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The education role in the development of the information society: Progressive ideas of the world's leading countries¹¹

Роль освіти у розвитку інформаційного суспільства в контексті творчого використання прогресивних ідей провідних країн світу

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Abstract

The article describes the retrospective of the countries' practice, which gives rise to the conviction of the signs of national character. This experience combines the support of traditions with a desire to listen to the demands of today's developed world. In the article, great attention is paid to the study of education systems in the countries of the European Union, as well as the USA, Canada and other countries, their features in the information society. The article shows similar approaches in the organization of the educational process. We revealed the signs of the national education system based on structural recommendations, the consequences of training and other resources relative to other countries, which will allow diplomats and managers to evaluate the consequences of educational practice, characterize the improvement of state policy in the field of education and make

Анотація

У статті охарактеризовано ретроспективу практики країн, що зараджує переконанню ознак національного характеру. Цей досвід суміщає в собі підтримку традицій жаги прислухатися до вимог нинішнього розвиненого світу. Одним із найважливіших шляхів урядових перетворень у різних країнах світу є децентралізація порядків державного керівництва, а також у галузі освіти, у ході якої ведеться поділ прав між гілками влади різних рівнів. У статті велику увагу приділено на дослідженні систем освіти у країнах Європейського Союзу, а також США, Канади та інших країн, їх особливостей в інформаційному суспільстві. Стаття показує подібні підходи в організації навчального процесу. Показано порівняльний аналіз значення системи освіти та методики підготовки майбутніх спеціалістів у

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informed decisions about its improvement. The training of specialists in the modern information society requires taking into account the ideas of continuity, openness and anticipatory development. The article analyzes the prospects of creative application of the advanced beliefs of different countries of the world for the training of specialists in Ukraine in the conditions of the modern information society.

Keywords: education, advanced ideas, information society, leading countries, training of specialists.

Introduction

The transition to the information society requires profound changes in the production of knowledge and its transfer and assimilation, and, as a result, fundamentally changes the role and place of education, which becomes the basis for social development.

The process of development of the information society is connected with intensive processes of formation of a new educational paradigm. The basis of the new paradigm is a change in fundamental ideas about a person and his development through education, a transition from a disciplinary to a systemic model of the content of education, the main part of which is to teach to understand the world, society, oneself, one's work.

One of the urgent trends in the growth of modern education is the training of specialists of a qualitatively new type, the realization that the sustainable development of society, overcoming differences depend on the education system, the level of education of the population, its orientation towards mastering new knowledge and competencies throughout life. Currently, the mission of renovating the education system in the conditions of the modern information society and ensuring its compliance with international standards is gaining particular relevance.

The need for a new educational model is caused by the implementation of an eco-humanistic way of constructing an information society, which is based on sustainable and safe development and

зарубіжних країнах та Україні. Ми розкрили ознаки національної системи освіти за структурними рекомендаціями, наслідками навчання та іншими ресурсами відносно інших країн, що дозволить дипломатам, менеджерам оцінювати наслідки освітньої практики, характеризувати покращення державної політики у сфері освіти та приймати зважені рішення щодо її вдосконалення. Потребує врахування ідей неперервності, відкритості та випереджаючого розвитку підготовка фахівців у сучасному інформаційному суспільстві. Стаття аналізує перспективи творчого застосування передових переконань різних країн світу для підготовки фахівців в Україні в умовах сучасного інформаційного суспільства.

Ключові слова: освіта, передові ідеї, інформаційне суспільство, провідні країни, підготовка спеціалістів.

replaces the crisis-driven, costly, unsustainable development.

New requirements for a specialist in the context of the development of the information society have determined our interest in the study of the essence and role of the information component in the system of vocational education. The novelty of the theoretical and methodological research lies in the systematization of existing knowledge on the research topic, as well as in identifying and concretizing the conditions for organizing and developing the information environment in vocational education institutions.

