SCIENTIFIC RESEARCH OF THE SCO COUNTRIES: SYNERGY AND INTEGRATION

上合组织国家的科学研究：协同和一体化

Proceedings of the International Conference

Date: January 26

Beijing, China 2022

上合组织国家的科学研究：协同和一体化国际会议

参与者的英文报告

International Conference “Scientific research of the SCO countries: synergy and integration”

Part 2: Participants’ reports in English

2022年1月26日，中国北京
January 26, 2022. Beijing, PRC

Proceedings of the International Conference
“Scientific research of the SCO countries: synergy and integration”. Part 2 - Reports in English

(January 26, 2022. Beijing, PRC)

ISBN 978-5-905695-82-7

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ISBN 978-5-905695-82-7

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PEDAGOGICAL SCIENCES

DOI 10.34660/INF.2022.53.41.001

媒体报道数字化背景下大流行对企业的影响
MEDIA COVERAGE OF THE IMPACT OF THE PANDEMIC ON BUSINESS IN THE CONTEXT OF DIGITALIZATION

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本文探讨了大众媒体对数字市场经济中经商方式的影响。 媒体宣传新思想和突出重要问题，吸引政府关注，以及宣传产品和吸引潜在客户的手段。

关键词：大众传媒； 市场经济；商业；流行文化；精英主义； 媒体的功能：思想、娱乐、信息、文化； 现代数字经济

Abstract. *This article examines the impact of mass media on the methods of doing business in a digital market economy. Media to promote new ideas and highlight important issues, attract government attention, as well as means of advertising products and attracting potential customers.*

Keywords: *mass media; market economy; business; popular culture; elitism; functions of the media: ideological, entertaining, informational, cultural; modern digital economy.*

The media play a large role in today's world. They reach a large number of people, and as a consequence, are able to have influence not only on the psychological state of people, but also on their decisions.

In today's world, we live in an information society. This type of society is distinguished by the fact that the direct "acting" product is information. A person, who is only a consumer of information, must be able to critically relate to the

information presented, to be able to work with it. Otherwise, it does not lead to anything good, because such an individual is simply confused by the abundance of information news, which will often contradict each other.

Let us consider the influence of media on the market economy and define the concept of mass media and study the influence of the media on market relations.

If we consider media from the perspective of economic sphere, we can safely say that it is a kind of "twin market" of goods and services. If we look at one side, the mass media create content for the masses - they generate goods. The other side is represented by the services of advertisers, who provide them with access to the audience - they advertise them.

Media have certain functions, which they perform in all spheres of society [4]. In such functions we include:

· Ideological, the purpose of which is to instill in society certain views and a model of behavior.

· Entertainment, which is used for recreation and entertainment, unloading from everyday worries. It is characterized by simplicity and even primitiveness in artistic and cultural respect.

· Informational, which is associated with bringing certain information to society. It should be noted that the quality of such information can also vary greatly in quality and plausibility. Therefore, such information needs to be carefully filtered by consumer.

· Cultural information, which forms cultural attitudes and stereotypes in society.

But we should not forget that culture is conventionally divided into two categories - popular culture and elite culture.

"Popular culture is designed for the culture of everyday life, entertainment and information, prevailing in modern society" [6], designed for "the widest possible audience. It aims to generate interest in the vast majority of people, regardless of social status, profession or wealth. It is a culture of ordinary and familiar life, which is broadcast on television, on the Internet, and through artwork. Its content is based on desires and needs that are obligatory and habitual elements of everyday life for the vast majority of people. Popular culture is subject to the influence of the main market condition: demand shapes supply. People get what they want to see, touch, and feel. Public and widespread ideas influence each other. The main cultural element is commerce. Viewers are willing to pay to divert their thoughts from existing problems, to get something unremarkable, to create variety in life, to entertain" [6].

"Elite culture is a form of culture oriented to a narrow circle of connoisseurs, incomprehensible to most people. Works of elite culture are created either by the privileged part of society or by its order" [7]. And we understand that the media,

oriented to profitability, give preference to the promotion of the first type of culture to the detriment of the second.

Media's participation in economic relations is not limited to their commercial activities. Equally important to society as a whole is their indirect influence on economic life. The simplest example is disturbing political news transmitted through media channels that can provoke fluctuations and even a market collapse not only regionally but also globally.

The ideology of individual "achievement" and "consumer society," without which the existence and development of a market economy is unthinkable, is planted in the media through advertising and works of popular culture. Thus, the media contribute to the cultural legitimization of the established economic system.

The modern market needs information security, the rapid dissemination of real commercial information of direct relevance to business, which leads to the rapid growth of the corresponding segment of the information market.

Since the end of the twentieth century, businesses around the world, including the Russian Federation, began to actively look at the media in order to use their resources for their own purposes. In order to form a positive image of people, many large companies began to produce their own media, designed for a wide audience, in order to promote their products.

If we consider the role and place of the media in relation to business, we can really distinguish several components of their relationship [2].

First, the media can be used by business as a source of information about what is happening in the world around them, thereby allowing them to make certain decisions that will allow them to take into account the changing situation.

Secondly, very often businesses use the media to promote their new ideas, and to highlight issues important to them. And also, to use media to create a major resonance for an issue, which, in turn, will bring it to the attention of the government.

Third, media can be seen by businesses as a means of advertising, a way to make more people in the country aware of their company, and thereby attract as many potential customers as possible.

We know that the media, in turn, has a strong influence on shaping public opinion. And it is very important for business players in a market economy. The media allows you to shape the public opinion about your company, which will be beneficial to the company, downplaying or omitting its shortcomings and, consequently, magnifying its strengths in relation to its competitors.

Therefore, if we consider the role of the media in the market economy, we can see that they are engaged in bringing together sellers and buyers, helping to increase demand for this or that product, distributing information about sellers to buyers.

By developing and strengthening, in people, the desire to buy a particular prod-

uct, the media contribute to an increased demand for it. Therefore, the company increases its production capacity, expands capital investment, and increases the number of jobs. From the wages of employees of the company go tax payments to the state budget" [5].

In the modern post-industrial period with the digital economy this influence has expanded. Today, many financial indicators are firmly dependent on exactly how and in what way a particular news item will be presented, which can affect economic performance.

There are also emerging media outlets that specialize in conveying specific financial content to people. This content may be such nuances as: information about fluctuations in the rate of stocks, information about fluctuations in the rate of currencies, securities or precious metals, the level of inflation.

This is largely due to the expansion of the audience, which is interested in all this. Nowadays, financial information is no longer the privilege of specialized people, as more and more people have become involved in investing. In this connection, such information becomes very relevant for them.

A rather vivid example that illustrates the influence of the media on the market is the coronavirus pandemic. This situation is relatively recent, so we will dwell on it in more detail.

In the context of socio-economic risks, the economic thinking of the population becomes the most susceptible to external factors. In times of uncertainty, people tend to turn to the experience and knowledge of other people, experts.

Such behavior is explained, for example, by a low level of financial literacy. In this case, people do not have enough knowledge to form economic behavior. It is at this point that the task of shaping economic thinking comes to the forefront of media activity [1].

The fact is that the content of news about the coronavirus included such facts as the closure of borders, installation of quarantine, suspension of production. This led to a situation in the market where uncertainty began to develop, and at the same time, the further it got, the stronger it got.

It should be noted that such unclear news has a very negative effect on investors, because it becomes impossible to predict where there is a profit and where there is a loss.

In this situation, using the information, which was supplied by the mass media, many investors rushed to get rid of those assets, which, in their opinion, were transferred to the risk group.

Meanwhile, the panic was growing worldwide, therefore, the process of getting rid of risky assets was increasing with each new piece of news. As a result, shares of all companies collapsed, both energy companies and IT-sphere stocks [3].

There are also examples when, in order to fight competitors, to reduce their profits and to contribute to the fall of their shares, some companies created fake news that they were allegedly under investigation.

As technology evolved, so did the mainstream media - first newspapers, then radio, later television, and finally, in today's world, the Internet. Information became cheaper, and therefore more accessible to the general public.

Since the end of the twentieth century, business all over the world, including the Russian Federation, began to actively look at the media in order to use their resources for their own purposes.

Nowadays, the media are used by business structures as a means of advertising for a huge number of the country's population, and by this to attract as many potential customers as possible.

In today's post-industrial era of the digital economy, this influence is even greater. And many financial indicators are firmly dependent on exactly how and in what manner any news information that affects economic performance is presented.

References

1. *Volkov D. Rossiyskoi media-landscape 2019: television, pressa, internet and social networks / D. Volkov, S. Goncharov // Rossiyskoi media-landscape 2019 (Press-issue of the Levada Center). — URL: https://www.levada.ru/2019/08/01/21088/print/. — Publication date — 01.08.2019.*

2. *Gordienko O. Y. Mutual influence of modern business and mass media / O. Y. Gordienko // Vestnik Tambovskogo universiteta. Series: Social Sciences. — 2016. — Vol. 2, No. 2 (6). — S. 49-54.264-270.*

3. *Gurzhiy D. A. Influence of the media on the formation of public opinion / D. A. Gurzhiy // Molodoyi uchenyi. — 2020. — № 12. pp. 991–993. — URL https://moluch. ru/archive/92/20451/ (accessed 23.06.2021).*

4. *Dzyaloshinsky I. M. Media space of Russia: communication strategies of social institutions: monograph / I. M. Dzyaloshinsky. — Moscow: Academia: APKiPPRO, 2018. P 118*

5. *Reva Y. V. Institutionalizatsiya svyazei s obshchestvennoi v sovremennoi rossiiskoi businesse / Y. V. Reva // Regionologiya. — 2017. — № 4*

6. *https://dnevnik-znaniy.ru/obshestvo/massovaya-kultura.html*

7. *https://yandex.ru/turbo/anews.com/s/novosti/134311025-jelitarnaja-kulytura-primery-i-priznaki-otlichija-ot-massovoj-i-narodnoj.html*

DOI 10.34660/INF.2022.15.70.002

作为俄罗斯发展新模式的一部分，转换为本国货币和其他货币
SWITCHING TO NATIONAL AND OTHER CURRENCIES AS PART OF CREATING A NEW MODEL FOR RUSSIA'S DEVELOPMENT

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Abstract. *The creation of voluntary regional economic unions of independent countries was an important direction in the development of the regional and world economy at the end of the twentieth century. They arise as a reaction to the dominance of several world national currencies that play a world-class role. The main feature that characterizes trade relations within such alliances is the departure from world currencies and the use of specially created regional ones. In practice, the main obstacle to the emergence and spread of such unions is the instability of regional currencies associated with their binding to one of the national currencies of a member state of the Union or to the gold standard. The article describes the current trends in Russia and the world, as well as the possibility of creating a supranational currency independent of any national currency or gold. The main trends include: the price of oil is falling more and more as the price of gold increases; Central banks in most countries of the world have consistently and actively increased their gold assets; a number of countries have already returned their gold reserves to their territory, and this process continues. The article presents the disadvantages of dollarization for the Russian and other national economies. The main directions for ensuring the possibility of creating a supranational currency later are proposed: the formation of currency zones where large regional currencies such as the Euro, yuan, and ruble will dominate; digitalization of money, which includes both the rejection of cash payments and the strengthening of the role of cryptocurrencies.*

Keywords: *dedollarization, the world's reserve currency, the Chinese yuan, cryptocurrency, currency area, US dollars, central bank, EAEU,*

Introduction

The status of the world reserve currency became a source of global power

for the United States, because they could borrow as much as they wanted on the international capital market without worrying about default on payments [5]. In addition, the reserve currency status allowed the US to control the global financial system and institutions (i.e. the IMF and the World Bank), and international loans were mainly provided in US dollars. More destructive for the borrowing countries were the Washington Consensus (a term coined by British economist John Williamson in 1989) with conditions of fiscal austerity during periods of economic recession, unrestricted international trade, and privatization of state assets [22].

Dollarization has been a topic of particular interest in the context of developing countries since the early 1970s, especially in emerging market economies [10]. During periods of macroeconomic and political uncertainty, many developing countries have experienced the partial replacement of their national currencies with foreign currencies as a means of saving, a unit of account or a medium of exchange. Countries with a high degree of dollarization rarely pursue policies actively aimed at reducing dollarization [13]. Instead, de-dollarization is mostly seen as a side effect of sound monetary and fiscal policy measures. However, in some cases, the authorities decide to take the policy to a new level and actually take measures to actually reduce the level of dollarization [14, 16]. These policy measures are usually aimed at eliminating factors that lead to dollarization and the development of alternative instruments in local currency [18]. In this regard, the purpose of this article is relevant, which is to substantiate the possible transition to national and other currencies within the framework of creating a new model of Russia's development. The scientific novelty consists in the formulation of the main directions to ensure the possibility of creating a supranational currency later.

Main part

The political leadership of the United States in the field of security, trade and even culture around the world has a decisive influence on the use of the dollar in the monetary sphere [15]. Other governments' reserve currency reserves and exchange rate management are heavily influenced by security ties, and therefore decisions on pegging to the dollar (and accumulating dollar reserves for intervention) from Taiwan to Saudi Arabia and Panama depend not only on the economy, but also on foreign policy. Private decisions to invest in the United States, both at the corporate level and by individuals, are supported by the desire of insiders to gain access to key decision-making processes and membership in transnational elites [21].

In fact, it is this desire for membership and access that is the main source of financially unprofitable investments made by foreigners in the United States - and thus the exorbitant privilege of the United States to pay its current account deficit in its own currency [22]. The European Union, not to mention the euro area itself, is unable or unwilling to offer these systemic or security advantages outside of a

very limited area, and is thus fundamentally limited in its ability to attract currency supporters, despite the success of the euro as a currency and a means of saving [24].

Since most dollar transactions pass through American banks, the US can claim that these transactions pass through US territory, thereby granting the US legal jurisdiction over them. This means that the United States has excessive control over the mechanism of international transactions - or has unique opportunities to use financial warfare in the service of foreign policy [1, 4, 7].

Dollarization as a policy has some disadvantages that need to be compared with the advantages in order to test the value of this policy. Below are some disadvantages of dollarization for the Russian and other national economies [3, 12, 25]:

* The central bank is losing its role as lender of last resort for its banking system

* The central bank loses the ability to collect "seigniorage", the profit received from the issue of coins.

• If a country does not have enough reserves, it will either have to borrow money, creating a current account deficit, or find the means to accumulate a current account surplus.

* A country cannot cheapen its goods on the world market by devaluing its currency.

* Relative inefficiency of the exchange rate as an adjustment mechanism.

Active measures are needed to combat dollarization and, consequently, its sustainability. We believe that any potential dedollarization scheme should include a reward and punishment mechanism, a carrot and stick approach that increases the cost of dollar mediation while simultaneously expanding the menu of instruments in local currency and increasing their attractiveness [17]. According to some researchers, a two-way approach is needed, in which prudential regulation should also be revised in order to eliminate the external effects associated with financial dollarization in advance [2, 6, 19]. Any successful de-dollarization strategy must be accompanied by a sound monetary policy. In addition, we need concrete measures aimed at justifying the presence of external effects and increasing the attractiveness of assets in local currency, forming a favorable macro policy. Institutional factors play an important role in dedollarization.

Some countries may try to contain the reduction in savings that may result from inflation by allowing the use of foreign currency; others may try to resist dollarization by promoting financial indexation schemes or resorting to capital controls. At the same time, the lack of deep financial markets to support the liquid market of indexed instruments, as well as the simplicity, transparency and reliability of dollar instruments may tip the scales in favor of partial dollarization

in some countries.

Currently, most of the world's trade is conducted in US dollars, and more than 60% of all world foreign exchange reserves are held in US dollars. This in itself gives the United States a great advantage over other States. However, with the help of decades of very dubious US decisions, this advantage is beginning to weaken [20]. One by one, Russia and China are finding allies ready to "de-dollarize" the economy; and the last one to join this trend is Argentina, which does not fulfill its obligations on serial payments. Discussions and rumors about "de-dollarization" have been circulating for several years, but finally, the Eurasian axis against the US dollar is rapidly taking shape, and recent events have been catalyzed and, of course, accelerated by US foreign policy, which has led to pushing Russia much closer and faster to China. To strengthen de-dollarization, Russian banks insist that Russian companies make bypassing the US dollar in international transactions their top priority, as the latest sign that Russia is turning its back on the West and moving towards Asia.

Recently, there has been considerable interest on the market from large Russian corporations in using various products in yuan and other Asian currencies, as well as in creating accounts in Asian countries. "Bank of China". In addition, Gazprom PJSC, which supplies 30 percent of its natural gas to Europe, announced that in the near future the company will transfer payment contracts "nine out of 10" from dollars to euros with the ultimate goal of transferring these contracts to rubles or yuan [9, 11].

Russia is not the only country that seeks to dedollarization. China is now accelerating its long-term plan to eliminate the US dollar as the world currency. It is important to note that China currently owns about $1.3 trillion of US debt, and this huge dependence on the US is beginning to turn into a serious political problem in China. The country is also the largest gold producer in the world, and it also imports huge amounts of gold from other countries. But instead of slowing down, the Chinese are accelerating the purchase of gold [8]. Many are convinced that China eventually plans to support the yuan with gold and try to make it the number one alternative to the US dollar.

Currently, only half of payments within the EAEU are made in national currencies, while the share of trade with China is even lower - 15%. 46% of Chino-Russian trade in the first quarter of the year was settled in US dollars (for the first time this share fell below 50%), 30% - in euros, 17% - in yuan and 7 percent in rubles. Russia calls on its partners in the Eurasian Economic Union (EAEU) and China will limit the use of the US dollar (and the euro) in the trading bloc to reduce dependence on the dominant monetary and financial system. by Western powers. To do this, researchers and politicians propose to link the EAEU free trade zone with the Chinese initiative "Belt & Road" (BRI), a plan to place China in the center

of world trade. The link between the two initiatives could create a large Eurasian bloc that would challenge the Western bloc led by the United States. There is no single currency in the EAEU, as in the European Union. To fill this gap, they propose to develop their own mechanism for international settlements based on national currencies and Chinese yuan, separate from the mechanism controlled by the US dollar. In addition, Russian companies may try to put an end to their dollar dependence in international trade transactions using blockchain technology.

Conclusion

Summing up the research, we can conclude that the trends of recent years indicate the possibility of de-dollarization of the world economy: firstly, the price of oil is falling more and more as the price of gold increases; secondly, the central banks of most countries of the world are consistently and actively increasing their gold assets; thirdly, a number of countries have already returned their gold reserves to their territory, and this process continues. The return of the gold standard and the disappearance of the dollar may lead to the replacement of the "world currency" by the so-called currency zones. These are regions where large regional currencies such as the euro, yuan, ruble, etc. will dominate. It is also possible to create new currencies that unite individual regions. Also, we should not forget about the process of digitalization of money, which includes both the rejection of cash payments and the strengthening of the role of cryptocurrencies.

References

1. Berdyshev A.V. On the prospects of de-dollarization of the global financial system // Bulletin of GUU. 2018. No. 10. pp.126-129.

2. Zharikov M.V. On the effectiveness of a hypothetical collective currency for the BRICS countries Problems of the Far East. 2019. No. 4 p. 93-103

3. Ishkhanov A.V., Linkevich E. F. The concept of a new settlement system of the EAEU // Greater Eurasia: Development, security, cooperation. 2018. No.1-1. pp.287-288.

4. Kuznetsov A.V. Supranational currency regulation: theoretical and practical approaches // Finance and credit. 2018. No. 1 (769). pp.191-208.

5. Kuznetsov A.V. Problems of formation of a multipolar financial system in the conditions of centralization of global capital // The world of the new economy. 2019. No. 2. pp.70-79.

6. Makhalina O.M., Makhalin V.N. Prospects for the creation of national and supranational cryptocurrencies in the BRICS countries//Management. 2019. No. 2. pp. 116-123.

7. Medvedeva A.E. Modern trends in the development of integration processes of the Eurasian Economic Union // Chronoeconomics. 2018. No.3 (11). pp.114-118.

8. Potapov M.A. When will the yuan become the world currency? Problems of the Far East. 2018. No. 2. pp. 173-177.

9. Rozhentsova E. V. Supranational currency as a synthesis of reserve and means of payment: SDR and the US dollar Journal of Economic Theory No. 2 2017.

10. Stepanov N.S. Dedollarization of the Russian economy under sanctions: problems and prospects. Modern economic success. 2019. N 3.

11. Stepanov N.S. Creation of a single supranational currency within the framework of the Shanghai Cooperation Organization. Finance and management. 2019. N 3.

12. Alper T. Chinese steel producers Use Blockchain to Overcome Dollar dependence. URL: https://cryptonews.com/news/chinese-steelmakers-using-blockchain-to-break-dollar-depende-7443.htm

13. Asaliev A.M., Dzhusim V.N., Tarkhova L.S. Regional currency unions and supranational currency // The economy of the region. 2014. No. 1. pp.22-210.

14. Catao L.A.V., Terones M.E. Financial dedollarization: a global perspective and the Peruvian experience. IMF Working Paper WP/16/97, International Monetary Fund, Washington, 2016.

15. Freeman K. D. China, Unlimited War and the Challenge to America. In F. Fleitz (ed.), A warning order: China is preparing for conflict and why we should do the same. Washington: Center for Security Policy Press. 2016, pp. 55-80.

16. He D., Luk P., Zhang V. Internationalization of the yuan as a currency of investment and financing: analytics and prospects. Pacific Economic Review, 2016.21(3), pp.295-323.

17. Joshua J. The Changing International Financial System. In the section: The "One Belt and One Road" Initiative and the global economy. Palgrave Macmillan, Cham, 2019. https://doi.org/10.1007/978-3-030-28068-0_2

18. Kuznetsov Yu. Adaptation of stable coins as a reserve currency // Review of research in the field of business and economics. 2019. No. 1. pp.57-61.

19. Li M., Park D., Saravia A. Trade consequences of US anti-dumping actions against China. Asian Economic Journal, 2017, 31(1), pp.3-16.

20. Liao S., McDowell D. No Reservations: The International Order and the demand for the yuan as a reserve currency. International Studies Quarterly, 2016, 60 (2), pp.272-293.

21. Mvase N., Kuma F.Y. Revision of the concept of dollarization: the global financial crisis and Dollarization in Low-income Countries. IMF Working Paper WP/15/12, International Monetary Fund, Washington. 2015.

22. Naser S.B., Hosni A., Hadjian G. How to de-dollarize financial systems in the Caucasus and Central Asia? Empirical economics. 2019, volume 56, pp.1979-1999.

23. Monthly reporting and statistics of the yuan tracker on the progress of the yuan (yuan) on the way to becoming an international currency. URL: https://www.swift.com/sites/default/files/files/RMB%20Tracker_July%202020_Slides.pdf

24. Urio P. China and the New World Order. Why and how China's foreign policy Put an end to the World created by America. In: China 1949-2019. Springer, Singapore, 2019. https://doi.org/10.1007/978-981-13-8879-8_6

25. Zharikov M. Moscow will become a new offshore yuan center // Review of research in the field of business and economics. 2019. No. 1. pp.6-18.

DOI 10.34660/INF.2022.19.40.003
UDC 620.9:622.32(510+470)

中俄能源（气）合作现状、影响因素及对策
SITUATION, INFLUENCING FACTORS AND COUNTERMEASURES OF SINO-RUSSIAN ENERGY (GAS) COOPERATION

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《俄罗斯联邦和中华人民共和国关于发展全面伙伴关系和进入新时代战略合作的联合声明》的发表标志着中俄关系进入系统发展和两国合作的时期 国家。

能源合作是重要的合作领域之一，在经济发展和能源结构调整中发挥着重要作用。

世界上最大的能源国家俄罗斯补充了中国不断增长的能源需求。 中俄能源合作有利于两国经济发展和能源结构平衡。 文章审视了中俄能源领域合作的现状，分析了影响能源合作的因素，提出了发展措施。

关键词。 中俄关系、能源合作、天然气、前景

Abstract. *The publication of the "Joint Statement of the Russian Federation and the People's Republic of China on the Development of Comprehensive Partnership and Strategic Cooperation Entering a New Era" marks the transition of Sino-Russian relations into a period of systemic development and cooperation between the two countries.*

Energy cooperation is one of the important areas of cooperation and plays an important role in economic development and in adjusting the balance of the energy structure.

The world's largest energy country, Russia, complements China's growing energy demand. Sino-Russian energy cooperation is beneficial for the economic development of the two countries and the balance of the energy structure. The article examines the current situation of Sino-Russian cooperation in the energy sector, considers the factors influencing energy cooperation and proposes measures for development.

Keywords. *Sino-Russian relations, Energy cooperation, gas, prospects.*

"BP" predicts that over the next few decades, global demand for oil and gas will continue to be supported and grow, and by 2040 Russia will become the world's largest exporter of oil and gas. At present, China's lack of clean energy and high dependence on foreign oil and gas are having some impact on the country's long-term green economy and security. In this context, the development of Sino-Russian cooperation in the field of energy and resources is still a strategic measure that should be developed to ensure China's energy supply.

The joint statement of the People's Republic of China and the Russian Federation on a new era in the development of relations of comprehensive partnership and strategic interaction put forward new requirements for cooperation in the energy sector: "Continue to deepen comprehensive energy cooperation in the field of exploration, production, processing and marketing, promote the exchange and cooperation of the parties in such areas of energy as the development and use of energy efficient technologies, common standards, personnel and information support. Support the institutionalization of the Russian-Chinese Energy Business Forum" [1].

The prerequisites for cooperation are relevant. Faced with the impact of adverse factors such as the development of shale oil and gas in America, falling oil prices and other adverse factors, the US has increased its strategic energy blockade against Russia. The Russian energy industry with a strategy of moving to the west is gradually diversifying in terms of marketing, since the objects of sanctions are industries related to the energy of Russia.

Russia has teamed up with OPEC to expand its scientific and technological innovation potential, maintains the status of an energy power, and actively seeks energy cooperation with all interested countries. China is experiencing a shortage of natural gas. He has a good geographical advantage. In addition, in recent years, China and Russia have maintained close relations regarding problem solving [2].

Status of cooperation in the field of natural gas: in 2015, Russia suffered from Western economic sanctions, for some time projects to develop natural gas were seriously hampered. China entered into a cooperation agreement with Russia on an Arctic natural gas project and acquired a share of the equity capital. The share of China in the gas project developed by Russia has increased to almost 30%. This project represents natural gas trade between Russia and China after the economic strategy of the "Belt and Road Initiative" was proposed. This is one of the options for energy cooperation and strategic relations between Russia and China.

In 2014, Gazprom and China National Petroleum Corporation signed a 30-year contract worth 400 billion dollars to supply China with 38 billion cubic meters of natural gas annually.

The gas pipeline built in China was put into operation in 2019. After the com-

pletion of the pipeline, Russia will be able to annually transport up to 40 billion cubic meters of natural gas through the pipeline to China.

The transportation of Russian natural gas will significantly affect the satisfaction of China's domestic demand for energy, increase energy reserves and implement the strategic development directions in the energy field. This can, to some extent, solve China's domestic pollution problems.

The "International Energy Agency's World Energy Outlook 2020" states that China's natural gas consumption will continue to rise over the next 20 years, driven by factors such as coal-to-gas conversion in industry and the power industry. Primary energy consumption in China will start to decline slowly after peaking around 2025. Compared to 2019, primary energy consumption in China will decrease by about 5% in 2030 and by 13% in 2040 [3].

From the standpoint of top-level national strategic projects – linking the Eurasian Economic Union (EAEU) and the Belt and Road Initiative (BRI) – the interconnection between the demand and supply of energy resources in Eurasia is becoming closer, the geographical advantages of China and Russia and the complementary advantages of the energy structure are becoming more and more obvious. Strengthening bilateral energy cooperation within the framework of conjugation of the EAEU and BRI can not only further stimulate the scale of energy cooperation and the process of economic integration throughout the Eurasian region, but also give a new impetus to the sustainable economic development of Eurasia and the Asia-Pacific region [4].

Issues of cooperation between China and Russia in the field of "gas" energy.

As part of their cooperation in the "gas" energy industry, China and Russia have been negotiating valuations for almost a decade, mainly in relation to natural gas trading prices. The question is in relation to gas prices, in Russia they are too high, and in China they are too low, which does not meet the psychological expectations of both sides. Therefore, the governments of the two countries could not come to an agreement on industrial cooperation. In the face of this situation, the Chinese government is constantly exploring the natural gas import market and has concluded natural gas purchase agreements with some countries in the Middle East and Africa through cooperation and exchanges with countries around the world. Thus, in the course of subsequent negotiations between Russia and China on cooperation in the field of gas energy, Russia's negotiating position is relatively passive. The price of natural gas exported from Russia to Asia has always been high. The Russian government attaches great importance to the export of domestic natural gas, so the gas industry is subject to great competition for interests. In the process of cooperation between China and Russia in the field of natural gas, in addition to export trade, further industrial cooperation in the development of natural gas, the interests of domestic groups interested in natural gas have been affected.

At the same time, there are also technical problems in the export trade between the two countries. Gas pipelines are old, and building new ones to transport natural gas requires large investment resources. Russia's current financial constraints have affected capital investment in natural gas pipelines.

The Russian government is constantly paying attention and political support, hoping that Chinese companies will enter Russia. However, there are a number of limitations related to local factors. Therefore, Chinese enterprises face great difficulties in entering the market.

References

1. Joint Statement of the Russian Federation and the People's Republic of China on the Development of Comprehensive Partnership Relations and Strategic Cooperation Entering a New Era [Electronic resource] // Official website of the President of Russia. URL: http://www.kremlin.ru/supplement/5413 (appeal date: 13.9.2021).

2. Yujun B F, Phd. The Yukos Affair and Sino-Russian Energy Cooperation[J]. international petroleum economics, 2003.

3. International Energy Agency. World energy outlook 2020[R/OL] (2020-10-01)[2021-02-01] https://www.iea.org/rep orts/world- energy-outlook-2020.

4. Chu Lin. Sino-Russian strategic cooperation: tasks and prospects / Chu Ling // Society: politics, economics, law. — 2021. — № 1. — P.31-36.

