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*Language –of text:* Engl.              – *of Summary:* Engl., Croat.  
*References:*11 *Tables:*0 *Figures:*1  
*Category:* Original Scientific Paper  
*Title:* HUMAN CAPITAL - E-LEARNING AND STRATEGY OF DEVELOPMENT  
*Author(s):* Metod Černetić, Olga Dečman Dobrnjić\*  
*Affiliation:* Faculty of Organizational Sciences, Kranj, University of Maribor, Slovenia, The national education institute of the Republic of the Slovenia\*  
*Key words:* human capital, education, e-learning, development  
*Abstract:* Conception of human capital is not entirely original, but it has achieved enormous success among international institutions and western governments, not only because it propose a strategy of permanent development as its advocates suggests, but because economical justifies education; what is in the eyes of decision makers only valid justification. It seems that globalization of on-line education opens fairly big market to firms that offers educational products. World market of on-line higher educational system in the years between 1996 and 2002 has passed over from 97 millions dollars to 3,9 billions of dollars; the market of educational computer programs in the period 1996 to 2000 has passed from 2,3 to 6,2 billion dollars; number of educational CD-ROMs has tripled in the period between 1998 and 2000. Prevailing doctrine in pedagogy and education today has a focus in the theories of human capital. These theories, although full of ideological prejudices, reflect very real tendency of modern capitalism to mobilizing a far greater number of values to their double aspects of factors of production and merchandise. With the term human capital different economists determine "stock of knowledge, which can be economically evaluated and has been captured by individuals." In the first place, these are qualifications, gained either in the system of qualification or either through professional experience. In the wider meaning this conception grasps numerous trumps, which can be carried into effect by individual in the marketplace and can be shown by employee as a potential sources of advantage: for example physical appearance, good manners, way of life and state of mind or even good medical condition. In such manner by the opinion of OECD human capital would unite "knowledge, qualifications, competence and individual characteristics, which relieve creation of personal, social and economic welfare."

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*Language –of text:* Croat.              – *of Summary:* Croat.,Engl.  
*References:*0 *Tables:*3 *Figures:*4  
*Category:* Original Scientific Paper  
*Title:* PORTFOLIO OPTIMIZATION AND EVOLUTION ALGORITHMS  
*Author(s):* Brano Markić  
*Affiliation:* Faculty of Economy, University of Mostar, Bosnia and Herzegovina  
*Key words:*technology, algorithm, portfolio optimization, security  
*Abstract:* Portfolio optimization of securities is very complex and challenging task where is needed integrated knowledge of different scientific disciplines for successful solution. Especially may be extracted and stressed economic knowledge which tends to maximize portfolio returns and minimize investment risk at the same time. It is necessary to monitor and analyze financial market and based on data about securities returns to select the portfolio which ensures satisfactory return and acceptable risk. In mathematical sense the problem may be solved by quadratic programming. In these paper is presented another approach to portfolio optimization problem using natural methods in form of genetic algorithm. It is developed and implemented especially software solution that proposes to investor weights of each one security in portfolio.

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*Language –of text:* Croat.              – *of Summary:* Croat.,Engl.  
*References:*17 *Tables:*0 *Figures:*0  
*Category:* Original Scientific Paper  
*Title:* HUMAN ECOLOGY AND TECHNOLOGY OF TRANSCENDENT COMMUNICATION  
*Author(s):* Juraj Plenković  
*Affiliation:* University of Rijeka, Rijeka, Croatia  
*Key words:* ecology, technology, communication, religion  
*Abstract:* In this paper author is giving diachrony and synchrony analysis of historical and technological possibilities of ecology and transcendent communication. He is using multilateral methodology of accomplishments of contemporary ecological and communication transcendent thought. It is a general thesis

that the world today is in a global crisis and ecology and technology in a new human challenge which is becoming dominant mark of human thinking, behaviour and acting in contemporary communicational and technical world. Modern life is setting human ecology in the first plan. Author is emphasising in his paper that ecology and technology shouldn't be left on their own, but all technologies must be used in human communicational manner with the goal of reaching maximal technological terms of communicational surroundings, space, culture, tradition and educative skills of all citizens.

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*Language –of text:* Engl.      – *of Summary:* Engl., Croat.  
*References:* 15 *Tables:* 4 *Figures:* 3

*Category:* Preliminary Communication

*Title:* QUALITY MANAGEMENT OF HOTEL INFORMATION SYSTEM

*Author(s):* Vlado Galičić, Slobodan Ivanović

*Affiliation:* Faculty of Tourism and Hospitality Management in Opatija, University of Rijeka, Opatija, Croatia

*Key words:* management, hotel, tourism, information system

*Abstract:* An information system is the basis of a hotel as a business system. Its role is to improve the processes involved in performing, managing and strategically planning business operations. It enhances the intangible features of services and increases process and service quality through improvements and innovations. As a business system, a hotel consists of a number of interrelated subsystems. A feature of modern hotel operations is the existence of an integrated hotel information system through the use of computers. This system comprises several components (Hardware, Software, Orgware, Lifeware, Netware and Dataware) that must all possess the same level of quality. Only by continuously analysing the quality and alignment of all components is it possible to gain insight into the global quality of a hotel information system and to ensure a more efficient management process. This paper presents the results of a survey conducted among 72 hotel managers from Croatia concerning the importance of the individual components of a hotel information system.

