

ABSTRACTS

UDC 004.94

MODELS OF EDUCATIONAL PLANNING SPECIALTIES OF HIGHER EDUCATION INSTITUTION

B. V. Durnyak, V. N. Senkivskyy, I. V. Hileta, O. V. Litovchenko

Ukrainian Academy of Printing,
19, Pidholosko St., Lviv, 79020, Ukraine
senk.vm@gmail.com

Research methodology. This paper presents the results of educational process planning of profession with using of the theory of structural modeling. Application of system analysis hierarchy determination procedure provided study subjects profession, the scheme to build relationships between the components of the curriculum, establish a hierarchical pattern of competence. The visualization software curriculum based on the methods of application programming models.

Results. The model of development of specialization curriculum provides the possibility of acquiring professional competence. It takes into account current labor market requirements, the needs for knowledge and skills of students and disciplines which are proposed by the university, modern technologies and tools of chosen profession. Considering the above, the given way of the curriculum formation in its implementation in school will enable better acquisition of knowledge by students.

Novelty. An original approach to planning educational process of specialization in the use of structural modeling of the theory of multilevel hierarchical systems has been sold in the research. The following models, such as structural graphical model curriculum specialty, which established the seat of specialization within the specialty; interactive graphical hierarchical pattern of competence, which defined hierarchical relationships specialization - specialization direction - Technology - tools; graphical model study of priority components of the curriculum, which provided the order of the study subjects of the curriculum have been constructed.

The practical significance. The proposed method for competence, which concerning the specialization, if it is necessary, may be extended for specialty or academic direction. Another useful application of curriculum models is to inform stakeholders about the set of tools and technology for learning specific competence. The result in this case is the acquisition of additional competence as referred to students of other specialties.

UDC 655.3.066.53+655.3.066

THE SIMULATION OF DESTRUCTION OF AROMA CAPSULES SHELLS DURING THE AROMA-PRODUCTS USING

S. F. Havenko, P. B. Petryk

Ukrainian Academy of Printing,
19, Pidholosko St., Lviv, 79020, Ukraine
havenko@point.lviv.ua

Research methodology. The methodological base of the research of damage process and aroma capsules destruction in aroma coating on print during its using is based on the principles of simulation, systems analysis, theories of friction and wear, electron microscopy.

Results. The models of the structure components of real consumer contact with aroma coating on the print, simulated mechanical damage of aroma capsules in the structure of aroma zones during the presentation of fragrances, determined factors of influence on the processes of fragrances release considering friction forces, deformations of aroma coating and its microstructure have been constructed and mathematically described.

Novelty. Scientific novelty of the results is the identifying and proving of the impact on the performance properties of aroma varnish coating of their morphological

structure; size, shape and structure of aroma capsules; structure and condition aroma coating surface; weight of shell and flavor; the thickness of the coating. Based on theoretical studies and electron microscopy it was established that the aroma zones at the print are able for deformation with flavor release during the presentation by the method of «rub and smell».

The practical significance. It was established that the magnitude and frequency of stress in the flavor presentation depend on the efforts of the friction, created by the hand of the consumer, humidity or dryness (sweating) his hands, thickness of microcapsules melamine shell, deformation properties of aroma varnish and a paper printout, which is important for predicting a long lasting use of aroma products by consumers.

UDC 004.9

MODIFICATION OF MODELS FORECASTING

B. V. Durniak¹, M. M. Kliap²

¹Ukrainian Academy of Printing,
19, Pidholosko St., Lviv, 79020, Ukraine

²Uzhgorod National University,
Universytetska St., 14, Uzhgorod, 88000, Ukraine
klyap205@mail.ru

The main purpose of using informational extensions is to provide opportunities within the system of forecasting (SP) in the automated mode, expand those or other packages the of individual components functionality of the system forecast implementation of (SRP) or a system of managing the process of forecasting (USP). The extension of the functionality provided by a means that for the most part is attributable to the need for the use of which is determined by factors that they can drill down, given the implemented features.

