
Informatologia, 39, 2006, 4, 240-332

Literature: Serial *Bibliographic level:* Analytic
UDC: 004.65 *ISSN:* 1330-0067
Coden: IORME 7 *Short title:* Informatologia, Zagreb
Vol. No. (Year): 39(2006) *Issue No.:* 4
Other identification: INFO-951 *Page numbers:* 240-244
Received: 2006-03-11 *Issued:* 2006-07-20
Language –of text: Engl. *-of Summary:* Engl Croat.,.
References: 0 *Tables:* 2 *Figures:* 4
Category: Original Scientific Paper
Title: SOFTWARE SOLUTIONS IN MARKETING RESEARCH FOR KNOWLEDGE DISCOVERY IN DATABASES BY FUZZY CLUSTERING
Author(s): Brano Markić, Dražena Tomić
Affiliation: Faculty of Economics, University of Mostar, Bosnia and Herzegovina,
Key words: knowledge discovery, data mining, data warehouse, cluster algorithms.

Abstract: Knowledge discovery in databases is the process of identifying novel, valid, useful and ultimately understandable patterns in data stored in databases. Data mining is only a step in this process in charge to find patterns or models in data. There are many data mining algorithms for clustering. Clustering is unsupervised classification, the process of grouping the data into classes so that the data objects (examples) are similar to one another within the same cluster and dissimilar to the objects in other clusters. In the paper is developed a conceptual model and program solution for clustering data stored in subject oriented data warehouse. Data warehouse and mining algorithms are integrated and this integration has shown satisfactory implementation power.

Informatologia, 39, 2006, 4, 240-332

Literature: Serial *Bibliographic level:* Analytic
UDC: 654.19:330.341.1 654.19:659.3 *ISSN:* 1330-0067
Coden: IORME 7 *Short title:* Informatologia, Zagreb
Vol. No. (Year): 39(2006) *Issue No.:* 4
Other identification: INFO-952 *Page numbers:* 245-250
Received: 2006-07-10 *Issued:* 2006-11-16
Language –of text: Engl. *-of Summary:* Engl., Croat.
References: 9 *Tables:* 0 *Figures:* 1
Category: Original Scientific Paper
Title: TRADITIONAL TELEVISION AND ITS ROLE IN A DYNAMIC MEDIA FIELD
Author(s): Suzana Žilić Fišer
Affiliation: Institute of Media Communications, University of Maribor, Maribor, Slovenia
Key words: Media changes, traditional media, commercial television, public service broadcasting, viewing, new technologies

Abstract: Technological as well as economical and political changes in society provoke dynamic changes in media systems. That is why in Europe de-regulation and re-regulation of the broadcast system started. One reason for this is that new media systems with purely commercial aims have substituted for the previous media system of public

television only. In this way a dual media system has formed, characterized by the activities of public television as well as private commercial stations. In changed circumstances, the characteristics of public service television that had formerly been very strict and noncommercial have evidently been modified. Beside economic and political changes of the broadcasting we could detect technological changes. New technologies brought the new platforms which should be part of traditional broadcasting system. It is most important that we research new technologies in the context of quality content that can be offered to the public, and also to think about television as an institution which is an important component of the social cultural and political system. The aim of the paper is to explain the importance of the economic success as one of the basic segments of the national communication system. Additionally, the necessity of the technological developments that will support television in its special role in the dynamic media field would be discussed.

Informatologia, 39, 2006, 4, 240-332

Literature: Serial *Bibliographic level:* Analytic
UDC: 004.414.2 MIRIS *ISSN:* 1330-0067
Coden: IORME 7 *Short title:* Informatologia, Zagreb
Vol. No. (Year): 39(2006) *Issue No.:* 4
Other identification: INFO-953 *Page numbers:* 251-255
Received: 2005-07-15 *Issued:* 2006-6-18
Language –of text: Engl. *-of Summary:* Engl., Croat.
References: 11 *Tables:* 4 *Figures:* 1
Category: Preliminary Communication
Title: EDUCATION MODEL FOR MIRIS METHODOLOGY

Author(s): Mile Pavlić, Patrizia Pošćić, Marija Marinović
Affiliation: Faculty of Philosophy, University of Rijeka, Rijeka, Croatia
Key words: MIRIS methodology, information technology, education model

Abstract: The paper presents the MIRIS methodology and education model that may help in acquiring knowledge and skills required in information system design. The education model is used with students, as well as with information technology (IT) professionals actively involved in information systems design. The model was changed during the course of time, and teaching made a shift from academic exposition towards communication and team-oriented modeling. The results are based on years long education. Results obtained by IT professionals were measured and the rate of successfully passed exams for information systems designer was recorded during a longer period of time.