DOI 10.34660/INF.2022.64.14.004

现代俄罗斯的进口替代：类型、评估方法、对经济的影响
IMPORT SUBSTITUTION IN MODERN RUSSIA: TYPES, METHODS OF ASSESSMENT, IMPACT ON THE ECONOMY

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本文根据该领域专家的研究结果，对现代俄罗斯的进口替代进行了分析。 描述了进口替代对加强和发展国家经济并确保其安全的重要性，考虑了进口替代的主要类型，分析了俄罗斯科学和实践中评估和衡量进口替代的方法，以及 为此目的使用的指标，以及基于这些指标的关于国内经济整体及其行业部门的进口依存度的结论。

关键词：进口，进口替代，进口替代指标，自给系数，本土化系数，进口强度，部门间平衡

Annotation. *The article contains an analysis of import substitution in modern Russia, based on the results of research by experts in this field. The importance of import substitution for strengthening and developing the country's economy and ensuring its security is characterized, the main types of import substitution are considered, methodological approaches to assessing and measuring import substitution that have developed in Russian science and practice are analyzed, as well as indicators used for this purpose, and conclusions based on them about the import dependence of the domestic economy as a whole and its industry segments are presented.*

Keywords: *import, import substitution, import substitution indicators, self-sufficiency coefficient, localization coefficient, import intensity, intersectoral balance.*

Introduction

Import substitution has become one of the main directions of the state's economic policy in modern Russia. This is primarily due to the growing global geo-

political confrontation, the introduction of Western anti-Russian sanctions since 2014. Other reasons for import substitution include the weakening of integration trends in the global economy in recent years, increased support for protectionism and "national identity" in developed countries, and the expectation of a global recession by leading experts and politicians.

The purpose of the study is to analyze the current state of import substitution and its impact on the development of the Russian economy on the basis of methodological approaches established in Russian science and practice.

Materials and methods

The study is based on scientific publications of Russian experts in the field of import substitution. General scientific research methods were used: analysis and synthesis, induction and deduction, a systematic approach, comparative analysis, economic and statistical analysis.

Results and discussion

The need for import substitution has become even more obvious due to the imbalance of international production chains, the slowdown in world trade and the disruption of logistics links in the context of the COVID-19 pandemic. Import substitution in the current situation is becoming one of the most important conditions for the country's economic security and an additional source of growth.

Comprehensive measures are being implemented in the country to support domestic producers, develop new types of products, and localize technological operations.

Serious attention is paid to import substitution in Russia's national projects, primarily in the project "International Cooperation and Export". From 2015 to 2019, the financing of import substitution projects from various sources in industry alone amounted to more than 2 trillion rubles. Purchases of Russian equipment within the framework of expenditures of national projects form the main reserve of import substitution. Of the 6 trillion rubles that these projects provide for machinery and equipment, 3.2 trillion rubles are allocated for Russian engineering products [1].

There are three types of measures related to direct or indirect support for import substitution in Russia:

1. The first type of import substitution is an increase in the volume of sales of finished domestic products on the domestic market by reducing sales of imported products. These are measures to develop new types of products, increase competitiveness and increase the volume of goods and services already produced. First of all, this applies to stimulating domestic agricultural production. Such measures have a tangible economic effect: the share of Russian products in the domestic market is rapidly increasing, domestic production and its added value are expanding in relation to the prevailing demand. Russia is becoming a world leader in the

export of certain types of agricultural products.

2. The second type of import substitution is a reduction in the share of the imported component in the cost of final products as a result of the substitution of imported raw materials, materials, components, works, services with their domestic counterparts, as well as stimulating the consumption of such products in the domestic market. This direction includes measures for the development of high technologies by domestic manufacturers, promotion of the production of high-tech domestic raw materials and materials, deepening industrial cooperation in the production of technically complex products. The economic effect of such measures is expressed in an increase in the volume of work performed by domestic enterprises, in the growth of production of intermediate products, as well as the share of Russian value added in manufactured goods.

3. The third type is the so-called export-oriented import substitution. It means that products with greater localization, i.e. with a greater share of the domestic component in the structure of its value, are sold not only on the domestic market, but also exported. In this case, the Russian economy benefits both from an increase in the amount of value added created at domestic enterprises and from increasing their competitiveness in the world market. This type of import substitution has been practiced and promoted in Russia since 2014-2015 [2,3,4].

All three areas of import substitution complement each other, contribute to overcoming the limitations of the existing domestic and external demand, accelerate economic growth.

The issue of indicators for the analysis, evaluation and measurement of import substitution processes is very important. Quite a lot of such indicators have been developed in Russia, but in their the basis is based on two of the most famous: 1) the self-sufficiency coefficient, which measures the share of domestic products in the domestic market of the country; 2) the localization coefficient, which determines the domestic share in the cost of manufactured products, and such calculations can be carried out for a specific unit of production, for the industry, as well as for the economy as a whole.

The derivative of the self-sufficiency coefficient is the indicator of the share of imports in the market. It is the share of imports in commodity resources that Rosstat offers as the main indicator for assessing import substitution in the country. For Russia, this is undoubtedly an important indicator of import substitution, but it is quite correct only for one segment of the domestic market – consumer. If we construct a similar indicator for the entire Russian economy based on the System of National Accounts, it will give distorted results due to the effect of repeated cost accounting.

The simplest solution for constructing a reliable indicator of import substitution is to compare imports with GDP, i.e. with the sum of all value added produced

in the economy, which excludes repeated counting. In Russian scientific publications , this approach is presented in two directions: 1) comprehensive study of the import dependence of the economy by segments of the domestic market; 2) study of the real dynamics of imports, its natural characteristics.

Within the framework of the first direction, several rather complex indicators have been proposed that clarify and detail the coefficients of self-sufficiency and localization. In particular, indicators are calculated on the basis of input-output tables, including a comparison of imports of various purposes in the relevant segments of the finished goods market (imports of consumer products in the final consumption of the population, investment - in investment costs, etc.), as well as indicators of direct, indirect and total import costs in the cost of final products of domestic production [5, 6].

In the second direction, the dynamics of imports in the Russian economy is studied based on the analysis of changes in its real volumes, taking into account price increases and fluctuations in the exchange rate of the Russian ruble [7, 8].

However, from the standpoint of these approaches, a comprehensive assessment of import substitution on the scale of the entire Russian economy is still not provided, and its impact on economic growth is not traced. This does not allow us to draw unambiguous conclusions about the results achieved in the field of import substitution.

The methodological approach proposed by A.V. Gotovsky seems to be more fruitful. He justifies the construction of detailed cost indicators of the import dependence of the economy using the model tools of the intersectoral balance in combination with the decomposition of real GDP growth rates based on the structure of final demand. This approach makes it possible to predict the dynamics of imports based on changes in the volume of demand and the real exchange rate of the ruble.

The calculations of import dependence of the Russian economy carried out on the basis of this methodology (taking into account the latest data available for calculations for 2017) showed the following results. The overall import dependence of the Russian economy does not look critical and is estimated at 17.2 kopecks of imports per 1 ruble of GDP. The total import intensity of various elements of various elements of the final use of GDP, calculated in kopecks per ruble of goods and services consumed by the relevant sector in buyers' prices, is estimated as follows: import intensity of the consumer basket of goods and services – 19.7 kopecks, investment goods (gross investment) - 29.4 kopecks, the domestic market of finished products - 19.5 kopecks, public services - 6.3 kopecks, export basket - 9 kopecks.. However, in producer prices (without taxes and surcharges), many industry segments of the domestic market actually quite significantly depend on imports. First of all, this applies to the finished products of the manufacturing industry used in

Russia, where the share of direct imports in the market is 38.7 kopecks, the share of indirect imports per 1 ruble of domestic products is 19.8 kopecks, and in general, the share of imports in products consumed by Russians reaches almost 51 kopecks.

At the same time, the total import intensity exceeding 50% of the cost of consumed finished products is typical for 10 out of 18 industry segments of the manufacturing industry. In the segment of motor vehicles, trailers and semi-trailers, the share of finished imported products on the market is 33.2 kopecks per 1 ruble of consumed goods in basic prices. In this area, there is the highest dependence of domestic production on foreign components (42.5 kopecks per 1 ruble of domestic products). As a result, Russians consume mainly imports (61.6 kopecks per 1 ruble). Of the non-industrial sectors, the highest import dependence is characteristic of air and space transport (42.1 kopecks). Only in five industry segments of the consumed products of the manufacturing industry, the total import intensity is less than 1/3: food, beverages and tobacco (27.4 kopecks), wood with primary processing (25.1 kopecks), printing products (21.5 kopecks), metallurgical products (17.2 kopecks), petroleum products (5.8 kopecks) [9].

Imports due to import substitution change in direct dependence on the exchange rate of the Russian ruble. The strengthening of the real exchange rate of the ruble, which means an increase in the cost of domestic products relative to foreign ones, causes a shift in consumer preferences in favor of foreign goods (services) and accelerates the growth of imports. On the contrary, the decline in the real exchange rate, which leads to an increase in the cost of imported goods, refocuses the economy on domestic goods, raw materials, and reduces imports.

After each crisis period in Russia, there was a recovery in economic growth with an increase in demand and a simultaneous strengthening of the real exchange rate, when there was an increase in imports. Therefore, a sharp switch to domestic products during the crisis years, followed by a return to the previous state, cannot be considered as turning points in the development of the Russian economy. Import substitution in these conditions only mitigated the decline in production. The analysis of data for 1996-2019 indicates a positive contribution of import substitution to economic growth.

Conclusion

Russia does not yet have a systematic comprehensive assessment of the dependence of import substitution on the dynamics of various economic processes, as well as its impact on economic growth. There is also no single methodological approach to measuring import substitution. One of the most effective is the method of assessing import substitution based on the model tools of the intersectoral balance. This method assumes a macroeconomic decomposition of GDP growth in the areas of its final use with the allocation of the contribution of import

substitution due to increasing self-sufficiency in finished domestic products and localization of production, domestic and export-oriented import substitution. The application of this approach leads to the conclusion that the import dependence of the Russian economy remains quite high. It is strongest in the manufacturing industry, where in 10 out of 18 industry segments the total import intensity of consumed finished products exceeds 50% of the cost.

The impact of import substitution cannot yet be attributed to systemic factors of economic growth. However, the analysis of data for 1996-2019 allows us to conclude that import substitution has a significant impact on the economic dynamics of Russia, especially during a period of high market volatility. The role and importance of import substitution in strengthening the country's economy and ensuring its security increases even more in the context of a sharp aggravation of geopolitical contradictions, as well as the crisis caused by the COVID-19 pandemic, when logistics links and international production chains are disrupted. In this situation, an important reserve for import substitution is the purchase of Russian equipment as part of the expenses of national projects, in particular, the project "International Cooperation and Export".

References

1. Belousov's keynote speech at the meeting on 7.02.2020 [Electronic resource] – URL: https://pandora open.ru >2020-02-15...tempy...ne .

2. Danilov-Danilyan A., Nikitin G. 10 myths about import substitution //Kommersant-Dengy, 2016, February 29. [Electronic resource]. URL: https://www. kommersant.ru/doc– 2912018

3. Narimanov N.F. Import substitution as a factor of increasing national economic security// In the collection: Competitiveness of the territory: development priorities and strategic guidelines. Proceedings of the International scientific and practical conference. – Ryazan: Ryazan State University named after S.A. Yesenin, 2015. – P. 37-41.

4. Narimanov N.F. The main directions of import substitution in modern Russia // In the collection: Ryazan State University named after S.A. Yesenin: a century-old history as a foundation for further development (dedicated to the 100th anniversary of S.A. Yesenin Ryazan State University). Proceedings of the scientific and practical conference of teachers of S.A. Yesenin

Ryazan State University on the results of the 2014/15 academic year. Responsible editor M.N. Makhmudov; Ryazan State University named after S.A. Yesenin, 2015. – P. 48-54.

5. Strizhkova L.A. On the structure of the cost of final domestic products based

on the intersectoral method //Economist. – 2013. – N 6. – pp. 61-71.

6. Strizhkova L.A. The use of input-output tables in assessing the dependence of the Russian economy on imports and import substitution processes // Questions of statistics. – 2016. – N 5. – pp.3-22.

7. Knobel A.Y., Firanchuk A.S., Lavrishcheva A.A. Russian foreign trade in 2018: growth of non-oil and gas exports // Russian Economic Development. – 2019. – Vol. 26. – N 4. – pp. 11-19.

8. Kadochnikov P.A., Chentsov A.M., Knobel A.Y. Assessment of the scale of import substitution in Russia in 2014-2016 //Economic Policy. – 2019. – Vol.14. – N 1. – pp.8-33.

9. Gotovsky A.V. The contribution of import substitution to Russian economic growth // Problems of Economics. – 2021. – N 4. – pp. 58-78.

DOI 10.34660/INF.2022.43.68.005

激发创新活动的世界实践
WORLD PRACTICE OF STIMULATING INNOVATION ACTIVITY

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文章考察了国外在创新支持领域的经验。 主要关注创新政策的以下工具：保护竞争的措施； 支持研发的税收优惠； 支持小企业的针对性创新政策； 国家研究补助金； 知识产权政策； 在创新领域增加人力资本的措施。

关键词：创新、创新政策、公共政策、刺激创新的工具、研发。

Annotation. *The article examines the experience of foreign countries in the field of innovation support. The main attention is paid to the following instruments of innovation policy: measures to protect competition; tax incentives to support R&D; targeted innovation policy to support small enterprises; state grants for research; intellectual property policy; measures to increase human capital in the innovation sphere.*

Keywords: *innovation, innovation policy, public policy, tools for stimulating innovation, R&D.*

Introduction

Technological progress and innovation underlie the economic dynamics and leadership of modern countries. In this regard, the development of an effective innovation policy is one of the key conditions for accelerating economic development, overcoming the consequences of the pandemic and improving the well-being of the population in the long term. For Russia, overcoming the technological gap and inclusion in the fourth technological revolution is of exceptional importance in the context of a sharp aggravation of geopolitical contradictions. Therefore, the study and analysis of the world practice of stimulating innovation has scientific and practical value.

The purpose of the study is to analyze the modern experience of developed

countries in the field of stimulating innovation.

Materials and methods

The study is based on scientific publications of foreign experts devoted to the analysis of various forms and mechanisms for stimulating innovation in developed countries. The article uses general scientific research methods: analysis and synthesis, induction and deduction, a systematic approach, comparative analysis, economic and statistical analysis.

Results and discussion

The economies of developed countries have accumulated a wealth of experience in innovation, developed both market and state mechanisms for stimulating innovation. Among the market mechanisms are competition, venture capital companies and corporate venture funds. The instruments of the state innovation policy are the targeted innovation policy for small businesses, tax measures to support R&D, state grants for research, promotion of the active use of human capital in the field of innovation.

Let's take a closer look at the market mechanisms for stimulating innovation. As for competition, although its impact on innovation activity in general cannot be recognized unambiguously, numerous studies show that in modern countries of Europe, South America and Asia, competition contributes to the activation of innovation activity [1, 2, 3].

This is primarily due to the fact that in a competitive market, firms do not receive monopoly profits protected by high entry barriers, therefore they are interested in introducing innovations as the only source of sustainable long-term productivity and profit growth.

Venture capital companies and corporate venture funds play a crucial role in promoting innovation processes in advanced Western countries. They provide financial support to high-risk projects and startups. International venture capital companies act as financial intermediaries that attract funds from various investors, including pension funds, insurance companies and other organizations, to implement innovations.

Despite the importance of market mechanisms of technological progress, the key condition for its successful implementation in modern countries has become an effective innovation policy of the state. For example, in the United States, more than 50% of R&D expenditures at universities and colleges have been funded from the federal budget in recent years, while the latter carry out about half of all basic scientific research. Tax deductions for R&D, which, according to the OECD, are actively used in 33 countries, have a significant stimulating effect. Such tax incentives have reduced the cost of R&D in the United States by about 5%, and in countries with the most generous tax regimes – France, Portugal and Chile – by more than 30%. In general, a 10% reduction in the tax value of R&D in the long

term increases the volume of R&D by 10%. The use of a tax deduction for R&D ensures an increase in the volume of patenting and increases productivity [4, 5, 6, 7].

In many countries, the state is developing a targeted innovation policy to support small enterprises. In particular, more significant tax deductions for R&D are provided for them. A more positive reaction of small businesses to innovative and other program support measures was revealed compared to large businesses. However, the problem is that such a policy can become an obstacle to the growth of small firms, since their expansion beyond a certain limit deprives them of the right to receive subsidies. In addition, financial constraints are more often experienced by young enterprises than small ones. Western countries, and above all, the United States, have found a way out of this situation in combining many small high-tech firms in one location, which creates agglomeration effects, high-density accelerators with intensive supervision and strict selection of firms, incubators with less active support, but also less stringent selection, as well as technoparks or ecosystems. At the same time, the provision of venture financing to young innovative enterprises gives a good result. Often preferential loans become more preferable for them in comparison with tax holidays [8].

Government grants are an effective tool for concentrating financial resources on the most important areas of fundamental research and development. Various government programs are aimed at supporting innovation by providing grant funding either to academic research or to private firms, for example, innovative small businesses. In the USA, grants granted to such enterprises at an early stage of research and development approximately double the probability of them receiving venture financing in the future, and contribute to obtaining patents. Data on the level of spending on military R&D indicate that with a 10% increase in the volume of public funding for R&D, their private funding increases by 3%. Thus, government support for R&D contributes to the expansion of their private financing [9].

In the USA, a significant share of government grants for R&D is allocated to universities, while in the future there is a flow of knowledge from the field of fundamental scientific research into the innovative activities of the private sector. Strong research universities are becoming powerful centers for the transfer of the latest knowledge and technologies to the surrounding business environment, as evidenced by Silicon Valley in California, Highway 128 in Massachusetts, the Research Triangle in North Carolina [10].

Effective legislative mechanisms for the implementation of the rights of various intellectual property rights holders are necessary for the implementation of innovations. In the USA, in 1980, significant changes were made to the regime of regulating the ownership of inventions that appeared with the state support of their developers. As a result, universities received a share in the intellectual property

rights created by their employees. Many universities have opened "technology transfer offices" that provide additional support for the commercialization of research results. The facts show that the higher the share of scientists in the ownership of the results of innovative activity, the greater the volume of innovations [11]. Data from Norway show that if a university researcher owns full ownership of the results of his innovation activities, he is more likely to patent his inventions and open startups [12].

Targeted program measures to support R&D in sectors that are significant for the country, primarily in the defense sector, are effective. These measures have contributed to important innovations in the US Defense Advanced Research Projects Agency (DARPA), as well as in the space industry, the National Aeronautics and Space Administration (NASA).

The need for state support for targeted breakthrough innovative projects is increasing in modern conditions due to the coronavirus pandemic and the aggravation of environmental problems. In this situation, the role and importance of high technologies in the field of healthcare, based on the convergence of biotechnologies with information technologies, as well as technologies for preventing environmental disasters, is growing.

In addition, Governments often finance their own research laboratories, which turn into centers that generate additional research activity and create jobs in the technological field of their specialization, as well as in the region where they are located. This effect is produced, for example, by the SLAC National Accelerator Laboratory at Stanford University (USA) and the Diamond Light Source synchrotron (UK) [13].

In order to activate innovative activity and increase the volume of innovations, as the experience of advanced countries shows, the state pursues a policy aimed at increasing the supply of scientific human capital. This is ensured through the expansion of university programs, a loyal migration policy, as well as the reduction of barriers to the self-realization of talented people with the ability to invent. In particular, practice has shown that an increase in the number of specialists in the country with good training in the field of scientific and technical disciplines (STEM) leads to an increase in the volume of innovations in general. The most noticeable effects were found in the fields of chemistry, medicine and information technology.

Some countries achieve this by increasing the admission of applicants by universities to the relevant specialties and improving their training (Italy), others - on the basis of an open migration policy to attract highly qualified specialists from other countries (USA). For example, in the US, immigrants make up 18% of the workforce over the age of 25 and 26% of the workforce employed in the STEM field. Immigrants also provide 28% of the most significant patents; they make

up 31% of all holders of scientific degrees (PhD) [14]. It was found that with an increase in the number of college–graduate immigrants by 1%, the number of patents per capita increases by 9-18%. This indicates the effect of knowledge transfer from highly educated immigrants to the rest of the population [15].

Conclusion. For most developed countries, innovation is the most reliable way to ensure sustainable long–term economic growth. Strategies for stimulating innovative technologies involve the use of many tools, the effectiveness of which varies depending on the length of the time period within which they operate. According to Western experts, in the short term, tax deductions for R&D, as well as the influx of highly qualified immigrants, give the greatest effect in stimulating innovation. In the medium term, direct grants for R&D, promotion of competition and targeted innovative support for small enterprises are effective. In the long term, it is necessary to rely on improving the quality and increasing the supply of human capital, primarily due to the growth in the number of students in universities and technical universities of the country in scientific and technical specialties.

References

1. Bloom N., Draca M., Van Reenen J. (2016) Trade induced technical change? The impact of Chinese imports on innovation, IT and productivity. Review of Economic Studies, Vol. 83, No, 1, pp. 87-117. https://doi.org/10.1093/restud/rdv039

2. Aghion Ph., Bloom N., Blundell R., Griffith R., Howitt P. (2005). Competition and innovation: An inverted-U relationship? Quarterlu Journal of Economics, Vol. 120, No, 2, pp. 701-728. https://doi.org/10.1093/qje/120.2.701

3. Shu P., Steinwender C. (2019). The impact of trade liberalization on firm productivity and innovation. Innovation Policy and the Economy, Vol. 19, pp. 39-68. https://doi.org/10.1086/699932

4. Dechezlepretre A., Einio E., Martin R., Nguyen K.-T., Van Reenen J. (2016). Do fiscal incentives increase innovation? An RD design for R&D. Centre for Economic Performance Discussion Paper, No. 1413.

5. Lucking B. (2019). Do R&D tax credits create jobs? Unpublished manuscript, https://stanford.edu/-blucking/jmp.pdf

6. Akcigit U., Grigsby J., Nicholas T., Stantcheva S. (2016). Taxation and innovation in the 20th centure. NBER Working Paper, No. 24982. https://doi.org/10.3386/w24982

7. Chen Z., Liu Z., Suarez-Serrato J. C., Xu D. Y. (2019). Notching R&D investment with corporate income tax cuts in China. NBER Working Paper, No.24749. https://doi.org/10.3386/w24749

8. Madaleno M., Nathan M., Overman H., Waights S.(2018). Incubators, accelerators and regional economic development. Centre for Economic Performance Discussion Paper, No. 1575.

9. Howell S. T. (2017). Financing innovation: Evidence from R&D grants. American Economic Review, Vol. 107, No. 4, pp. 1136-1164. https://doi.org/10.1257/aer20150808

10. Moretti E., Wilson D.J. (2017). The effect of state taxes on the geographical location of top earners: Evidence from star scientists. American Economic Review, Vol. 107, No. 7, pp. 1858-1903. https://doi.org/10.1257/aer20150508

11. Lach S., Schankerman M. (2008). Incentives and invention in universities. RAND Journal of Economics, Vol. 39, No. 2, pp. 403-433. https://doi.org/10.1111/j.0741-6261.2008.00020.x

12. Hvide H.K., Jones B.F. (2018). University innovation and the professors privilege. American Economic Review, Vol. 108, No. 7, pp. 1860-1898. https://doi.org/10.1257/aer20160284

13. Helmers Ch., Overman H. G. (2016). My precious! The location and diffusion of scientific research: Evidence from the synchrotron diamond light source. Economic Journal, Vol. 127, No. 604, pp. 2006-2040. https://doi.org/10.1111/ecoj.12387

14. Shambaugh J., Nunn R., Portman B. (2017). Eleven facts about innovation and patents. Hamilton Project Report, Brookings Institution.

15. Bernstein S., Diamond R., McQuade T.J., Pousada B. (2018). The contribution of high-skilled immigrants to innovation in the United States. Stanford Graduate School of Business Working Paper, No. 3748.

DOI 10.34660/INF.2022.12.50.006

个人基金作为统一的非营利组织的一种新的组织形式和法律形式
PERSONAL FUND AS A NEW ORGANIZATIONAL AND LEGAL FORM OF A UNITARY NON-PROFIT ORGANIZATION

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本文考察了单一非营利组织的一种新的组织形式和法律形式——个人基金的特点； 给出了指定经济实体类型的定义，考虑了法律规定的运作的法律基础，揭示了个人基金组织和法律形式的基本特征； 由于俄罗斯执法实践法律制度的新颖性，分析了执法的潜在问题，并提出了降低继承关系风险和消除继承法潜在问题的方向。

关键词：个人资金，遗嘱，税务代理人，继承关系，个人决定，继承基金。

Abstract. *This article considers the features of a new organizational and legal form of a unitary non-profit organization - a personal fund; the definition of the indicated type of economic entity is given, the legal foundations of functioning established in the law are considered, the essential features of the organizational and legal form of a personal fund are revealed; potential problems of law enforcement are analyzed due to the novelty of the legal institution for Russian law enforcement practice and directions for reducing the risks of inheritance relations and eliminating potential problems in inheritance law are proposed.*

Keywords: *personal funds, will, tax agent, inheritance relationship, individual decision, inheritance fund.*

Non-profit organizations (hereinafter - NPO), whose activities are based not on making a profit, but on achieving other social goals, including the organization of inheritance rights, today play an important economic role. So, for example, in

order to preserve capital in the Russian Federation and reduce their withdrawal from the country to foreign trusts, personal funds are introduced into Russian law enforcement.

A personal fund, in accordance with amendments to the civil legislation, is a unitary non-profit organization established for a certain period or indefinitely by a citizen or after his death by a notary public, which manages the property transferred to it by this citizen or property inherited from this citizen in accordance with the management conditions approved by him [1].

Two possible options for its creation are identified: personally by the founder during his lifetime, or by a notary - after the death of a citizen in accordance with his will (inheritance fund).

It should be noted that inheritance is the practice of transferring property, titles, debts, rights and obligations after the death of an individual [4]. In the civil law of continental Europe, the relevant branch is usually called the law of inheritance. In Anglo-American common law, it is customary to distinguish between the origin of real property and the distribution of personal property. The rules applicable to the two types of property have been merged, but the common name is not yet generally accepted. In Russia, the issues of inheritance are determined by the sources of civil law. Thus, inheritance law is part of the civil law of the Russian Federation.

Thus, personal funds created in the form of a non-profit organization ensure the implementation of the constitutional right to inheritance and are aimed at fulfilling a social function, and also have the economic tasks of preserving capital within our country.

Personal foundation as a new legal form NPO differs from commercial organizations in several aspects. In particular, the focus is on fulfilling a social mission rather than seeking profit, the diversity of stakeholders, and there is a strong financial dependence on sponsors with different assets than investors in the commercial sector. These features lead to the emergence of managerial problems characteristic of this type of organization. Given these fundamental differences, in order to better understand the factors that drive managerial innovation in this type of organization, a new system of analysis is needed that incorporates personal fund management features.

It is provided that the property transferred to a personal fund by its founder belongs to the personal fund on the basis of ownership, while the founder of a personal fund does not have rights to the property of the fund created by him. The value of property transferred to a personal fund (with the exception of a hereditary fund) by its founder cannot be less than one hundred million rubles. A personal fund may be established for an indefinite period or for a fixed period.

In addition to the legally established characteristics of the legal status of personal funds, today it is important for the Russian Federation to assess the potential

problems of the functioning of the new organizational and legal form of organizations.

Firstly, the economic function of personal funds, enshrined in the relevant changes in civil law, requires detailing in the legislation on NPO in terms of expanding the status of such companies, as well as tax law - in terms of establishing the specifics of the performance of duties of tax agents by personal funds.

It should be noted that at the moment, upon receipt of income from the use of assets, the personal fund is subject to income tax, and then the beneficiaries themselves are obliged to pay personal income tax when receiving payments from the personal fund. It turns out that there is a system of double taxation for the same object of income, which is unacceptable in order to respect the rights of taxpayers [5].

In order to support initiatives to create personal funds, our country is invited to make appropriate changes to tax legislation and eliminate regulation in terms of double taxation. In support of such an initiative, it is necessary to indicate examples of foreign practices in which the income of such structures is not subject to income tax.

Secondly, in Russia there is no institution and practice of fiduciary management (professional asset managers), as well as appropriate control and responsibility [3]. In many foreign jurisdictions that are used to organize trusts and foundations, there is a licensing of this activity and professional standards have been approved.

Thirdly, in Russia it is only necessary to develop judicial practice in terms of personal funds. The long-term work of international trust and fund mechanisms has made it possible to analyze thousands of cases and litigation, to form a large array of practices that can be relied upon. In Russia, taking into account, most likely, the infrequent use of personal funds, the formation of judicial practice will take more than a dozen years.

In addition, the legislation on personal funds establishes that the will of the testator to create a personal fund (after the death of the testator) must be recorded in the will. It should be noted that there is also no unity in scientific publications regarding the essence of the concept of "testament". Some authors define it as a document, others as a legal fact in the form of a legal act, on the basis of which, after the death of the testator, an inheritance legal relationship arises [2].

A will is essentially a one-sided transaction, that is, the will of one person, the testator, is enough to make it. The term "Will" has two meanings. Firstly, it is a document that indicates the desire of the testator, and secondly, the act of expressing the testator. The testator's act of will is a one-sided transaction and does not imply the opinion of any other person. As a general rule, it is not necessary for the heir to be informed of the contents of the will. A will may be made without undue

influence, be made in writing, signed by the testator and two impartial witnesses.

At the same time, the creation of a personal fund with the transfer of property, for example, for management, clearly contradicts the principle of individual decision. The subject who is entrusted with the relevant right to manage, at a minimum, must agree with such duties. Accordingly, there is a discrepancy between the general norms of inheritance law and an innovation on the regulation of the status of personal funds.

To solve this problem, it is necessary at the legislative level to determine the features of the procedures and actions of the participants in relations for managing a personal fund (opportunities and rules for giving up management, the procedure for transferring rights, etc.).

It should also be noted that the freedom of the rights of the testator is limited by the mandatory share of his legal heirs. A will is also a personal and formal transaction. It is personal because it represents the unique and exclusive desire of the testator and is carried out only by the testator and not by the representative.

