the Republic of Croatia in strengthening social cohesion and reducing regional disparities”*<sup>109</sup>.

Towards the model of the Nordic countries<sup>110</sup> where investments into human resources and lifelong learning are foundations of economic success and technological progress, it is necessary for Croatia as well to build a system which would meaningfully discover, encourage and direct the individual to develop skills, acquire new knowledge and apply them, in order to, based on their own views and experiences, ensure a high level of competitiveness and ability to adapt fast to new conditions and circumstances.

Since the 1<sup>st</sup> of January 2011, the Republic of Croatia fully participates in the Lifelong Learning Programme of the EU which is an instrument set up to implement the European education and training policies (learning through mobility). General objective of the Programme: *“through lifelong learning contribute to development of the EU as an advanced knowledge-based society, with sustainable economic development, larger number of jobs of higher quality, and stronger social cohesion. Particularly it aims to foster mutual exchange, collaboration and mobility between education and training systems in the EU...”*<sup>111</sup> After accession to the EU the Republic of Croatia will participate more actively in the development of strategies, with higher levels of implementation and access to European funds with funds to implement these strategies. The strategic framework for education cooperation with the EU is a document named “Education and Training 2020”, adopted by the EU Council in 2009, where one of the objectives is: *“to make lifelong learning and mobility a reality by, for instance, development of qualification frameworks, promotion of learning through mobility, introduction of measures for more flexible learning pathways (informal / non-formal)”*,

<sup>107</sup> *Strategija održivog razvitka RH (Strategy for Sustainable Development of the Republic of Croatia)*, 2009, Narodne novine, nr. 30, pp. 22-23;

<sup>108</sup> *Smjernice za strategiju odgoja, obrazovanja, znanosti i tehnologije (Guidelines for Education, Science and Technology Strategy)*, MZOS (Ministry of Science, Education and Sports), 2012; <http://public.mzos.hr/fgs.axd?id=18632> (17<sup>th</sup> March 2013)

<sup>109</sup> *Strategija održivog razvitka RH (Strategy for Sustainable Development of the Republic of Croatia)*, 2009, Narodne novine, nr. 30, p. 38.

<sup>110</sup> Sweden, Finland, Norway and Denmark

<sup>111</sup> [www.mobilnost.hr/index.php?id=272](http://www.mobilnost.hr/index.php?id=272) (11<sup>th</sup> April 2013)

and “to improve the quality and efficiency of education and training, and enable all pupils and students to acquire essential skills and competencies needed for employment”.

Croatian Qualifications Framework (CROQF) represents a significant requirement for organization of the lifelong learning system which is a backbone of knowledge-based society and social inclusion. It is in accordance with European Qualifications Framework as part of the foreign policy of the Republic of Croatia.

### 3. The role of educational institutions in the process of lifelong learning and education – Case study: Faculty of Economics in Osijek

Despite the large number of unemployed, uncoordinated educational structure of the unemployed to labour market needs, educated people with insufficient core competencies for survival in the labour market or adaptation to social and economic changes, only a small number of people in Croatia participate in the lifelong learning process. According to Eurostat data for 2011 proportion of the population aged 25-64 years which participated in the lifelong learning process in Croatia was 2.3%, while the EU-27 average was higher than 8.9%, and in the Nordic countries it was as follows: Sweden 25%, Finland 23.8%, Norway 18.2% and Denmark 32.3% (see Table 1).<sup>112</sup>

Table 1 Involvement of the population in the lifelong learning process in European countries in 2006 and 2011 (proportion of the population aged 25-64 years, in percentage)

