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CONTENTS

The main directions of improving the quality of educational services of higher education institutions	11
Karashchuk V. O.	11
Economic potential of industrial enterprises, factors affecting it and directions for its increase	13
Karimova G. I. qizi	13
Modern information technologies: a means of activating educational and cognitive activity	17
Karpenko R. V.	17
Development of general competencies during the study of specialized medical disciplines by future doctors	21
Karpenko Yu. P.	21
Time management and goal-setting in informal education in the conditions of digitalization	24
Karpova O. O.	24
Modern approaches to the training of bachelors in the field of tourism in the context of digitalization of the economy	27
Kashyna G.	27
The role of education in the development of the digital economy	31
Kyrchata I. M.	31
Consulting in conditions of uncertainty	33
Kyslytsia I. O., Volovyk I. A.	33
Using of ICT in the training of future foreign language teachers	36
Klieba A. I., Nechyporenko M. O.	36
Information security of information protection activities	39
Klimovych S. O., Pushtaryk O. S.	39
Study of structure formation of high chromium alloys with computer analysis	42
Klochko O. Yu., Voronov O. S.	42
Factors of future managers' social and professional adaptation to the working environment	47
Koval M. S., Lytvyn A. V., Rudenko L. A.	47

Global trends in solving the problems of agricultural education as a factor in the sustainable development of communities and rural areas	
Kovalchuk I. V.	51
Information technology as a method of learning in higher education	
Kovban A.	55
Online compiler «Replit» usage during the study of the programming discipline	
Kovtaniuk M. S.	60
Neural networks: basic provisions	
Kodirov E. S.	62
Digital tools in higher education	
Kodola R. M., Smirnova O. I.	73
Information models of research development in higher educational institutions	
Kozlovskiy Y. M., Stehkevych O. O., Stehkevych L. K.	77
New administrative and resource opportunities for implementing information and communication technologies in the Ukrainian economy	
Kolodiychuk A. V.	81
Improving organizational and economic mechanisms for managing human capital in the digital economy	
Komolov S. Kh., Sattarova Kh. B., Gaibnazarova Z. T.	86
Use of information technologies in higher education: problems and prospects	
Kononenko L. V., Kononenko S. O.	97
Using remote technologies during classes: lms moodle, google classroom	
Kopilets L. O., Alieksieieva G. M., Horbatiuk L. V.	101
Use of computer technologies in the educational process	
Korinchak L. M.	106
Students competencies formation's qualimetry of higher education institutions in the knowledge quality assessment system	
Korobovych L. P.	110
Analysis of interactive methods of teaching informatics to students of general secondary education institutions	
Kosovets O. P., Shuliak Yu. S.	114

Modern information technology in foreign language teaching Kosovykh O. V.	119
Research on the possibilities of IT for countering public disinformation Kotlykhova L. D.	122
The essence of effective management and its importance in the management of organizations Qo'chqorova R. A., Rustamov D. R. son	124
Specifics of the educational process management on the basis of a systematic approach Kosheleva N. G.	131
Ensuring the human right to privacy when using information technologies (for example, the Internet) Kravchuk S. M.	136
Internet marketing at the present stage structural changes in the national economy Kramskyi S. O.	139
Usage of information technologies for ensuring practical orientation of educational process for training lawyers Krasytska L. V.	144
The use of computer-oriented methodological systems for teaching mathematical disciplines at the pedagogical university Krasnozhon O. B., Matsiuk V. V.	148
Methods of teaching programming and IT Kryvonos O. M., Kryvonos M. P.	151
Separate issues of the development of organizational and legal principles of management and modernization of the management system of higher education institutions Kryvoruchko L. S.	156
Use of the Go-Lab cloud service for the formation of research competence Kryvoruchko I. I.	160
Application of information technologies during the training of specialists for bodies of the National Police of Ukraine Kryzhna V. V.	163

Application of signs of functioning of systems built according to the OSI model for solving technical diagnostics problems Kuzavkov V. V., Bolotiuk Yu. V.	167
Micro-credentials as an innovative tool of modern higher education Kuznetsova N. B.	171
2020 was an important year for Uzbekistan in the development of the ICT sector Kukieva S. S., Akhunova D.	176
Multimedia as a learning tool at the Maritime English lesson Kulikova I. Yu.	180
Implementation of distance education in inappropriate conditions at Mykolaiv National Agrarian University Kurepin V. N.	183
Transformation of the education system as a catalyst for innovation in modern China Kurpayanidi K. I.	187
The role of digital economy in modern business management Kuchkorova D.	191
Use of KPI system (key performance indicator system) in effective management of employees Kuchkorova R., Rustamov D.	197
Using of innovative technologies to teaching the criminal-legal cycle disciplines at the Zaporizhzhia National University Larkin M. A.	201
The use of information and communication technologies in the process of teaching economic profile disciplines in higher education institutions of Ukraine Lysenko A. M.	204
Theoretical principles of application information technologies in the educational process Lysenko N. V.	208
Databases in the structure of the National Police of Ukraine Lytvynenko O. G., Omarova K.	212