Informatologia, 39, 2006, 4, 240-332

Literature: Serial *Bibliographic level: Analytic*
 UDC: 71:504>(497.4+4-67EU) ISSN: 1330-0067
 Coden: IORME 7 *Short title: Informatologia, Zagreb*
 Vol. No. (Year): 39(2006) *Issue No.: 4*
 Other identification: INFO-954 *Page numbers:256-261*
 Received:2006-04-17 *Issued:2006-06-18*
 Language –of text: Engl. *-of Summary: Engl., Croat.*
References:24 Tables:2 Figures: 0
Category: Preliminary Communication
Title: SPATIAL PLANNING WITHIN ENVIRONMENTAL ISSUE ON NATIONAL AND EUROPEAN INFORMATION LEVEL
Author(s): Melita Rozman
Affiliation: Biotechnical faculty, University of Ljubljana, Ljubljana, Slovenia
Key words: Spatial development, Spatial planning, Sustainable use, Environment, European level
Abstract: Spatial development plays an important role in the conservational and sustainable use of biodiversity as well as at local and regional level and should be considered properly. Therefore the paper reports how far the topic is already involved in spatial documents and procedures on national and european level. The paper composes two themes. The first one presents the past and current situation of Slovenian spatial development and its thematic issues focusing on The Spatial Development Strategy of Slovenia. The second one reviews European spatial trends and actual legislation compared with the Slovenian situation. Environmental issues were the first among elements of sustainable development strategies in Slovenia being positively accepted in the planning practice and generally in the public.

Informatologia, 39, 2006, 4, 240-332

Literature: Serial *Bibliographic level: Analytic*
 UDC: 004:371 ISSN: 1330-0067
 Coden: IORME 7 *Short title: Informatologia, Zagreb*
 Vol. No. (Year): 39(2006) *Issue No.: 4*
 Other identification: INFO-955 *Page numbers:262-266*
 Received:2005-11-20 *Issued:2006-06-17*
 Language –of text: Croat. *-of Summary: Croat. Engl.,*
References:0 Tables:0 Figures:0
Category: Author Review
Title: COMPUTER LITERACY AND COMPUTERISATION OF EDUCATION
Author(s): Dorđe Nadrljanski
Affiliation: Faculty of Philosophy, University of Split, Split Croatia
Key words: new media, computerisation of school, computer literacy
Abstract: Literacy has always been a part of culture and tradition; it has its historical, political, social and ideological characteristics. Present computerised era has connected people, cultures, knowledge and business, and daily life characterized by computers, regardless of geographic differences, imposed new social practices, new media and new methods of creating

values, and consequently new interpretation of literacy. Traditional expressing of meaning through a language is now oriented towards multimedia expressions which is expanded by images and text. This paper deals with issues of computer literacy and computerisation of school.