We consider it necessary to note that quite recently such concepts as "informatization" (the process of regulating the structure of various production areas based on information technologies and information and telecommunication interactions), "information society" and "information culture" were considered in the context of the applied activities of specialists on information technologies. Today, information flows and technologies are so rapidly penetrating various areas of human life that they determine the information design of its various aspects: socio-cultural, professional, industrial, educational, etc. In this situation, innovative changes are obvious in many areas, primarily in education.

In modern conditions, education must meet the demands placed on it by society. Education appears as a socially adaptive mechanism capable of responding to social transformations,

and in a sense, it is necessary to develop a model of education in such a way that it (education) functions as a dynamic and flexible system capable of responding to social changes. As the experience of many countries shows, only the anticipatory development of the education sector forms the investment attractiveness of the country and ensures a technological breakthrough, all these problems are considered by us in the article.

The purpose of the article: to consider the content and features of training specialists from different countries in the modern information society and to highlight the progressive ideas of the leading countries of the world regarding their implementation in the educational process of Ukraine.

Literature Review

Many scientists have considered the problem of education in the development of the information society in the context of creative use of advanced concepts from the leading countries of the world. V. Bilan (2010) devoted his research to analyzing the current state and trends in the development of innovation in Germany. He identified the advantages and disadvantages of the state of innovation activity in Germany, as well as measures to use modern foreign experience in order to change the innovation sphere in Ukraine. Under the leadership of V. Kremen (2003; 2014), a complete study of the state and change of National Education during the 25-year period of independence of Ukraine was carried out. He proposed recent problems of the educational range, the causes of their occurrence were identified, and scientifically based traditions of modernizing national education in the situation of globalization, European integration and general self-identification.

N. Terentyeva, & O. Sytnyk (2016) analyzed education in Ireland and Ukraine, performed a comparative analysis of current trends in the advance of teaching in Ireland and Ukraine, gave a description of the main forms and content of education in both countries. Based on the conducted research, the authors attempt to identify the common and distinctive features of Irish Education for Ukraine and justify recommendations for using the progressive ideas of the Irish experience in the progress of the education system in Ukraine.

O. Kuchai (2014) highlights «...the main task of modern education in Poland – lifelong learning and the introduction of information technologies

in all spheres of public life and activities». Students take qualified knowledge during their studies (regardless of its duration), which helps them manage their own experience; participate in the methods taking place in the world around them, using information support.

T. Kuchai (2009) carried out, that «...a comparative analysis of the content of the education system and methods of training future specialists in the UK and Ukraine, which made it possible to identify similar approaches in the organization of the educational process; to identify the presence of different levels of training and features of such training in universities in the UK».

T. Sverdlova (2002) characterizes, that «...the educational systems of the Far East countries that are in a state of rapid development and indicates significant evolutionary changes, similar to the education system in Ukraine».

S. Honcharenko (1993) investigate the problem of building a Ukrainian school, emphasize the need to introduce individualization in the learning process.

Kravchenko et al., (2022) show, that «...modernization of computer technologies, especially multimedia ones, is a necessary condition for the functioning of specialists in modern society, since specialists are at the center of the educational process, during the improvement of professional competence».

Plakhotnik et al., (2022) expose, that «...multimedia teaching tools, which are promising and highly effective tools that allow the teacher not only to present an array of information in a larger volume than traditional sources of information, but also to include text, graphs, diagrams, sound, animation, video, etc. in a visually integrated form».

Shchyrbul et al., (2022) demonstrate, that «...relevant ideas of media education, developed form an important basis for the modernization of education, which will contribute to the construction of an information society in the country and the formation of civil society».

Methodology

The foundation of scientific research is the philosophical principles of the theory of knowledge, according to which the character of education in the change of the information society is considered as an object of systematic

study, analysis and interpretation of scientific facts from the standpoint of integrity, unity, interaction of various factors; general scientific principles of historicism, cultural relevance, unity of the national and universal.

The basis of the methodology is also a established of ideas set forth in the works of many scientists devoted to the part of education in the progress of the information civilization in various countries in the world.

Results and Discussion

The main task and main feature of current education in the information society is lifelong learning and the introduction of information technologies in all ranges of community life and actions. Students, future specialists, receive qualified knowledge during their studies (regardless of its duration), which helps them manage their own experience; participate in the processes taking place in the world around them, using information support.