The parameters that describe the following cumulative characteristics, as a measure of adequacy of $\mu(ZPr_i)$, are determined on the basis of taking into account the parameters describing the DTP. ZPr process adequacy, which is realized by means of carrying out the protection of DTP from the negative influence of Vp_i , is calculated on the basis of the determination of changes in the values of the regular options $\{x_1^p, \dots, x_n^p$ that describe the process of implementation of the individual fragments in DTP. ZPr adequacy is determined by the regarding object that is operated by ZPr. It is obvious that the status of the external process ZPr, shall always be determined in relation to the process, which is external. As part of this work ZPr_i is outside on a staff DTP, because this process performs servicing functions of the DTP, consist in protecting the latter from the influence of random negative factors described as random events Vp .

UDC 655.021

RESEARCH OF DEPENDENCES OF PAGES FIELDS ON THEIR LOCATION IN SENTENCES

V. M. Senkivskyi, T. S. Holubnyk

Ukrainian Academy of Printing,
19, Pidholosko St., Lviv, 79020, Ukraine
senk.vm@gmail.com

Research methodology. The foundations of statistical analysis of the experimental data form the methodological base of the research. The change in the fields of couple turn pages (that depends on their location in the book) has been grounded. The results were presented in statistical tables under which the appropriate graphics have been done.

Results. As a result, the conditions of field changing have been installed, based on the research for each book at mutually-perpendicular folding and further completing match. As in the completing investment, different facts, such as paper thickness, the location of the pages in a book or the number of bands influence into size of fields.

Novelty. The interdependence between the conducted measurements and theoretical data has been proved. It confirms the reliability of the research. The theoretical data of selected fields for the research have been counted according to standards and also the size of fields of couple turn pages (that is shown in the outcome charts) has been defined. The statistical analysis of experimental data has been done, according to that, the subjections of field sizes of couple turn pages from their location in a book have been received.

The practical significance. The diagrams of the subjections of field sizes of couple turn pages from their location have been done. The interdependence between the conducted measurements and theoretical data, that confirms the reliability of the research has been proved. This research will provide the quality of the process of assembly descents designing of book publications at mutually-perpendicular folding and further completing match.

UDC 004.9

MODEL OF THE RISK MAGNITUDE DEFINITION BASED ON THE USE OF PROBABILISTIC APPROACHES

B. V. Durniak, T. M. Maiba

*Ukrainian Academy of Printing,
19, Pidholosko St., Lviv, 79020, Ukraine
maiba@ukr.net*

The magnitude of the risk is the most common parameters during the evaluation of those or other losses. If the value of the loss cannot be determined definitely in the form of some numeric value that allows for a certain error, for such losses used a value of R, that is, by definition, is a forthcoming assessment of possible losses. Therefore, the risk is interpreted as a score certain losses that determines with precision, which is characterized by a particular value of the probability that the specified losses will be.

Analyzed different models determine the magnitude of risk, using probabilistic approaches.

The following specifications and informative interpretation of characteristics of Puason scheduling illustrate the appropriateness of its use to describe the flow of attacks coming in on the object that you want to protect. Described approach to constructing a model of risk allows you to calculate the magnitude of risk, bringing the components of this model to the means allowing sufficient to adequately describe the main factors that determine the possibility of the negative results of the actions of their respective attacks.

UDC 004.9

PECULIARITIES OF ENCIPHERING METHODS FOR INFORMATIVE SOCIAL NETWORKS PROTECTION

B. V. Durniak, T. M. Khometa

*Ukrainian Academy of Printing,
19, Pidholosko St., Lviv, 79020, Ukraine
taraskhometa@gmail.com*

The issue of access control to complex informative systems using the SPX access control system is under consideration. Performed analysis shows the possibility of SPX protocols modification with the purpose of their adaptation to the requirement

of informative social systems. Such adaptation may imply simplification of certain procedures of this protocol stipulated by peculiarities of the social system.

Analysis of peculiarities of cryptographic methods of protection in informative social systems is carried out. Due to it, new tasks of information protection were set up, which primarily relate to its access protection.