To date, the peculiarities of the order of occurrence of rights to the property of a personal fund have not been regulated. In such a situation, it is assumed that the courts will be overwhelmed with claims against personal fund managers in disputes over violation of the inheritance rights of the plaintiffs (subjects from the queues for the right to inherit). It is important at the legislative level to establish a rule on the possibility or prohibition of direct heirs and heirs of other lines to claim the property of a personal fund.

The founder of a foundation bears subsidiary liability for the obligations of the foundation, and a personal foundation, with the exception of a hereditary foundation, bears subsidiary liability with its property for the obligations of the founder of a personal foundation within three years from the date of its creation. In exceptional cases, if the creditors of a personal fund or a founder of a personal fund, for valid reasons, were not able to file claims against the founder of a personal fund or a personal fund within the specified period, this period may be extended by the court, but not more than five years from the date of creation personal fund. At present, situations are very common when businessmen or top managers are brought to subsidiary liability or are obliged in connection with the application of the consequences of transactions that were declared invalid at the claims of interested parties during the bankruptcy of organizations and individuals. This is often a very lengthy process. Often such court decisions are issued five to seven years after the implementation of controversial transactions (management of a person subsequently recognized as insolvent). However, the creation of a personal fund and the establishment of a pre-emptive period of liability (five years) makes it possible to significantly strengthen the protection of the property interests of the founder of the hereditary fund from claims in cases of bygone days. At the same time, the fi-

nal answer to the question of strengthening the protection of property interests can only be given by judicial practice, which will be formed over the next ten years.

Based on the analysis of the concept of this institution enshrined in civil law, it is possible to single out the main characteristics of the concept under study in our country.

So, a personal fund is a non-profit organization that is created during the life of the owner of the assets (when created after death - an inheritance fund). It is logical to assume that, after all, this institution will be most in demand in the framework of the inheritance of large property rights and financial resources. Unfortunately, in practice, it is not uncommon for a successful business created by hard work to be sold for next to nothing or to be crushed and wasted after the death of its owner. In order to preserve the assets, the owner got the opportunity to form a personal fund, which determines the fate of the business and the mechanism for managing it during the life of the testator.

A personal fund can be created both during the life of the testator and after the death of the citizen who bequeathed the creation of the fund. In this case, such a will must be notarized.

The activities of the fund can be both fixed-term and perpetual, depending on the conditions for managing the hereditary fund, which were specified in the will.

The civil legislation provides for a certain procedure for its creation, including in terms of the terms of registration authorized for this procedure. It should be noted that the law also indicates the means of legal protection of the rights of beneficiaries, executors and heirs in the event that the notary does not fulfill his obligations to create an inheritance fund.

The law establishes rather stringent requirements in terms of managing the property of the fund or part of it, amending the charter of the hereditary fund, which, most likely, is due to the need to fulfill the will of the testator, as well as preventing criminal encroachments on the property of the fund. The peculiarity of the property fund is that it cannot be replenished by gratuitous transfer of assets by other persons.

Information on the creation, management and other legal actions within the framework of the functioning of a personal fund is not of a public nature, it is open exclusively to a certain circle of persons, which include a notary, fund management bodies, beneficiaries, state authorities and local governments in cases established by law. That is, the mechanism for managing the hereditary fund cannot be disclosed to third parties.

The introduction of such a subject of civil law as a personal fund led to changes not only in the rules of inheritance, but also in the rules on legal entities. At the same time, regulation is carried out both by general provisions on funds and by special rules in relation to this legal entity [6].

A significant drawback of the considered legal structure is its insufficient inclusion by the legislator in the general system of Russian inheritance law. Thus, in order to avoid legal conflicts, it will require amendments to the norms on the property rights of spouses, on the rights of creditors of the testator, a number of changes will be made to the legislation on notaries. There is a gap in the regulation of relations of the subsequent fate of hereditary property in case of revealing incorrect data indicated by the testator when making a will. In addition, issues of taxation of the fund also remained unresolved, such as tax on the profits of the fund.

Thus, the presence in the Russian circulation of property relations of such an institution as a personal fund indicates the development of Russian inheritance law and its convergence with the European practice of inheritance. The purpose of the legal norm under study is to protect the rights and interests of the testator, to ensure compliance with the last will of the testator.

At the same time, due to the relative novelty of the legal norm, there are legal conflicts and gaps in the legislation that make it difficult to implement the legal norm in practice.

References

1. On Amendments to Parts One and Three of the Civil Code of the Russian Federation: Federal Law of 01.07.2021 № 287-FZ / [Electronic resource] Access: http://www.consultant.ru/document/cons_doc_LAW_388907/.

2. Zhelonkin S.S. General provisions of inheritance by will / Bulletin of the St. Petersburg University of the Ministry of Internal Affairs of Russia. 2019. № 4 (64). P.63-69.

3. Korneva M.M. Comparative legal analysis of the trust and inheritance fund in England and Russia // Ural Journal of Legal Research. 2020. P. 32-48.

4. Petrov E. Yu., Renz I. G. Development of Russian inheritance law // Law. 2017. № 6. P. 44-50.

5. From March 1, 2022, it will be possible to create personal funds in Russia // [Electronic resource] Access: https://www.pwc.ru/ru/legal-services/flash-reports/flash-183-254-rus.pdf.

6. Kolieva A.E. On the fiduciary nature of legal relations in property management // Black holes in Russian legislation. 2011. № 6. P. 33-35.

DOI 10.34660/INF.2022.32.77.007

UDC 343

教育系统腐败控制法律支持的合理化
RATIONALIZATION OF LEGAL SUPPORT FOR CORRUPTION CONTROL IN THE EDUCATION SYSTEM

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腐败对国家安全、民主、经济和教育机构的正常全面运作构成严重的潜在威胁。 学术环境中的腐败会增加风险，因为存在大规模流行和系统性的威胁。 腐败环境下的资金周转量每年约为 55 亿美元。 在这方面，有必要确定并证明最合理的方法来改善控制教育系统腐败的法律框架。

关键词：腐败、教育、贿赂、官员、责任、惩罚

Annotation*. Corruption constitutes a serious potential threat to national security, democracy, the normal full functioning of the economy and educational institutions. Corruption in the academic environment carries an increased risk, since there is a threat of mass prevalence and systemicity. The turnover of funds in a corrupt environment annually amounts to about 5.5 billion dollars. In this connection, it is necessary to identify and justify the most rational ways to improve the legal framework for controlling corruption in the education system.*

Keywords*: corruption, education, bribe, official, responsibility, punishment.*

The constant changes taking place in the education system, aimed at modernization and reconstruction, justify the need to improve the legislative framework in order to reduce the corruptogenic academic environment and create an effective, really functioning legal and regulatory framework. Countering corruption crimes is an activity carried out by specially authorized bodies of the law enforcement system, state bodies, public associations, aimed at:

1) detection, disclosure and investigation of corruption-related crimes;

2) carrying out prophylactic and preventive measures in order to eliminate the causes of committing corruption-related crimes;

3) elimination of the consequences of the harm caused and minimization of corruption risks.

According to Federal Law No. 273 “On Combating Corruption”, activities

aimed at preventing corruption situations and eliminating the causes and conditions that contribute to the generation of corruption desires leading to the commission of crimes of this direction are a priority state policy program. The implementation of this program is entrusted to authorized entities. The normative basis for preventive areas is laid down in Federal Law 172 "On Anti-Corruption Expertise of Regulatory Legal Acts and Projects".

Conducting a survey and a sociological survey led us to the conclusion that the employees of the education system evaluate the anti-corruption expertise of legal acts as the most effective tool aimed at eliminating corruption gaps in the legislation. Almost 80% of the teachers and students surveyed believe that anti-corruption expertise makes it possible to eliminate manifestations of corruption already at the stage of developing legislative norms, thereby eliminating the possibility of using emerging gaps, contributing to the development of a strategy to resist the seizure of power by lobbying bills, initiating the launch of an effective mechanism for social control of any manifestations of corruption.[1]

According to this federal law, public associations, civil society institutions can carry out anti-corruption expertise of legal acts at their own expense. The results of the examination are not binding, but represent an effective mechanism for recommendatory action. The production of anti-corruption expertise of regulatory legal acts in the production of licensing, attestation and accreditation in higher education institutions is also advisory in nature. However, it contributes to the effective launch of the mechanism for eliminating corruption gaps.

The production of such an examination is estimated by experts quite highly: the production of licensing one specialty is estimated at 50-150 thousand rubles, and several specialties - 200-500 thousand rubles. University accreditation is from 300 thousand to 1.5 million rubles. According to the Federal Law "On Education in the Russian Federation", public professional accreditation is carried out on a voluntary basis, no additional obligations from the state are required. The information obtained as a result of the anti-corruption expertise is not binding and is advisory in nature. However, quite often, the production of expertise in the field of licensing, attestation and accreditation and the issuance of a recommendatory opinion by voluntary associations is a clear example of ignoring the conclusions of an expert by managers, or giving an unmotivated answer.

Many public associations such as "Teacher", "Healthy Thought", "Expert Council" constantly conduct voluntary public examination of the Federal Law "On Education in the Russian Federation". The results of the examination formulated by them are not officially refuted. However, they are replete with references to the norms of the same Law, indicating on the legitimacy of the normative

1 *Arkhipov M.A., Khachatryan A.V., Milova I.E. To the question of the history of the development of criminal law counteraction in the field of combating corruption in sports. Actual problems of jurisprudence. – 2020. – No. 1 (65). – P. 25-30.*

act underlined by the experts. According to the data of the Ministry of Justice of Russia from 2020, various state administration structures received 95 opinions of independent expert associations, out of which 41 opinions were taken into account. The rest were refuted or insufficiently motivated answers were given, and the subjects received 126 opinions, of which 57 were considered. According to the study, 8% of accredited expert associations are currently active in the country.[2]

The study clearly shows that there are many gaps in anti-corruption legislation that create obstacles to the development of a social base for combating corruption:

- it is necessary to legislate the significance of the work performed by independent experts, to give their conclusion a certain procedural significance;

- it is necessary to determine the mechanism for considering the result of the examination, and fix the form of a reasoned response to the received expert opinion;

- it is necessary to establish responsibility in cases of ignoring the results of independent examination by the heads of the relevant institutions.

According to the study, we consider it necessary to make a recommendation to the legislative bodies of the Russian Federation to adopt amendments to the existing legislative norms:

- all information obtained during the independent accreditation by public associations must be taken into account and formed the basis for the state accreditation, the corresponding amendment must be made; in paragraph 8 of Art. 96 FZ "On Education in the Russian Federation";

- to submit the consideration of an expert opinion within the strictly established terms sent to a certain structure based on the results of licensing, accreditation. To send a reasoned response to the public independent expert commission within 30 days, unless the conclusion does not contain specific proposals on how to eliminate the main causes and conditions for the emergence of corruption factors.

- to recommend to the Ministry of Education of the Russian Federation to create an official portal for receipt of opinions of independent experts, to consider these opinions on a competitive basis with subsequent mandatory posting of the results of the review on the official website. The Federal Law “On Combating Corruption”, in addition to a set of prophylactic and preventive measures, also includes a system of measures providing for administrative liability for corruption crimes.

The purpose of criminal punishment is to restore social justice, correct the convict, prevent the commission of new crimes. Therefore, according to social practice, the feeling of fear that arises in a person before being exposed and subsequently held accountable by assigning a just punishment, forms apathy for com-

2 *Ponomarev D.A. Corruption and organized crime as modern forms of social and legal deviance in the context of globalization (criminal law and criminological analysis): Abstract of the thesis. ... Candidate of Legal Sciences: 12.00.08 / Legal Acad. – Moscow, 2005. – 32 p.*

mitting corruption attacks, and suffering especially to an official of the type of punishment as deprivation of the right to hold a certain position. Therefore, it is necessary to provide in the Federal Law "On Combating Corruption", the types of punishment imposed in the commission of corruption crimes, which will reduce the number of "corrupt individuals" in the field of education and serve as a kind of deterrent.[3]

The results of a social survey of potential bribe takers (16%) (teachers, educators, officials) showed that the tightening of legal sanctions is not a sufficiently effective mechanism for combating corruption crimes. However, the overwhelming majority of potential victims of corruption crimes (71.25%) (students) support this position, believing that the introduction of legal sanctions will create certain difficulties in extorting bribes by university employees. Sanctions for crimes of corruption are provided for in the norms of criminal law in Chapter 30 of the Criminal Code of the Russian Federation - "Crimes against state power", in Chapter 23 of the Criminal Code of the Russian Federation - "Crimes against the interests of service in commercial and other organizations". In the process of research, let's pay attention to Article 290 of the Criminal Code of the Russian Federation "Taking a bribe", where the subject of the crime is an official, whose characteristics are given in the note to Art. 285 of the Criminal Code of the Russian Federation. According to it, an official is a person who exercise organizational, administrative, administrative and economic functions temporarily, permanently, for a special purpose, in state bodies, local governments and municipalities. The subject of the crime in Art. 204 of the Criminal Code of the Russian Federation is a person exercising economic and administrative and authoritative - managerial functions in a commercial organization. According to these definitions, all of the listed functions for the implementation of administrative and economic and power-management decrees by the sole executive body, a member of the board of directors, an official do not apply to the characteristics of a university teacher. It is difficult to apply to ordinary teachers such concepts as the implementation of organizational and administrative functions aimed at managing a team, selecting and placing personnel, maintaining discipline, applying incentives, or imposing disciplinary sanctions..[4]

And according to the decision of the Plenum of the Supreme Court No. 6, the subjects of receiving a bribe cannot be ordinary employees of state bodies of local self-government, municipal institutions, performing duties in them that are not related to managerial or economic administrative. So the question arises: how to prosecute university teachers, since the existing criminal legislation does not pro-

3 *Akhmedkhanova S.T. Corruption as a social phenomenon that generates negative trends in society//Modern scientist. – Moscow, 2021. – P. 123-127.*

4 *Zvarygin V.E., Kondakov A.S. Criminal-legal problems of prosecuting for corruption-related crimes on the example of commercial bribery Bulletin of the Udmurt University. Economics and Law Series. – 2020. – V. 31. – No. 4. – P. 647-653.*

vide for the possibility of arraigning them on a criminal charge. But in the same resolution there is a small digression, according to which the organizational and administrative functions are certain powers of persons aimed at making decisions that have legal significance and consequences. It is customary to refer to such decisions, if we talk about the activities of a teacher, taking an exam, grading an examination commission. Teachers have many other professional duties that allow them to commit corruption-related crimes, such as writing term papers and theses for a monetary reward, grading for tests, exams, tests, and numerous absences.[5] According to the study, it can be concluded that many corruption-related crimes remain outside the field of criminal law. Therefore, it is necessary to make certain adjustments and consider the note of the already existing article 285 of the Criminal Code of the Russian Federation in the following content:

- Officials in the articles of this chapter are recognized as persons who permanently, temporarily or by special authority perform the functions of a representative of power, or exercise organizational and management, business and administrative, economic and professional functions in state bodies, local governments, state and municipal institutions, state corporations, as well as in the Armed Forces of the Russian Federation, other troops and military formations of the Russian Federation.

2. And the note of Article 201 of the Criminal Code of the Russian Federation should be amended and supplemented with the following content:

- A person performing the functions of a sole executive body, a member of the board of directors or other collegial executive body, as well as a person performing organizational and management, business and administrative, economic and professional functions functions permanently, temporarily or by special authority in these organizations.

References

1. Arkhipov M.A., Khachatryan A.V., Milova I.E. To the question of the history of the development of criminal law counteraction in the field of combating corruption in sports. Actual problems of jurisprudence. – 2020. – No. 1 (65). – P. 25-30.

2. Akhmedkhanova S.T. Corruption as a social phenomenon that generates negative trends in society//Modern scientist. – Moscow, 2021. – P. 123-127.

5 *Sukhanova K.A. Criminal law counteraction to corruption in Russia: a retrospective analysis // New scientific research. Collection of articles of the International Scientific and Practical Conference: in 2 p. – Penza, 2021. – P 134-136.*

3. Zvarygin V.E., Kondakov A.S. Criminal-legal problems of prosecuting for corruption-related crimes on the example of commercial bribery Bulletin of the Udmurt University. Economics and Law Series. – 2020. – V. 31. – No. 4. – P. 647-653.

4. Ponomarev D.A. Corruption and organized crime as modern forms of social and legal deviance in the context of globalization (criminal law and criminological analysis): Abstract of the thesis. ... Candidate of Legal Sciences: 12.00.08 / Legal Acad. – Moscow, 2005. – 32 p.

5. Sukhanova K.A. Criminal law counteraction to corruption in Russia: a retrospective analysis // New scientific research. Collection of articles of the International Scientific and Practical Conference: in 2 p. – Penza, 2021. – P 134-136.

DOI 10.34660/INF.2022.61.57.008

俄罗斯联邦地方自治机构的发展方式和方向
WAYS AND DIRECTIONS OF DEVELOPMENT OF THE INSTITUTE OF LOCAL SELF-GOVERNMENT IN THE RUSSIAN FEDERATION

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本文讨论了俄罗斯地方自治制度进一步发展的可能方向。 值得注意的是，如今俄罗斯正在进行地方自治政府的改革，其目标是将该机构纳入统一的公共权力体系。 需要强调的是，地方自治机构运作的有效性将取决于它们与国家当局的成功互动，以及它们合理的地域组织和解决地方重要问题的能力。

关键词：俄罗斯联邦宪法，宪法改革，地方自治，社会理论，国家理论，独立，中央集权，公共权力

Abstract. *The article discusses possible directions for the further development of the institution of local self-government in Russia. It is noted that nowadays the reform of local self-government is ongoing in Russia, which has as its goal the inclusion of this institution in the system of unified public authority. It is emphasized that the effectiveness of the functioning of local self-government bodies will depend on their successful interaction with state authorities, as well as on their rational territorial organization and ability to resolve issues of local importance.*

Keywords: *Constitution of the Russian Federation, constitutional reform, local self-government, social theory, state theory, independence, centralization, public authority.*

The Constitution of the Russian Federation of 1993, for the first time in the history of domestic statehood, fixed in its content the institution of local self-gov-

ernment as one of the key foundations of the constitutional system (Article 12). In addition, in the Constitution of 1993, a special chapter was assigned to local self-government, specifying its territorial foundations, forms of implementation and areas of activity. Thus, in Russia there was a constitutional registration and isolation of the institution of local self-government, which predetermined two main trends in its development for many years to come - the organizational independence of local governments from state authorities and the economic inferiority of municipalities, which manifests itself over a larger area countries in their inability without the support of the state to effectively solve economic, housing, social and economic issues that are within their competence [2, p. 103-104]. The development of local self-government in practice has led to the misconception that municipalities are not bound by obligations in relation to state power, and some of the municipalities openly hindered the implementation of decisions taken at the federal and regional levels of government.

It seems that such judgments and positions do not have any serious theoretical justification, and also do not contribute to the progressive development of Russian statehood. Supporters of this point of view can be objected to the following. Firstly, the organizational isolation of municipalities and the empowerment of their own powers in the framework of issues of local importance does not mean that local governments function separately from state authorities and should not implement in their activities the decisions taken by the President and the Government of the Russian Federation, senior officials of the subjects of the Russian Federation. Assuming the opposite, we call into question the principle of unity and territorial integrity of the Russian Federation, expressed in the well-known formula "one country - one power." Secondly, the organizational isolation of local self-government bodies from state authorities was due to the Soviet past, which made local councils an automatic executor of all decisions made in the center without taking into account local features. Constituting the organizational independence of the institution of local self-government, the authors of the 1993 Constitution pursued one very important goal i.e. to activate the political and economic initiative of citizens on the ground, as well as to bring power closer to the population living in the regions of the country remote from the center, as well as in rural areas. This independence and substantive competence of local self-government bodies were outlined directly in the Constitution of the Russian Federation itself and federal legislation and do not entail the emergence of municipal authorities, absolutely autonomous from the state and its authorities.

A logical response to the practice of the mismatched functioning of state authorities and local self-government, which developed in the late 90s. XX century - the beginning of the XXI century, as well as in order to strengthen the system of public administration, amendments to the Constitution of the Russian Federation,

adopted during the constitutional reform of 2020. It put an end to the discussion about whether complete autonomy of municipalities from public authorities is possible. Art. 132 of the Constitution was supplemented with part 3 of the following content: "Local self-government bodies and state authorities are part of a single system of public power in the Russian Federation and interact to solve problems most effectively in the interests of the population living in the relevant territory." It is obvious that this norm has reduced a certain polarization in the relationship between state authorities and local governments, including the latter in the structure of a single public authority. It seems that this decision is correct, since, on the one hand, it consolidates the unity of the entire system of public authority in the country and excludes cases when municipalities de facto sabotage the implementation of decisions taken by public authorities. On the other hand, it strengthens state control over the activities of the municipalities themselves in the interests of the development of territories and their population.

It should be especially noted that the constitutional reform of 2020 affected the status of the institution of local self-government in no way as one of the foundations of the constitutional system of the Russian Federation, but only specified its place in the system of state administration, specifying that local self-government is carried out in municipalities (part 1 of article 131 of the Constitution). State authorities can participate in the formation of local governments, the appointment and dismissal of local government officials (part 1.1 of article 131 of the Constitution). We believe that these innovations reflect the trend towards streamlining the territorial foundations of local self-government in Russia, and also strengthen the unity of the government system across the country. These changes, in our opinion, indicate a partial departure from the public theory of local self-government, which proclaims the autonomy of municipal structures from state authorities, and an attempt to move to the implementation of the state theory of local self-government in practice. It claims that local self-government bodies - logical continuation and completion of the state power in the field. They have a certain independence in resolving issues of local importance, but are under state control.

Realizing that each theory of local self-government has its supporters and opponents [1, p. 11-12], we must emphasize that Russia's choice in favor of the state theory of local self-government is explained by a number of circumstances. Firstly, the functioning of local self-government bodies in isolation from state authorities in Russia is completely impossible, if only because the competence of local self-government is determined primarily by the state itself. If you are not independent economically, then you cannot be independent organizationally and managerially. Secondly, the lack of control by the state often gave rise to a negligent attitude of municipal employees to the performance of their duties, predetermining a negative assessment of local self-government as an institution

of public authority in the whole country. The inefficient work of municipal bodies and structures is automatically transferred by citizens to all authorities as a whole, since an ordinary citizen does not distinguish between the categories of "municipal authority" and "state authority". Finally, thirdly, the level of local self-government is entrusted with a significant list of social and housing functions. Their high-quality implementation is impossible without state subsidies and subsidies, control by public authorities and attracting a “state resource” [3, With. 194]. In this regard, a clearer and more smooth coordination of the activities of local governments by the state is a measure justified in the conditions of a modern state, which once again confirms the experience of foreign countries [4, p. 84].

What are the further ways and directions for the development of the institution of local self-government in the Russian Federation in the near and mid-term? The following two scenarios seem to us the most probable. The first scenario is the successful development of local self-government in line with the state theory. The second scenario is the actual nationalization of local self-government, its transformation into local government with the absence of any economic and organizational independence and the automatic implementation of all decisions “on command from above”. Let's consider them in more detail.

The development of local self-government in line with the state theory, in our opinion, will need to be associated with the centralization of local self-government. As far as is known, a two-tier system of local self-government is currently being implemented in Russia, the core of which is urban and rural settlements, as well as municipal districts and urban districts. This structure seems rather cumbersome and unnecessarily complex. As we remember, initially the reform of local self-government, which was carried out in Russia in the early 90s. of the last century, pursued the goal of bringing power closer to the local population. It is for this reason that in the original version of the Constitution it was indicated that local self-government is carried out in urban and rural settlements. It is obvious that this task was generally completed in both urban and rural settlements, the necessary conditions were created for the development of civil initiative and the solution of the basic needs of the population. However, at the same time, within the framework of the two-level system of local self-government, there is periodically a struggle for powers and funding between various municipalities. In addition, in modern conditions, a significant part of municipal services is provided to the population in electronic format. Therefore, it is simply unprofitable to maintain a very large staff of municipal employees. It is more expedient, in our opinion, to concentrate municipal officials and deputies in urban districts, municipal districts and area, and in rural and urban settlements to leave representatives of local governments of the above mentioned municipalities. Of course, such an organization of local self-government will be economically justified, it will also involve even closer

interaction between state authorities and local self-government. This development trajectory, in our opinion, is capable of attracting more trained managers to the ranks of municipal employees and strengthening local self-government as an institution of public authority, raising the level of public confidence in its functioning.

The second scenario, outlined by us above, provides for the complete nationalization of local self-government and its transformation into an institution of state power at the local level. This scenario is also possible in principle, but unlikely, since local self-government, as one of the foundations of the constitutional system, is guaranteed and protected by the Constitution of the Russian Federation. Objectively, state cannot resolve all issues solely by administrative measures. In the Russian Federation, the institution of local self-government is a necessary link connecting local interests, the interests of the regions and the federal center together for the benefit of the social and economic and political development of Russia. If one of its elements is excluded from the existing system, most likely, such a system will be less effective. In addition, it will be extremely difficult for the state to solve problems on the ground alone. It seems that the further reform of local self-government in Russia will take place under the control of the state, but taking into account all the diversity of the territories that make up the country, as well as the traditions and way of life of the population of these territories.

Summarizing what we have said above, we emphasize the following. Currently, the institution of local self-government in the Russian Federation is undergoing a period of reform. This process is due to the constitutional reform of 2020 and the course taken by the political leadership of the country to build a system of unified public power. İn this system the development of the country and its individual territories is subject to common tasks, goals and principles. It seems that this vector in the development of local self-government will only gain momentum and the main direction in its further development will be its centralization and reduction of the excessive number of municipalities, municipal bodies and employees. Developed local self-government should ensure a decent life for the citizens of Russia, and not feed corruption and irresponsibility on the ground. The most effective institution of local self-government in Russia can only be within the framework of the state theory of its development, with the involvement of the necessary material and organizational base, under the control of the state and with the full support of the population of its various forms and structural elements.

References

1. Andreyeva L.A., Visnap N.E., Trukhina I.N. Problems of interaction between the state and local authorities // Bulletin of the Novgorod branch of the RANEPA. 2015. No. 1-1 (3). P. 8-18.

2. Metelitskaya Yu.V. Actual problems of local self-government in the Russian Federation // Issues of Russian justice. 2021. No. 12. P. 100-105.

3. Mikheyeva S.N. Local self-government at the present stage: unresolved problems and new development trends // Bulletin of the Ural Law Institute of the Ministry of Internal Affairs of Russia. 2021. No. 4 (32). P. 90-96.

4. Sokolova S.N., Shaposhnikov S.V. France: modern features of local self-government // Municipal Academy. 2020. No. 4. P. 80-84.

DOI 10.34660/INF.2022.40.20.009

清洁能源作为工程能力转型的动力
CLEAN ENERGY AS AN INCENTIVE FOR THE TRANSFORMATION OF ENGINEERING COMPETENCIES

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本文考虑了能源向清洁和绿色能源生产的转变，主要与可再生能源有关。 编制和分析了2016-2020年中国能源消费总量中清洁能源消费年均增幅的数据表。

清洁能源项目的发展促进了工程师技能和能力的提高和转变。 已经研究了在能源部门工作的具有环境思维的工程师的环境素养、能力和技能。

关键词：清洁和绿色能源，可再生能源，环境素养，能力和技能，环境思维

Abstract*. The paper considers the transformation of energy toward the production of clean and green energy, with is mainly associated with renewable sources. A table of data of the annual increase in clean energy consumption in the total energy consumption in China for the period 2016-2020 was compiled and analyzed.*

The development of clean energy programs stimulates the improvement and transformation of the skills and competencies of engineers. The environmental literacy, competencies and skills of engineers with environmental thinking working in the energy sector have been studied.

Keywords*: clean and green energy, renewable sources, environmental literacy, competencies and skills, environmental thinking.*

The article's relevance is that the world community closely follows environmental problems, for example, carbon emissions into the atmosphere, affecting climate change. The development of clean energy programs stimulates the improvement and transformation of engineering competencies in the training new specialists for the energy sector and the advanced training or retraining of existing engineers in the energy sector.

Clean energy. The word "energy" (from the Greek "energia") serves to designate action, activity and characterize various forms of the movement of mat-

ter. Physicists distinguish between electrical, thermal, nuclear, electromagnetic, gravitational, and other types of energy, which correspond to various physical processes. The development of energy industries is caused by the need to meet the population's electricity needs and industrial enterprises. However, the world community is concerned about air pollution: emissions of carbon, sulfur dioxide, nitrogen oxide, and fine particles, which affects the environment and is reflected in climate change on our planet. There were requirements for states to comply with the Montreal Protocol on Substances that Deplete the Earth's Ozone Layer.

"Since January 1, 2010, the production and consumption of carbon tetrachloride and methyl chloride have been stopped in China" [5, p. 27]. Even earlier, CFCs and halogens were completely phased out in China. Russia joined the Paris Agreement on Combating Climate Change in 2019. In January 2021, Liu Changjun, Vice-Chancellor of the Institute of Marxism, China Youth University of Political Science, wrote: "Currently, the level of carbon dioxide in the Earth's atmosphere has reached a sadly record high, and the average annual temperature on the planet is already 1.2 degrees Celsius higher than in the pre-industrial period" [3, p. 4].

There are such concepts as clean and green energy in the energy sector. *Clean energy* refers to environmentally friendly and does not emit air pollutants. Clean energy also includes energy obtained by increasing the energy of enterprises. *Green energy* is energy derived from natural renewable sources. Usually, these two concepts are combined, and they talk about clean or green energy. In recent years, clean energy has been associated with clean or renewable energy sources. When people talk about "green" energy technologies, they understand "a set of technologies for improving energy efficiency and developing technologies for using energy from renewable sources" [6, p. 226]. This is consistent with the opinion of experts from the Massachusetts Institute of Technology (USA), who in 2014 identified seven innovative technologies. One of these technologies is ""green" (sustainable) product, which involves the gradual construction of a low-carbon, low-waste production infrastructure by further improving energy and resource efficiency, increasing the share of waste recycling, industrial use of solar panels (PV), and solar energy storage technologies (CSP)" [6, p. 228].