Informatologia, 39, 2006, 4, 240-332

Literature: Serial *Bibliographic level: Analytic*
 UDC: 371.3:5>(497.4) ISSN: 1330-0067
 Coden: IORME 7 *Short title: Informatologia, Zagreb*
 Vol. No. (Year): 39(2006) *Issue No.: 4*
 Other identification: INFO-956 *Page numbers:267-270*
 Received:2005-09-15 *Issued:2006-02-16*
 Language –of text: Engl. *-of Summary: Engl., Croat.*
References:7 Tables:2 Figures:1
Category: Author Review
Title: ANALYSIS OF INCORPORATING ELECTRONIC AND OTHER SOURCES OF KNOWLEDGE INTO THE CONTEXT OF TEACHING ELEMENTARY NATURAL SCIENCE
Author(s): Samo Fošnarič, Jurij Planinšec
Affiliation: Faculty of Education, University of Maribor, Maribor, Slovenia
Key words: natural science, pupils, teaching, electronic sources, information
Abstract: Efficient education is becoming the basis for life learning. Therefore teachers and parents need to look after the children's knowledge. This knowledge is not an endless learning by heart of enormous amount of data which are quickly forgotten, but a knowledge which needs to be efficient and functional in the future as well. The intention of the presented research in this article was to establish whether students in elementary natural science of nine-grade primary school in Slovenia use electronic and other sources of knowledge, how much they use them and if they use them at all. We find that students do use other sources of knowledge. Nevertheless, next to observing and listening to teacher's explanation and description, the use of school books and work books is still the most widely used source of knowledge. Learning by electronic sources and searching for information on the internet is, despite the fact that we are living in a computer-information era, still not present enough

Informatologia, 39, 2006, 4, 240-332

Literature: Serial *Bibliographic level:* Analytic
UDC: 316.774(497.5) *ISSN:* 1330-0067
Coden: IORME 7 *Short title:* Informatologia, Zagreb
Vol. No. (Year): 39(2006) *Issue No.:* 4
Other identification: INFO-957 *Page numbers:* 271-275
Received: 2005-12-17 *Issued:* 2006-07-18
Language –of text: Croat. *-of Summary:* Croat. Engl.,
References: 27 *Tables:* 1 *Figures:* 0
Category: Author Review
Title: THE MEDIA AND NEW VALUES OF THE FREE MARKET SOCIETY
Author(s): Antun Šundalić, Iva Heteši
Affiliation: Faculty of Economics, University of Osijek, Osijek, Croatia
Key words: electronic media, communication, information, media reform, democratisation.
Abstract: Modern society is primarily characterized by information technology and communication. Communication through the media, especially the electronic ones, has become the main link of the fast-changing world, rich in innovations. Mobilism and relativism of the new reality are the result of the technicistic interpretation of the world. The information technology paradigm has not only put knowledge as symbolic capital before material indicators of wealth; it has also made the very existence dependent on being well-informed. Such circumstances have given the electronic media a premium role, in which they assume and control the power.
 In such an environment transition, societies are trying to adapt to the age of new values by a media reform at the socio-cultural and economic-technological level. The development of independent media, especially electronic ones, should go hand in hand with the democratisation of society. This is still far from being the case in Croatian society, as the public frequently puts the media in the service of the power elite

Informatologia, 39, 2006, 4, 240-332

Literature: Serial *Bibliographic level:* Analytic
UDC: 004:371](497.4) *ISSN:* 1330-0067
Coden: IORME 7 *Short title:* Informatologia, Zagreb
Vol. No. (Year): 39(2006) *Issue No.:* 4
Other identification: INFO-958 *Page numbers:* 276-279
Received: 2006-09-14 *Issued:* 2006-07-22
Language –of text: Engl *-of Summary:* Engl., Croat.
References: 5 *Tables:* 2 *Figures:* 2
Category: Author Review
Title: APPLIANCE OF INFORMATION AND COMMUNICATION TECHNOLOGY (ICT) IN SLOVENIAN EDUCATION SYSTEM
Author(s): Ivan Gerlič
Affiliation: Faculty of Education, University of Maribor, Maribor, Slovenia
Key words: information society, educational system, computer in education, information and communication technology (ICT), computer - informatics literacy, qualification staff.
Abstract: Research project “Didactical aspects of appliance of Information and Communication Technology (ICT) - learning and training” has covered the following topics: analysis of ICT, design and definition of didactical aspects of ICT in Slovenian learning system, design and definition of didactical forms, methods, approaches, models of ICT in education and training, their practical value, and compatibility with contemporary educational systems goals.