Risks and threats to children in the digital environment as a subject of criminological research	
Lubenets I. H.	216
Designing a help system for detecting PC malfunctions and receiving advice on their elimination	
Lubko D. V.	220
Implementation of information technologies in scientific and research work of students at non-philological departments in English language classes	
Lukianova H. V.	225
Mechanisms of cryptographic protection during user authentication in data transmission systems	
Lukina K. V.	229
Theoretical and practical aspects of the use of information technology in pedagogical education	
Lutfillaev M. X., Suyumov J. Yu.	233
Material and technical support of the activities of subjects in the field of information relations	
Liublin V. D.	236
Peculiarities of the use of IT in teaching foreign languages in a higher educational institution of Ukraine	
Liulka V. M., Tarasova N. I.	239
Automation of the staff list of scientific and teaching employees	
Lyashenko O. B.	243
Features of electricity demand forecasting for the "Education" section as a link of the budget sphere of the economy with an estimate of the amount of electricity savings	
Maistrenko N. Yu.	246
The influence of innovative technologies on the efficiency of the customs authorities of Ukraine	
Makarova S. O.	251
Features of the safe use of information technologies, taking into account the age category	
Maksymenko Yu. B., Matokhniuk L. A.	253
Google digital tools in the activity of the lecturer	
Maksymchuk A. V., Maksymchuk D. S.	257

Management in education	
Mamajonov F.	259
Methods of modeling processes in the management system	
Mamajonova Z. B. kizi, Boltabayeva Sh. Sh. kizi	262
The Japanese experience of anti-monopoly policy and development of competition	
Mamajonova D. V.	267
The use of information and communication technologies in the study of the French language	
Mamosiuk O. S.	272
Management in forensic expert activity	
Martynenko N. V.	277
Jetpack Compose: new approaches to Android UI development	
Marchenko S.	281
Low-complexity LIDAR Point Cloud Filtering Method for Self-driving Vehicles	
Matvienko V. T., Mushta I. A.	284
Problems faced by women-entrepreneurs in Uzbekistan	
Makhkamova Kh. B., Abdvakhobova Z. O.	290
Means of gamification in the formation of media literacy as an element of information and digital competence of participants in the educational process	
Medvedieva M. O., Titova L. O.	294
Directly in the production of innovative technologies in the state of science	
Medyanyk V. Yu., Roman S. H.	298
Main events and decisions to create an independent Slovak Republic after the Velvet Revolution in 1989	
Matej Mindár	300
Introduction of new information technologies in the conditions of innovative transformation of the economy	
Mirzaolimov O. K., Kurpayanidi K. I.	301
Content-essence, socio-philosophical, historical and modern classifications of concepts of tourism and culture	
Mirzarakhimov B.	305

Optimization of time management and student performance in modern conditions Mykhailenko M. H.	309
To the problem of in-company training of company employees Mikhaylov A. B., Kurpayanidi K. I.	313
Using of teaching tools in Ukrainian literature classes Mikriukova K. O.	318
Free software as an alternative to proprietary in an education institution Minenko M. M., Alieksieieva G. M.	321
Digital technologies in linguistic research Nadutenko M. V., Nadutenko M. V.	325
Geoinformation technologies in the assessment of seismo-ecological risks of water reservoir zones Nazarevych L. Ye., Nazarevych A. V.	329
Comments on the history of traditional medical services in Turkestan Nazirov M.	333
Use of digital resources at foreign language lessons for distance learning in the Ukrainian universities Nasakina S. V.	337
Application of publicly available cloud internet services for forming a virtual educational environment Nemchenko Yu. V.	340
Technologies for stabilizing the spiritual environment of society Nurmatova I., Akhmedova M.	344
Concept of green development of China Oliinyk O. M.	350
Mastering the basics of information technologies and sciences as the most important means of professional orientation in institutions of higher and professional pre-higher education (colleges) of the economic direction Osmolyan V. A., Dombrovska O. M.	355
Organization of management activities of a health care institution based on modern information and communication technologies Ostryanina S. V., Smirnova I. V., Mikitchenko V. V.	359