However, there are differences between clean and green energy. For example, hydropower works on water as a renewable source of electricity. Nevertheless, during the construction of hydroelectric power plants, forests are cut down, or large land plots are flooded for the construction of reservoirs, which harms the environment.

Renewable energy sources are based on obtaining energy from resources that are inexhaustible on human scale. These resources include the sun, wind, water currents, ocean and sea tides, waves, and geothermal sources. These sources are opposed to fossil fuels such as gas, oil, coal, or peat. *Solar power plants* use the

sun's energy to convert *electromagnet radiation* into electrical or thermal energy using photovoltaic panels. The result of solar activity is wind energy. It is used in *wind turbines*, windmills, and other units that convert the *kinetic energy* of air masses into electrical, mechanical, thermal, and other form of energy. The sun also forms the *potential energy* of water. Hydroelectric power plants built on rivers have less impact on the atmosphere that thermal power plants, and their generators can be adjusted more quickly depending on the level of energy consumption. Russian scientists have developed and built a compact hydraulic unit for operation even in arctic conditions. *Tidal power plants* use *kinetic energy of the Earth's rotation* when the gravitational forces of the Moon and the Sun change the water level twice a day, creating high and low tides. They are built on the shores of the seas and oceans. On the surface of the oceans, *wave power plants* are being built, which uses the *potential energy of ocean waves.* In the mouth of rivers or in bays where there are no tides, dams are erected, in which hydraulic units are installed operating in the mode of a generator or a hydraulic pump. *Geothermal power plants* are built in volcanic areas with geysers in which water is superheated above the boiling point. They are more environmentally friendly than thermal power plants. Heat in the form of hot water or steam is used to heat buildings and generate electricity.

Both Russia and China are interested in *clean energy development programs*. Wei Jinshen, Associate Professor at the Institute of Politics and International Relations at Lanzhou University, believes that "energy cooperation continues to play the role of a "stabilizer" and "damper" in the development of Sino-Russian trade relations" [4, p. 29]. In the report on the work of the Chinese government in 2021, the newspaper "Zhenbmin zhibao" singled out the ecology section, indicating that "the utilization rate of clean energy for heating in northern China will reach 70%" [4, p. 19]. The statistical communique on economic and social development in 2020, provided by the National Statistical Office of the People's Republic of China, provides the data "Share of clean energy consumption in total energy consumption [2016-2020]" [4, p. 33]. We compiled a table (see table) and analyzed the data.

Table

Share of clean (green) energy consumption in total energy consumption [2016-2020]

Year	2016	2017	2018	2019	2020
Share in %	19.1 %	20.5 %	22.1 %	23.3 %	24.3 %
Annual increase in %		1.4 %	1.6 %	1.2 %	1.0 %

The annual increase is calculated as the difference between the percentage shares of the next two years of clean (green) energy consumption obtained from renewable sources. It is *concluded* that the share of clean (green) energy consumption in total energy consumption in China grew by 0.2 % annually in the reporting period to 2018. Further, there is a decrease in the share of clean (green) energy consumption, apparently related to the COVID-19 pandemic and overcoming the difficulties that arose with its appearance.

At one time, green energy was very popular. However, renewable sources have proven *unreliable*. The lack of wind stopped windmills of Western Europe in 2021, and solar panels could not cover the lack of heat in homes.

The British weekly "The Economist" published a forecast that "in 2022, natural gas will return to fashion, nuclear energy will be rehabilitated" [2, p. 4]. Clean energy includes energy obtained from nuclear and gas power plants and the processing of biological waste. In recent years, projects have been developed to create bioenergy, specializing in the production of electrical and thermal energy from biofuels, obtained by processing algae, biological waste, or pyrolysis of biomass, such as softwood waste such as bark, branches, and stump.

Clean and green energy affects:

- *on the ecology* of the planet, as it does not allow excessive degradation of ecosystems, such as oil spills and leakage of natural gas, as well as catastrophic climate changes;
- *on the economy*, since, using renewable sources for the production of electricity, it retains the possibility of their further use, reducing the cost of finding new energy sources;
- to provide *the population* with environmentally friendly food, thereby prolonging their life and maintaining health.

Changing the energy industry towards clean and green energy is an incentive to transform the skills and competencies of engineers trained to work in the energy industry. To keep up with the times, power engineers must develop and implement environmental technologies in energy production, and in doing so, it is necessary to rely on new competencies and knowledge.

The fundamental values for power engineers with environmental engineering thinking are:

- conservation of nature and man;
- safety of operation of energy facilities built on renewable sources;
- support for clean, low-carbon energy production;
- improvement of non-waste indicators in electricity production
- reducing the discharge of harmful substances into the atmosphere and the environmental;
- availability of quality services in the electric power industry;

· reliability of energy support to consumers from energy facilities built on renewable sources;

· sustainable development of energy enterprises, energy companies, and the industry.

It is necessary to form knowledge bases on the environmental transformation of the energy sector and its tools, develop environmental literacy programs together with universities, organize advanced training and retraining courses for personnel working in clean and green energy to improve the environmental literacy of employees of energy companies. *Environmental literacy* refers to the knowledge and skills of personnel working in clean and green energy, which allow them to safely use natural renewable resources and environmental technologies to achieve their goals. At the same time, "the factor of modern production implies knowledge and possession by technical specialists of fundamental knowledge in the field of mathematics and physics to create and structure a large amount of data and automate the process of ensuring the life cycle of a product" [1, p. 10]. The environmental factor implies a good knowledge of chemistry, hydrology, materials science and the basics of safe life be engineers.

Environmental literacy does not appear on its own and does not end with graduation from university. Engineers must accept and adhere to the principle of continuous learning because there is and will be an integration of new environmental technologies into already traditional engineering practices.

Environmental literacy is based on *environmental competencies*, which are determined by the ability and ability of employees working in the renewable energy industry to "combine various stages of production into a single process: from setting a production goal and starting design to obtaining a specific result" [1, p. 11].

There are environmental competencies engineers working in the renewable energy industry:

· develop new mathematical models and business models, taking into account the modern requirements of society for environmentally friendly and ensuring the quality and availability of services in the power industry, as well as reliability of power supply, energy security;

· solve various problems in the field of renewable energy using environmental technologies that minimize waste and greenhouse gas emissions, do not pollute the environment;

· apply resource-saving and energy- saving methods;

· to ensure the safety of their work with renewable energy sources.

The environmental literacy of employees working in clean and green energy includes their personal, technical and intellectual *skills* to live and work in an ecological environment. *Ecological skills* are models of human behavior, brought to automatism, allowing him to person professional duties to solve environmen-

tal problems. Environmental skills are conditionally divided into user (basic and derivative) and professional. *Basic environmental skills* are closely related to functional literacy in using electrical equipment in nuclear and renewable power plants. *Derived environmental skills* are skills aimed at obtaining a practical result. *Specialized professional environmental skills* are skills associated with engineer's professional activity, with knowledge of the subject of activity and those environmental technologies that the engineer uses in his work.

Power engineers have many *specializations*. They can work in the power generation system at hydroelectric power plants or nuclear power plants, or be engage in the installation and operation of energy supply systems for nuclear reactors and wind turbines, or repair of electrical network and electrical equipment. They can be engaged in installing electrical equipment, commissioning, and participating in testing and acceptance of power hydraulic for commercial operation. They can conduct research on energy sources, develop measures for safety of hydrotechnical and wind structures, design energy networks, and draw up projects to improve the quality of services to electricity consumers.

To perform his professional duties, an energy engineer *must have necessary knowledge* in his specialty:

- know the purpose, principles of operation of electrical installations and electrical equipment;
- know the permissible "level of negative impact on the environmental, which is provided for by international treaties" [7, p. 288];
- know the regulations on labor protection, safely, and fire safely.

An energy engineer *must have necessary skills and abilities* such as:

- ability to plan and organize to production process;
- ability to work in a team: interact and consult;
- ability to work with technical documentation;
- ability to control the load of electrical equipment at hydroelectric power plants;
- ability to control the permissible mode of operation of electrical equipment at power plants built on renewable sources;
- ability to evaluate the results of diagnostic work at wind farms;
- ability to draw up flow charts for the implementation of routine maintenance, diagrams and drawings;
- ability to carry out technical supervision of the correct operation of electrical installations and appliances at power plants built on renewable sources;
- ability to assess risks in decision-making in non-standard situations;
- ability to develop measures to prevent and eliminate the causes of accidents at power plants built on renewable sources;
- to be proficient in the technique of working on computers to draw up

applications for the purchase of necessary equipment and spare parts, reports on approved forms and indicators and build drawings, prepare switch forms and work permits;

· speak a foreign language to familiarize and evaluate foreign experience in the field of clean electric power industry;

· master the technique of investigating the causes of accidents at power plants built on renewable sources.

Conclusion. An energy engineer must have a technical background, technical thinking and analytical skills to work in clean (green) energy. He must be aware of his professional importance and responsibility for the results of his engineering activities in terms of ecology. He must have such personal qualities as responsibility, discipline, attentiveness, balance and sociability. Many energy corporations would like to see as their employees peoples with not only technical education and environmental engineering thinking, but also with managerial and flexible skills.

References

1. Burkovskaya M.A., Klenina L.I. The program for the development of modern society "Industry 4.0" and current requirements for the competencies of graduates of technical university // Bulletin of the Moscow State Regional University. Series: Pedagogy. 2018. No. 2. P. 8-15. DOI: 10.18384/2310-7219-2018-2-8-15.

2. Chernykh E. What the Rothschilds prophesy to the world in 2022 // Komsomolskaya Pravda. January 12-19. 2022. P. 4-5.

3. China. Monthly Magazine. 2021. No. 1 (183). – 80 p.

4. China. Monthly Magazine. 2021. No. 4 (185). – 64 p.

5. Climate World. Bulletin of the association and enterprises of the climate industry. 2018. No. 106, January. – 96 p.

6. Terentiev N.E. "Green" energy in the system of technologies of the new industrial revolution / Scientific works; Institute of Economic Forecasting of the Russian Academy of Sciences. 2016. (p. 226-240). [Electronic resource]. – Access: URL: – https://cyberleninka.ru/article/n/zelenaya-energetika-v-sisteme-tehnologiy-novoypromyshlennoy-revolyutsii (appeal data 17.01.2022).

7. Yakovleva P.N. Green technologies in the energy sector // Proceeding of XIV International Scientific and Practical Conference (Yekaterinburg, May 20-21, 2020). Ural Federal University, 2020. (p. 287-291). [Electronic resource]. – Access mode: URL: – https://elar.urfu.ru>bitstream/10995/82636/1/sueb_2020_.. (appeal data 17.01.2022).

DOI 10.34660/INF.2022.47.56.010

俄罗斯远东地区社会发展的有希望的方向
PROMISING DIRECTIONS OF TERRITORIAL SOCIAL DEVELOPMENT IN THE FAR EASTERN REGION OF RUSSIA [1]

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考虑了改善与该地区低水平和低生活质量相关的人口社会组织的最重要方向。 由于该国人口潜力的减少，建议将学制缩短至 10 年。 建议减少年轻人外流的主要方向是提供职业教育以牺牲预算资金，另外在国家中央大学使用职业教育配额。 该地区的工资必须与现有的地区系数分开计算，因为它们被视为对该地区社会发展不足的补偿。 从孩子出生的那一刻开始，他们的付款可以是固定金额。

关键词：远东地区，人口质量，工资，移民，青年教育

Annotation. *The most important directions of improving the social organization of the population associated with the low level and quality of life in the region are considered. Due to the reduction of demographic potential in the country, it is proposed to reduce the duration of schooling to 10 years. The main directions for reducing the outflow of young people are proposed to provide vocational education at the expense of budget financing, additionally the use of quotas for vocational education in the central universities of the country. Wages in the region must be calculated separately from the existing regional coefficients, since they are considered compensation for insufficient social development of the region. Their payment can be as a fixed amount, starting from the moment of the birth of the children.*

Keywords: *Far Eastern region, population quality, wages, migration, youth education.*

The territorial organization of society began to be measured by qualitative indicators of life, through the assessment of welfare improvement and comprehen-

1 The article was prepared within the framework of the state task: registration number AAAA-A16-116110810013-5 "Geographical and geopolitical factors in the inertia, dynamics and development of various ranked territorial structures of the economy and settlement of the population of Pacific Russia".

sive personal development. However, the raw materials orientation of the region's economy was set by ministries and departments several decades ago, since then the Far East has been developing in this direction. As a result of the change in the economic paradigm, in conditions of limited state participation in the fate of the region, the Far East has ceased to be attractive to residents from other regions of the country. Economic conditions of the region's development, there is an active turbulence of the socio-economic environment, acquiring properties close to the point of no return.

For successful regional development, the region needs to solve:

- the problem of integrated use of natural resources;
- geographically justify the rational placement of production;
- optimal territorial organization of the population;
- significant improvement of people's living conditions.

The planned projects for the construction of new processing plants are carried out mostly or entirely for foreign investment and without the participation of the local population. These are mainly Chinese investments, where it is planned to use Chinese labor, export income abroad. The problems of degradation of the territory, environmental damage from the effects of harmful industries on the environment and public health remain in the Far East.

As a more general result of territorial socio-economic development, demographic behavior, which has developed as a result of the interaction of factors of the natural and social environment, still plays a major role. [5]. It is influenced by the quality of life, including objective and subjective factors, such as health status, life expectancy, environmental conditions, nutrition, living conditions, social environment, satisfaction of cultural and spiritual needs, psychological comfort.

In the socio-cultural space of the resource regions of Russia, a stable immunity to new constraints on their economic development is being formed. Naturally, it is difficult to include the whole complex of forms of the established traditional way of life and the range of social technologies being introduced, innovative ways of managing in a market economy, qualifications and professional skills (qualitative potential), contradictory patterns of everyday life of different generations, new communication technologies and practices (media, social networks, mobile communications), new forms of regional governance and municipal self-government [6]. It is necessary to update the labor policy, the practice of social and labor relations in order to increase their effectiveness, strengthen social justice in the economy and society.

The main direction should be taken as the development of a system of jobs based on the structural reorientation of the economy from raw materials industries to manufacturing, as well as to the high-tech sector [5]. Migration policy should take into account the age structure of migrants more than before, be consistent

with the prospects of socio-economic development of the territory, closely linked to regional demographic policy and focused on creating a stable population within optimal limits, as it was in the second half of the twentieth century.

Delegating the authority to form a contingent of workers in new areas to the level of the production team allowed us to obtain significant social and economic results. As a rule, new districts serve as a powerful magnet in which preferential wage conditions are created and priority employment is provided for incoming migrants. A strategic mistake should be considered weak involvement of the local population already living in the territory in new projects. The permanent population is poorly attracted to participate in the construction, so a persistent feeling of lack of demand is formed. This situation is characteristic exclusively for all local territories where innovative construction is taking place.

The main question is how to reduce the migration outflow of the Far East. The main message of all those leaving is low wages, and then social adjustment. Government documents use a mechanism for implementing state obligations in the form of establishing a guaranteed wage level, which provides for "bringing the average salary of employees of public sector institutions to the average salary in the relevant region." This message of social policy is fundamentally wrong, it stimulates interregional migration within one professional group. For example, a teacher, a doctor, should receive depending on the qualifications, and not on what kind of pay the janitor, the seller, etc. in this subject of the federation in which they work. This is the root cause of the outflow of young people from the region.

Another opportunity to reduce the outflow of population by increasing the incomes of the population living here may be the reform of the surcharge for living in remote areas. If we compare salaries without paid regional coefficients, then an even greater stratification of the income of the population in terms of wages between the western and eastern regions of the country will be revealed. If we remove the district coefficient in the northern polar regions, we will receive a payment of no more than 15-20 thousand rubles. In such conditions, wages will have to be increased by 3-4 or more times. (Instead of 20 thousand rubles - 50 thousand plus r / k 50% in Primorsky Krai). Surcharges in the form of district coefficients should go separately from the basic salary, without tax deductions and are not taken into account when calculating pensions. This may be a fixed amount, although now the higher the salary level, the greater the accrual for the district coefficient. When a pensioner leaves the region, the surcharge is removed. District coefficients are considered as compensation for low social living conditions and must be paid from the moment of birth and the entire period of residence in the area.

An additional significant measure may be the program: "Passport of the Far East" [3], which applies to those living from the moment of birth, residence (at least 10 years) and work in the Far East. For horizontal establishment of equal pay

for employees of the same qualifications in the country, it is necessary to withdraw all accruals by district coefficients beyond the scope of remuneration. They are also paid extra to the pension, and are lost if people leave the Far East. If the amount of wages rises, then the amount of pensions assigned will automatically rise. In addition, the costs of carrying out economic activities will be reduced, including the cost of building new facilities or upgrading existing infrastructure. The district coefficient will not be taken into account in the cost.

Due to the shortage of qualified personnel of educators and teachers, the educational services market today is largely not ready to respond promptly to quantitative and qualitative changes in demand in the local labor market, including migrants from the former Soviet republics. Moreover, graduates of universities in central regions of Russia do not seek to work in the Far East due to social and cultural conditions. This opinion is erroneous if we consider the supply and demand in the labor market, with high wages. A vivid example is the Khanty-Mansi Autonomous Okrug (Ugra), where conditions are not comparable with the south of Primorsky Krai, and those wishing to find a job are many times higher.

In the current situation, there is a need to revise the terms and conditions of youth education in the country. Demographic conditions require this. To do this, we need to recall the post-war situation, how the military losses were replenished during the economic recovery. The wide development of vocational schools allowed to attract to the manufacturing sector from the age of 14-16. By this time, the majority of young people, having received incomplete secondary education, went to the Federal State Educational Institution and received a profession, having the opportunity to continue their studies on the basis of evening schools and correspondence courses in technical schools and universities [3]. In the current socio-demographic conditions, it is also necessary to change the duration of education in a comprehensive school, reducing the duration of education to 10 years. Children graduate from school at the age of 18, although the working age comes much earlier, from the age of 16. If you start studying from grade zero (kindergarten preparation), 3 years in elementary school (grades 2-4) and from the age of 9 to grades 5 – 9, and after removing the 11th grade, the usual 10th grade can be completed at 16-17 years old, then enter the university - 4-6 years of study. More widely use such forms of education as family education and externship. The introduction of a special economic regime in the Far East can give a powerful impetus to the economy of the macroregion [3].

. Strategic challenges that should be taken into account now:

- loss of the contingent due to a decrease in the number of school graduates;

-active migration processes;

- outflow of graduates – with high scores from schools in the region to educational institutions in Moscow, St. Petersburg, Novosibirsk, Tomsk;

- geographical distance from leading educational centers.

Such problems indicate the need for fundamental changes in the field of special and higher education.

To adequately fill vacancies in the high-tech sector, it is necessary first of all to solve the social problems of young scientists and teachers (low salary, low social status, lack of housing), contribute to the outflow, especially of doctors and candidates of sciences, to central and western universities. After all, the consequences of the demographic pit of the 1990s are also affecting there. A difficult problem of socio-demographic development is the limited mobility of qualified personnel within the region. Young people focus on learning abroad

The shortage of specialists who meet the needs of the time can become a serious obstacle to the development of an innovative economy in the country. The introduction of the Unified State Exam has created certain problems for the regional higher school - graduates with a high score leave the region, since no university of the Far East has entered the elite group. Those who still graduated from a local university with high results are "outbid" by Western companies after a while. We need a quota system for studying in the capital's universities, in the magistracy, with a mandatory return back to the region. P. Sakha (Yakutia) has an effective system for promoting the training of highly qualified personnel on the basis of agreements with universities. Since the beginning of the 2000s, about 800 students and postgraduates from Yakutia have been studying at the universities of the Far Eastern Federal District every year. [1].

Graduates are not socially protected by getting a job. Now the number of children graduating from school is approximately equal to the number of budget places - the basis for free education for all local school graduates. [6]. The support of the existing (declared) social youth and students forms a new crisis protest situation. The reason is the lack of government programs for young people and students, low scholarships for undergraduates and graduate students, high rates of loans for education, lack of guaranteed employment, prospects for housing for young families. In this regard, more than 45% of graduates of Far Eastern universities are focused on obtaining jobs and residence permits abroad, including in the Asia-Pacific countries [1].

Currently, the Far East has significant scientific and technological potential, which is the most important factor in the further socio-economic and cultural development of the region [5]. It is noted that the concentration of science and higher education in the Far Eastern region relative to the population is one of the highest in Asian Russia [2], which is achieved due to a purposeful policy of their integration, cultivated in the region on the model of the Novosibirsk Academic Town since the 1970s. This is one of the factors of improving the level and quality of students' education in universities of the Far East. Currently, new directions

have been identified as growth points in the Far East - gas chemistry, oil and gas projects. None of the universities in the region produces specialists for these industries. It is possible to ensure the sustainable operation of such enterprises only at the expense of specialists trained in other regions of the country. Instead of opening new universities, which are formed not in one year, it is more correct to ensure the training of the necessary specialists according to quotas for studying in the leading universities of the country for graduates of the Far East, as it was done for the Republic of Tyva.

In those countries where the state policy provides for massive investments in people, their significant economic successes are explained by the outstripping growth of human capital. (South Korea, Malaysia, Singapore, Taiwan). Correction of individual preferences by creating a growth model and entering into an independent life of a young person should again become a state prerogative (upbringing, education, ensuring the quality of life in young years, first job). If this is not ensured, then there is no reason to make up for the losses in science, production, and culture that arose due to the destruction of the previous model of personality formation and socialization of the young population of Russian citizens, when an entire generation was launched into free navigation on the stormy sea of the semi-criminal Russian economy.

References

1. Makarenko V.G. Higher education as a factor in the development of the Far East: market reforms and new opportunities (1991-2013) / Bulletin of the Far Eastern Branch of the Russian Academy of Sciences No. 4, 2013. - pp.18-23.

2. Sergienko V.I. Science and education in the Russian Far East //The twenty-fourth Japanese-Russian Symposium of scientists of the FEB RAS and the Kansai district. Osaka: University of Economics and Law, 2009. pp. 73-74.

3. Sidorkina Z.I. Demographic echo in the formation of the population of the Far East / Geosystems in Northeast Asia: territorial organization and dynamics. Materials of the All-Russian Scientific and Practical Conference on April 20-21, 2017. Vladivostok. Vladivostok: Pacific Institute of Geography FEB RAS, 2017 .- pp.330-334

4. Search. Weekly newspaper of the scientific community. 2013. No. 17 (1247). p. 3,4

5. Sidorkina Z.I. Investments in the economy of the Far East and Demographic Problems of Their Development / Proceedings of the International Conference "Process Management and Scientific Developments" (Birmingham, United Kingdom, October 13, 2021). Part 1 pp. 125-132 DOI 10.34660/INF.2021.80.18.02

6. Sidorkina Z.I. Regional features of demographic behavior of the population of the Russian Far East // Pskov Regionological Journal. 2021. Vol. 17. No. 3. pp. 44-57. DOI: https://doi.org/ 10.37490/S221979310015014-8

DOI 10.34660/INF.2022.15.37.011

学前教育机构组织高龄儿童爱国主义教育的组织和教学条件
ORGANIZATIONAL AND PEDAGOGICAL CONDITIONS FOR THE ORGANIZATION OF PATRIOTIC EDUCATION OF CHILDREN OF SENIOR PRESCHOOL AGE IN A PRESCHOOL EDUCATIONAL ORGANIZATION

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分析了某学前教育机构组织高龄儿童爱国主义教育的组织条件和教学条件问题。 作者考虑了这个问题的条件； 与学前教育机构人员进行方法学工作的质量； 为学前教育组织培训员工的各个方面； 提高教师专业技能的工作形式； 学前教育机构和学生家庭联合工作的想法。 已经进行了一项研究。

关键词：爱国者、教养、道德品质、教师技能、人格发展、能力、教育环境、学龄前儿童。

Abstract. *The paper analyzes the problems of organizational and pedagogical conditions for the organization of patriotic education of children of senior preschool age in a preschool educational organization. The authors considered the conditions of this problem; the quality of methodological work with personnel in preschool educational institutions; aspects of training employees for a preschool educational organization; forms of work to improve the professional skills of teachers; ideas for joint work of preschool educational institutions and families of pupils. A study has been carried out.*

Keywords: *patriot, upbringing, moral qualities, teacher's skill, personality development, competence, educational environment, preschooler.*

The organizational and pedagogical conditions for organizing patriotic edu-

cation with children of senior preschool age include: increasing the professional competence of teachers on the problem of patriotic education in children of senior preschool age; involvement of parents in the process of patriotic education in children of senior preschool age; organization of the environment for the implementation of patriotic education in children of senior preschool age;

Let's look at each condition.

1. Increasing the professional competence of teachers on the problem of patriotic education in children of senior preschool age.

The professional competence of a preschool teacher is understood as a set of universal moral qualities and professional attitudes, thanks to which he/she successfully copes with his/her main task, as well as with non-standard situations that arise in the preschool organization of pedagogical work. Solving them contributes to the improvement of the teacher, the development of his/her general and special abilities [8].

The educator in the preschool needs to be able to prompt the child in the right direction, help him/her and support him/her. The main task is to be able not to suppress, but to encourage initiative, to develop in the child the ability to form his/her own opinion, to promote children's self-government.

To achieve a positive impact of the team on the individual; there should be an impact by the teaching staff on the children's team. From the pedagogical skill of the teacher-educator depends on its influence on the personality of the child and assistance in socialization.

Methodological work in PEO should be aimed at solving the problems of improving the professional skills of each teacher, developing the creative potential of the teaching staff, improving the quality and efficiency of the educational process.

The success of a preschool institution largely depends on the quality of methodological work with personnel. The complexity and diversity of functions and tasks in PEO, the versatile, constantly renewing nature of its content, as well as the specific features of PEO, presupposes a sufficient variety of forms of work, constant enrichment and increase in the efficiency of established traditional forms, and innovative application of new forms. The methodological activity of educators has been and remains the basis for the effectiveness of methodological activity [1].

Most teachers, especially beginners, always need help from more experienced colleagues, leaders, senior teachers of the PEO, from the professional methodological community, at present, this need is multiplying.

An important aspect of employee training is the use of active learning methods, when the teacher receives knowledge not from finished materials, but directly from self-education - the use of special literature; analysis of different opinions; work with situations that do not have an unambiguous solution under certain circumstances and conditions.

Solving crossword puzzles and business games can also be attributed to self-education. All this not only stimulates the creative activity of teachers, but also facilitates the process of memorizing and consolidating the material [6].

To successfully achieve the goals in the activities of a preschool institution, the desire of teachers to work effectively is necessary. As a result of the introduction of the achievements of psychological and pedagogical science and advanced pedagogical experience into the work of educators, many new forms of improving the professional skills of teachers have emerged [2].

Therefore, the preschool regularly conducts work to improve the professional skills of teachers. Forms of work are different.

1. Seminars, workshops using active and interactive teaching methods. The seminar is a form of training of a practical nature, which is aimed at in-depth study of theoretical material.

2. Consultations. Consultation - direct work with people aimed at solving various kinds of problems, where the main means of influence is a conversation constructed in a certain way.

3. Business games (research, innovative, reflective, search-tested, educational). A business game is an imitation of a workflow, modeling, a simplified reproduction of a real production situation.

4. Week of pedagogical excellence. During the week of pedagogical excellence, experienced teachers conduct open demonstrations so that educators in practice can get acquainted with effective forms of working with children, the most interesting teaching methods and techniques. This will allow them to measure their capabilities and decide on the implementation of successful experience in their work.

5. Master classes. Master classes are conducted by experienced teachers in order to train teachers in the methods and techniques of working with children. An open screening makes it possible to establish close contact with the teacher, to receive answers to questions of interest.

6. Mentoring. Mentoring is a relationship-based method of staff development in which a more experienced and knowledgeable employee assists a less experienced or less knowledgeable employee in the work.

7. Viewing videos of direct educational activities of colleagues from other kindergartens, followed by discussion and evaluation.

8. Role-playing games with staging of possible situations. Such games help to develop the skills of teachers to integrate any situation into the educational process, using it to solve the problems of child development.

9. Involving parents in the process of patriotic education in preschool children[7].

We conducted a study on the basis of MAPEI "KG No. 6" Nizhnekamsk. 40

families of pupils of the senior groups "Forget-me-not" and "Ship", 4 teachers took part in the experimental work.

Families and teachers were divided into experimental and control groups (EG and CG, 20 families and 2 teachers in each group). EG - children, parents and teachers of the "Forget-me-not" group, CG - children, parents and teachers of the "Ship" group.

After the implementation of the proposed conditions, we re-conducted a survey of preschoolers, including the same questions as at the ascertaining stage:

1. What is the name of the country where you live?
2. What is the name of the capital of Russia?
3. What is the name of the city where you live?
4. What sights do you like to visit with your parents?
5. Why do you think we love our city?

For each correct answer, the preschooler was assigned 1 point, as a result, we assessed the level of formation of patriotic education:

5 points - high level - children are well versed in the concepts of "capital", "country", quickly give answers to questions.

4 - 3 points - average level - children have difficulty in separating the concepts of "capital" and "country", they could not show a personal manifestation of feeling for their native land.

2 - 0 points - low level - the concepts of "capital" and "country" are not formed in children. They could not name them, as they do not distinguish between these concepts.

Table 1

The results of the reexamination of the children's EG (Control stage)

Levels	The level of patriotic education of the EG of preschoolers		The level of patriotic education of the CG of preschoolers	
	Number of preschoolers	%	Number of preschoolers	%
High	8	40	4	2
Average	12	60	11	55
Low	0	0	5	25

Thus, despite the fact that the average level (60%) remained the predominant level of patriotic education in the EG of children, the children answered all questions correctly, except for the question "What sights do you like to visit with your parents?" level. It was already detected in 40% of children - they correctly answered all the questions, gave complete answers to the questions "Why do you love your city?" and “What sights do you like to visit with your parents?” They substantiated their answers with reasoning. Low level is not marked.