|                    | Total |      | Male |      | Female |      |
|--------------------|-------|------|------|------|--------|------|
|                    | 2006  | 2011 | 2006 | 2011 | 2006   | 2011 |
| EU-27              | 9.3   | 8.9  | 8.4  | 8.2  | 10.1   | 9.6  |
| Belgium            | 7.5   | 7.1  | 7.4  | 6.7  | 7.6    | 7.4  |
| Bulgaria           | 1.3   | 1.2  | 1.3  | 1.2  | 1.3    | 1.2  |
| Czech Republic     | 5.6   | 11.4 | 5.4  | 11.2 | 5.9    | 11.6 |
| Denmark            | 29.2  | 32.3 | 24.6 | 25.6 | 33.8   | 39.0 |
| Germany            | 7.5   | 7.8  | 7.7  | 7.9  | 7.2    | 7.7  |
| Estonia            | 6.5   | 12.0 | 4.2  | 9.2  | 8.6    | 14.5 |
| Ireland            | 7.5   | 6.8  | 6.1  | 6.3  | 8.9    | 7.2  |
| Greece             | 1.9   | 2.4  | 2.0  | 2.6  | 1.8    | 2.3  |
| Spain              | 10.4  | 10.8 | 9.3  | 10.0 | 11.5   | 11.6 |
| France             | 6.4   | 5.5  | 5.9  | 5.2  | 6.8    | 5.9  |
| Italy              | 6.1   | 5.7  | 5.7  | 5.3  | 6.5    | 6.0  |
| Cyprus             | 7.1   | 7.5  | 6.5  | 7.2  | 7.8    | 7.8  |
| Latvia             | 6.9   | 5.0  | 4.1  | 3.8  | 9.3    | 6.1  |
| Lithuania          | 4.9   | 5.9  | 2.9  | 4.6  | 6.6    | 7.1  |
| Luxembourg         | 8.2   | 13.6 | 7.6  | 14.2 | 8.7    | 13.0 |
| Hungary            | 3.8   | 2.7  | 3.1  | 2.6  | 4.4    | 2.9  |
| Malta              | 5.4   | 6.6  | 5.4  | 6.3  | 5.4    | 6.9  |
| Netherlands        | 15.6  | 16.7 | 15.3 | 16.5 | 15.9   | 16.9 |
| Austria            | 13.1  | 13.4 | 12.2 | 12.2 | 14.0   | 14.5 |
| Poland             | 4.7   | 4.5  | 4.3  | 4.0  | 5.1    | 5.0  |
| Portugal           | 3.8   | 11.0 | 3.7  | 10.5 | 4.0    | 11.4 |
| Romania            | 1.3   | 1.6  | 1.3  | 1.6  | 1.3    | 1.5  |
| Slovenia           | 15.0  | 15.9 | 13.8 | 13.7 | 16.3   | 18.2 |
| Slovakia           | 4.1   | 3.9  | 3.8  | 3.4  | 4.4    | 4.4  |
| Finland            | 23.1  | 23.8 | 19.3 | 19.9 | 27.0   | 27.7 |
| Sweden             | 18.4  | 25.0 | 13.3 | 18.4 | 23.7   | 31.9 |
| United Kingdom (2) | 26.7  | 15.8 | 22.2 | 14.0 | 31.3   | 17.5 |
| Iceland            | 27.9  | 25.9 | 22.4 | 22.8 | 33.7   | 29.0 |
| Norway             | 18.7  | 18.2 | 17.2 | 17.1 | 20.2   | 19.2 |
| Switzerland        | 22.5  | 29.9 | 21.7 | 31.0 | 23.4   | 28.7 |
| Croatia            | 2.9   | 2.3  | 3.1  | 2.3  | 2.8    | 2.3  |
| FYR of Macedonia   | 2.3   | 3.4  | 2.4  | 3.4  | 2.3    | 3.3  |
| Turkey             | 1.8   | 2.9  | 2.1  | 3.0  | 1.5    | 2.7  |

(1) Refer to the internet metadata file ([http://epp.eurostat.ec.europa.eu/cache/ITY\\_SDDS/en/lfsi\\_edu\\_a\\_esms.htm](http://epp.eurostat.ec.europa.eu/cache/ITY_SDDS/en/lfsi_edu_a_esms.htm)).

(2) 2006: unreliable or uncertain data.