Implementation of e-learning technologies in adult education Palahusynets R. V., Koshova S. P.	363
History of management development and the evolution of management thought Palinchak M. M., Steblak D. M.	368
Construction of technologies for manufacturing products of critical products using computer simulation Parusov E. V., Gubenko S. I., Prykhodko I. Yu.	372
The role of information technologies in teaching technical disciplines Petrenko O. V., Biletskyi E. V.	376
Information technologies in educational institutions as an element of remote form of communication Petrykovska A. A.	380
Incorporation of information and computer technologies during musical and educational training of a primary school teacher Pishun S. G.	384

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ONLINE COMPILER «REPLIT» USAGE DURING THE STUDY OF THE PROGRAMMING DISCIPLINE

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Interactive technologies have become widely used in the formation of professional skills of students. Their use in the educational process is due on the one hand, the need to prepare the applicant for his future profession, and on the other – the need for more effective transfer of knowledge, which aims to improve the quality of competence and competence of future professionals. Every year more and more computer science teachers practice the use of various web services for learning, they successfully implement innovative technologies in the educational process. Such services are online development environments [1].

Modern realities require new methods and approaches that the teachers should use during the educational process. According to the New Ukrainian School concept the teachers` aim is not only to teach students but to show the ways how they can use the knowledge in ordinary life. Of course, the competences, that are needed for successful self-realization, should be formed. Digital competence is one of 10 main competences of New Ukrainian School, which provides for basic programming discipline mastering and information and communication technologies` usage.

Currently, interactive technologies` studying is the way to organize the educational process, in which the special web resources take one of the main position. The impact of information and communication technologies on all areas of life grows constantly. That`s why Ukraine and the whole world need qualified IT professionals. Substantial training of the staff can be possible only if there is a qualified teaching of technical disciplines, including programming.

Every year more and more computer studies teachers practice the usage of various web services for teaching, they successfully compound the innovation technologies with the educational process. The popularity of online compilers for basic coding learning grows. Online compilers have a lot of advantages over the classic software for programme`s making.

Firstly, online-IDE are not needed to be installed on PC. It's enough just to have the internet to make your first programme. Besides, it gives an opportunity to program no matter the capacity of hardware is, to use compiler on every OS and to reduce the time wasted on installing of the hard desktop programme tools.

One of such services is online-IDE «Replit». «Replit» is online compiler with wide capabilities, which gives a lot of opportunities to computer studies teachers for educational process organization. It helps its users to write the code and make programmes and web sites by means of browser [2].

You need to enter the resource using your account Google, Github or Facebook to make the first programme. That's let you save your programme projects within limits of one account. You can have access to it with PC or even with your smartphone or other device. You can work with this service after downloading the app in Google Play Market or Apple Store.

It's very easy to use «Replit» because as soon as you start the work this service automatically will propose you to make one of its variant. Moreover, the programme window and the console window are set in one workspace. It helps to accelerate code writing and improve the work. Another advantage is that online IDE includes more than 40 different languages of programming. The syntax of code of each language marks in different colours what is good for better visualization of information for applicant [3].

«Replit» is also can be used during the distance learning. The resource has a function of common work at code with chat for discussions. It will help computer studies teachers to demonstrate the programme code to all applicants at once commenting the actions.

Among the disadvantages of web service is English interface and long compilation of professional «hard» programmes with lots of modums.

Conclusion. The new online services' appearance helps to make the educational process various to enrich teacher's methods and approaches and to optimize computer studies teaching in process of programming learning. The functionality of online IDE with every year increases, and the teachers' interest at its usage in educational process increases too. The usage of such web resources during the basic programming learning is appropriate and important part of coding study which raises the knowledge quality of applicants, engages them and motivates.

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NEURAL NETWORKS: BASIC PROVISIONS

НЕЙРОННІ МЕРЕЖІ: ОСНОВНІ ПОЛОЖЕННЯ

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In recent decades, a new applied area of mathematics has been rapidly developing in the world, specializing in artificial neural networks (NNs). The relevance of research in this direction is confirmed by the mass of various applications of NN. These are automation of image recognition processes, adaptive control, approximation of functional, forecasting, creation of expert systems, organization of associative memory and many other applications. With the help of neural networks, one can, for example, predict the performance of the stock market, perform recognition of optical or audio signals, create self-learning systems that can control a car when parking, or synthesize speech from text [1].

A wide range of tasks solved by the NN does not currently allow the creation of universal, powerful networks, forcing the development of