At the same time, no significant changes were found in the CG. The results show that there is a positive trend in the level of patriotic education in the EG of children. A high level compared to the level of the EG of children at the ascertaining stage increased by 25%, the average level remained unchanged, and the low level decreased. The data obtained prove the effectiveness of the implementation of the proposed conditions. No significant changes were found in the CG of children.

Enriching the environment with benefits for the formation of patriotic feelings also contribute to the development of cognitive activity and ideas about patriotic development. Many children are interested in using various didactic aids, equipment and facility of play areas in the daily life of the kindergarten. Looking at the results obtained in children, we can conclude that they prove the effectiveness of the selected pedagogical conditions.

Then we conducted a second survey of teachers from the EG and teachers from the CG. The results of the questioning of teachers in the EG showed:

- 2 teachers have a sufficient level of professional competence (100%), not a single teacher has an acceptable level of professional competence (0%),
- not a single teacher has a critical level of professional competence (0%).

The results of a repeated survey of teachers from the CG (the "Ship" group) showed the following:

- not a single teacher has a sufficient level of professional competence (0%),
- the acceptable level of professional competence has become for 2 teachers (100%),
- not a single teacher has a critical level of professional competence (0%).

Based on the results of the reexamination of teachers from the EG, it can be concluded that the level of their professional competence in matters of interaction with the families of pupils on the patriotic upbringing of children has increased. The results of a survey of teachers from the CG showed that there is a positive trend, but not to a large extent.

The results of questioning the parents of the EG and parents of the CG at the stage of the control experiment showed improved results in the parents of the EG. The results of the survey of the parents of the CG showed that there is little positive dynamics.

Table 2

The results of the reexamination of parents (control stage)

Level	Parents of EG of children		Parents of CG of children	
	Number of parents	%	Number of parents	%
Optimal	8	40	6	30
Permissible	9	45	8	40
Impermissible	3	15	6	30

Based on the results, it can be concluded that there are positive dynamics in the results of the survey of the parents' EG. Most of the parents of the EG surveyed had an increased level of formation of ideas about the importance of patriotic upbringing of children, the percentage of families with an unacceptable level decreased significantly.

Many families have become more interested in the issue of patriotic education, to take an active part in the educational process. At the same time, it should be noted that the results of the survey of parents from the CG did not change significantly.

Thus, we can conclude that the organization of patriotic education of preschool children in pre-school education gave positive results.

In our opinion, teachers and parents should first of all:

- as early as possible to awaken love for their native land, city, country in children;

- to form in them such traits ofcharacter that will help to become a worthy person and a worthy citizen of their country, to cultivate love and respect for their home, kindergarten, street, native village, village, village;

- to form a sense of pride in the achievements of the country, love and respect for the army, pride in the courage of soldiers, to develop interest in the phenomena of public life accessible to the child.

References

1. Agapova D.Yu. Patriotic education of preschool children in the conditions of preschool educational organizations / D.Yu. Agapova // Proceedings of the Institute of Pedagogy and Psychology of Education. - 2018. - No. 4. - P. 130-134. - https://www.elibrary.ru/download/elibrary_36642677_82968118.PDF

2. Blinova G.M. Moral-patriotic education of preschoolers in the process of implementing the Federal State Educational Standard / G.M. Blinova, E.F. Gorokhova, A.M. Blinova //Childhood as an anthropological, cultural, psychological and pedagogical phenomenon: materials of the IV Intern. scientific conf. within the framework of the project "A.Z.B.U.K.A. of childhood". (Samara, June 15, 2018) – Samara. -2018. - P. 220-224. - https://www.elibrary.ru/download/elibrary_35662794_91650063.pdf -

3. Vinogradova N.A. Educational projects in kindergarten / N.A. Vinogradova, E.P. Pankova. – M.: Iris-press, 2008. – 208p.

4. Golub M.S. Features and pedagogical conditions of patriotic education of older preschoolers / M.S. Golub // Prospects for science and education. - 2018. - No. 5 (35). - P. 110-117.https://www.elibrary.ru/download/elibrary_36332869_88782632.pdf

5. Lesunova V.V. Patriotic education of preschool children as a basis for the formation of a morally healthy personality / V.V. Lesunova // Young scientist. - 2018. - No. 43 (229). - P. 73-74. - https://moluch.ru/archive/229/53325/

6. Moral and patriotic education of older preschoolers: targeted creative practice-oriented project / ex.ed. N. N. Leonova, N. V. Netochaeva. – Volgograd: Uchitel, 2013. – 103 p.

7. Nosayeva I.A. Problems of patriotic education of preschool children /I.A. Nosaeva // Questions of science and education. - 2018. - No. 6 (18). - P. 141-143. -https://www.elibrary.ru/download/elibrary_34913939_87545297.pdf

8. Shalamova E. Patriotic education / E. Shalamova / / Child in kindergarten. – 2009. – No. 6. – P. 13-16.

DOI 10.34660/INF.2022.26.26.012

学前教育组织方法论支持教师的理论方面
THEORETICAL ASPECTS OF METHODOLOGICAL SUPPORT TEACHERS OF A PRESCHOOL EDUCATIONAL ORGANIZATION

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这篇文章讨论了教育科学的一个热点问题——学前教育组织中的方法论活动。国内科学家对这一问题的一些现代研究进行了分析。 “有条不紊的工作”和“教师培训”这两个概念的相关性是通过有条不紊工作的主体（控制子系统）和客体（控制子系统）的选择来考虑的。给出了学前教育组织方法论工作的功能特点。此外，正在更新组织方法学活动的方法：面向方案的方法、面向个性的方法；激励目标方法；系统方法。关注PEO组织方法学活动的原则，这会影响幼儿园方法学工作的有效性和改进。描述了在学前教育组织中组织有助于实施这些原则的方法学活动的方法。

关键词：方法论、原则、方法、方法论活动、方法论支持、组成部分、科学和方法论工作、教育者、教师、资格、专业精神、自我教育、能力

Abstract. *The article deals with a topical problem for pedagogical science - methodological activity in a preschool educational organization. A number of modern studies of domestic scientists on the problem were analyzed. Correlations between the concepts of "methodical work" and "training of teachers" are considered through the selection of the subject (control subsystem) and object (controlled subsystem) of methodical work. The characteristics of the functions of the methodological work of a preschool educational organization are given. Also, approaches to the organization of methodological activities are being updated: program-oriented approach, personality-oriented approach; motivational-target approach; systems approach. Attention is drawn to the principles of organizing methodological activities in PEO, which affect the effectiveness, improvement of*

methodological work in kindergarten. Methods for organizing methodological activities in a preschool educational organization that contribute to the implementation of the principles are described.

Keywords: *methodology, principles, methods, methodological activity, methodological support, components, scientific and methodological work, educator, teacher, qualification, professionalism, self-education, competence.*

Innovative searches in modern education cause changes in various components of the activity of teachers of PEO. In this regard, we notice the strengthening of the continuous nature of training and professional development of teachers for new models of activity, preparedness for solving professional problems. Preschools should create conditions for the full development of preschoolers. Managers are required to be prepared by every specialist to create these conditions. It is necessary for the methodological service of the PEO to work on improving the competence of teachers. Because, they organize educational activities in accordance with the requirements of the FSES.

Many scientists, both foreign and domestic, are interested in the problems of organizing methodological activities in PEO. For example, Yu.V. Vasilyeva, Yu.A. Konarzhevsky, M.M. Potashnik, V.A. Slastenina, T.I. Shamova, V.I. Zvereva, A.M. Moiseyeva and others. So, Tatyana Ivanovna Shamova considered methodical activity as a complex and integral system of work with teachers in educational organizations. According to Alexander Matveyevich Moiseyev, methodological activity is an integral system, which is based on the achievements of science and advanced pedagogical experience [3, p.123]. The main function of methodological work is to improve the skills of teachers of educational organizations. According to M.M. Potashnik, methodical work is an activity that helps to ensure the organization of the pedagogical process using planning, leadership, organization and control and ensures the achievement of educational goals.

In pedagogical science, scientists-researchers distinguish approaches to the organization of methodological activities. So, scientists N. Stefanov, E.P. Golubkov, P.I. Tretyakov worked on a program-oriented approach; E.S. Yakimanskaya over the personality-oriented approach. V.I. Zvereva highlighted the motivational-target approach. V.P. Bespalko, V.G. Afanasyev, I.V. Blauberg, D.N. Bogoyavlensky, Yu.A. Konarzhevsky, V.N. Sadovsky, E.G. Yudin, G.N. Serikov, E.V. Yakovleva worked on a systematic approach.

In a systematic approach, the main element is the goal. The goal is to determine the image of the desired result in working with PEO teachers. The purpose of the methodological work is determined by what features, the specifics of the kindergarten, the professionalism of the teaching staff, the educational program of the PEO according to the FSES PEO teachers understand that the effectiveness,

improvement of methodological work in kindergarten is carried out in accordance with the principles. Scientists have identified the principles of organizing methodological activities in PEO. For example, Petr Ivanovich Tretyakov highlights the principles that contribute to the organization of methodological work: scientific character, humanization, objectivity, optimality, concreteness, efficiency and consistency. M.M. Potashnik defined: the principle of collegiality and unity of command, which makes it possible to rationally combine rights, duties and responsibilities between the subjects of methodological activity; the principle of optimality, which reveals itself in determining the most appropriate ways for an educational organization to organize methodological activities [6, p.131].

One of the components of the organization of methodological activities in a preschool educational organization are methods that contribute to the implementation of the principles. There are several approaches to the grouping of methods of pedagogical management. So, M.M. Potashnik distinguishes the following groups of methods: by goals - methods can be tactical, operational, strategic; on the object of management - methods of state, regional, local, intra-school management; on the subject of management - methods of administrative, economic, public management, interaction and adoption of a joint decision; according to the mechanism of influence - social and economic, social and political and psychological-pedagogical; by the time of management actions - current, long-term, prospective [6, p.99]. Group of methods by P.I. Tretyakov are the following ones: organizational and pedagogical, organizational and administrative, economic; socioal and psychological [9, p.123].

Subjects (defectologists, speech therapists, psychologists), teachers of additional education, methodologists, deputy directors are also defined in methodological activity. In accordance with the federal state standard for preschool education (FSES PE), the parents' community and the social environment can also act as subjects of methodological work.

Thus, based on the analysis of theoretical studies, it was revealed that methodological activity consists of interrelated components: goals, methods and ways of its implementation, principles of organization, subjects of activity.

Further, it is important to determine the features of methodological activities in kindergarten, the use of various approaches to its organization in the conditions of preschool education, and the disclosure of its content. Having studied the theoretical foundations of the research problem, we came to the conclusion that methodological activity in kindergarten is considered differently. L.I. Falyushina believes that methodological activity is a purposeful influence of a methodologist on an educator in order to improve his/her qualifications [11, p.145]. O.K. Aleksandrova believes that methodological activity is a purposeful, systematic, individual and collective activity aimed at improving the scientific and theoretical level, pro-

fessional skills and methodological training. A.I. Vasilyeva calls methodological activity a complex and creative process in which teachers are trained in methods and techniques of working with preschoolers. According to L.V. Pozdnyak, methodological activity is a system of measures aimed at improving the qualifications of teachers, as well as at increasing the creative potential of the teaching staff [5, p.78].

It follows from these definitions that in methodological activities it is important to influence teachers in order to achieve results, which is typical for an authoritarian management style. It is known that the methodologist does not carry out a differentiated approach to teachers, which is not typical for a modern preschool organization. Domestic researchers K.Yu. Belaya, L.V. Pozdnyak, V.Ya. Volobueva, N.S. Golitsina, L.M. Manevtsova, S.S. Lebedeva, R.Ya. Spruzhi single out the main approaches to the organization of methodological work in a PEO: functional, meaningful, functional-content [1, p.56].

With a functional approach, methodological activity is considered as the performance of a number of functions by the leaders of the preschool educational institution: planning, control, organization, coordination, leadership. L.V. Pozdnyak distinguishes the following functions of a methodologist: target and procedural functions. Target functions are aimed at organizing methodological work in a preschool educational organization. Procedural ones contributes to the implementation of target functions, such as planning, control, organization, coordination and leadership. L.M. Manevtsova continued the research of L.V. Pozdnyak and designated the following functions of managers: managerial and pedagogical. The former help to improve the pedagogical process in the preschool educational institution, and thanks to the second function, the qualifications and self-education of educators and teachers are improved. According to A.I. Vasilyeva and L.A. Bakhturina, a meaningful approach to the organization of methodological activities is aimed at organizing the work of a methodological office, improving the qualifications of kindergarten teachers, organizing work with advanced pedagogical experience, preparing and conducting pedagogical councils, organizing experimental work in a preschool educational organization, improving the quality of the pedagogical process. The third approach combines functional and content approaches. The researchers L.V. Pozdnyak, S.A. Ezopova, A.K. Bondarenko, V.I. Shkatulla believe that the deputy head for educational and methodological work works with the parent community, contributes to the professional development of teachers of a preschool educational organization, organizes the work of the methodological office, and also performs such functions as planning, control, regulation and organization of these areas. But, the analysis of the work of the methodologist of the preschool educational organization does not reveal the features of the activity of the deputy head for SMS according to new trends in education, does not show how

to organize a differentiated approach to each teacher.

In modern conditions, many methodologists already organize an individual route of accompanying a teacher, taking into account his/her abilities, needs and interests, to help improve his/her professional competence. Today, scientists single out another approach to determining the content of methodological activity - competence-based. The competence-based approach is personality-oriented and is aimed at providing specific assistance to the teacher, pedagogical support. And the deputy head of the SMS has special requirements: to be competent in all pedagogical issues.

The term "support" appeared in pedagogy in the late 90s of the XX century. In the explanatory dictionary by S.I. Ozhegov's support is characterized as following alongside, together with someone as a companion or guide. According to A.A. Arkhipova, E.S. Zair-Beck, L.S. Ilyushin, E.I. Kazakova, L.M. Mitina, I.V. Serebryakova, A.P. Tryapitsina, G.S. Kuragina, M.A. Ivanenko "support" is considered as an ideology of humanization of the educational process from the standpoint of the theory and practice of Pedagogy of Success. E.I. Kazakov and M.S. Polyansky believe that accompaniment is a pedagogical technology that allows the object to gain new knowledge, experience that contributes to solving problems in difficult life situations. L.M. Shipitsina considers "support" as a certain guarantee for the accompaniment subject to receive protection so that he himself can solve his/her problems. According to M.R. Bityanova, L.M. Shipitsina and I.V. Serebryakova "support" is seen as a joint activity of specialists who create conditions for the successful learning and development of preschoolers in a particular educational space.

The content of activities within the framework of support involves the following areas:

1. Psychological and pedagogical examination of the child with the consent of individual tasks, the participation of teachers and parents in psychological classes. According to the psychological examination, a plan is drawn up for conducting psycho-correctional and psycho-prophylactic work with children who have deficiencies in the development of mental functions, with difficulties in interpersonal relationships and with emotionally disadvantaged children.

2. Implementation of work with teachers: consulting and informing teachers in matters of psychological development of children; conducting lectures, workshops, trainings, seminars for teachers in accordance with the topic and goals of psychological classes.

3. Psychologization of parents: consultations for parents; implementation of the joint work of the kindergarten with the parents of children at risk.

4. The organization of the work of the psychological, medical and pedagogical council (PMPC) represents the cooperation and personal responsibility of the

participants in the educational process; the use of professional knowledge when accompanying a child by an adult in the upbringing, education and development; implementation of individual and group counseling; joint activities of various specialists.

Thus, by psychological support we mean the professional activity of a psychologist, which contributes to the effective psychological development of a preschooler while creating favorable social and psychological conditions.

Scientists are paying more and more attention to the social and pedagogical support of children, for example, adolescents from large families, children left without parental care. Social and pedagogical support contributes to the creation of favorable conditions for the accompanied, the provision of the necessary psychological and pedagogical assistance, the implementation of the most successful preparation for independent living. I.S. Batrakova and N.V. Chekalev's support is considered as the creation of conditions for vocational education, which is aimed at accompanying the teacher and student in the educational process [12, p.26]. This is a special, organized assistance to a specialist who solves educational problems. When accompanied by a teacher, the following methods are used: individual consultations, seminars, design, examination and analysis of educational and methodological developments, attendance at training sessions of other teachers. Accompanying teachers, according to I.V. Serebryakova and L.G. Taritas can be considered as personality-oriented and as system-oriented. With student-oriented support, difficulties are solved in a particular area by a real teacher [7, p.26].

System-oriented support can be implemented by innovative teachers, leading specialists, methodologists of methodological services for the education management of a city or district. The most important is student-oriented support, which contributes to a differentiated approach to each teacher. The difficulties of teachers depend on the level of knowledge of the specialist, the professional competence of the teacher, the software and methodological support of the kindergarten. At the same time, with system-oriented support, the experience of accompanying methodologists is enriched. They can choose the most relevant methods and techniques for interacting with educators.

Thus, analyzing the psychological and pedagogical literature, we found out that such types of support are usually distinguished as: psychological support aimed at providing psychological assistance and support to children, teachers and parents; social and pedagogical support, contributing to the implementation of assistance and support for special children in the course of their socialization; scientific and methodological support, providing assistance and support in the conditions of educational activities to the subjects of the educational process; individually-oriented support aimed at providing differentiated assistance to a person; system-oriented support that facilitates the provision of assistance to a group of people experienc-

ing difficulties in the same area. Based on the foregoing, it can be confirmed that the methodological support of the educator is an activity aimed at the constant and individual influence of the methodologist on the educator to assist and support the teacher in pedagogical activities, taking into account his/her knowledge, skills and abilities.

Methodists-experts claim that help and support to the teacher help them. The professional knowledge of the methodologist is increasing. Finally, the result of all this is the professional development and growth of the methodologist.

The work carried out made it possible: to establish the essence of the concept of methodological support; highlight the principles of its organization; determine the main stages of this process; to clarify that methodological support, consisting of social, pedagogical, valeological and psychological support, was determined as the main method of support; to determine the main condition for the organization of methodological support, which is the organization of a system of support by a teacher's methodologist to expand his/her professional competence.

References

1. Belaya Yu.K. Methodical work in PEİ: analysis, planning, forms and methods / K.Yu. Belaya. - M.: Sfera, 2005. - 93 p

2. Zeer E. F. Psychology of professions: textbook for university students / E. F. Zeer. – 2nd ed., rev., add. – M.: Academic Project; Yekaterinburg: Business book. 2003. – 336 p.

3. Moiseyev A.M. Strategic school management: a reference dictionary. / A. M. Moiseyev. - Moscow: APA, 2014. - 366 p.

4. Ozhegov S.I. Explanatory dictionary of the Russian language. / S.I. Ozhegov; under gen. ed. of L. I. Skvortsov. - Moscow: World and Education, 2015. - 1375 p.

5. Pozdnyak L.V. Management of preschool education / L.V. Pozdnyak, N.N. Lyashchenko. - M.: Academiya, 2001. – 432 p.

6. Potashnik M.M. Management of the teacher's professional growth in a modern school: a guide for teachers and school leaders / M. M. Potashnik. - Moscow: Center of ped. Education, 2009. - 445 p.

7. Serebryakova I.V. The main activities of the department of psychological and pedagogical medical and social support / I.V. Serebryakova // Improving the management of the processes of formation, preservation and strengthening of the health of children and adolescents, their development at the level of municipalities in the Khanty-Mansiysk Autonomous Okrug / Under ed. of Vasilkov V.A. – Surgut, 2002. p. 26-30.

8. Tarita Lyubov Grigorievna. Methodological support of innovative processes in the management of the district educational system: Abstract of the thesis. ... candidate of pedagogic sciences: 13.00.01 / St. Petersburg State University of Pedagogical Excellence. - St. Petersburg, 2000. - 21 p.

9. Tretyakov P.I. School: management by results / P.I. Tretyakov. -M.: New school. 2004. - 314p.

10. Falyushina L.I. Management of the quality of the educational process in PEI / L.I. Falyushina. – M.: ARKTI, 2004. – 262 p.

11. Shamova T.I. Management of educational systems: Textbook for university students / T.I. Shamova, P.I. Tretyakov, N.P. Kapustin; Ed. T.I. Shamova. - M.: VLADOS, 2001. - 319 p.

12. Chekaleva Nadezhda Viktorovna. Theoretical foundations of educational and methodological support for the process of studying pedagogical disciplines in a pedagogical university: Thes. of ... Dr. of ped. sciences: 13.00.08: St. Petersburg, 1998 - 426 p.

DOI 10.34660/INF.2022.80.25.013

学前教育机构管理体系的科学和方法支持
SCIENTIFIC AND METHODOLOGICAL SUPPORT IN THE MANAGEMENT SYSTEM OF A PRESCHOOL EDUCATIONAL ORGANIZATION

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本文讨论了一个教育组织的活动对科学和方法论支持 （SMS） 的问题。作者分析了科学家对“专业发展”定义的方法。领导作用是赋予个人的专业发展。人们认为，获得新的技能、知识和技能是一个持续的培训、再培训和高级培训的复杂过程。应该注意的是专业发展的管理，它经历了几个主要阶段。职业发展管理经历七个阶段。文章还指出了现阶段领导和管理的特点。作者考虑了学前教育机构负责人的职能和专业素质。值得注意的是，PEO 中各种形式的科学和方法学工作也取得了积极成果。很大程度上还取决于学前教育组织的科学和方法服务的构成。此外，本文还根据联邦州教育标准更新了对教师的要求。

关键词：教师、专业精神、科学和方法支持、学前管理、资格、职能、发展、人的潜力、FSES、教育者、过程。

Abstract. *This article deals with the problem of scientific and methodological support (SMS) by the activities of an educational organization. The authors analyze the approaches of scientists to the definition of "professional development". The leading role is given to the professional development of the individual. It is believed that the acquisition of new skills, knowledge and skills is a continuous complex process of training, retraining and advanced training. It should be noted about the management of professional development, which goes through several main stages. Professional development management goes through seven stages.*

The article also notes the features of leadership and management at the present stage. The authors consider the functions and professional qualities of the head of a preschool educational organization. It is noted that positive results are also achieved with a variety of forms of scientific and methodological work in PEO. Much also depends on the composition of the scientific and methodological service of a preschool educational organization. Also, the article updates the requirements for a teacher according to the Federal State Educational Standard.

***Keywords**: teacher, professionalism, scientific and methodological support, preschool management, qualifications, functions, development, human potential, FSES, educator, process.*

Scientific and methodological support as a tool for managing the professional development of teachers. The reason is that, today, the development of human potential of human potential is becoming dominant and is increasingly focused on improving the quality of life. Human capabilities in all areas are expanding. And the development of personnel has become the most important condition of educational organizations. The modern accelerated scientific and technical stage of life leads to rapid changes and new requirements for professional knowledge, skills and abilities. The ability to be the subject of one's own development and to be able to find ways independently to solve significant problems comes to the fore.

Specialists gave the leading role to the professional development of the individual. Professional development, as a rule, is identified with the progressive development of a person: maturation, formation, self-development, self-improvement [8].

There are various definitions of the term "professional development", which complement each other.

Let us consider some approaches to the definition of this concept:

1. Professional development - the process of personality formation, focused on high professional achievements, mastery of professionalism and self-development of the individual, professional activities and relationships [9].
2. Professional development is an active and qualitative transformation of the teacher's inner world, the internal determination of the teacher's activity, leading to a new way of professional activity. At the same time, attention is drawn to the fact that there is no difference between age and its influence on professional development [1].
3. Professional development is a process of progressive personality change, under the influence of social influences, one's own activity and professional activity. On the contrary, Zeer E.F. relies on the chronological age of a person and his/her level in the profession performance [3].
4. Professional development is a combination of individual psychological

characteristics of a person, which provide him/her with the greatest efficiency of his socially useful activity and satisfaction with his/her work [2].

5. In pedagogy, professional development is the process of solving professionally significant, cognitive, communicative, moral tasks. In the course of this, the teacher acquires an important and necessary set of business and moral qualities associated with his/her profession [4].

Having considered several concepts of the definition of "professional development", we can conclude that the acquisition of new skills, knowledge and competences is a continuous complex process of training, retraining and advanced training. In other words, continuous uninterrupted professional development of the individual is necessary.

Management of professional development takes place in several main stages: attraction and recruitment of a teacher; questioning new and young teachers in order to familiarize all teachers and assess the psychological climate; psychological diagnostics to determine the personal qualities of a teacher; certification of a teacher within a certain set timeframe in order to match the competencies and qualities of the individual to the position held, to the level of performance of their work, determine the intensity of the load and form a further training plan for professional development; planning the professional development of a teacher within the framework of the SMS system of professional development; the inclusion of a teacher in the personnel reserve for various types of activities; organization of teacher training according to established forms and individual programs [7]. The management of the development of teaching staff in an educational organization is implemented with the help of the teacher's SMS with continuous professional development.

Regulatory and legal conditions that make it possible to interpret the priorities in the organization of innovative activity are included not only in the documents of the federal, regional and municipal levels, but also in local documents. They are developed directly in the educational organization itself. These documents are charter, collective agreement, job descriptions of employees, an employment contract, in which the professional duties and professional competencies of teachers are included as much as possible.

To date, teachers are offered a variety of forms of advanced training: extramural training, distance learning, advanced training courses, etc. But for the most part, they all require financial costs. Knowledge is rapidly losing its relevance due to rapid changes in society. An effective organization was the transition from reproductive, informational forms to productive and research ones, requiring the active participation of the teacher himself/herself in the education process. And this means that the attitude of teachers to their professional activities will change, the number of teachers who will be able to take part in technological, organizational,

social innovation events will increase.

New modern forms of developing interaction are becoming: project seminars, business games, coaching sessions, round tables simulating professional situations using interactive teaching methods, etc. [5].

In the modernization mode, it is necessary to build a new professional development management system, involving teachers in the development, application and implementation of new experience. It is not the formal belonging of the educator to the profession that comes to the fore, but his/her personal position, which ensures his/her attitude to work.

A feature of leadership and management at the present stage is the satisfaction of the professional needs of the teacher and his/her inclusion in the creative search. And the leader, together with the senior educator, should contribute to the professional and personal growth of teaching staff using formal, non-formal, informal forms of their professional education, relying on and using the new SMS system of professional development.

All responsibility lies with the head of the educational organization, who creates and provides conditions for improving the professionalism of teachers, forms a pedagogical culture, a creative atmosphere, taking into account the characteristics of his/her team, and provides a growth perspective. He/she pays special attention to equipping the workflow, which will serve as a prerequisite for creative self-development. An important function of the head of the PEO is to direct, support and control the training, advanced training of existing staff, create a process for the exchange of experience between the PEO and in the educational organization itself, control participation in competitions, control the necessary documents when accompanied to various events. And most importantly, the leader should stimulate the creative initiative of teachers [5].

All of the above needs scientific and methodological support because the teacher cannot always cope with the task on his/her own, he/she needs help to plan his/her professional development correctly, allocate time and his/her own efforts correctly, be able to study and change himself/herself. Motivating teachers is one of the important conditions for professional development. Stimulation is necessary to create good motivation. Just as important is control and support, both from management and from the team.

At present, the profession of an educator is becoming more in demand, and so are the requirements and responsibilities for the profession. Special requirements for the upbringing of children, especially for preschoolers, began to be presented. It is at preschool age that the foundations of the worldview, social behavior, ethical norms and moral qualities are laid and formed. All this development is ensured by the professionalism of the teacher of the preschool educational organization.

Work in a kindergarten involves the education and upbringing of children from

an early age to 7 years. These are the periods: from 1.5 to 3 years-old, from 3 to 4 years-old, from 4 to 5 years-old, from 5 to 6 years-old, from 6 to 7 years-old. Each age period has its own characteristics and requires a special approach to education.

The work of an educator requires special knowledge in the field of psychology and age characteristics. The personal qualities of a teacher include: responsibility, balance, sociability, empathy, kindness, attentiveness, patience, etc.

To professional qualities: a high level of culture, a positive attitude, the ability to quickly find an approach to a child, quickly make a decision, erudition, etc.

An effective pedagogical process requires a constant search for new, more effective methods of education and training, with the help of which the content of education is transferred to children. It is the scientific and methodological activities that are assigned the leading role in the creation and implementation of innovations in practice.

Scientific and methodological support (SMS) is recognized to ensure the quality of education by increasing the professional competence of teachers and introducing innovative technologies into the educational process in preschool educational organizations.

In a preschool educational organization, methodological activities are carried out by the scientific and methodological service, which manages the activities of teachers in the implementation of the main educational program, advanced training and professional competence, ensures interaction with other methodological services of other organizations at the level of the city, region, as well as scientific and methodological assistance innovative development of the educational process [5].

The composition of the scientific and methodological service includes: groups of teachers, temporary creative teams, problem groups. The scientific and methodological service is headed by a senior educator (deputy head for educational and methodological work). This is a specialist who is ready to work in an innovative mode, owns new information technologies and knows how to organize innovative work and owns new innovations. This is an expert analyst responsible for organization, coordination and control [7].

The information subsystem of scientific and methodological work is a methodological office, with the help of which the necessary information is selected, systematized, teachers are familiarized with public scientific and methodological information, legal and other documents, a data bank is created and timely receipt of all necessary new information is organized.

All scientific and methodological work (SMW) is developed in three areas:

1. In relation specifically to each teacher. The main task is the formation of an individual, author's, highly effective system of pedagogical activity that meets the professional standard of the teacher. All SMW should be aimed at enriching

the knowledge of the teacher, developing his/her motivation for creative activity, performing arts, and pedagogical technology.

2. In relation to the teaching staff. A team of like-minded people is being formed, which is aimed at the formation of a pedagogical credo, the traditions of the team, the organization of diagnostics, self-diagnosis, control, analysis of educational activities, the identification and dissemination of advanced pedagogical experience.

3. In relation to the general system of continuous education. It involves the study of creative understanding of legal documents, the introduction of scientific achievements and best practices [4]. First of all, the senior educator, when organizing SMW, must take into account the interests and wishes of the team.