Source: Eurostat (online data code: trng\_lfs\_01)

Source: <http://epp.eurostat.ec.europa.eu/statistics> (10<sup>th</sup> April 2013)

<sup>112</sup>[http://epp.eurostat.ec.europa.eu/statistics\\_explained/index.php?title=File:Lifelong\\_learning\\_2006\\_and\\_2011\\_\(1\)\\_\(%25\\_of\\_the\\_population\\_aged\\_25\\_to\\_64\\_participating\\_in\\_education\\_and\\_training\).png&filetimestamp=20121001105931#file](http://epp.eurostat.ec.europa.eu/statistics_explained/index.php?title=File:Lifelong_learning_2006_and_2011_(1)_(%25_of_the_population_aged_25_to_64_participating_in_education_and_training).png&filetimestamp=20121001105931#file) (4<sup>th</sup> April 2013)

Consequently, lifelong learning in Croatia, compared to the EU countries and especially the Nordic countries, is insufficiently developed.

Faculty of Economics in Osijek, as a part of the Josip Juraj Strossmayer University in Osijek, has started since 2009 a series of professional training programmes which are within the framework of lifelong education concept, in accordance to the University Statute and article 12 of the Regulations on studies and studying at the University. These are:

- Professional training programme “Project Cycle Management”
  - Professional training programme “Public Procurement”
  - Professional training programme “Cost & Benefit Analysis of Investment Projects”
  - Professional training programme for leaders of local and regional government units,
- Furthermore, they are in the process of obtaining approval from the University to establish and carry out a professional training programme intended for school directors and bankruptcy trustees. All aforementioned programmes should ensure necessary knowledge and skills to develop their own individual abilities and their competitiveness in the labour market.

### 3.1. Professional training programme “Project Cycle Management”

Process of Croatian accession to the European Union has allowed significant pre-accession funds to become available. It is anticipated that up to 2013 European Union will invest € 910.2 million in Croatia just within the IPA programme.<sup>113</sup> Familiar with the insufficient level of knowledge required to make projects in accordance with Project Cycle Management (PCM) methodology, and wishing Eastern Croatia to participate more significantly in using EU and other international funds, Faculty of Economics in Osijek has reached a decision in 2009 to introduce a professional training programme „Project Cycle Management“. The Programme was accepted by the Josip Juraj Strossmayer University in 2009 as a part of a lifelong education programme, and it is intended for higher education personnel. Purpose of the Programme is to teach the participants about the procedures, access and making of PCM projects. By producing the final paper which represents an elaboration of project idea(s) a participant gets a Certificate of completion of professional training from the Faculty of Economics in Osijek and achieves 60 ECTS points, which can later be used for further education programmes. By May 2013 total of 93 participants have finished the Programme, throughout six generations. The educational structure of participants who completed the professional training programme “Project Cycle Management” is shown in the Table 2.

Table 2 The educational structure of participants who completed the professional training programme “Project Cycle management” at the faculty of Economics in Osijek from 2009 to 2013

| Number       | Occupation                   | Number of participants | Structure in % |
|--------------|------------------------------|------------------------|----------------|
| 1            | lawyers                      | 11                     | 11.83          |
| 2            | economists                   | 52                     | 55.91          |
| 3            | engineers in various fields  | 17                     | 18.28          |
| 4            | doctors                      | 2                      | 2.15           |
| 5            | historians                   | 2                      | 2.15           |
| 6            | educators                    | 3                      | 3.22           |
| 7            | political scientists         | 1                      | 1.08           |
| 8            | social workers               | 1                      | 1.08           |
| 9            | in the process of graduation | 4                      | 4.30           |
| <b>Total</b> |                              | <b>93</b>              | <b>100.00</b>  |

Source: data of the Faculty of Economics in Osijek from 2009 to 2013, calculations made by the author

<sup>113</sup> <http://ec.europa.eu> (17<sup>th</sup> March 2013)

Table 2 shows that within the participants who completed the professional training programme "Project Cycle Management" from 2009 to 2013, 52 out of 93 participants or 55.91% were economists.

Some of the projects administered by the completed participants have been successfully evaluated by the European Commission, and their implementation is undergoing. Very valuable example of such project is the project of designing wine roads in the Osijek-Baranja County area with the total value of approximately € 1.25 million. Overall objective of the project was improvement and development of wine tourism as a generator of development in Osijek-Baranja County. Approved EU support was approximately € 930,000.00, and the project was carried out within the pre-accession program IPA IIIc - Regional Competitiveness Operational Programme 2007-2009.