Informatologia, 39, 2006, 4, 240-332

Literature: Serial *Bibliographic level:* Analytic
UDC: 338.24:316.774 *ISSN:* 1330-0067
Coden: IORME 7 *Short title:* Informatologia, Zagreb
Vol. No. (Year): 39(2006) *Issue No.:* 4
Other identification: INFO-959 *Page numbers:* 280-285
Received: 2006-01-15 *Issued:* 2006-08-28
Language –of text: Croat. *-of Summary:* Croat. Engl.,
References: 0 *Tables:* 6 *Figures:* 0
Category: Author Review
Title: ELECTRONIC MEDIA AS A KEY OF COMPETITIVENESS OF TRANSITION COUNTRIES
Author(s): Katerina Malić-Bandur
Affiliation: Faculty of Economics, University of Mostar, Mostar, Bosnia and Herzegovina
Key words: transition, electronic media, competitiveness, ratio of diversification in production and electronic media
Abstract: Transition is a complex process that in political terms means the transition into democratic society and in economic terms it means the establishment of free market. Transitional changes also include a new role and position of electronic media. The question of influence of electronic media on transition is not only the question of freedom of media but this question is also used as a measure of the success of transition. First, transition is a process of obtaining competitiveness in particular in production

companies. Transitional changes are professionally very demanding in the segments of internal organisation of every company, in management, in business processes and their adjustment to wider regional, European and global markets. Electronic media are crucial for obtaining the competitiveness of companies as they enable their presentation on global market. Electronic media have an impact on company performance and maintaining its competitiveness on the market. It is of crucial importance for a large number of Croatian companies, that hardly have any chance in international competition using the electronic media in this way, to change their approach to this significant segment. The assumption is that electronic media have an influence on the company's capabilities to use its competitiveness for faster establishment into the global market.

Informatologia, 39, 2006, 4, 240-332

Literature: Serial *Bibliographic level:* Analytic
UDC: 372.87:004 *ISSN:* 1330-0067
Coden: IORME 7 *Short title:* Informatologia, Zagreb
Vol. No. (Year): 39(2006) *Issue No.:* 4
Other identification: INFO-960 *Page numbers:* 286-289
Received: 2006-03-10 *Issued:* 2006-10-20
Language -of text: Engl. *-of Summary:* Engl., Croat.
References: 2 *Tables:* 0 *Figures:* 7
Category: Author Review
Title: NEW QUALITIES OF USING COMPUTERS IN FINE ARTS TEACHING
Author(s): Matjaž Duh
Affiliation: Faculty of Education, University of Maribor, Maribor, Slovenia
Key words: Fine Arts, primary school, computer, digital photography, computer graphics
Abstract:

Computer generated artistic production in Slovenian primary schools leads to new qualities in spite of a less frequent use of the computers. The teachers of Fine Arts together with their pupils, research computer tools and use them in a creative way. The quality is displayed in their understanding of the specifics of artistic expressiveness of the computer tools. In the 90's of the previous century computer generated pictures and drawings of our primary school pupils were merely a pale copy of those in classical or traditional drawing techniques. In more recent times on the other hand, we encounter children's works of art which fully use the advantages of computer tools. Contemporary input units in particular open up new possibilities for artistic modeling or creation. Nevertheless, in using the latest computer technology the teacher also has to be aware of the educational goals in teaching Fine Arts and organize his pedagogical work to be in agreement with the basic contemporary Fine Arts Education aims from the didactic, content and organizational point of view.

Informatologia, 39, 2006, 4, 240-332

Literature: Serial *Bibliographic level:* Analytic
UDC: 37:004:910.22 *ISSN:* 1330-0067
Coden: IORME 7 *Short title:* Informatologia, Zagreb
Vol. No. (Year): 39(2006) *Issue No.:* 4
Other identification: INFO-961 *Page numbers:* 290-292
Received: 2006-01-28 *Issued:* 2006-07-17
Language -of text: Engl. *-of Summary:* Engl., Croat.
References: 7 *Tables:* 0 *Figures:* 0
Category: Professional Paper
Title: USE OF MODERN INFORMATION TECHNOLOGY IN EDUCATION WITH SPECIAL EMPHASIS ON GEOGRAPHY AND GIS
Author(s): Karmen Kolenc-Kolnik
Affiliation: Faculty of Education, University of Maribor, Maribor, Slovenia
Key words: ICT, education, GIS, geography
Abstract: Determinants of the modern school are derived from the innovative character of post-industrial information society in which thinking, creativity, anticipation and innovation are becoming the contents and criteria of educational effectiveness. This can be partly achieved by thoughtful inclusion of use of information communication technology (ICT) into geography education being aware of its advantages and disadvantages. This article will study the importance of inclusion of geographical information systems (GIS) in education with the basic goal to enable our youth to become geographically educated also with the help of ICT. We are finding that use of GIS in geography teaching does not only stimulate quality in achieving specific knowledge it also enables development of abilities and skills of inter-subject connection and its use for further professional development of the youth. Inclusion of GIS into geographical education demands adequately qualified teachers and, naturally, access to modern teaching technologies. We have formed a list of competencies of a geography teacher and have analysed some of the main educational demands for the use of GIS