The direction of scientific and methodological work can be implemented in the following: the work of the entire teaching staff on a common scientific and methodological topic or problem; conducting scientific and pedagogical consultations; work of scientific and methodological associations; work with young educators; work with the official website of the preschool educational organization, etc.; work to improve the SMW of the educational process and the developing environment in groups; holding scientific and practical conferences and seminars; system of course preparation of teachers; participation of teachers in professional reviews, competitions; research work of teachers, publications [5].

The forms of scientific and methodological work in the PEO are aimed at involving educators in the development and implementation of modern technologies that are relevant and significant for their organization. For this, interactive forms are used, such as briefings, discussions, round tables, brainstorming, etc. [6].

The work of creative teams, author's workshops is organized, individual counseling is carried out, training in problematic thematic courses, etc. The PEO also cooperates with universities and methodological centers to improve the qualifications of teachers in courses and seminars. This cooperation is carried out for experimental activities to resolve emerging problems of the entire organization, and not just professional development of the teacher. The most important form is self-education of a teacher - self-acquired knowledge, which is a good foundation for organizing a creative search for a teacher.

The dissemination of advanced pedagogical experience is carried out through: speeches at pedagogical councils, seminars, team viewings, master classes, workshops, presentations, placement on information sites and placement of materials in periodicals, etc.

The Federal State Educational Standard has firmly entered preschool education, under which the information volume of the requirements put forward for education and teachers has increased. The requirements include personnel, psychological and pedagogical, material and technical, subject-developing, financial.

Staffing is the most important. The content of education is enriched with new procedural conditions, the formation of sustainable professional competencies, the development of abilities, the handling of information, the creative solution of scientific problems with an emphasis on individualization. The requirements for personnel include advanced training of pedagogical and managerial employees.

Requirements for a teacher according to FSES PE:

1) research skills: to be able to conduct self-analysis of their work; to be able to evaluate an educational event; to study the psychological characteristics of the child's personality; to analyze the effectiveness of the educational process, methodological work.

2) design skills: to be able to develop various educational activities; develop a plan, a program in accordance with the goals and objectives.

3) organizational skills: to be able to apply modern pedagogical technologies; to know modern approaches to education; to be able to include children in various activities, according to age.

4) communication skills: to be able to build and manage communicative interaction.

5) constructive skills: to observe the principles of the implementation of the educational process; tobe able to select the optimal forms, methods and techniques of education [6].

A single requirement is that all preschool teachers must have a pedagogical education. The requirements of the professional standard also actualized the problem of improving continuous education and professional development of pedagogical workers, in particular, the creation and implementation of the SMS system of professional development (professional competence, professional qualification, professionalism of pedagogical activity) in professional educational organizations.

An important goal of this system is the organization and management of the professional development of teachers. The educator must constantly improve his/her skills, using the achievements of pedagogical science and best practices. It is necessary to master innovative technologies, non-traditional methods, but also should not forget about the good old (oral folk art). For a real specialist in his/her field, increasing professionalism is an eternal, ongoing process.

Thus, it can be noted that a modern educator needs professional training and retraining. And for this, it is necessary to create an organization of a scientific and methodological service for the promotion and development of a teacher in accordance with all regulatory requirements. For this, in order for educators to meet modern requirements, it is necessary to competently organize scientific and methodological work, create conditions and a competent senior educator (leader) who would contribute to the development of PEO personnel.

References

1. Davlyatshina O.V. Professional and personal development of teachers in the conditions of a general educational organization: study guide / O.V. Davlyatshina; under scientific ed. E.O. Galitskix. - Kirov: Raduga – PRESS, 2015. - 195 p.

2. Demin V.A. Professional competence: concept and types / V.A. Demin // Monitoring of the educational process. - 2000. - No. 4. - P. 35-39.

3. Zeer E.F. Psychology of vocational education: textbook / E.F. Zeer. - M. 2009. - 384 p.

4. Kirdyankina S.V. Scientific and methodological support for the professional growth of a teacher: Abstract of the thesis. ... candidate of pedagogic sciences: 13.00.08 / Kirdyankina Svetlana Vladimirovna; - Khabarovsk, 2011. - 28 p.

5. Kochetova N.A. Handbook of the senior educator: manual / N.A. Kochetova, T.V. Komardina. [and etc.]; - Volgograd: Teacher. 2015. – 301 p.

6. Kulnevich S.V. Modern school management. Organization and content of methodological work. / S.V. Kulnevich, V.I. Goncharova, T.P. Lacotsenina. - PPC. - Rostov-n/D: Publishing House "Uchitel". 2017. – 288 p.

DOI 10.34660/INF.2022.73.60.014

学前教育机构负责人管理文化的形成
FORMATION OF THE MANAGERIAL CULTURE OF THE HEAD OF A PRESCHOOL EDUCATIONAL INSTITUTION

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本文探讨了学前教育机构负责人管理文化形成的基础。 作者分析了国内科学家对研究问题的方法和看法。 根据K.L.Wilson 的方法进行了一项研究。 威尔逊“管理技能循环”（管理技能问卷），O.G. Tikhomirova，E.I. Rogov“个人发展的个人动机领域的定义”。

关键词：管理文化，学前教育机构，领导者管理文化的基础，计划制定，取得的成果。

Abstract. *This article discusses the basics of the formation of the managerial culture of the head of a preschool educational institution. The authors analyzed the approaches, views of domestic scientists on the research problem. A study was carried out according to the methods of K.L. Wilson "Cycle of managerial skills" (questionnaire of managerial skills), O.G. Tikhomirova, E.I. Rogov "Definition of personal-motivational spheres of personal development".*

Keywords: *managerial culture, preschool educational institution, foundations of the leader's managerial culture, plan development, result achieved.*

In pedagogy, leadership is revealed as well as a process directed, systematically ordered, containing a variety of structural elements, interdependent, ensuring unity, successful implementation of the goals of education, optimal formation of the educational process.

The management culture includes the need and ability to take part in management activities, that is, in management activities; possession of knowledge, skills

and abilities in the field of management; personal culture of a professional as a subject of interpersonal relationships.

The personality of the manager of a preschool educational institution is universal. It is thanks to this very fact that it is of great importance. In various domestic and foreign research works, the figure of the manager occupies a significant role.

Worldview approaches to building managerial transformations are proposed in the works of Yu.S. Alferova, K.Ya. Vazina, E.P. Tonkonoqaya. The works of V.A. Slastenin, R.Kh. Shakurov, Yu.N. Kulyutkin, A.K. Markova, L.M. Mitina and others.

In the works of these scientists, the theoretical conceptual issues of the study of the concepts of "culture", "professional culture" were identified, various aspects of the work of the presented provisions were carried out [10].

So, for example, V.A. Slastenin argues that the professional culture formed by the manager helps the teaching staff achieve their goals with appropriate means in the optimal period of time. He recommends using as an indicator of managerial culture a highly moral disposition towards the teacher to his activity, otherwise it (activity) comes to incorrect forms.

Actually, moral and ethical relationships in collective activity act as a source of managerial culture [9]. Most of the goals and objectives that are currently emerging are related to the understanding of the entire pedagogical process from the position of management.

The most important features of a managerial culture are: mastering high-class skills, mastering a common culture, familiarizing with its achievements, full creative implementation of professional skills, competence in one's type of activity, competent, efficient use of means and methods in achieving a goal, rationality, prudence in carrying out one's work, the possibility of predicting the results of labor is a great gift of clarity inherent in people [6].

Therefore, the ability and desire to transfer one's skills, knowledge, skills, as well as a culture of communication and professional ethics seem to be an important constituent of managerial culture [7].

The development of managerial culture implies the achievement by the subject of professional activity of the level of formed personality traits, abilities and skills of professional work.

The field of managerial culture is created by professional values, knowledge and concepts that provide the formation of professional culture at the intersection of personality, consciousness and activity. Every time when there is an interface with internal and external changes of the personality, its consciousness and activity, in this way, there is a mastery of managerial culture [2].

How does a kindergarten begin in terms of leadership, it begins with a correctly and competently formed managerial culture of the leader. It will depend on the

actions of the leader how much correctly all the work of the preschool institution will be put.

After analyzing the literature on the managerial culture of the head of the preschool educational institution, we took as a basis the study of K. V. Khoroshun. It clearly reflects the fact that "successful managerial activity is impossible without the proper level of managerial culture of its subject (executive employee)[14].

At present, this is not just a requirement for a leader, but a full-fledged social order coming from the state. A preschool institution can be fully approved as the first stage of a social institution. It is in preschool childhood that the formation of a preschooler as a social personality begins. Our goal at this stage is to give complete harmonization to the preschooler with the external, adult world.

Referring to many sources of literature, we selected for our work several researchers who were directly involved in this area, let's turn to one of them.

And so, D.A. Andreнeva made the following conclusions, on which we will rely in our work.

The managerial culture of the head of a preschool educational organization depends on:

- success in the implementation of administrative and management functions;
- secondly, the culture of making managerial decisions;
- development of innovative activity, management;
- fourthly, the professional and pedagogical culture of the leader;
- social and psychological culture of the leader (creation of a creative teaching team);
- team motivation;
- creating a favorable psychological climate in the team;
- communication culture of the leader;
- business and personal qualities of the leader [11, p.163].

According to O.V. Sukhova, the author of the study "Management culture of the leader", the development of the managerial culture of the head of a preschool educational organization includes the improvement of such components of managerial culture as:

- mastering the technologies of management and marketing in education; involvement in the management processes of the general public, the pedagogical community;
- creation of fundamentally new models of scientific and methodological work in a preschool educational organization;
- updating the educational process, reforming education and raising the status of the head of a preschool educational organization as a leader.

After conducting a study in the field of "Managerial culture of the head of the preschool educational institution" we can draw the following conclusions:

- the leader's culture is manifested in his/her direct activities in a preschool educational organization;

- depends on how qualitatively it manifests itself in the whole work;

- manifested in the relationship between the leader and subordinates of the preschool educational organization;

- is manifested in what indicators are reflected in the work of a preschool educational organization.

We have developed a plan for the formation and improvement of the managerial culture of the head of a preschool educational organization.

The table below shows an action plan for the formation of a managerial culture, as well as its assessment based on the results achieved.

Action plan for the 2020-2021 academic year at MPEI No. Nizhnekamsk of the Republic of Tatarstan

Name of the event	Date held	Achieved result	Conclusion	Notes
Online conference with the heads of preschool educational institutions. (In the context of covid preventive measures)	September 2020	During the conference, everyone made a small conclusion for himself/herself about how effective his/her leadership of the PEI was	Good experience in exchanging leadership structure.	There are none.
Evaluation of the work of the head and administrative staff.	October 2020	The job descriptions of the management staff of the PEI were revised.	Job descriptions were agreed with the trade union committee of the PEI.	There are none.
Round table of teaching staff	November 2022	The work is analyzed for the 2019-2020 academic year.	These activities will help to increase the level of competence of PEI teachers.	To send PEI teachers to advanced training courses. (partially)
Meeting with the MBPEI team.	December 2020	Replenishment of the material and technical base.	An order to familiarize with the etiquette inside the kindergarten was considered.	Based on all the notes, consultation work was carried out with the employees of the PEI.

Round table on the topic: The use of new educational technologies, multimedia resources of a new generation in working with children 4-7 years old to teach the Tatar language, organize a consultation for educators of the preparatory group.	January 2021	Continuity between PEI and school.	Work continues.	There have not been identified anything.
Development of a model of cooperation between preschool educational institutions and parents.	February 2021	Topic: "Etiquette in a preschool institution"	Opportunity to improve the effectiveness of training and education in cooperation with the parents of pupils	There have not been identified anything.
Business game "The result of the monitoring on the formation of the managerial culture of the head of the preschool educational institution"	March-April 2021	The work continues throughout the academic year.		The notes of the supervisor have been corrected.

Having carried out work according to the plan developed by us in September 2020, we came to the conclusion that the work of the head of a PEO is involved in all the characteristics of the managerial culture of the head of a PEI (structural aspect of managerial activity, conditions of the educational process, the system of relations with subordinates, the results of educational activities).

At the beginning of our study, we used the following diagnostics: K.L. Wilson "Cycle of managerial skills" (questionnaire of managerial skills), O.G. Tikhomirova, E.I. Rogov "Determining of personal-motivational spheres of personal development".

After analyzing the activities of the managerial culture of the leaders of the MBPEI of the city of Nizhnekamsk RT according to the method of K.L. Wilson, we reached the following results presented below.

For our study, we involved the heads of 10 preschool educational institutions in Nizhnekamsk, RT, with whom we conducted a survey.

The poll results are as follows:

At the time of monitoring, 60% of the managers surveyed had an experience of 20-35 years, despite this, each leader was not fully confident in the correctness of his/her leadership in some moments. All this depended on how the leaders re-

sponded to the internal policy of the governing body.

40% of managers had a shorter seniority in a managerial position, and they were more loyal to the leadership of their preschool educational institutions.

The results of the study according to the questionnaire of O.G. Tikhomirova, E.I. Rogov "Determining of personal-motivational spheres of personal development" gave us the following data:

- 25% of managers noted that they love their work and are ready for productive activities;
- 55% of managers love their job and are ready to fulfill their job responsibilities;
- 15% of managers have a good attitude towards their work, but are not ready for productive activity;
- 5% have an insufficient level of professional culture, do not like their work.

Based on the foregoing, we can draw the following conclusions. The main percentage of managers has a high management culture entrusted to them by the preschool educational institution, in connection with which they always have high performance. This fact is due to the fact that the results of the formed managerial culture of the head of a preschool educational organization are reflected in the effectiveness of the educational activities of a preschool institution.

The professional activity of the head of a preschool educational organization must have managerial training. That is, it must have certain professional qualities of a professional culture, a component of which is management culture [5].

This helps to enrich the personality, expands its capabilities, includes it in the sphere of social and economic interaction with the team, forms a motivational sphere, and changes value orientations.

References

1. Bychko N.V. Theoretical approaches to understanding the managerial culture of the leaders of educational institutions / N.V. Bychko // Siberian Pedagogical Journal. - 2011. - No. 8. - P. 28–33.

2. Kolodyazhnaya T.P. Management of modern preschool education / T.P. Kolodyazhnaya. – Rostov n/d.: Uchitel, 2011. – 190 p.

3. Komarova E.S. I run a kindergarten: a guide for leaders of preschool educational institutions / E.S. Komarov. – M.: Prosvechsheniye, 2008. – 224 p.

4. Mezentseva O.I. Psychological and pedagogical conditions for the development of professional culture of the modern head of the preschool educational institution / O. I. Mezentseva, E. V. Kuznetsova. - Novosibirsk, 2013. -158 p.

5. Mogdoeva M.P. Organizational culture as a basis for the management culture of a PEO / M.P. Mogdoyeva, L.V. Nikolaeva // International Student Scientific Bulletin. – 2016. – No. 5-3. – 381-382 p.

6. Presnyakova E.B. The modern head of the preschool educational institution: the basics of management / E.B. Presnyakova // Center for additional education "Voskhozhdeniye". – M., 2010. – 47 p.

7. Prigozhin A.I. Organizational culture and its transformation / A.I. Prigozhin // Social sciences and modernity. – 2003. – No. 5. – 12-22 p.

8. Ronzhova N. V. Effective management of an educational organization. / N.V. Ronzhova // Young scientist. -2016. - No. 23. - P. 513-515.

9. Slastenin V.A. Pedagogy / V.A. Slastenin, I.F. Isayev, E.N. Shiyanov, under ed. V.A. Slastenin. 8th ed., revised. – M .: Publishing Center "Academia", 2008. – 576 p.

10. Slastenin V.A. Professional culture of the educator. /V.A. Slastenin. – M. Shk. Press, 2005. – 71 p.

11. Turgeneva A. A. Formation of the managerial culture of the head of the PEI in managerial activity / A. A. Turgeneva. // Young scientist. -2019. - No. 35 (273). - P. 163-165. - URL: https://moluch.ru/archive/273/62176/ (date of access: 01/26/2022).

12. Troyan A. N. Management of preschool education: Textbook. /A.N. Troyan. M.: Tts-Sfera, 2015. - 160 p.

13. Falyushina L. I. Management of a preschool educational institution. Modern aspect. / L. I. Falyushina. - M.: Pedagogical Society of Russia, 2015. - 80 p.

14. Khoroshun K.V. Modern models of managerial culture as a personal and professional quality of a leader / K.V. Khoroshun // Scientific works of KSUT. -2106. - No. 2. - P.31-39.

DOI 10.34660/INF.2022.55.88.015

哈贝马斯概念下的民主话语互动问题
THE PROBLEM OF INTERACTION IN DEMOCRATIC DISCOURSE IN THE CONCEPT OF J. HABERMAS

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本文分析了在俄罗斯建设民主和公民社会的问题，以及它与国家结构的相互作用。没有强大的公民社会，现代国家的民主化进程是不可能的，但是关于国家与社会之间的相互作用的问题出现了。俄罗斯的国家政权基本不承认民间机构的影响和与人民对话的必要性。然而，公民社会的结构没有机会对国家精英的决策产生重大影响，也没有寻求这样做。在与尖锐政治问题（例如家庭暴力）相关的事务中，可以解决国家利益与公民社会之间的矛盾。

讨论国家与公民社会之间的沟通实践的问题已经成熟。有必要考虑在国家权力与人民之间的互动问题上的交流实践的哲学和方法论基础。

关键词：公民社会、社会与国家的互动、法律制度化、民主、公民社会、交往理性。

Abstract. *The article analyzes the problems of building democracy and civil society in Russia, as well as its interaction with state structures. The processes of democratization of a modern state are not possible without a strong civil society, but questions arise about the interaction between the state and society. The state power in Russia basically does not recognize the influence of civil institutions and the need for dialogue with the people. The structures of civil society do not have the opportunity to exert a significant influence on the decision-making of the state elite, however, and do not seek to do so. It is possible to fix the contradiction between the interests of the state and civil society in matters relating to acute political problems, such as, for example, domestic violence.*

The issue of discussing communication practices between the state and civil society is ripe. It is necessary to consider the philosophical and methodological foundations of communicative practices in matters of interaction between state

power and the people.

Keywords: *civil society, interaction between society and the state, legal institutionalization, democracy, civil society, communicative rationality.*

Introduction

Recently, the processes of democratization and the formation of civil society in Russia have been actively studied from the point of view of sociology, psychology, law, philosophy and cultural studies. However, the problem of the formation of democratic procedures that reflect the interests of the people, which are necessary when making decisions on generally known problems, has not been fully explored. J. Habermas, analyzing the processes of democratization in the interaction of the state and society, developed communication technologies that allow for the interaction of these institutions[1. P.136].

The model developed by J. Habermas contains a description of rational technologies for collecting information about the interests and preferences of citizens, the formation of feedback between society and public authorities, which could ensure a dialogue between the ruling elite and the population. The subject of rationalization is democratic mechanisms and technologies that allow them to be changed taking into account the situation and the interests of citizens. In different countries, this approach finds its expression in the practice of social expertise, in the interaction of the authorities with public organizations, political parties - in all communication projects that are implemented in the process of formation and functioning of civil society institutions.

The problem of the formation of civil society in Russia lies in the fact that various attempts to introduce elements and structures of civil society into the social space of new systems lead to their dysfunction. As a result, protective mechanisms are activated, and the system regains stability, but not due to the democratization of the social space and self-development of social actors, but due to the strengthening of the qualitative intensification of repressive measures. Russia is developing in conditions of catching up modernization, in specific conditions, the specifics of its development is that the country has never had social and legal traditions for the formation of civil institutions in society.

The process of formation of civil society in Russia is a multi-level, complex process of emergence and construction in the social space of a system of institutions and structures, elements and subjects of society. Its content, methods of implementation, timing and vector orientation are determined by the degree of development of the entire social system, so the process of formation of civil society in Russia requires special consideration. Civil society arises in the process of functioning of the social system as one of the complex complexes, as a kind of "feedback" that allows you to optimize the negative processes taking place in so-

ciety. The work used a systematic method and general scientific methods: analysis and synthesis, deduction and induction.

The concept of communicative rationality was first put forward and opposed to the notions of the instrumental rationality of classical modernity by J. Habermas in his theory of communicative action. Reason as an instrument of domination was criticized by the theorists of the Frankfurt School, primarily M. Horkheimer and T. Adorno, who proceeded from the fact that a person is not able to control the consequences of his own rational activity, activity that generates systemic effects.

J. Habermas, sharing with his predecessors the critique of instrumental reason, finds, however, in contrast to them, grounds for historical optimism. Habermas' optimistic diagnosis is based on a new understanding of rational action - the transition from goal-oriented rational action to communicative action. The sphere of realization of a rational communicative action extends not to a self-preserving individual entering into relations with objective reality, but to a symbolically structured life world, which is constituted on the basis of the reflexive acts of the participants in the communicative action. Habermas reveals the mechanisms of conscious, rational coordination of actions, understanding it as the implementation of the consensus of the participants in the communicative action. Although the possibilities of rational consensus are limited by systemic effects - the clashing interests of the participants in social communication and systemic imperatives, it is rational communication that sets the space for freedom in a democratic society.

This understanding of communicative rationality is aimed at solving the problem of institutionalization of the rule of law state with its principle of equal participation of all citizens in the formation of political will, the problem of implementing the principles of popular sovereignty. The difficulty of implementing these principles is due to the fact that the people, from which power should come, organized in the form of a state, is not a single political entity endowed with will, consciousness and the ability to make decisions. The processes of self-organization are not able to solve the problem of equal participation of all citizens in governance and coordination of their interests in making political and administrative decisions.

Therefore, the most important task on the way to building a state of law is the task of rationally building communications that allow aggregating and consolidating the goals and interests of citizens. The generally accepted point of view is that the main prerequisites for the formation of civil society in the social system are: individuals with rights and freedoms enshrined in legislative acts, the presence in the social space of systems free from direct state interference [2, p. 33].

The term "civil society" in the scientific literature is used in both broad and narrow senses. In a broad sense, civil society is seen as the entire part of society that is not covered by the state. Civil society arises and changes in the course of

natural-historical development as an autonomous sphere that does not directly depend on the state. Civil society in a narrow, intrinsic sense is inextricably linked with the rule of law, they do not exist without each other.

Civil society is a variety of relationships not mediated by the state of free and equal individuals in a market and democratic legal statehood. It has a complex structure; unlike state structures, it is dominated not by vertical (subordination), but by horizontal ties - relations of competition and solidarity between legally free and equal partners. The main thing in the concept of civil society should be the definition of the main characteristics of real social relations, which can be defined as a modern civil society [3, p.128].

In this regard, civil society is an objectively established order of real social relations, which is based on the demands of justice and the measure of achieved freedom, the inadmissibility of arbitrariness and violence, recognized by society itself. This order was formed on the basis of the internal content of these relations, which turns them into a criterion of "justice and measure of freedom" [4, p.34]. Thus, the relations that make up civil society acquire the ability to carry certain requirements, normative models of behavior of citizens, officials, state bodies and the state as a whole in accordance with the ideals of justice and freedom.

This means that in the social relations that form civil society, the ideas of law are embodied as the highest justice, based on the inadmissibility of arbitrariness and guaranteeing an equal measure of freedom for all members of civil society. These are the normative (obligatory) requirements that develop and exist in civil society, regardless of their state recognition and enshrined in laws. But following them on the part of the state is a guarantee that the law in such a society and state acquires a legal character, that is, they not only embody the state will, but this will fully meets the requirements of justice and freedom.

Considering the process of institutionalization, we define two ways of forming a civil society: "from above" - from the authorities, where the state plays a decisive role. This statement corresponds to the following scheme. The state forms the institutions of civil society and sets them the task of forming a civil society. The process of institutionalization "from below" is a process when society itself participates in public life, in building new social structures of civil society. Such a society is characterized by a high degree of social activity.

J. Habermas recorded the tension between consensus and conflict in modern society, he is called the philosophers of politics and morality, he developed the theory of communicative rationality to solve the problems of the modern world [5, p.57]. The concept of communicative rationality was first put forward and opposed to the notions of instrumental rationality of classical modernity by J. Habermas in his theory of communicative action. Reason as an instrument of domination was criticized by the theorists of the Frankfurt School, primarily M. Horkheimer

and T. Adorno, who proceeded from the fact that a person is not able to control the consequences of his own rational activity, activity that generates systemic effects [6, p. 59].

Academic research often argues that civil society has a core of institutions that are voluntary associations outside the state and economy, churches, cultural unions, sports clubs and debating societies, independent media, citizen groups, public organizations, associations, political parties and trade unions. Their task is to maintain and expand the boundaries of civil society, to form a connection with the state through two processes: the expansion of social equality, freedom, restructuring and democratization of state institutions. However, in Russia the problem of communicative rationality has not been sufficiently studied and developed as a method of achieving social consensus between the structures of civil society and the state from the point of view of legal institutionalization.

J. Habermas describes it approximately as follows: the law is binding only for the person who either created it himself or agreed with it [7, p. 109]. However, the problem is that laws require the consent of all members of society, and it is assumed that in a modern democratic society such consent should ideally be free, not forced. What if the consent of all is required, and the democratic legislator issues his laws, focusing only on the majority? J. Habermas notes that both can be reconciled only if the majority principle is in some kind of internal conjugation with the search for truth [8, p. 47].

J. Habermas considers the sphere of realization of a rational communicative action, which extends to the structured life world, on the basis of the reflexive acts of the participants in the communicative action. Habermas reveals the mechanisms of conscious, rational coordination of actions, understanding it as the implementation of the consensus of participants in a communicative action, although he sees that rational consensus is limited by side effects - the clashing interests of participants in social communication, it is rational communication that creates a space of freedom in a democratic society.

This understanding of communicative rationality is aimed at solving the problem of the institutionalization of civil society with its principle of equal participation of all citizens in the formation of political will, the problem of implementing the principles of popular sovereignty. The difficulty of implementing these principles is due to the fact that the people, from which power should come, organized in the form of a state, is not a single political entity endowed with will, consciousness and the ability to make decisions. The processes of self-organization of public structures are not able to solve the problem of equal participation of all citizens in governance and coordination of their interests in making political and administrative decisions.

Therefore, the most important task on the way to building civil societies is the

task of rationally building communications that allow aggregating and consolidating the goals and interests of citizens.

Conclusions

J. Habermas considers the democratic process in direct connection with the process of legal institutionalization of civil society institutions. He writes: "I would like to understand democratic procedure as the institutionalization by law of the forms of communication necessary for the rational formation of political will" [9,p.37] J. Habermas sees in constitutions the main tool for uniting citizens of a pluralistic society: "Citizens are united in a society formed by social, cultural and ideological pluralism, first of all, by the abstract principles of an artificial democratic order created by law" [10, p. 21]. Democracy for J. Habermas is the constitutive basis of law, which acts as a product of democratic, that is, fair, in his understanding of discourse. Human rights for him are not only and not so much what makes it possible for a person to participate in the process of social and political communication, but the product of such participation.

However, it should be noted that civil society will remain a theoretical construct for the majority of Russian citizens if the mechanism of dialogue and the achievement of consensus between the institutions of civil society and the state are not developed and institutionalized. J. Habermas believed that this process should be based on legal and democratic foundations, he raised one of the acute problems of modern democratic society - the problem of dialogue between the authorities and the people, and, moreover, he suggested, albeit theoretical, but ways out.

References

1. Habermas J. Democracy. Intelligence. Morality / Transl. from Ger. M.: Science, 1992.252 P.

2. Rubantsova T. A., Koltunova N. V. Formation of civil society in Russia: social and philosophical aspect. // Civil society and the rule of law. 2011. №1. P.32 -35.

3. Flivberg B. Habermas and Foucault theorists of civil society // Sociological Studies. 2000. P.127 - 136.

4. Habermas J. Theorie des kommunikativen Handelns. B. 1. Frankfurt/Main: Suhrkamp Verlag, 1995. P.34.

5. Habermas J. Involvement of the Other. Essays on political theory. - SPb.: Science, 2008. 417 P.

6. Keane J. Democracy and civil society. / Transl. from Engl. - M.: Progress, 2001.400 P.

7. Habermas J. Theorie des kommunikativen Handelns. B. 1. Frankfurt/Main: Suhrkamp Verlag, 1995. P.34

8. Habermas J. Democracy. Intelligence. Moral /Transl. from Ger. - M.: Science, 1992. 256 P.

9. Habermas J. Communication and the Evolution of Society. - L. 1979. 239 P.

10. Habermas J. Involving the other. Essays on political theory. - SPb.: Science, 2008. 415 P.

DOI 10.34660/INF.2022.99.98.016

关于科学思维的问题
TO THE QUESTION OF SCIENTIFIC THINKING

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"All science is nothing but improved everyday thinking...".[1]

这篇文章讨论了科学思维的出现，关于形成这种人类活动的思想的思想家，旨在理解周围世界的完整性和统一性。

据说，明智的思想家没有必要关闭这条道路，转向另一条有意义但仍然片面的理性思考的道路，旨在理解有条件的、瞬息万变的物质世界。

得出的结论是，今天，在科学和实践偏向外部的条件下，物质世界及其多重对象、现象、过程、起源、原因、基础和现象本身被零散地呈现出来，经常以一种扭曲的形式，并且根本没有指定目标，这再次成为科学思想的主要认知任务。

它的解决方案与对思维的真正理解有关。这需要呼吁有智慧的国内外思想家。

关键词：人类活动、思维、理性思维、科学思维、完整性、统一性

Abstract. *The article discusses the emergence of scientific thinking, about the thinkers who formed ideas about this type of human activity, which was aimed at understanding the integrity, unity of the surrounding world.*

It is said that there was no need for wise thinkers to turn off this path to another path of meaningful, but still one-sided, rational thinking, aimed at understanding the conditional, transient material world.

1 Einstein A. Coll. sci. op. M., 1967. V. IV. P. 200.

It is concluded that today, in the conditions of a one-sided orientation of science and practice to the external, material world with its multiple objects, phenomena, processes, the origins, causes, foundations of which and the phenomena themselves are presented fragmentarily and often in a distorted form, and the goals are not at all are designated, again on the agenda the main cognitive task of scientific thought.

Its solution is connected with a true understanding of thinking. This requires an appeal to wise domestic and foreign thinkers.