UDC 655.5: 004.942

THE CHOICE OF ALTERNATIVE SYSTEM FOR THE FORMATION OF EDUCATIONAL ELECTRONIC SOURCES

I. V. Pikh, R. R. Andriiv

Ukrainian Academy of Printing,
19, Pidholosko St., Lviv, 79020, Ukraine
pikhirena@gmail.com

Research methodology. *The method of multicriteria optimizations for criteria that predetermine the calculation of alternative options of the process of electronic publications design has been used. The choice of the optimal variant is conducted on the basis of the analysis of membership function of the convolution of sets intersection of non-dominant alternatives.*

Results. *The comparison of the CMS-system, MVC and HMVC frameworks has been conducted. The system of electronic publication formation on the basis of fuzzy preference relations has been defined.*

Novelty. *In the process of the research the setting and the problem of calculation of alternative variant of the CMS-system and frameworks usage considering Pareto optimization criteria (of linguistic variables) has been carried out and solved. The fuzzy preference relations of factors have been considered in the alternatives and the value of the function of convolution factors membership has been calculated.*

The practical significance. *With the help of the method of multicriteria optimization the optimal technological variant of the choice of programmatic tools for the elaboration of educational electronic resource has been defined. The criterion of this resource is a minimal value of the function of intersection at the additive relation convolution membership.*

UDC 004.9

THE MODELS OF DECISION MAKING AT PROJECTING OF ELECTRONIC EDITION

I. V. Hileta

Ukrainian Academy of Printing,
19, Pidholosko St., Lviv, 79020, Ukraine
hileta@gmail.com

Research methodology. *This paper presents the results of analysis of the characteristics of electronic publications (EP), which use web technologies. The models which describe the hierarchy of business processes with the necessary level of detail, the criteria and standards for their implementation, a set of tools and development environment of operation take an important place for designing above publications. The impact factors which characterize the quality of EP have been allocated by the application of the method of system analysis. Based on the decision theory, the task of selecting of the optimum value in relation to EP criteria has been formulated.*

Results. *Three ways of solving the problem of choosing the optimal EV have been offered. The first method uses the formation of effective alternatives, the second one uses for bring the problem with many criteria efficiency electronic publication of criteria to one and the third uses for forming of semi structured task for the*

system, when there is no possibility to establish quantitative assessment criteria and parameters between a test system using the analytic hierarchy.

Novelty. The multifactorial task, that is determined during the design, manufacture and operation of information products, is choosing one of the best electronic publishing of network. The selection of optimal parameter values EP can be considered reasonably by the proposed concept of decision-making in the design.

The practical significance. The feasibility of using a linguistic approach has been grounded during making strategic decisions on the assessment of the effectiveness of information system. Consequently, the characteristics which define the efficiency are considered in terms of the theory of fuzzy sets as linguistic variables. In assessing the characteristics of the information system, the linguistic approach allows to use as quantitative characteristics, which objectively inherent uncertainties and qualitative, such subjective evaluation which are expressed by vague concepts.

UDC 655.326.1:534.838.7

DEVELOPMENT OF EXPERIMENTAL ULTRASOUND DEVICE FOR MODIFICATION OF PHOTOPOLYMER FLEXOGRAPHIC PRINTING PLATES

S. A. Bartashevich¹, S. K. Grudo¹, S. A. Khokhriakov²

¹Belarusian State Technological University,

13 a, Sverdlova St., Minsk, 220006, Republic Belarus

²«Powder Metallurgy Institute» National Academy of Sciences of Belarus

41 Platonov St., Minsk, 220005, Republic Belarus

Bart19@belstu.by

Research methodology. Mathematical modeling based on a method of calculation of oscillatory system with the piezoceramic transformer for determination of necessary technological parameters of experimental ultrasound device for modification of flexographic photopolymeric printing plates was used.