Informatologia, 39, 2006, 4, 240-332

Literature: Serial *Bibliographic level:* Analytic
UDC: 37:62:004 *ISSN:* 1330-0067
Coden: IORME 7 *Short title:* Informatologia, Zagreb
Vol. No. (Year): 39(2006) *Issue No.:* 4
Other identification: INFO-962 *Page numbers:* 293-296
Received: 2006-04-15 *Issued:* 2006-11-05
Language –of text: Croat. *–of Summary:* Croat. Engl.,
References: 8 *Tables:* 0 *Figures:* 0
Category: Professional Paper
Title: MEDIA IN EDUCATION AND LEARNING
Author(s): Vladimir Rosić, Damir Donadić
Affiliation: Faculty of Philosophy, University of Rijeka, Rijeka, Croatia
Key words: educational technology, medija, computer, Internet, quality and technology
Abstract:
 Education and upbringing belong to the most complex and at the same time to the most responsible human activities. The results achieved through them depend on many exterior and interior factors, but the teacher (professor) is surely one on of the most important factors. Why ? The answer is unquestionably positive. During different periods different educational technology was applied which actually reflected the level of development of science, technology and technics in that respective period. In the area of education , our century has brought about a series of technical means and aids: from the film, the radio and television to the computer and several other inventions in the modern times. All these processes, however, can only take place with appropriately qualified teachers

Informatologia, 39, 2006, 4, 240-332

Literature: Serial *Bibliographic level:* Analytic
UDC: 371.3:004.738.5 *ISSN:* 1330-0067
Coden: IORME 7 *Short title:* Informatologia, Zagreb
Vol. No. (Year): 39(2006) *Issue No.:* 4
Other identification: INFO-963 *Page numbers:* 297-300
Received: 2005-12-18 *Issued:* 2006-06-20
Language –of text: Croat. *–of Summary:* Croat. Engl.,
References: 0 *Tables:* 0 *Figures:* 0
Category: Professional Paper
Title: :CONCEPTUAL ISSUES OF E-LEARNING IN ELECTRONIC ENVIRONMENT
Author(s): Mila Nadrljanski
Affiliation: Faculty of Maritime Studies, University of Split, Split, Croatia
Key words: e-learning, educational technological system, video conferences
Abstract: In this paper the basic issues of electronic learning are discussed: What is e-learning? Why should it be implemented? How will it be realized and used? What are its advantages and weaknesses? Nowadays teachers use new technologies connecting computers and modern telecommunication achievements, and if we want to include all aspects of implementing technology for educational

purposes in one expression (or definition) then the definition could be communication through computer, or e-learning. E-learning may be used in numerous ways: electronic mail, interactive messages, large or small discussion groups, large video conferences, on line catalogues or data bases, on line learning, various programmed web archives (data like images, sound, text, video), complete campus computerized systems, etc. As any educational technological system it has its advantages and weaknesses.