***Keywords**: human activity, thinking, rational thinking, scientific thinking, integrity, unity.*

In the process of development, human activity manifested itself in the creation of mythology, religion, art, as ways of reconstructing the perceived, including the created reality. Along with these forms, a scientific method of mental reconstruction of reality arose.

It is generally accepted that the understanding of this method lies in antiquity, meaning officially recognized antiquity, in particular, in ancient Greek thought. That Socrates created a "thinking room" - a school of joint thinking as a process of the birth of knowledge in the diverse dialogues presented by Plato. That Aristotle structured it, outlined the theory of science, defined scientific thinking.

But the foundations of a true understanding of the surrounding world and attitudes towards it were laid in Vedic knowledge long before the named period. Information about him, in particular, the ideas of the beginning of being; two worlds, their unity, integrity; the origins of the manifested, limited material world; superficial differences between the phenomena of the manifested world and their deep similarities are contained in myths, epics, legends, and other sources.

As for the beginnings, for Thales, as you know, the beginning is water, for Diogenes - air, for Heraclitus - fire. Empidocles added earth. Anaxagoras said he started an infinite multitude. The Pythagoreans talked about numbers, the elements of which are even, personifying the infinite, and odd, personifying the limit, which constitute the unity that is the essence of being.

The infinite, the one, according to Parmenides, exists as a mental. The conceivable in Plato is a single one, represented by the idea with which knowledge begins, against which Aristotle categorically objected, who did not recognize Platonic eidos. The ultimate, it is also manifested, multiple, sensually perceived.

Democritus, characterizing the material cause of knowledge, also came to the one, which he has in existence (full, dense, having a structure) and non-existent (empty, rarefied). Their difference is that being has a structure, order, a certain position and correlation with other structures.

Plato divided thinking, knowledge into practical and cognitive. He considered

practical thinking, as it were, rooted in business, connected the creation of objects with practical knowledge, understood it as knowledge of a craft, called it craft knowledge and, at the same time, art.

Cognitive thinking forms knowledge[2], which Plato also called art. He singled out in it the commanding, nutritious (educational) art that the ruler should master. This is a royal, state art, in which politicians occupy a special place - educators, shepherds not only of mankind, but also of its superiors. Cognitive art includes the art of messengers, who, having received other people's thoughts, pass on the acquired knowledge and prescribe it to others. Accordingly, science is divided into the science of command, control, and general nutrition. The cognitive art includes both divinatory and judgmental activities.

Plato believed that thinking, cognition should be aimed at identifying the grounds, causes, goals, laws of motion, including circulation, cyclic movement, and ongoing changes. They are aimed at obtaining true knowledge based on a holistic view of the unity of the universe. Arguing about God, heaven, space, earth, he uses the myth of creation, the development of the world and the concept of it[3]. One can speak of a certain similarity between the judgments of Plato the pagan and Vedic knowledge.

Aristotle reproaches his predecessors for not investigating the question of the movement of the existing[4], and called the question of whether there is a single and existing essence of things the most difficult and perplexing question[5].

In the judgments of Aristotle, one can see both similarities and differences from the views of Plato and Vedic knowledge. He argues in their line when he says that thinking is aimed at identifying the beginnings, causes, elements of the knowable.

He characterizes the cause, which in terms of being he calls a metaphysical category that can be an essence, and in terms of logical thinking, as an epistemological category, it can be a beginning (principle) in relation to logical consequences.

There are both differences and similarities in his judgments when he says that thinking, including scientific thinking, knowledge, is directed towards an object, that they begin with sensation, and that science arises through experience.

That scientific thinking leads to knowledge about the subject, what is, about being, and the knowledge of why it is, i.e. science is the knowledge of causes and beginnings.

He is firmly convinced that the existence of an object precedes thinking and

2 The possession of knowledge later Hegel would call intelligentsia. See: Hegel. Encyclopedia of Philosophical Sciences. Volume 3. Philosophy of spirit. M., 1977. P. 253.

3 See: Plato. Politic. Op. in three volumes. Volume 3. Part 2. M., 1972. P. 13-26, 31-82.

4 And Plato's judgments about the immutability of the divine, about the constant movement of the Universe, about its circulation, cyclic, backward movement, about the changes involved in the material body, all living beings. See: Plato. Ibid: P. 27-31.

5 See: Aristotle. Metaphysics. Works in four volumes. Volume 1. M., 1976. P. 75, 101.

knowledge, moreover, the object and knowledge about it constitute an inseparable whole. Therefore, the infinite cannot become the subject of scientific knowledge (and in Vedicism and Plato it can).

At the same time, Aristotle calls the mind divine, not subject to anything, and it cannot be considered as an organic function. God, he says, belongs to causes and is a beginning.

By analogy with Plato, Aristotle talks about knowledge, science, art. Comparing them, he says that the sphere of art is practice and production, and the sphere of knowledge, science is the contemplation of an object, theory, conclusion. What science and art have in common is that they are capable of being communicated through learning[6].

Objective thinking, knowledge based on sensory perception and experience, knowledge of "what" is at one particular moment or another, which is knowledge of the individual, were relegated to the lowest level. Above is the knowledge that knows the origins, the beginning, the causes, the purpose of the phenomenon, which answers the question "why"[7]. Later, this question will be called the main question that the scientist must answer.

This is also recognized by Aristotle: that knowledge predominates, he says, which is based on the unity of being, its integrity, which rises to the level of the general. But this is his level of generalization of a single knowledge acquired by experience, and its expression in a concept. This knowledge, which he, following Plato, endows with the power of art[8].

In the eastern, in particular, ancient Chinese tradition, thinking, cognition, knowledge are not reduced to the objectivity of being. Their nature is emptiness, which is the Great Unity of eternal fullness. Their birth is the actualization of the boundless potency of the all-encompassing, formless One Body of the universe.

They are born from a borderline state, from being between stillness and movement, finite and infinite, emptiness and fullness, identity and difference, truth and untruth. They operate on an external, surface level, interacting with sensory perception. But they are more characterized by an inner, deep state (as in Vedism: the main thing is the depth of thinking, knowledge), which, according to Zhuangzi (IV-III centuries BC), is inexpressible, which you can only trust in and follow[9].

With such thinking, not so much the discovery of conditional truth is con-

6 See: Aristotle. Metaphysics. P. 35-39, 42, 52-57, 65-70.

7 V.O. Klyuchevsky believed that the task of a scientist, in particular a historian, is to understand the initial causes of the origin and development of human societies. Klyuchevsky V.O. Russian history. A complete course of lectures in three books. Book one. M., 1993. P. 81-82.

8 See: Aristotle. Metaphysics. P. 61-93, 99-101, 136, 145-148, 157 etc.

9 See: Chuang Tzu // Ancient Chinese Philosophy. Collection of texts in two volumes. Volume 1. M., 1972. P. 249-294.

nected, but, mainly, insight, spiritual enlightenment, contributing to the vision of depth, penetration into the unconditional truth. This ancient wisdom was constantly pondered by Chinese thinkers and rulers of the Celestial Empire, who followed his will.

The state of thinking, consciousness, in their understanding, is not substantial and not objective, it is functional. Their way of being is constant movement, wandering, as the thinkers themselves say, endless transformation: they pass from otherness to being and back. Confucius probably said about them: if you hold tight, you will save, if you leave, you will perish. Their comings and goings have no definite time, and no one knows their whereabouts[10].

Ancient Indian wisdom says: thinking, the formation and increment of true knowledge are associated with deepening, elevation, approaching fullness, which are achieved in the process of liberating thinking from the captivity of material existence, attachment to visible things. This is the way of forming a true experience, which is given only by internal vision, which does not have external objects. Scientific research based on them is also imperfect because imperfect feelings are their instrument[11].

In the depths, primordial thinking appears as the consciousness of non-consciousness of the knowable, as the possibility of experiencing life itself, its tendency and comprehending a holistic experience. Thought, consciousness, knowledge in this understanding are merged with life, they are the flow of the life itself, the hidden life, its mystery.

The secret is the thought of a person, including scientific thought, the consciousness of a person, his entire spiritual, moral and mental life. In this regard, Dostoevsky's saying becomes clear: man is a mystery. The sages believed that this secret-truth, to which thought, including scientific thought, is directed, does not reveal itself to everyone, not always, but only at separate, significant moments of life.

There was no need for wise thinkers to turn off the true path to another path of meaningful, but still one-sided, rational thinking, aimed at understanding the conventional, transient material world.

From the path, which, according to ancient wisdom (and the most ancient and officially named as such), directed to the recognition and comprehension of unity, the integrity of unconditional and conditional being, to understanding the significance and priority of the general over the individual.

Ignoring unity both in the mental activity itself and in the subject of its attention, exaltation of the manifested, material world, focusing on its individual elements led to the emergence of a special way of thinking called scientific thinking,

10 These words are quoted by Mencius. See: Classical Confucianism. Volume two. Mencius. Xun Tzu. SPb., M., 2000. P. 102.

11 See: Bhagavad-gita as it is. Ed. Bhaktivedanta Book Trust. 2001. P. 25-34.

the purpose of which is to know the origins, causes, historical truth of the material world and the meaning of its life.

This need was not among the ancient Proto-Slavs, who discovered the secret of life and the righteous path - the true path in Vedic knowledge. The ancient Chinese thinkers who possessed this secret did not have it, who followed the path of fluid mental activity, constantly taking on new, transformed forms, the way of Tao (Tao among ancient Chinese thinkers is the true path). It was not among the sages of Ancient Greece, who determined the royal path (the true path of the knowing king and broadcaster of knowledge in Plato).

Today, in the conditions of the one-sided orientation of science and practice to the external, material world with its multiple objects, phenomena, processes, the origins, causes, foundations of which and the phenomena themselves are presented fragmentarily and often in a distorted form, and the goals are not indicated at all, the main cognitive task of scientific thought is once again on the agenda. Its solution is connected with a true understanding of thinking, including scientific thinking.

Under these conditions, it is obvious that it is necessary to turn to wise domestic and foreign thinkers of ancient[12] and subsequent historical periods, including philosophers, theologians, poets, writers, science fiction writers, storytellers.

It is determined by the law of being, which consists in the unity of the past, present and future and in the transfer of accumulated experience, in particular, the ancient mental tradition to subsequent generations. Perhaps this is the "thread of Ariadne" that modern man should grab onto, rushing about in the labyrinth of ideological, political, economic and other structures, structures and their crises?

References

1. Aristotle. Metaphysics. Works in four volumes. Volume 1. M., 1976.

2. Bhagavad-gita as it is. Ed. Bhaktivedanta Book Trust. 2001.

3. Hegel. Encyclopedia of Philosophical Sciences. Volume 3. Philosophy of spirit. M., 1977.

4. Classical Confucianism. Volume two. Mencius. Xun Tzu. SPb., M., 2000.

5. Klyuchevsky V.O. Russian history. A complete course of lectures in three books. Book one. M., 1993.

6. Plato. Politician. Op. in three volumes. Volume 3. Part 2. M., 1972.

7. Chuang Tzu // Ancient Chinese Philosophy. Collection of texts in two volumes. Volume 1. M., 1972.

8. Einstein A. Coll. sci. op. M., 1967. V. IV.

12 This refers to ancient times, not only in its official understanding.

DOI 10.34660/INF.2022.99.49.017

青年组织作为民间社会的特殊机构
YOUTH ORGANIZATIONS AS A SPECIAL INSTITUTE OF CIVIL SOCIETY

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文章将青年非营利组织视为公民社会的特殊社会机构。青年和非营利组织作为中介机构，帮助解决公共问题，积极与政府当局和企业互动。来自非营利组织的青年组织的特点是将青年实现自我的愿望与社会和国家的形成性努力结合起来，以社会期望和社会可接受的方向动员、管理和控制青年。本文探讨了由于国家、市场和社会领域的价值取向占主导地位而改变青年组织活动方向的特点。对现有的俄罗斯青年协会进行了分析。关注的焦点是近年来此类组织出现方式的变化。国家权力的主要活动旨在发展年轻一代的造物主义和创造性活动，概述了青年倡议的实施。给出了俄罗斯和国外青年政策实施的例子，以及在支持青年非营利组织领域积极合作的结果。

关键词：青年组织、非营利组织、青年政策、以项目为导向的方法、青年议会。

Abstract. *The article considers youth non-profit organizations as a special social institution of civil society. Youth and non-profit organizations, as intermediate institutions, help in solving public problems, actively interacting with government authorities and business. The peculiarity of youth organizations from NPOs is to unite the desire of young people for self-actualization, and the formative efforts of society and the state to mobilize, manage and control young people in a socially desirable and socially acceptable direction. The article examines the peculiarities of changing the direction in the activities of youth organizations due to the preponderance of value orientations towards the state, the market, as well as towards the social sphere. The analysis of existing Russian youth associations is given. Attention is focused on the change in the ways of the emergence of such organizations in recent years. The main activities of the state power aimed at the development of demiurgeous and creative activity of the younger generation, the implementation of youth initiatives are outlined. Examples of the implementation of youth policy in Russia and foreign countries are given, as well as the result of*

active cooperation in the field of support for youth non-profit organizations.

Keywords: *Youth organizations, non-profit organizations, youth policy, program-oriented approach, youth parliament.*

Youth is the most important actor of social development, a figure of innovation and a translator of values to future generations. Participation of youth in socially significant issues is carried out through activities in youth public organizations. Youth and non-profit organizations, as intermediate institutions, help in solving social problems, actively interacting with authorities and business.

The special task of youth non-profit organizations is to unite the following subsystems: state, market, social area. Skewness into one of the subsystems can cost the organization the loss of identity and supporters among young people. If the bias goes in the direction of the "state" subsystem, the organization will switch to its full financing, as a result - bureaucratization and loss of independence. When skewed into the “market” subsystem, this is the risk of commercialization and the loss of common values. Even now, there are many organizations that implement projects only to receive and develop grants, as well as pay for the jobs of the organization's management, without a socially significant component. And the shift to the “social area” subsystem leads to the loss of the authority of the leader of the organization, the general manageability, the transformation of the organization into a club of friends of interest, and further division into smaller independent groups. Such organizations do not conduct socially useful activities, do not try to attract new personnel, closing to create leisure for existing ones.

One of the key contradictions regarding youth associations, which distinguishes them from other types of NPOs, is that youth associations, on the one hand, are based on the desire of young people to unite and build a self-service system due to common interests. On the other hand, they are often initiated and used by other social groups, more often by the authorities, with the aim of directed socialization, education and control of young people. Therefore, the peculiarity of youth public associations as institutes of civil society is to combine both the desire of young people for self-actualization and the formative efforts of society and the state to mobilize, manage and control youth in a socially desirable and socially acceptable way.

Youth associations exist thanks to the implementation of joint projects by young people, common interests, internal communication, informal communication. Here, the informal component becomes a separately important factor of association, which, unfortunately, is often not noticed by the authorities in the formation of regulatory legal acts of federal and regional significance.

An analysis of existing Russian youth associations shows that the methods of emergence have undergone changes in recent years. If in the early 1990s, when

there was a boom in the creation of new youth associations, they arose mainly on the fragments of the Komsomol structures, trade unions and other organizations of the Soviet era (RUY, Union of the YRC, RATUS, etc.), then more branches of international and foreign organizations (scouts, YMCA AIESEC, etc.), as well as initiative organizations of interest.

Currently there is a wide range of diverse youth associations of a broad orientation in Russia. The process of creating coordinating structures, which is specific to a developed civil society in foreign countries, is also actively taking place. It should be noted that among Russian youth associations this process began earlier and is more intensive than among NPOs in other areas of activity. In 1992, the National Council of Youth and Children's Associations of Russia was established, which is currently the recognized representative of Russia in the European Youth Forum and other international youth structures. In 1993-1994, the creation of round tables and councils of youth associations in the regions began, and coordinating and network structures arose that brought together youth human rights, environmental and other organizations.

The directions of youth policy are reflected in the Federal Law dated December 30, 2020 N 489-FZ "On Youth Policy in the Russian Federation" [1]. Despite the expansion of youth policy ways in Russia, it must be taken into account that this number will not be enough to cover all 100% of the young generation of the state. This approach is aimed at only a fairly small part of this policy, which, in turn, is the most active and capable, as well as a certain age limit. Along with this, the European youth policy is based on the involvement of the younger generation from an early age. In fact, disadvantaged youth who are persons with disabilities, as well as young people who are less active at their stage of development, prefer to remain on the sidelines.

The state youth policy of Russia is a system of state priorities and measures aimed at creating conditions and opportunities for successful socialization and effective self-realization of young people, for developing their potential in the interests of Russia and, consequently, for the socio-economic and cultural development of the country, ensuring its competitiveness and strengthening national security.

In accordance with the Fundamentals of the State Youth Policy of the Russian Federation for the period up to 2025, approved on November 29, 2014 No. 2403-r, youth policy is based on the assertion that young people have a strong potential in terms of innovation. "Global trends convincingly prove that those states that can effectively and productively use the innovative potential of development, the main carrier of which is the youth, will have strategic advantages" [2].

Along with this, subject to specific conditions and the influence of political forces, this potential can be both constructive and destructive, which is to the detriment of the country and society, including directly to the youngest generation. The

activities of the state authorities are aimed at promoting the development of the demiurgeous and creative activities of the younger generation, the implementation of youth initiatives, covering all spheres of life, in the process of forming society's responsibility for today and its future.

In the process of implementation, youth policy at various levels of government (at the federal, regional and local levels) throughout its existence has been widely using the program-oriented approach. So, in the country, in terms of implementing youth policy, there are oriented programs at the regional and local levels. The interaction of state bodies and youth organizations in the implementation of these programs is carried out in two main areas of activity: firstly, the implementation of joint activities of authorities and youth organizations in terms of implementing activities under youth policy subprograms, based on its main directions; secondly, assistance from state bodies of a purposeful nature to the development and support for the implementation of activities by youth organizations: this can be equity financing, assistance in various matters relating to organizational, informational, personnel and educational nature [3].

So, in order to promote the strategic development of the JSCo "RZD" Holding, a system is being developed to attract young people, its effective adaptation and the involvement of young people in solving corporate problems. As part of the youth policy of JSCo "RZD", areas are being implemented that develop international youth cooperation, conditions are being improved for the development of professional and corporate competencies and career advancement of young people. One of the tools for involving young people in the process of innovative development is the annual youth competition of innovative projects "New Link". The main direction of the project was the development of scientific and technical initiative among young workers [4].

In order to interact effectively with youth organizations, the Ministry of Education and Science of Russia has prepared and concluded cooperation agreements with a number of all-Russian public organizations. These organizations are: the National Council of Youth and Children's Associations of Russia; Russian Union of Youth; Association of students and student associations; Association of student youth "Commonwealth"; All-Russian public organization "Integration".

There are many different youth projects and programs in the US and Russia. For example, one of the largest in the District of Columbia is the "Young Republicans of the District of Columbia" project. "Young Republicans" are individuals who live or work in the District of Columbia, between the ages of 18 and 40. The main mission of the project is to provide an interactive and educational program for members of the organization, as well as to support candidates from the Republican Party during elections for public office. In addition, young people take an active part in republican events and the public life of the city; a unique opportunity

is provided for young professionals to get to know people who are actively implementing social policy in society, as well as to find more like-minded people [5].

In Russia, the "Youth Parliament" project is being implemented on the territory of many regions. The "Youth Parliament" exists in the Sverdlovsk Oblast - a legal advisory body and includes commissions: on social policy and health care; on housing construction and communal policy; for Economic Development and Entrepreneurship; on culture, public relations, youth affairs and information policy; on agricultural issues.

It is worth noting that with the help of such projects as "The Forum for Youth Investment" in Washington and "Russian Student Teams" in Yekaterinburg, today's youth have the opportunity to acquire professional skills in industries of interest to them, which will positively affect the success of their professional activities in the future.

An important direction in the implementation of youth policy is active cooperation and participation in the process of developing youth policy directions together with such international organizations as the UN, the Commission of the European Union, UNESCO, the Council of Europe and others. Specialists of state authorities and representatives of Russian youth organizations take part in the program of international youth exchanges.

One of the countries with the most developed legislative base of the state youth policy is Germany, which has a long tradition of lawmaking in the interests of youth. In modern united Germany, ratified international acts, general laws of the country, as well as a number of laws relating to exceptionally special problem situations of children and youth are aimed at solving the problems of youth [6].

The Russian state and foreign countries are actively implementing youth policy, willingly interacting with youth organizations in terms of supporting the implementation of various programs and projects. There are many similar youth social projects in Russia and abroad, which indicates the similarity of the needs and interests of young people from different countries.

References

1. Russian Federation. The laws. Federal Law dated December 30, 2020 N 489-FZ "On youth policy" in the Russian Federation // Rossiyskaya Gazeta, N 1, 11.01.2021 // Collection of Legislation of the Russian Federation, N 1 (part I), 04.01.2021, art. 28.

2. Fundamentals of the state youth policy of the Russian Federation for the period up to 2025. [Electronic resource]. URL: http://government.ru/media/files/ceFXleNUqOU.pdf (date of access: 17.04.2021).

3. Astafyev D.A. Youth movements in Russia: history and modernity. Orenburg. 2012, P. 118.

4. Youth policy - New link: [Electronic resource] URL: www.rzd-expo.ru (date of access 23.01.2022).

5. Nortsev D.S. Features of the implementation of regional youth programs in Russia and the USA // Vestnik PAGS. 2015. – No. 5. P. 123.

6. Chaltseva I.S. Youth policy abroad: an attempt at analysis / I.S. Chaltseva // Siberian Pedagogical Journal. 2010. No. 1 (87). P. 298.

DOI 10.34660/INF.2022.94.55.018

教育过程中的整合和连续性：困难和克服方法
INTEGRATION AND CONTINUITY IN THE EDUCATIONAL PROCESS: DIFFICULTIES AND WAYS TO OVERCOME

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理论和实证研究表明，一年级学生的主要心理困难表现为：与在校教师相比，学生与大学教师的互动不足； 学生缺乏构成脑力工作基础的智力技能（分析、综合、概括、比较、系统化、分类等）； 一年级学生的特点是自我意识发展水平低（自我调节、自我控制、自我组织等）。 所获得的数据证明，不同层次的教育互动不足，需要进行整合，以确保中学和高中学生的教育和发展的连续性。

关键词：心理困难，“师生”体系中的互动，智力技能，自我意识，自我调节，自我控制，从中等教育向高等教育过渡的连续性

Abstract. *The theoretical and empirical study shows that the main psychological difficulties of first-year students are as follows: insufficient interaction of students with university teachers compared to teachers at school; students lack intellectual skills that form the basis of mental work (analysis, synthesis, generalization, comparison, systematization, classification, etc.); first-year students are distinguished by a low level of development of self-awareness (self-regulation, self-control, self-organization, etc.). The data obtained testify to the insufficient interaction of different levels of education and the need for integration to ensure the continuity of education and development of students in secondary and higher schools.*

Keywords: *psychological difficulties, interaction in the "teacher-student" system, intellectual skills, self-awareness, self-regulation, self-control, continuity in the transition from secondary education to higher education.*

In an integral system of continuous education, a number of interrelated and interacting stages can be distinguished, between which a through vertical integra-

tion should be carried out, ensuring the regularity and progression, continuity and integrity of the process of personality development, the continuity of its general and professional education. At the same time, there is currently a significant gap between them in the content of education, in the forms and methods of teaching and development, in the nature of the educational and cognitive activity of schoolchildren and students, which causes great difficulties for students in the transition from school to university.

In psychology, the concept of *difficulty* is usually used in the case when the subject encounters an obstacle in the course of his activity or a "gap in activity" appears [7].

The concept of "difficulty" is associated with the concept of "activity" and is organically inherent in the subject of activity, and therefore, is a purely psychological phenomenon. Difficulties perform both positive and negative functions. They signal an obstacle, an overdue contradiction (indicator function). When they are overcome, the possibilities of the individual are actualized (stimulating function). Overcoming difficulties enables a person to believe in his own strength, in his potential, in the strength of his "I", in the possibility and necessity to act independently.

On the other hand, difficulties can also have a deterrent or hindering function. Long-term failure affects not only the results of students' educational work, but also leads to the fading of motivation, interest, and a decrease in the level of self-esteem and claims of schoolchildren and students. A number of studies [5, 6, 8] show that the difficulties of learning at a university are associated with a mismatch in the organization of the educational process, the content and volume of educational material, in the nature of acquired knowledge, monitoring and evaluating the results of educational activities, in organizing independent work, the nature of relationships participants in the educational process. Since the process of learning and development is characterized by a twofold mediation (the activity of the student is mediated by the activity of the teacher, and the activity of the latter is mediated by the activity of the student), the subjective difficulties of students have an objective psychological and pedagogical significance for the teacher. Therefore, it is important for school and university teachers to have a correct understanding of the content of the difficulties of beginning students, their causes, dynamics from course to course, because overcoming them is the key to the real implementation of continuity between secondary and higher education. It is important to provide an optimal measure of the difficulties of the learning process, which is largely a subjective process. At the same time, it is necessary to know the most typical difficulties of students, schoolchildren and the causes of their occurrence, to correlate the difficulties and causes of their occurrence with the specific conditions for the functioning of the pedagogical process at a school or university,

to develop a methodology for their prevention and overcoming.

The problem of difficulties in teaching first-year students at the university is addressed in many studies. Based on repeated surveys of students of technical universities, V. I. Budarny and A. B. Kaganov state that the difficulties associated with the transition to higher education forms are the most significant factor affecting the performance of junior students. Among students with high academic performance, 39.1% of respondents experience difficulties. For students with lower academic performance, this figure rises to 87.7%. The reasons causing transitional difficulties (the need to organize independent work, changes in monitoring progress, etc.) do not depend on the progress of students, the type of secondary institution they completed, or their place of residence at the time of study. Insufficient succession of secondary and higher schools definitely and severely affects the performance of graduates of various educational institutions. In the conditions of continuous education, this fact deserves special attention. Researchers [2, 4, 6, 10], speaking about the difficulties of teaching first-year students at a university, note that even former excellent students have poorly developed skills of self-organization and self-education. The authors believe that one of the main reasons for the difficulties of studying at a university is the insufficient preparation of students for the requirements and conditions of work at the university level. According to a number of studies, it is in the first years of university that the highest percentage of diseases and dropouts of students is often the highest. Attention is drawn to the fact that the cause of difficulties for first-year students is also associated with the choice of methods for presenting educational material, with teachers' insufficient knowledge of the mechanisms of perception, thinking, and memory of students. When choosing teaching methods, teachers mainly rely on their intuition, on their personal experience. The study by S. M. Godnik [3] shows that the first year is difficult for both students and teachers. Comparing the homogeneous information he received from first-year students and university professors, S. M. Godnik emphasizes that the difficulties cited by students and the difficulties of teachers themselves in working with first-year students coincide. He quite rightly points out the importance of changing the internal position of a high school student, an applicant, a student, turning the latter into a subject of activity. Paying tribute to numerous studies of the problem of difficulties in the transition of students from one stage of education to the next, we directed our efforts to identify psychological difficulties and the causes of their occurrence not only in activities, but also in the interactions of teachers and first-year students of the natural and mathematical faculties of universities (n=87).

For this purpose, a survey of first-year students (14 questions), conversations, interviews with students and teachers, and observation of their activities were conducted.

Analysis of the results of the survey of first-year students shows that:

- One of the main psychological difficulties of studying at a university is a sharp change in the relationship between students and university teachers compared to school teachers (49%). The collective psychological portrait of the teacher, compiled on the basis of the answers of the first-year students, is as follows: the teacher of the school is able to create a creative (creative) atmosphere in the classroom, based on the principles of mutual respect, friendliness, help, support, openness, equality of personal positions of the teacher and student, understanding and acceptance of it individual uniqueness. While a university teacher does not strive to build emotionally positive dialogue communication with students, he is emotionally unstable, rigid, and shows coldness, alienation, and suspicion towards students. What causes students' fear of self-expression, negative emotional experiences and states. Only 5% of students noted "too much guardianship of teachers at school".
- The second ranking difficulty in the study of first-year students is the large amount of information needed for assimilation. This difficulty in learning was indicated by 41.03% of the surveyed first-year students. It should be noted that in studies carried out 25–30 years ago, such a difficulty was not named by students. Apparently, this is explained, firstly, by the increased information gap between secondary and higher education. At school, as a rule, information is given in small portions, and at a university, in a two-hour lesson, first-year students in the same discipline receive a much larger amount of information. Secondly, all the arguments about overloading secondary school programs lead to emasculation of the content of education, to its simplification. At the same time, students receive a lot of unnecessary factual material.
- Great difficulties for first-year students are connected with planning their working time. 25.12% of respondents see the difficulties of studying in the first year in the fact that they cannot properly distribute their working time. This difficulty ranks third in the ranked ranks. Apparently, in secondary school, students were not trained in the ability to distribute their working time, and in universities little attention is paid to helping first-year students in the rational distribution of study time. First-year students stress that they "always don't have enough time to study"; "I have a life in constant fear, I don’t have time for anything". In this case, the lack of adaptation of first-year students to the conditions of work at the university is most likely manifested.
- Many of them find it difficult to organize independent work. Thus, 20.73% of the students surveyed believe that organizing independent work causes

them difficulties. In the ranked series of answers to the question of the questionnaire, this difficulty occupies the fourth place. Compared with secondary school, the forms, functions and significance of independent work change radically for beginning students at a university. From the first days of studying at a university, a student is faced with the need to systematically comprehend new educational material, assimilate it at the level of patterns, generalizations and conclusions, which requires a high level of development of theoretical thinking. This essence of the transition from secondary school to higher education can be schematically described as follows: from the assimilation of the amount of knowledge necessary for general education to an independent systematic system formation of knowledge that is closely related to the begun and future professional activity. These tasks often take novice students by surprise, which is expressed in the answers: "I don't have the skill of independent work", "I don't know how to work independently", etc.