### **3.2. Professional training programme "Cost & Benefit Analysis of Investment Projects"**

Regulatory framework of EU Cohesion Policy demands development of cost-benefit analyses for all major infrastructural projects which apply for EU funds. At Osijek-Baranja County area and beyond, there is a need for experts in making cost-benefit analyses. This will especially be significant when Croatia becomes an EU member and infrastructural and Cohesion funds become available. In order to satisfy current market needs for experts in making cost-benefit analyses, as well as expected future trends (when this need will become far more pronounced), Faculty of Economics in Osijek decided to start a professional training programme for development of cost-benefit analyses. Working on cost-benefit analyses demands specific knowledge, skills and experience for whose acquisition until now there was no adequate academic training. Purpose of the Programme is to teach participants about the procedures, access and making of cost-benefit analyses for project proposals which are demanded not only by the EU, but also many other donors and investors.

Professional training programme "Cost & Benefit Analysis of Investment Projects" was until May 2013 successfully completed by 18 participants who took 55 hours of interactive classes. Their successful completion and passing exams gives the Programme participants a Certificate of completion of professional training issued by the Faculty of Economics in Osijek and 10 ECTS points.

### **3.3. Professional training programme "Public Procurement"**

Purpose of the professional training programme "Public Procurement" is to teach participants about the needs for general and specific knowledge and skills regarding various types of procurements, as well as planning and implementation of public procurement procedures in private, public and civil sectors in the Republic of Croatia. The Programme was structured by the contents corresponding to the European criteria. The emphasis is on acquisition of professional and practical knowledge and skills, and their implementation in practice. After the completion of professional training programme participants are trained to practically and independently implement public procurement for users in private, public and civil sectors. By January 2013, the professional training programme "Public Procurement" was completed by 12 participants of the first generation who attended 50 hours of interactive classes. After passing exams they get a Certificate of completion of professional training and 10 ECTS points.

### **3.4. Professional training programme for leaders of local and regional government units**

To successfully run a sustainable regional and rural development new contemporary and applied knowledge are essential. Especially since the entry of the Republic of Croatia in the EU system requires a new approach to development which is based on the principles of democracy, sustainable development, economic approach to use of public property, using funds of international financial institutions, and especially resources of the Structural Funds and the Cohesion Fund of the EU.

Purpose of the professional training programme is to teach participants about procedures and approaches in leading economic policies of local and regional government units. Since there are business activities in the area of Eastern Croatia that are related to European economy, gaining new knowledge is an imperative for current and future leaders of local and regional government units.

#### 4. Conclusion

In a globalized world where intellectual capital doesn't know of national boundaries, the concept of lifelong learning and education gives us a different approach to problem solving and adaptation to economic needs, as well as new changes that are yet to come. Economies are being built on true values of intellectual capital and based on that sustainable development is achieved. So, the focus is on economy of knowledge, innovative economy, flexible economy, information-based economy, everything that contributes to creation of new or added value. The economy of knowledge is a qualitative factor for development of certain economy. The very fact that it is not quantifiable and measurable gives it a special significance.

Development of society based on knowledge and its implementation has stressed the importance of lifelong learning and education. Lifelong learning and education in developed economies are necessary prerequisites for transformation towards the knowledge society with the final objective of raising the competitiveness, productivity and employment, and consequently, achieving stable and sustainable economic growth. Lifelong learning promotes development of intellectual capital and continued creation of added value, for an individual as well as the whole society. Since people are the main carriers of ideas, information, knowledge and skills, motivation and variety in education possibilities are a very important factor in the process of lifelong learning and education. Intellectual capital is the strategic foundation in contemporary society and economy.