Informatologia, 39, 2006, 4, 240-332

Literature: Serial *Bibliographic level:* Analytic
UDC: 070.11(497.5) *ISSN:* 1330-0067
Coden: IORME 7 *Short title:* Informatologia, Zagreb
Vol. No. (Year): 39(2006) *Issue No.:* 4
Other identification: INFO-964 *Page numbers:* 301-304
Received: 2006-03-17 *Issued:* 2006-07-08
Language –of text: Croat. *–of Summary:* Croat. Engl.,
References: 11 *Tables:* 0 *Figures:* 0
Category: Professional Paper
Title: ETHICS IN E-ZINES
Author(s): Đorđe Obradović
Affiliation: University of Dubrovnik, Dubrovnik, Croatia
Key words: ethics, Internet, anonymity, freedom, censorship
Abstract: Research conducted with quantitative and qualitative content analysis method of certain Croatian E-zines revealed how individuals, hidden by anonymity, one of Internet's major benefits, vulgarize freedom of speech and turn it into intolerance towards others, eruptions of hatred and anarchy.
 Instead on aspects, anger is aimed on author, his family, nation, religion or race, according to this research. Freedom is the right of people on truthful, accurate, fair, balanced and unbiased information coverage, freedom is the ability to use right on corrective amendment, acknowledged by Croatian law system, and freedom is also the right not to watch some programs and shows or not to read articles by certain authors.
 But, freedom was never, nor it will become, the right to imperil rights of others, which unfortunately still didn't live up to be rule of conduct in bidirectional communication through E-zines.

Informatologia, 39, 2006, 4, 240-332

Literature: Serial
UDC: 371.13:004
Coden: IORME 7
Vol. No. (Year): 39(2006)
Other identification: INFO-965
*Received:*2006-03-20
Language –of text: Engl.
*References:*1 *Tables:*9 *Figures:*0
Category: Professional Paper
Title: PEDAGOGUES, INFORMATISATION AND EDUCATION WORK
Author(s): Franc Tehovnik
Affiliation: Boarding School Ivan Cankar, Ljubljana, Slovenia
Key words: informational literacy, informational technology, pedagogues, students
Abstract: The main goal of this article is to present pedagogues' satisfaction in Boarding schools with technology they have their computer knowledge satisfaction and on which areas they need to be more educated. Technological progress itself does not create information era. Only information literacy when people will know how to use information technology which they dispose, will bring us to information era. Pedagogues in boarding school must realize important concept of life long learning, in range of that also belongs information literacy education. Pedagogues must be capable to guide and advice students how to get correct information. Therefore they must be well educated in computer science. To have knowledge of computer skills help educators' contemporary and faster communication with students.

Bibliographic level: Analytic
ISSN: 1330-0067
Short title: Informatologia, Zagreb
Issue No.: 4
*Page numbers:*305-307
*Issued:*2006-06-14
-of Summary: Engl., Croat.

Informatologia, 39, 2006, 4, 240-332

Literature: Serial
UDC: 7:654.197
Coden: IORME 7
Vol. No. (Year): 39(2006)
Other identification: INFO-966
*Received:*2006-05-24
Language –of text: Croat.
*References:*5 *Tables:*0 *Figures:*0
Category: Professional Paper
Title: COVERAGE OF THE CULTURE AND ARTS TOPICS IN THE NEWS PROGRAMMES OF NATIONAL TELEVISION CHANNEL OPERATORS IN CROATIA
Author(s): Ksenija Žlof
Affiliation: Postgraduate Course in Information Science, University of Zadar, Zadar, Croatia
Key words: culture and arts, coverage, media commercialization, lasting values
Abstract: Our society today is dominated by market economy and fast developments in technology. These two trends impact what goes on in our media industry, where increasing commercialization and media fragmentation now represent the two most important trends. TV broadcasters are faced with two diverging needs, one being the need to make their programmes meet the demands of the general public and the other being the need to promote lasting social values, including culture and arts. The goal of this paper is to focus on and quantify the coverage of culture and arts topics in the news programmes broadcast by national TV broadcasters in Croatia, including: HRT, Nova TV and RTL, over a period of eight days. Although there are considerable differences between these broadcasters (RTL does not have regular reports on culture and arts events in its news programmes), our survey has shown that the area of culture and arts is generally well represented, because its coverage by the other two braodcasters (HRT and Nova TV) shows that it comes third in their coverage of topics, right after reports on political events and crime.

Bibliographic level: Analytic
ISSN: 1330-0067
Short title: Informatologia, Zagreb
Issue No.: 4
*Page numbers:*308-311
*Issued:*2006-11-23
-of Summary: Croat. Engl.,