As T. Sverdlova (2002) notes, that «...the educational systems of the Far East countries are in a state of rapid development». In the process of these changes, the top general successes and the most broadminded world practice are positively combined. As a consequence, the use of training in the modern information society is constantly increasing, and at the same time, its humanistic orientation is becoming more and more pronounced.

Recently, scientists note that research on the development of the modern education area in the modern information society should be carried out comprehensively. In particular, V. Kremen (2006) notes that education, as a whole is a field of complex research, interdisciplinary approach and system analysis, since it is a "systemic" object.

In Ukraine, changes are taking place in the field of politics, economy, culture, and interethnic relations, which encourage a rethinking of educational goals in the modern Information Society (Hryshchenko, 2009).

Global integration processes require an objective, comprehensive scientific analysis of the development of education systems in the modern information society, in both Europe and the East. Ukrainian researchers mainly focus on the study of the education systems of the European Union states, as well as the United States, Canada and other countries. Meanwhile,

as the identification of scientific sources shows, the experience of the development of education systems in the countries of the East, in particular, the training of specialists, is not sufficiently studied (Komar et al., 2021).

Japan is one of the world's leading economic powers, which retains its original national culture under broad international influences. The experience of the Japanese people in educating the younger generation has a long history, which has developed over the centuries as the most important tradition. The study of the historical experience of this country should contribute to understanding the peculiarities of the national character of the Japanese, which combines dedication to traditions and at the same time a evidently spoken and positive desire to income to explanation the necessities of the current civilized world. Japanese education is a unique phenomenon. Its special appeal lies in the high efficiency of the economic and intellectual development of the nation. Japan's education is not isolated from society; it is influenced by the transformations that characterize its development (Kuchai, 2015).

In Ukraine, only the question of increasing the role of education in the life of society, in the "intellectualization" of the economy, in the development of education is raised. Japan, in the middle of the last century, passed the path of "intellectualization" of the economy and became one of the first advanced countries in the world. The prestige of creativity in European culture is very high. According to content analysis, the word "creativity" itself is among the top ten most commonly used words in psychology, sociology, philosophy, and even political science. However, for example, this is not the case in eastern culture, and such a seemingly Western-progressive country as Japan does not have such a cult of creativity as in the United States. The main thing for a Japanese schoolchild, and then a Japanese engineer, or any specialist, is first to learn how to perform something in the best, most effective way. In addition, the entire education system in Japan, organized in its own way, is aimed at serious education of children (Hrynevych, 2011). According to UNESCO, Japan provides its children with education, according to some indicators, almost the best in the world (Sverdlova, 2004).

Investigating the problem of the development of the Ukrainian school, Ukrainian scientists S. Honcharenko (1993) consider it necessary in the modern information society to introduce individualization in the learning process.

Continuing their opinion, we note that the tendency of individualization is a strong cross of the organization of the education process (Oseredchuk et al., 2022).

The formation of aesthetic consciousness of students and young people in the system of education and training of Japan takes place in educational, pedagogical, methodological and other areas. This contributes to the development of creative thinking of young students, parents and other categories of the population. A wide range of aesthetic learning and training makes it possible to develop and constantly update not only the value component (aesthetic perception, aesthetic needs, aesthetic attitude), but also the cognitive component (aesthetic ideas, aesthetic knowledge). In addition, national traditions that contribute to the aesthetic education of students retain their strength today, contributing to the deepening of the aestheticization of the Japanese people. Children systematically develop politeness, obedience, hard work, insubordination, ability to work in a group, discipline and other qualities. Leading Japanese scientists justify approaches aimed at ensuring the widespread use of national traditions in the educational process of the school (Kuchai, 2015). The theoretical justification of training specialists in the modern information society requires taking into account the ideas of continuity, openness, advanced development, which depends on the results of the integral process of teacher formation at the methodological, general pedagogical, general psychological, scientific levels and is considered as the formation of a scientific worldview based on them (Shunkov et al., 2022).