Despite the large number of unemployed, uncoordinated educational structure of the unemployed to labour market needs, educated people with insufficient core competencies for survival in the labour market or adaptation to social and economic changes, only a small number of people in Croatia participate in the lifelong learning process. Lifelong learning and education system in Croatia is not adequate to obvious growing market needs. It is necessary to establish a socially acceptable value system, enable evaluation of lifelong learning and education, i.e. recognition of competences acquired in the process of lifelong learning and education, increase and stimulate investments into lifelong learning and education, and emphasize the importance of lifelong learning and education in stimulation of economic development and general prosperity of the society, as well as social cohesion.

#### REFERENCES

Barić, V., Jelenc Raguž, M (2008), *Značaj obrazovanja za razvoj društva znanja (The Role and Significance of Education for the Knowledge Society Development)*, 1<sup>st</sup> International Conference "Vallis Aurea", focus on: regional development, Požega;

Barro, R.J. (1997), *Education and Economic Growth*. Harvard University;

Bogović, T., Cingula, M. (2008), *Utjecaj visokog obrazovanja na razvoj informatičkog poduzetništva u varaždinskoj regiji (Higher education impact on informatics entrepreneurship in Varaždin County)*, 1<sup>st</sup> International Conference "Vallis Aurea", focus on: regional development, Požega;

Dragičević, M. (2002), *Znanje kao temeljni strateški resurs 21. stoljeća (i slučaj Hrvatske), Znanje – temeljni ekonomski resurs, (Knowledge as an Essential Strategic resource in the 21<sup>st</sup> Century (Case Study Croatia), Knowledge – an Essential Economic Resource)*, Rijeka, Faculty of Economics at the University of Rijeka;



Lev, B. (1996), *Granice financijskog izvješćivanja i kako ih proširiti (The Boundaries of Financial Reporting and How to Extend Them)*, SEC Symposium, Washington DC;

North, K. (2008), *Upravljanje znanjem – Vodenje poduzeća usmjereno prema znanju, (Knowledge Management – Leading a Company Directed Towards Knowledge)*. Naklada Slap;  
Pulić, A., Bornemann, M.: *Fizički i intelektualni kapital austrijskih banaka (The Physical and Intellectual Capital of Austrian Banks)*, www.measuring-ip.at (15<sup>th</sup> January 2012);

Organisation for Economic Co-operation and Development (OECD), www.oecd.org/edu/eag2010: *Education at a Glance 2011, OECD indicators* (30<sup>th</sup> November 2011);

Hanushek, E. A. (2005), *Economic Outcomes and School Quality*. <http://unesdoc.unesco.org> (15<sup>th</sup> December 2011);

<http://www.mckinseysociety.com> (30<sup>th</sup> March 2013);

<http://public.mzos.hr/fgs.axd?id=18632> (17<sup>th</sup> March 2013);

[www.azvo.hr/images/stories/visoko/PRAGUE\\_COMMUNIQUE.pdf](http://www.azvo.hr/images/stories/visoko/PRAGUE_COMMUNIQUE.pdf), (17<sup>th</sup> March 2013);

[www.mobilnost.hr/index.php?id=272](http://www.mobilnost.hr/index.php?id=272) (11<sup>th</sup> April 2013);

[http://epp.eurostat.ec.europa.eu/statistics\\_explained/index.php?title=File:Lifelong\\_learning,\\_2006\\_and\\_2011\\_\(1\)\\_\(%25\\_of\\_the\\_population\\_aged\\_25\\_to\\_64\\_participating\\_in\\_education\\_and\\_training\).png&filetimestamp=20121001105931#file](http://epp.eurostat.ec.europa.eu/statistics_explained/index.php?title=File:Lifelong_learning,_2006_and_2011_(1)_(%25_of_the_population_aged_25_to_64_participating_in_education_and_training).png&filetimestamp=20121001105931#file) (4<sup>th</sup> April 2013);

<http://ec.europa.eu> (17<sup>th</sup> March 2013);

*Strategija održivog razvitka RH (Strategy for Sustainable Development of the Republic of Croatia)*, 2009, Narodne novine, nr. 30;

Document “Education and Training 2020.“, EU Council, in 2009;

*Smjernice za strategiju odgoja, obrazovanja, znanosti i tehnologije (Guidelines for Education, Science and Technology Strategy)*, MZOS (Ministry of Science, Education and Sports), 2012