Results. Experimental ultrasound device of homogenization of photopolymeric composition was developed and made. This device will allow improving the firmness of raster structure of flexographic printing plates and can be used for printing plates, various on hardness, which expands its functionality. The process of ultrasound modification of flexographic plates realized in the device has low power consumption and is environmentally friendly.

Novelty. Development and making of experimental device for ultrasound modification of flexographic printing plates is executed taking into account properties of the irradiated material. Use of system of the regulated voltage of a working surface of the tool carries out effective influence by ultrasound fluctuations on the irradiated working surface of a form on zones with necessary acoustic contact between them.

The practical significance. A certain economic effect of introduction of this development into the production can be expected in the long term at the expense of increase in service life of a flexographic printing plate.

UDC 681.124:686.1.053

INFORMATION-CONTROL DEVICE OF THE FOLDING MACHINES USING PROGRAMMABLE LOGIC CONTROLLERS

O. R. Kazmirovych, R. V. Kazmirovych

Ukrainian Academy of Printing,

19, Pidholosko St., Lviv, 79020, Ukraine

kazmoleh@gmail.com

Research methodology. Experimental by the development and research of a physical model of the information-control device (ICD), the usage of simulations of

its work on the computer in the editor FBD (Functional Block Diagram) program, using LOGO! Soft Somfort, mathematical modeling.

Results. The laboratory sample ICD of the folding machines (FM) is based on PLC LOGO! TD company SIEMENS. The device forms the packs of signature in which the content has been given, counts the number and the total amount of signature and measures the speed of the folding machines. The results of all measurement have been highlighted on the text box LOGO! TD. Automatic grouping of the signature a FM has been carried out by the repulsion of the last signature in the pack or with the help of slowdown.

Novelty. ICD is proposed for counting and controlling the productivity of FM using the new progressive hardware platform, which provides the continued functioning of the national printing machines in the management of digital control system and in the final version to be ready for work with the data CIP4 / JDF. Practical electrical circuit forced electromagnet controller has been carried out to form the forming packs of signatures and the analytical performance depending on the quick work of the electromagnet reaction on a magnitude of applied voltage.

The practical significance. The implementation of the developed ICD FM in production permit to reduce working staff, culture and to increase the accuracy of accounting, reduce the cost of printing production and increase the technical level and competitiveness of national printing equipment. The results of the investigation have been used in educational process which help to develop the scientific and technical support for regional cluster «Paper and Printing».

UDC 070.000.32(71=161.2)''1945/1990''(043.5)

MATRIX CONCEPT OF THE NATION: SOCIAL COMMUNICATIVE CONTEXT

V. A. Kovpak

Classical Private University
70 B, Zhukovskogo St., 69002, Zaporizhzhya, Ukraine
kovp-uni@ukr.net

In the design and relay Ukrainian national narrative special place belongs to the joint information and communication space uniting media reflection on the diachronic and synchronic levels, including the diaspora. A key factor contributing to the consolidation of the public has been and remains a national idea.

However, in the Ukrainian scientific paradigm is not unified and common methodological model (scheme), which would serve as a tool for integration of different theoretical developments of Ukrainian scientists at the national idea. Therefore, for the formation of national identity as part of the national idea must be a single communicative field in which media strategy design overall national indicators for the cohesion of the social groups, local ethnic communities, «work» on the development of communicative effective information and communication activities of the mass media. It is indisputable that without preserving their original culture of a nation loses its face (your identity) and is doomed to disappear. Matrix components of the national idea today in the scientific paradigm it is often found such categories as «civilizational matrix of Ukraine» (A. Pavka), «matrix of national identity» (T. Dziuba) etc., which is determined not so much as the content but as structural elements.

Thus, the aim of our research – to identify and analyze the components of the matrix in the idea of the nation social communicative context. Dimensional array of elements, modeling matrix idea of the nation, is made up of such indicators, which overlap in daily social practices: worldview nation (social meanings, concepts,

symbols, stereotypes, myths, etc.) and public-ideological system (ideological vector, legislation, public policies, etc.).