Modern methodological approaches to the education and training of students in Japanese schools are of considerable scientific interest: egalitarian, activity-based, traditional, cultural, and systematic, partner to the school-university system, as well as the multicultural, functional and approach to the education of children. Creative implementation of these and other approaches ensures achievements in the development of Education, Science, Culture, Nanotechnology and allows the country to be a leader among other advanced countries of the world.

The Ministry of Education, Culture, Sports, Science and Technology of Japan refers to the ways of modernizing the educational process in the modern Information Society in universities: updating the content of training; introducing new training courses; using innovative teaching

methods. Moreover, preparing training instructions and didactic materials for students; a strict system of knowledge assessment; creating the necessary conditions for independent training of students in the modern Information Society; training creative future specialists with a humanistic worldview, developed creative abilities. The content of professional training of teachers is based on a combination of native Japanese philosophical attitudes, national traditions and modern conceptual provisions of domestic and world pedagogy (Kuchai, 2015).

Poland's accession to the European Union has led to another wave of modernization in the education system, in particular in the system of training and improvement of highly qualified specialists in the modern Information Society.

Another feature of professional training of specialists in Poland is the use of various methodological concepts in the classroom, which helps to assimilate knowledge with a predominance of methods activated by discussion, group decision-making, planning and creative development of thinking depending on the program content in the modern Information Society (Kotiash et al., 2022).

A characteristic feature of the training and activity of a Polish specialist is pedagogical control, the modernization of which began in 2011. The task of modernization is the development of the education system (coordination of external control over teaching in the country, formulation of general requirements, selection of assessment and control tools, training of persons responsible for external pedagogical supervision) and improvement of individual schools and other educational institutions. In each voivodship, regional centers for the quality of education are established – institutions responsible for conducting pedagogical supervision. Education quality inspectors should examine the quality of Educational Institutions' activities to ensure that they meet the same criteria for all schools. The introduction of external monitoring helps to analyze, draw conclusions, and outline short-and long-term strategies for the development of education at the state and local levels.

One of the qualities of professional training of specialists in Poland is increased attention to the educational component.

European education requires that a modern specialist in the modern information society is not only a person who gives knowledge, but also

an adviser to the student regarding its development, independent formation of its creative foundations. A new generation of future specialists should be prepared for such tasks, which is characterized by knowledge, information skills and qualified pedagogical training (Kuchai, 2014).

In Europe, the country with a pronounced decentralized education system is the United Kingdom, which is associated with its division into England, Wales, Scotland and Northern Ireland. In each of these regions, the education system reveals certain specifics. At the same time, both local education authorities and educational institutions themselves enjoy the right to solve many specific problems independently everywhere.

Great Britain is one of the countries that were the first to embark on the path of industrial development and felt the negative consequences of industrialization and the scientific and technological revolution, to overcome which the national and original education system of the population created in the country is focused. It is based on universal values and folk traditions of environmental protection, wide dissemination of progressive ideas in society (Kravchenko et al., 2022).

Comparing the forms of organization of training and methods in Ukraine and the UK, we note that, although the didactics of higher education in the UK does not clearly distinguish between teaching methods and organizational forms of training, the positive thing in university education is that discussions, debates, group forms of training are extremely widely used. As well as the imitation of certain fragments of their future activities by future specialists, as a result of which more effective training of students is carried out because in the classroom they learn to argue their opinions, listen to each other, conduct discussions, etc.

Discussion both as a method of teaching and as a form of organizing the educational process, according to English experts, has a number of important advantages: it helps students develop the ability to express and argue their opinions, listen to each other, and act as critics. Conducting a discussion, which requires not only the logical construction of the utterance, but also the correct literary design of the provisions, contributes to the development of spontaneous speech. Discussion forms of work form students' scientific thinking, stimulate their independence and activity, develop the ability to discuss

problems, and prepare them for their future profession (Kuchai, 2009).