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*Language –of text:* Engl.      – *of Summary:* Engl., Croat.  
*References:* 15 *Tables:* 7 *Figures:* 1

*Category:* Authors Review

*Title:* INFORMATION AND COMMUNICATIONS TECHNOLOGIES AND THE TRANSFORMATION OF LEARNING AND TEACHING PROCESS FOR THE 21<sup>ST</sup> CENTURY

*Author(s):* Velimir Topolovec, Marija Marinović, Mile Pavlić

*Affiliation:* Department of Information Science, University of Rijeka, Rijeka, Croatia

*Key words:* education, communication, technology, learning

*Abstract:* Despite three decades of government initiatives and academic research, the use of information and communications technology (ICT) in learning and teaching remains only partially understood. This paper strives toward giving some evidence how new knowledge provided by cognitive, social, and learning scientists, information and computer scientists, and subject matter specialists studying learning and teaching has generated advances in our understanding of learning and teaching processes and contributes substantially to our understanding of how to use ICT to improve and transform learning and teaching. The production, sharing, and use of new knowledge and developments can dramatically improve and change the processes and outcomes of learning and teaching in 21<sup>st</sup> century.

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*Language –of text:* Engl.      – *of Summary:* Engl., Croat.  
*References:* 9 *Tables:* 0 *Figures:* 0

*Category:* Author Review

*Title:* MEDIA EDUCATION IN THE SCHOOL SYSTEM

*Author(s):* Wojciech Walat

*Affiliation:* Institute of Technology, University of Rzeszow, Rzeszow, Poland

*Key words:* education, communication, media

*Abstract:* The diagnosis of the problem of the contemporary world in the area of global media communication is a basic challenge for existing and modernised educational systems. Without a complete vision of the world, people

cannot exist in a fully aware way. Hence, the most important questions related to such social development in which no one would be excluded from the world-wide circulation of information. The general assumptions of common media education have been presented in the article.

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*Language –of text:* Croat.                      *– of Summary:* Croat., Engl.  
*References:* 12 *Tables:* 30 *Figures:* 33  
*Category:* Professional Paper  
*Title:* COMMUNICATION ANALYSIS OF VISUAL CRITERIA FOR EVALUATION OF SUCCESS OF PARLIAMENTARY PARTIES  
*Author(s):* Mario Plenković, Daria Mustić, Slobodan Hadžić, Goran Radoš  
*Affiliation:* Department for Communication Science, Faculty of Graphic Arts, University of Zagreb, Zagreb, Croatia  
*Key words:* billboards, visual estimation, graphic design  
*Abstract:* Visual elements of the message are functional only if the criteria of graphic design and communicational structure are appreciated, which are taking psycho-physiological characteristic of the human eye into consideration, basic laws of perception and outside factors (media, place of the message). The paper is dealing with the problem of successful usage of visual elements in outdoor advertising on the example of billboards of croatian parliamentary parties in the time of the parliamentary elections. The research is aimed questioning are the political parties designed their billboards using professional standards of graphic design. The paper is exploring success in designing key visual elements. Theory discussion is conducted thru forming and analysis of the structure of professional criteria for the usage of visual elements and analysis of their application on billboards of parliamentary parties.

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*References:* 10 *Tables:* 0 *Figures:* 0  
*Category:* Professional Paper  
*Title:* VISUAL ARTS THEME OF MARITIME STORM AND/OR ITS CONSEQUENCES  
*Author(s):* Eduard Pavlović\*, Kristian Debeuc\*, Paula Jovanović\*, Iris C. de Corbavia  
*Affiliation:* Psychiatric Clinic Rijeka, Rijeka, Croatia \*  
*Key words:* maritime storm, arts theme, sea, psychiatry  
*Abstract:* A maritime storm is characterized with strong, destroyed wind and with powerful sea. On the other side ship as one complex maritime reality is able to be one specific «social laboratory» due to various interactions, social dependents and pressions of different persons within the long time. It is very important to believe in possibility of dealing with crisis of storm or ship damage. The aim of this paper didn't bring nearer social and individual mariner psychological aspects in the crisis of storm or ship damage than to bring nearer the storm and ship damage impression and their articulation by visual artists. Therefore visual art works on theme of maritime storm and/or its coneqences were sorted out avaiable books of visual arts history. In this way The flood of the magnificent Leonardo da Vinci is prophetic now such as The wave of Gustave Courbet with its fullness of elementary dramatic power. It seems that the big theme as maritime storm and/or its consequences i.e. its variant could be articulated only by great visual artists as L. Da Vinci, W. Turner or O. Kokoschke because they could make the scene of maritime storm as the undying battle between life and death i.e. Eros and Thanatos.