Such definition is working, but it is possible to prove the legitimacy of the use of the cognitive approach. The idea of the nation in social communicative space is a complex system, which operates under the influence of a significant number of factors, providing conditions for its implementation and verify. The feasibility of such design is connected with the necessity of structuring information and construction of scientific approaches justify strategic solutions involving cognitive modeling methods. Prospects for further research are studied according to this methodological approach.

UDC 655.512+81'38

SCIENTIFIC RESEARCH FACILITY IN STYLE OF OUR SCIENTISTS

L. O. Ivasenko

Ukrainian Academy of Printing,
19, Pidholosko St., Lviv, 79020, Ukraine
lili-tango@yandex.ua

Research methodology. The use of problem-chronological articles and comparative historical methods allowed to see how attitudes have changed the nature of scientific research presentation. Figurative different types of tools specific to scientific presentation are researched using descriptive and comparative methods.

Results. The changes in views on the nature of scientific style and their impact on the quality of scientific publications are analyzed in the article. Analysis of current scientific texts showed that expressiveness is not contraindicated language of science, it does not disappear from the scientific style. This particularly applies to statements genres monographs and scientific articles, which often present features expressiveness and emotionality which are introduced by the author regardless of the theme of his research.

Novelty. For the first time a comprehensive analysis of methodical, scientific and educational publications that provides guidance to authors of scientific papers concerning the presentation, from the 50s of the last century until today are realized in this article. That is scientific novelty of the research.

The practical significance. Despite recent researches which change attitudes towards scientific presentation, continues to exist the traditional view of scientific literature - difficult to understand, riched standard language patterns, released from interest. Therefore, the authors of scientific papers have to realize that nowadays personal achievements in the field of science may interest in broad reader`s range if they are given clearly, precisely and simply by means of emotional expression and even the so-called lyrical digressions. Then we can expect the appearance of scientific publications that will benefit the Ukrainian science and become a bestseller for interested readers.

UDC 050:001:004.7(477)

ELECTRONIC SCHOLARLY PERIODICALS IN UKRAINIAN INFORMATIVE SPACE: TRENDS AND CURRENT CHALLENGES

I. V. Ryzhko

Ukrainian Academy of Printing,
19, Pidholosko St., Lviv, 79020, Ukraine
ira.ryzhko@gmail.com

Research methodology. To understand trends and current challenges in electronic scholarly publishing more completely it was used methods of data collection. The

data analysis for the present research was done quantitatively with the help of online periodicals datasets and websites of scientific institutions. After collection of information with the help of relevant tools and techniques data was analyzed and interpreted with a view to arriving at empirical solution to the problem.

Results. *The scholarly periodical system in Ukraine is at a critical stage because of quantity, format and intellectual quality of electronic periodicals. In our country government through libraries provides politics of open access which help to reach more readers than subscription access publishing. We figured out the ways how to provide wide dissemination of Ukrainian science by using bibliometric datasets and science bases.*

Novelty. *Novelty detection is the full study of electronic scholar periodicals in Ukrainian informative space, trends and current challenges.*

The practical significance. *Key points of this article can be used by publishers to improve existing e-periodicals and to spread them to the world scientific institutes.*

UDC 007:304:070

TRAVEL-JOURNALISM AS OBJECT OF SCIENTIFIC UNDERSTANDING SPHERES OF INTEREST AND DISCUSSION PROBLEMS (ON THE MATERIALS OF FOREIGN EXPERIENCE)

Y. G. Polyezhayev

Zaporizhzhya National Technical University,
64, Zhukovskogo St, Zaporizhzhya, 69063, Ukraine
brikrio@rambler.ru

Research methodology. *In order to determine the framework of scientific understanding of heterogeneous phenomenon of travel-journalism in western media-studies the methods of comparison, synthesis and analysis are implied. The ideological, economical, cultural, political and social peculiarities of western media environment are taken into consideration during the investigation process. The methodological basis of the article are principles of complexity, reliability and scientific objectivity. The topic is developed and grounded on English primary sources, which have never been translated into Slavonic languages.*