Germany has a highly developed policy in supporting innovation. The National High-Tech Strategy, introduced in 2006, covers all ministries. It creates strategies for 17 "future areas" and goals to instrument new skills as soon as possible. In February 2008, this state implemented an internationalization strategy to appeal scientists, students and foreign investment. Germany also reserves investigate plans to support research in schools and universities. Significant advantages of Germany can be defined as: close cooperation between higher education institutions; research institutions and enterprises; creation of clusters; highly developed infrastructure; competitive environment; high level of demand for innovative products and services; developed policy in the field of innovation support (Bilan, 2010).

The study and implementation of foreign experience through its adaptation to domestic educational and cultural traditions will contribute to providing the population with broad access to the expansion of the worldview and personal development throughout life, which in turn is the key to the development of education in our country.

In the course of conducting a comparative pedagogical analysis of the development of education in Ireland and Ukraine, modern trends in the development of Education in Ireland are highlighted, in particular: public partnership in education, namely: the creation of public organizations (AONTAS, NALA). In addition, regional education in order to ensure work with people who want to return or continue their education, offering a person-oriented approach using individual training, in order to ensure positive personal or social results. Modernization of the content of educational programs for adults, in particular with the allocation of areas of work with different groups of the population (women or young mothers, men, travelers, people with disabilities, the elderly, migrants refugees, disadvantaged people, rural residents); integration of national programs to participate in the European educational program environment to involve the population in education (Terentyeva & Sytnyk, 2016).

Conclusions

In our opinion, the progressive ideas of the leading countries of the world that should be

implemented in Ukraine include training of a research specialist by applying a research-oriented approach and foreseeing university curricula in the educational process. In addition, partnership approach to the school-university system; implementation of the leading function of environmental education in the formation of a high culture of behavior in the environment among the younger generation, combining the cultural traditions of the people and modern ideas about human interaction with nature. Moreover, enrichment of the methodological system of environmental education in Ukraine, taking into account the progressive ideas of Great Britain and providing their scientific and methodological justification by: diversity of teaching methods (active, interactive, informational). Also, increasing the time for independent work of students in order to develop critical thinking of future specialists; introducing the most relevant subjects of our time to the curriculums of pedagogical faculties of universities; technological approach to equipping the educational process.

Among the orientations of information provision of professional education, the following can be distinguished: information mobility, efficiency, as well as the need to ensure the reliability and validity of synthesized knowledge, which allows productively (in various ways) to solve professional tasks within a given time limit in conditions of high professional competition; clarity, systematicity and step-by-step provision of information, characterized by imperatives: from knowledge to knowledge, from complete knowledge to comprehensive knowledge, from existing knowledge to more perfect knowledge", implemented with the help of experience that ensures continuous professional self-improvement based on the formation of necessary professional competencies ; focus on high-quality information professional support, characterized by the relevance and reliability of the information resource used.

Summing up, we can say with confidence that the goal of professional education is not just the accumulation of knowledge and skills, but also the professional development of an individual who has the ability to independently produce knowledge of a new type.

Bibliographic references

Bilan, V.I. (2010). Innovative sphere of Germany: development trends and ways of using progressive experience for Ukraine. Scientific works of KNTU. Series "Economic

Sciences". 17.
http://www.kntu.kr.ua/doc/zb_17_ekon/stat_17/69.pdf

Honcharenko, S. U. (1993). Socio-pedagogical problems of building the Ukrainian school. Native school, 4, 51-56. (In Ukrainian)

Hrynevych, L. M. (2011). Educational indicators for international evaluation (on the example of the report "View of education 2011): OECD indicators". Theory and methodology of education management. 7.
http://umo.edu.ua/images/content/nashi_vydanya/metod_upr_osvit/v_7/3.pdf

Hryshchenko, I.M. (2009). The state and features of higher education management in Japan. Tribuna, 9-10, 26-29. (In Ukrainian)

Kotiash, I., Shevchuk, I., Borysonok, M., Matvienko, I., Popov, M., Terekhov, V., & Kuchai, O. (2022). Possibilities of Using Multimedia Technologies in Education. International Journal of Computer Science and Network Security, 22(6), 727-732.
<https://doi.org/10.22937/IJCSNS.2022.22.6.91>

Komar, O., Bazhenkov, I., Vnukova, O., Kolomoiets, H., Yanchyshyn, A., & Polishchuk, O. (2021). Theoretical Principles of Using Innovative Modern Technologies in Higher Education Institutions. International journal of computer science and network security, 21(9), 185-190.