Results. *In contemporary western media-studies, it is possible to segregate three main approaches in studying travel-journalism. The first approach is the theoretical one, which includes the aspects of methods and approaches. The second approach deals with the relationship between travel-writing and ideological, advertising, gender and other discourses. The third approach that is represented in the analyzed works is devoted to the investigation of national traditions of travel-journalism worldwide, works of practical journalists and peculiarities of articles content, which are related to the conceptual field of travel.*

Novelty. *The scientific novelty of the article lies in methods of foreign scientific materials investigation in the framework of Ukrainian academic paradigm. According to the results, three main research approaches in the scientific understanding of heterogeneous phenomenon of travel journalism in western academic tradition are defined: theoretical, cross-discursive and precedential.*

The practical significance. *The analyzed experience of foreign researchers opens new horizons for investigation search in the field of Ukrainian travel-journalism on the one hand, on the other hand, the methods used and issues highlighted by the western researchers can be implemented in the research of Ukrainian media landscape in general.*

UDC 007 : 304 : 070

**INFORMATION GENRES AS PRIORITY IN PRACTICE
OF NEWS AGENCIES**

O. V. Harmatiy

Lviv Polytechnic National University,
12, Stepan Bandera St., Lviv, 79013, Ukraine
ulitska@ukr.net

Research methodology. Realization of purpose and tasks of the article is stipulated the use of a few mutually supplemented methods. By means of the method of analysis of documents the Ukrainian and foreign scientists' works concerning the problems of news agencies' activity and requirements to their materials are considered, texts of reports of the leading Ukrainian and foreign news agencies are worked out. The system analysis which allowed defining the place of news agencies in the general genre system of news agencies' materials is used.

Results. Generalization and conclusions of work complement already known and form new knowledge about informative genres as constituent of the system of genres which are used by the modern news agencies. Basic forms of genre embodiment of news agencies' informative materials are determined in a publication. It is found out that a note is the priority genre of news agencies' reports. Reasons for predominance of information messages are indicated in news agencies' practice. The basic requirements to materials of news agencies are researched.

Novelty. On the example of mastering such a form of presenting materials as infographics by the news agencies modern changes in the system of genres of news agencies' materials are considered. Infographics is examined as one of the newest methods of communication, that has considerable prospects of development in news agencies' practice.

The practical significance. Author's works can be used in subsequent general theoretic research of genre features of news agencies' materials, and also used for writing reports of informative genres in practical journalistic activity.

UDC 655.5+347.781.5

**THE COMPILATION IN THE LITERATURE: FORMS OF REALIZATION
AND THE PROBLEM OF PLAGIARISM**

A.-L. R. Lozynskyy

Ukrainian Academy of Printing,
19, Pidholosko St., Lviv, 79020, Ukraine
adamlozyn@gmail.com

Research methodology. The principles of analysis, synthesis, content analysis, functional method and method of comparison have been the methodological basis of the study, which contribute to a better theoretical understanding of the phenomenon of compilation in the literature. The methods of analysis and synthesis are used in this research. We analyze typological characteristics of different art of literature on the basis of compilativity. The method of content analysis is processing of different theoretical sources. A functional method is the functioning of compiling during the creation of literary works. In the method of comparison we correlate the principles of compiling in the different types and kinds of literature.

Results. Research is shown which cases of compilative character of work is absolutely reasonable and even necessary. Special attention was paid to the difference between compilation as a principle of creation of literary works and compilation as a copyright infringement. Such works as encyclopedia, collected papers, compilation, review, textbook, manual, non-fiction works, dictionaries etc.

were determined as compilative, because they need processing of a large number of sources.

Novelty. *The scientific novelty of the results is in the fact that compilation in the literature has been singled out, considered and described for the first time. Compilation is not the new phenomenon in literature. But today, when there is the constant accumulation of data in the society, compilation is a good source with the most important selected information.*

The practical significance. *The present research has an outstanding practical significance for modern authors, which create compilative works rather than original. Specification of the concept of compilation in literature enables to avoid misunderstandings during the writing of this kind of works.*