Kravchenko, T., Varga, L., Lypchanko-Kovachyk, O., Chinchoy, A., Yevtushenko, N., Syladii, I., & Kuchai, O. (2022). Improving the Professional Competence of a Specialist in Poland by Implementing Multimedia Technologies. International Journal of Computer Science and Network Security, 22(9), 51-58.

Kremen, V. G. (2006). The philosophy of anthropocentrism in the context of educational problems. Electronic scientific edition of the materials of the international science and practice conf. "Humanism and Education" (June 11–13, 2006) / Ministry of Education and Science of Ukraine, Academy of Pedagogical Sciences of Ukraine, Vinnytsia National Technical University, Yevle University (Sweden). Vinnytsia National Technical University (VNTU).
<http://conf.vntu.edu.ua/humed/2006/txt/06kvkpo.php>

Kremen, V.G. (2003). Education and science of Ukraine, ways of modernization (Facts, reflections, perspectives). K.: Diploma. (In Ukrainian)

Kremen, V.G. (2014). Synergetics and education: monograph. K.: Institute of the Gifted Child.

- Kuchai, O. V. (2014). Theoretical and methodical principles of training future primary school teachers by means of multimedia technologies in higher educational institutions of Poland. Cherkasy: publisher Chabanenko Yu. A. (In Ukrainian)
- Kuchai, T. P. (2009). Preparation of future teachers in the universities of Great Britain for ecological education of students (thesis. ... candidate ped. Sciences) Cherkasy, Bohdan Khmelnytsky National University, 237. (In Ukrainian)
- Kuchai, T. P. (2015). The system of professional training of primary school teachers in Japanese universities for the moral and ethical education of students. (Dissertation of Dr. Ped. Sciences). Cherkasy 400. Bogdan Khmelnytskyi Cherkasy National University.
- Oseredchuk, O., Mykhailichenko, M., Rokosovyk, N., Komar, O., Bielikova, V., Plakhotnik, O., & Kuchai, O. (2022). Ensuring the Quality of Higher Education in Ukraine. *International Journal of Computer Science and Network Security*, 22(12), 146-152.
- Plakhotnik, O., Strazhnikova, I., Yehorova, I., Semchuk, S., Tymchenko, A., Logvinova, Ya., & Kuchai, O. (2022). The Importance of Multimedia for Professional Training of Future Specialists. *International Journal of Computer Science and Network Security*, 22(9), 43-50.
- Shchyrbul, O., Babalich, V., Mishyn, S., Novikova, V., Zinchenko, L., Haidamashko, I., & Kuchai, O. (2022). Conceptual Approaches to Training Specialists Using Multimedia Technologies. *International Journal of Computer Science and Network Security*, 22(9), 123-130.
- Sverdlova, T. G. (2002). Elementary school in Japan: compliance with the criteria of humanization of education. Theoretical issues of culture, education and upbringing. coll. of science works of KNLU, NMAU, 21, 117-120. (In Ukrainian)
- Sverdlova, T. G. (2004). Theoretical principles of the process of humanization of education in Japan. (diss. ... candidate ped. of science). Drahomanov National Pedagogical university, Kyiv. 216.
- Shunkov, V., Shevtsova, O., Koval, V., Grygorenko, T., Yefymenko, L., Smolianko, Y., Kuchai, O. (2022). Prospective Directions of Using Multimedia Technologies in the Training of Future Specialists. *International Journal of Computer Science and Network Security*, 22(6), 739-746. <https://doi.org/10.22937/IJCSNS.2022.22.6.93>
- Terentyeva, N. & Sytnyk, O. (2016). Adult education in Ireland and Ukraine: common and different in development trends. *Education*, 1(13), 198-207. (In Ukrainian)