- 20.32% of respondents consider the gap between theory and practice to be one of the difficulties in learning. This difficulty in the ranked series of answers is in fifth place. This gap is especially evident when first-year students study the natural and mathematical sciences, when lectures are significantly ahead of practical classes. First-year students note that the university did not explain to them "how to work on lecture materials, how to prepare for practical exercises". The main thing, in their opinion, is to memorize the main content of the lecture, to memorize the laws, formulas, theorems, and conclusions contained in it. And only about 16% of first-year students believe that the content of the lecture should be thoroughly worked out, highlighting the main thing, trying to connect new material with previously known.
- First-year students find it difficult to take notes of lectures and primary sources. Thus, 12.18% of the first-year students surveyed note this difficulty. She is in the sixth place in the ranked rows of answers. From conversations with first-year students, it turns out that they do not receive clear didactic and methodological instructions for conscious and thoughtful note taking. Particularly lacking are such skills as highlighting the main thing, drawing up theses, a plan, and a scheme of what has been studied.
- A small percentage of 6.85% of the first-year students surveyed indicated the difficulty associated with the complexity, inaccessibility of the presentation of educational material by individual teachers. In the ranked series of answers, "the complexity of the presentation of educational material" is in seventh place. Apparently, this is one of the manifestations of a violation of continuity in the activities of university and school teachers.

Often in a university, the presentation of educational material is carried out without due regard to the level of preparedness of first-year students in mathematics, physics and other academic disciplines. Only for 3.06% of the students surveyed there were no difficulties in learning in the first year. These students emphasized that "at school, mathematics was studied at a high level of generalization", "preparatory courses helped, which brought knowledge into the system at a higher theoretical level". A small percentage of respondents 2.10% found it difficult to answer the question of the questionnaire.

As a result, we can conclude that the general level of applicants' readiness for successful university education is insufficient. The nomenclature of the difficulties identified in the study makes it possible to combine them into a complex due to the following psychological and pedagogical reasons: firstly, the insufficient level of development of the "teacher-student" community in the university compared to the degree of interaction in the "teacher-student" system in secondary school; secondly, the insufficient level of formation of the intellectual skills of first-year students, which form the basis of mental work, thirdly, the low level of development of the components of self-consciousness (independence, self-control, self-regulation, self-organization). However, speaking about the difficulties of teaching first-year students, one must keep in mind that the point is not only to make it easier for students to transition from school to university conditions. It is necessary that the difficulties of the transition to the greatest extent serve the personal and professional development of novice students, in which the successful solution of difficult problems would bring them the greatest satisfaction, contribute to successful professional training. Therefore, students need to be specially trained in ways to overcome difficulties. Such learning can occur involuntarily (spontaneously) and voluntarily (with the help of special exercises). "Spontaneous" learning is ensured by the functioning of the internalization mechanism, through which the initial external interaction in the "teacher-student" system passes "inside" the student and thereby determines his individual psychological originality.

Internalization is closely connected with exteriorization as a mechanism of development. This refers to transitions from the internal to the external, from thought to action, i.e., where emotional (and moral) assessment and volitional effort are needed.

The mechanisms of interiorization and exteriorization play an important role in the development of the affective-emotional, personal sphere of the student, where there are transitions from assistance to sympathy, to empathy, to the generation of life meanings, and from them to independent free and responsible actions.

In "voluntary" learning, when the student must master the ways of overcoming difficulties, it seems to us appropriate to refer to the concept of the *zone of proxi-*

mal development - the central idea of the general concept of L.S. Vygotsky on the relationship between learning and development. He believed that when moving from the "lower threshold of learning" to the "higher one", "the difficulty of solving increases and, finally, becomes insurmountable even for solving in cooperation" [1]. Thus, the "zone of proximal development" can be represented as an ordered set of tasks of progressively increasing complexity. This implies an increase in the amount of assistance that is currently needed for each successive task.

Phenomenologically, the difficulty is determined by the presence or absence of means of activity and the state of the subject. According to the way they are formed (cause of occurrence), difficulties can be divided into two types: psychological difficulties caused by external causes, and difficulties caused by internal causes. The former arise as a result of the objective complexity of the task (situation) and are characterized by the lack of means of solution, while the latter are determined by the individual characteristics of the individual and her mental states (anxiety, excitement, fear, etc.). Therefore, the teacher should provide students with both intellectual and emotional (psychological) help and support.

Like L.S. Vygotsky, S.L. Rubinshtein pointed out the insufficiency of dividing schoolchildren into those who can and those who cannot independently, without someone else's help, solve the problem [9], and the need, in view of this, to further divide the latter into two groups: those whom the assistance provided promotes to the solution, and those who are not affected by it. S.L. Rubinstein had in mind intellectual support by analogy with the method he developed of "probing thinking with the help of dosed prompts." In our opinion, this differentiation of schoolchildren could be continued by taking different types of assistance as a basis for separation: intellectual and emotional. The volume of both increases with the increase in the gradient of task complexity, but in a differentiated way, depending on the individual characteristics and capabilities of the student.

In this context, the influence of the positive emotional impact (support) of the teacher on the development of the student's ability to overcome difficulties, on the activation of his own efforts and, thus, on the development of not only the student's intellectual sphere, but also the personality as a whole, becomes obvious.

In this context, the influence of the positive emotional impact (support) of the teacher on the development of the student's ability to overcome difficulties, on the activation of his own efforts and, thus, on the development of not only the student's intellectual sphere, but also the personality as a whole, becomes obvious.

References

1. *Vygotsky L. S. Psychology of human development. — M.: Publishing house Meaning; Eksmo, 2005.*

2. *Gvilia N.A., Gorba L.K., Kol O.D., Myasnikova L.A., Parfenov A.V., Shulzhenko T.G. Continuity and continuity of training is always in trend // Bulletin of SPbSUE. 2020. №2 (122). P. 37-40.*

3. *Godnik S. M. Theoretical Foundations of the Continuity of Secondary and Higher Schools in the Conditions of Lifelong Education: abstr. diss. ... dr. ped. sci. / S. M. Godnik. – M., 1990. – 32 P.*

4. *Ermolaeva M.V., Lubovsky D.V. Evaluation of meta-subject and personal educational results during the transition of students to a new level of general education // Psychological Science and Education. 2019. Volume 24. № 1. P. 80–88. doi:10.17759/pse.2019240106*

5. *Krainik V.L., Continuity in teaching schoolchildren and students: what can and should be done at school // Director of the school.-2005.-№2.-P.53-58*

6. *Kustov Yu.A., Continuity of vocational and higher education. - Sverdlovsk: Ural university, 1990.*

7. *Leontiev A. N. Selected psychological works: In 2 v. V. II. — M.: Pedagogy, 1983.*

8. *Mitin G.V., Continuity as a subject of psychological, pedagogical and sociological research // Intergenerational Relations: Modern Discourse and Strategic Choices in Psychological and Pedagogical Science and Practice / Ed. L.M. Mitina. – M.: Psychological Institute of the RAE, 2020. P. 227-230. DOI: 10.24411/9999-047A-2020-00064*

9. *Rubinshtein S.L. Man and the world. — M., 1997.*

10. *Smantser A.P., Berezovin N.A. Continuity of teaching mathematics in secondary and higher schools. - Minsk: Universitetskoe, 1985.*

DOI 10.34660/INF.2022.55.25.019

结构的亲和性 – 设计原则和有效复合材料的创建
AFFINITY OF STRUCTURES - DESIGN PRINCIPLE AND CREATION OF EFFECTIVE COMPOSITES

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我们这个时代最重要的问题之一是为特殊功能目的创造有效的复合材料。 为提高使用技术原料获得的建筑材料的质量，有必要更加重视化学添加剂和填料对水泥组合物水化和硬化过程的作用机制的研究，从分子水平到 宏观结构。 作者在建筑材料科学中提出了结构亲和定律，该定律基于主要基础和砂浆材料固有的基本特性和模式，以及为接触层提供可靠和耐用运行的保证特性的必要特性集 的结构。

关键词：接触层，材料结构，结构亲和律

Abstract. *One of the most important problems of our time is the creation of effective composites for special functional purposes. To improve the quality of building materials obtained using technogenic raw materials, it is necessary to pay more attention to the study of the mechanisms of action of chemical additives and fillers on the processes of hydration and hardening of cement compositions, from the molecular level to the macrostructure. The authors proposed the law of affinity of structures in building materials science, which is based on the basic properties and patterns inherent in the main base and mortar material and the necessary set of properties that provide guaranteed properties to the contact layer for reliable and durable operation of the structure.*

Keywords*: contact layer, material structure, structure affinity law.*

One of the most important tasks of the building materials industry of the XXI century is the development and provision of construction with efficient, low-ener-

gy and environmentally friendly materials manufactured using safe technologies using local raw materials, waste and industrial by-products. Currently, more than 30% of mortars in our country are made using chemical additives and fillers of various nature. Increasingly, by-products and man-made wastes from various industries are being used in the technology of building materials production. Despite the fact that there are quite a lot of theoretical and experimental studies regarding the use of waste in the production of building materials, however, in the production of mortars, the use of secondary raw materials is very limited. In addition, the energy reserve of the inherent and acquired properties of technogenic raw materials is not always fully used: dispersion, state of aggregation, the presence of chemically active phases (ability for chemical interaction, hydration, hardening) and surfactants. Usually the main selection criterion is the chemical composition, however, with this approach, there is an irretrievable loss of the unique properties of recycled materials. If there are amorphous (chemically active) phases in the composition of the waste, the best ways to use them should be considered options when positive effects are provided not only by the chemical composition, but also by the state of aggregation, as well as the physical properties of the waste [1–3].

To improve the quality of building materials obtained using technogenic raw materials and reduce environmental damage, it is necessary to have complete diagnostic information about the chemical and mineralogical composition, state of aggregation, technological conditions of formation, annual production volume and sanitary and hygienic characteristics of each technogenic production product. At the current level of development of building materials science, in the context of improving the methods of fine chemical and structural analysis, the study of the mechanisms of action of chemical additives and fillers on the processes of hydration and hardening of cement compositions, from the molecular level to the macrostructure, deserves more attention [4,5].

The problem of rational use of binders in cement and composite materials is extremely relevant. In this regard, the task of building materials science is the development of composite binders with the maximum use of geopolymer materials technologies. Composite binders are being developed using gypsum binder, cement and active mineral additives based on local raw materials. Building materials made using composite binders have increased water resistance, strength and durability [6–8].

An increase in the activity and level of rational use of binders can be achieved in various ways: an increase in the fineness of grinding, chemical and mechano-hydrochemical activation, optimization of compositions and hardening modes, etc. The most effective way is the joint grinding of binder and filler. Joint grinding of cement and active mineral additives allows to reduce the consumption of binder in the composite mixture up to 30...40%. As active mineral additives in compos-

ite binders, not only carbonate materials can be used, but also silica-containing additives, which are widespread in central Russia. The combined use of finely dispersed carbonate sludge and similar additives in the production of composite binders makes it possible to rationally use the crystal-chemical activity of the carbonate filler and the pozzolanic activity of mineral additives. In this case, it is possible to achieve significant synergistic effects [9,10].

An important aspect in such studies is the study of the mechanisms of chemical and crystal chemical activation of the processes of hydration and hardening, the patterns of formation of the porous structure of composites, rheological and physicomechanical properties, which will make it possible to control the processes of structure formation and obtain materials with a high degree of reliability and durability. In the technology for obtaining effective composites, it is necessary to fulfill the conditions that ensure the proper structure of the material and, accordingly, its physical, mechanical and operational characteristics. First of all, they include:

– the use of high-strength cements and aggregates, the use of composite binders is especially effective;

– extremely low water-cement ratio, providing a high initial density of the structure;

– correct selection of the ratio of various components of the solid phase, which allows obtaining a particularly dense structure of the material;

– the use of superplasticizers and complex additives that increase the density of the solution and control its structure formation;

– the use of super-fine mineral fillers, such as microsilica, to increase the density and fine grain structure of the cement stone.

Disposal of industrial wastes, which, accumulating in dumps, alienate vast land areas and increase the technogenic burden on the environment, is an urgent task of modern materials science. The building materials industry is today the only industry that is able to widely and efficiently use industrial waste, while solving the problems of resource saving in the building complex and environmental protection [11-13].

Given the huge volumes of construction of buildings and structures made of concrete and reinforced concrete, the problem of their operation is becoming one of the most important problems that require urgent solutions, the development of new repair materials and effective technological approaches. Only a competent choice of means and methods for carrying out these works can provide a long-term positive effect during the subsequent operation of the structure.

To date, the use of dry mortars has significantly changed the specifics of repair construction work, has shown their high efficiency and advantages over traditional mortars.

The fundamental basis for the design of materials for various purposes is the

physicochemical approach to understanding the totality of the structural and associative properties of microscopic formations: compounds, molecules, atoms, but even knowledge of the microstructure is not enough to predict the final microscopic properties of the system being created. To assess the characteristics of the material, the whole complex of interactions, both its individual components and structural organizations, is taken into account.

When performing repair work, it is necessary to create a durable, reliable intermediate layer of mortar that holds together various materials, providing a protective coating and durability of the structure as a whole. Special problems arise when creating solutions at the joints of several different materials, especially if the design works in extreme conditions.

To create a reliable and durable contact layer between the repaired base and applied mortar, we approached from the standpoint of the law of affinity of structures proposed by us in building materials science, which is based on the basic properties and patterns inherent in the main base and mortar material and the necessary set of properties, providing guaranteed properties to the contact layer for reliable and durable operation of the structure [14].

First of all, to create a reliable and durable contact layer between the main and auxiliary materials, for example, between any wall material and a repair mortar, it is necessary to take into account the chemical affinity of the materials used, their compatibility, their prerequisites for creating a reliable contact, the absence of antagonistic reasons between them. These conditions are especially relevant for creating contact layers during repair work. The fulfillment of all these conditions will ensure a guaranteed long service life of this contact layer and the reliability and safety of the structure as a whole. It should be taken into account that we quite often have complex structures that can consist of many chemical elements, but nevertheless, it is necessary to take into account their compatibility, incompatibility, and, possibly, synergy.

A significant influence on the creation of the contact layer, according to the authors, is exerted by the genetic features of the main and auxiliary material, as well as the raw components of the contact layer; in this regard, it is necessary to take into account and select raw materials taking into account their genesis, as a result of which, the reactivity of the constituent elements in the system can be adjusted taking into account the tasks set.

When creating a contact layer, the structure of the main (base) and finishing materials is of great importance, which in turn have their own characteristics of macro-, micro- and nanostructures. The task of creating a contact layer is to form such a structure that it grows into these structures and creates a single monolithic layer and the formed structure provides stable mutual connections with a certain order of their adhesion to each other. The concept of structure includes the size and

arrangement of pores, capillaries, interfaces, microcracks. Just these elements of the structure play the most important role in creating a strong stable structure of the contact layer [14].

Particular attention deserves the affinity in the phase compositions of the main, auxiliary material and the contact zone and the phase transitions of the water in their pores, which has the most significant effect on all the properties and behavior of the material during operation.

The affinity of the main (base) and finishing layers and their contact zone must satisfy a number of physical properties, including indicators of average density, porosity, hydrophysical and thermophysical properties. The creation of a rational contact zone, taking into account the named properties, will ensure high and reliable performance properties of the composite.

Creation of a reliable contact zone between the base and finishing materials provides a high affinity in terms of mechanical properties. If these conditions are met, the required goals can be achieved, however, it should be borne in mind that when creating contact zones, recommendations for conducting construction work should be taken into account.

For example, to create reliable contact layers between the bases of two fundamentally different materials, represented by ceramic and silicate bricks and repair mortar layers based on cement binder applied to them, it is necessary to know the genesis and chemical composition of the materials of these bases.

To ensure a reliable contact zone of the considered joints in terms of physical and mechanical properties, it is necessary to analyze in detail for each factor and make optimal decisions, taking into account the conditions and features of their functioning. Particular attention should be paid to the features of the affinity in terms of the phase composition of the contacts and the phase transitions of water in these zones, since this factor largely determines the operating conditions of the entire design solution.

The elements in the system are not isolated from each other, but are grouped in such a way as to ensure the expediency of the entire system, any changes in a single element or the replacement of one element with another usually leads to a change in the properties of the entire system. The elements of the system are interconnected and the more versatile the connections, the more effective the system being created.

The production of high-performance building materials of a new generation today is accompanied by the use of complex, from a chemical and mineral point of view, compositions of components in order to obtain high-quality building materials for various functional purposes with improved, and sometimes with fundamentally new properties and a certain predetermined structure. The creation of such binders is based on the principle of purposeful control of technology at all its

stages: the use of active components, the development of optimal compositions, the use of chemical modifiers, the use of mechanochemical activation of components, and some other methods.

The implementation of the laws of affinity of structures involves the creation of a hardening composite system, in which the foundations for responding to changing conditions of synthesis and operation are laid; neoplasms are purposefully synthesized and a nano-, micro- and macrostructure is created that has the ability to self-heal defects that occur in a certain range of operational loads. Theoretical and practical approaches should be a prerequisite for the creation of a new class of "intelligent" building materials with effective properties. So, when creating and using any building material, there are certain requirements, the violation of which leads to a decrease in strength, failure to meet operational requirements, and sometimes to the destruction of the structure, and violation of the laws of structure affinity leads to the above consequences.

The basic theoretical principles of the proposed law of structure affinity served as a scientific basis for the creation of composite binders and repair mortars based on dry building mixtures with high physical and mechanical properties, with improved performance properties and a predetermined structure.

References

1. Karapuzov E.K., Lutz G., Gerold H. et al. Dry building mixes. - K.: Technique, 2000. - 226 P.

2. Dry mixes in modern construction. / Ed. doctor of technical sciences professor V.I. Belana. - Novosibirsk: NSUACE, 1998 - 95 P.

3. Sultanbekov T. K., Shayakhmetov G. Z., Soltanbekov K. T., Estemesov Z. A. Modern dry building mixes. - Alma-Ata: TseLSIM, 2001. - 325 P.

4. Uretskaya E.A., Batyanovsky E.I. Dry building mixes: materials and technologies. - Minsk: NPOOO "Strinko", 2001. - 208 P.

5. Kozlov V.V. Dry building mixes. - M.: DIA Publishing House, 2000. – 96 P.

6. Runova R.F., Nosovsky Yu.L. Features of the use of mineral binders in dry building mixtures. // Coll. of proceedings of the 2nd international scientific and technical conference "Modern technologies of dry mixes in construction". - P.-Petersburg, 2000.

7. Additives for the production of dry construction mixtures. / Prospectus of the firm "EuroChem-1"

8. Bolshakov E.L. Production of dry building mixtures in Russia: current state and prospects. // Coll. of proceedings of the 2nd international scientific and technical conference "Modern technologies of dry mixes in construction". - P.-Petersburg, 2000.

9. Tyurina T.E. The prospect of development and improvement of the regulatory framework for dry building mixtures. // Coll. of proceedings of the 2nd international scientific and technical conference "Modern technologies of dry mixes in construction". - P.-Petersburg, 2000.

10. Korneev V.I., Zozulya P.V. Dictionary "What" is "what" in dry building mixes.- SPb: NE "Union of Producers of Dry Building Mixes", 2004.- 312 P.

11. Panchenko A.I. Features of the production and use of dry mixes in Russia. // Coll. of pceedings of the 3rd international scientific and technical conference "Modern technologies of dry mixes in construction". - S.-Petersburg, 2001.

12. Bazhenov Yu.M. concrete technology. - M.: Higher school, 1987. - 415 P.

13. Bazhenov Yu.M. Methods for determining the composition of concrete of various types. - M.: Stroyizdat, 1975. - 267 P.

14. Bazhenov Yu.M. High-strength fine-grained concrete for reinforced cement structures. -M.: Stroyizdat, 1963. — 127 P.

DOI 10.34660/INF.2022.86.63.020

构建现有自动消防控制系统的问题及其发展前景
PROBLEMS OF BUILDING EXISTING AUTOMATED FIRE PROTECTION CONTROL SYSTEMS, PROMISING WAYS OF THEIR DEVELOPMENT

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本文概述了现有消防系统的问题，先进的消防系统的构建和算法化，基于各种保护设施的家用吸气式火灾探测器，以及现有设施保护设施的分阶段现代化的可能性。 总的来说，本文致力于使用远程信息传输方式（由吸气式火灾探测器和视频监控团队产生的信号）作为超早期检测故障和火灾迹象以做出运营管理决策的工具的可能性 在管理维护和监控小组以及消防救援单位的行动时。

关键词：早期火灾探测，火灾探测器，视频监控，火灾报警系统，向消防部门传递信号。

Abstract. *The article provides an overview of the problems of existing fire protection systems, the construction and algorithmization of advanced fire protection systems, based on domestic aspiration fire detectors at various protection facilities, with the possibility of a phased modernization of existing facilities protection facilities. In general, the article is devoted to the possibilities of using remote means of information transmission (signals generated by teams of aspiration fire detectors and video monitoring) as a tool for ultra-early detection of malfunctions and signs of a fire to make operational management decisions*

when managing the actions of a maintenance and monitoring group, as well as fire rescue units.

***Keywords**: Early fire detection, fire detectors, video monitoring, fire alarm system, relaying signals to fire departments.*

Automatic Fire Alarm System (AFAS) is an integral part of the fire protection system, which converts non-electrical information parameters associated with a fire into electrical signals. The system is quite complex and saturated with a large number of communication lines, peripheral devices, which means that it is expensive and difficult to operate. Further development of automatic fire alarm systems should ensure not only the autonomy of its operation, but also the possibility of choosing an algorithm for connecting (turning on) other elements of Automatic Fire Protection Systems (AFPS), as well as joint work with control and life support systems of the protected object and the possibility of timely signal transmission alarm in the units of the Ministry of Emergency Situations [1-5], but despite all the automation, the AFPS system is extremely vulnerable to the human factor:

- design solutions, they are not always successful and during operation the need to modernize the system is revealed (budgetary (social) sphere, which is covered by 44-FL and 223-FL (who will give the lowest price));
- the competence of the owner's representative (who, in accordance with their official duties, coordinate activities for maintenance and compliance with industrial safety standards and do not have experience in design and survey work);
- qualification of operators (in the evening and at night they are replaced by security officers) and other factors.

Currently, the problem of limited resources, import substitution, modernization (many fire alarm systems and other elements of AFPS, which are more than 10 years old), timely high-quality maintenance, quick troubleshooting and monitoring of fire protection systems is very relevant. In fulfillment of the requirements and as measures to improve fire safety in accordance with Paragraph 7 of Article 83 of the Federal Law of July 22, 2008 N 123-FL (as amended on December 27, 2018) "Technical Regulations on Fire Safety Requirements" (fire alarm systems must provide light and sound signals about the occurrence of a fire to the control panel in the premises of the staff on duty or to special remote warning devices, with duplication of these signals to the control panel of the fire department without the participation of employees of the facility and (or) the organization broadcasting this signal), currently implemented software and Hardware Complex (HC) PAK "Strelets-Monitoring". The main task is to transmit “Alarm” signals to the EMERCOM console, retransmit signals from other stations via a two-way radio channel at frequencies allocated specifically for the EMERCOM, and the complex also allows the construction of an AFPS monitoring system in accordance with

GOST 56935-2016, but there are a number of serious problems:

- if one of the stations of the facility equipment fails, then the relaying of notifications may occur incorrectly (as a result of which entire arrays “fall off”);

- the software is made on closed codes, (even the ability to work on virtual stands, a very limited time, only 2 hours during training) has its own architecture (extremely unfriendly interface), training is possible only by contract and very formal (limited recruitment into groups according to dates and dates, a lecture on such a complex system 1 hour 20 minutes, especially testing, where there is no explanation for right or wrong answers, many questions are frankly advertising and contradictory), but for money, in case of malfunctions, specialists come (there is an impression of an imposed service);

- the equipment of centralized control consoles in the subdivisions of the Ministry of Emergency Situations was put on the balance sheet by order of the Ministry of Emergency Situations of Russia dated 28.12.2009. No. 743, then canceled by order of 01/29/2016, then again put by order of the Russian Emergencies Ministry of 09/05/2018, all this led to a number of serious problems: there is no training for fire department dispatchers (the system is really complex), there are no contracts for equipment maintenance (funding is not provided for these purposes), there are no programmers who correct errors that occur at the software level (checking the functioning of object stations and centralized control panel devices observations, diagnostics of possible malfunctions, generation of reports according to the malfunction log in the software module, re-formation of the signal transmission route, signal transmission period, adjustment of the introduction of objects, updating the system, which must be carried out "manually");

- contracts for training employees (in fact, dispatchers only record the appearance of a signal, and then give a message to the fire department by telephone), i.e. monitoring functions (malfunction, false alarm or true alarm in fact is not determined by the dispatcher);

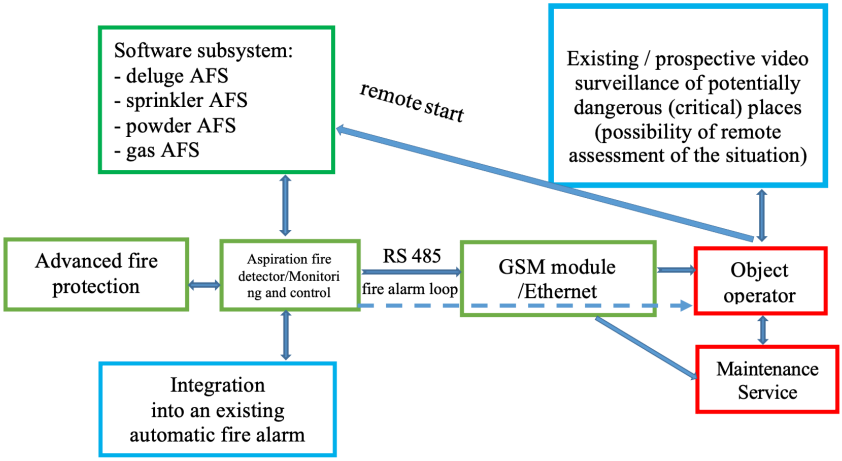
- the possibility of implementing monitoring control by the Department of Supervisory Activities and Preventive Work (fire safety inspector) of EMERCOM for the above problems is almost impossible (in fact, this is a report from dispatchers to the head of the garrison, who then sends it to the Department of Supervisory Activities and Preventive Work (fire safety inspector).

As a solution to the above problems and within the framework of the state program of import substitution carried out by the Government of the Russian Federation to build the APS subsystem of a promising AFPS, fire protection control systems built on more promising elements (adjustable sensitivity threshold, multi-creterial detection of fire factors, signal transmission not only by remote means, but also through existing wire lines, integration as a starting module into the system of automatic fire extinguishing installations) - Aspiration Fire Detec-

tors (AFD), manufactured by CJSC "PO SPETSAVTOMATIKA" (Biysk).

AFD has a wide range of applications: buildings, structures, hangars, warehouses, garages, cable tunnels, shopping areas, workplaces with permanent residence of people. The ability to set a threshold (class) of sensitivity by detectivity, as well as multi-criterial detection of fire factors at an early stage [3], the ability to connect devices to existing systems of BOLID Orion, Rubezh LLC, etc., will allow these devices to be widely used. The ability to control (remotely) and transmit information via a GSM module or Ethernet technology will significantly reduce the response time and material costs for the servicing organization for troubleshooting, as well as operational monitoring of the fire protection system. The work of the GSM module is proposed to be implemented on the basis of existing software (software): M2M24 Cloud TCP connection server - cloud software for connecting via GPRS (TCP / IP) nodes of dispatch systems operating in the "Client" mode: dispatch programs and TELEOFIS equipment (modems, terminals, routers, etc.), connected to metering devices. The server allows you to administer multiple devices and supports multiple communication channels [5].

In order to solve problems, the following algorithm for the functioning of a promising system of fire protection of an object is proposed (Picture 1).



Picture 1. The sequence of operation of the fire protection system

To detect a fire, the detector transports the gas-air mixture from the sampling points through the pipeline to the measuring chamber, where the electronic module measures, analyzes and calculates the fire probability based on the current and previous values of the following factors:

- carbon monoxide concentration and rate of rise;
- smoke and rate of increase;
- temperature of the gas-air mixture and the rate of its increase;
- air flow rate and level of contamination of the detector.

When processing a combination of factors and obtaining a probabilistic assessment of a fire, the detector fixes the level of danger with an indication of the state and transmission of notifications to external circuits [1]. During operation, the detector constantly monitors the state of the aspiration system. When the flow of the gas-air mixture deviates from the norm, a "Maintenance Required" notice is generated, the "Fault" indicator turns on, a signal is transmitted to external circuits via the RS-485 interface or via a Fire Alarm Loop to the AFAS control indication units and related information is displayed on the indicator. The inscriptions: "Flow above normal", "Flow below normal" on the main screen indicates a flow deviation caused by a violation of the integrity of the pipeline,

dusting of holes, breakdown of the aspirator motor.

In case of malfunction of the AFD, a notification "Fault" will be generated with status indication and notification transmission to external circuits [4]. The monitoring and control unit, by means of the AFD, in the fire alarm mode for the fire alarm loops, generates fire alarms and launches the Automatic Firing System when the detectors are triggered in a two-stage method with a simultaneous check of the serviceability of the fire alarm system. If the Fire Alarm Loop re-request function is disabled, then when one detector is triggered, the transition to the "Attention" mode is performed, and when the second detector is triggered, it switches to the "Fire 1" mode. If the Fire Alarm Loop re-request function is enabled, then when two (or more) detectors are triggered, the system switches to the "Fire" (or "Fire 2") mode. In the event of a break or short circuit of the Fire Alarm Loop, the unit switches to the "Fault" mode, which means that this function allows you to monitor the integrity of the Fire Alarm Loop without additional devices [2].

The ability to integrate existing video surveillance of critical or potentially dangerous places into the fire protection system, without directly introducing video surveillance cameras into the fire protection system, will avoid an excessive increase in the flow of information, reduce the number of personnel on duty and significantly increase the objectivity of monitoring large spaces or dangerous places, as well as correct assessment of the situation. Remote transmission of information to the maintenance service allows:

- if necessary (the specifics of production or the small size of the object), to carry out remote control of the facility's fire protection systems;
- reduce the time to eliminate a malfunction or malfunction of the fire protection systems;
- organize the operational interaction of the service with the operator or repre-

sentative of the facility, and, if necessary, with the fire service dispatcher.

The considered algorithm for building a fire protection system makes it possible to optimally build not only a modern fire monitoring system based on domestic aspirating Fire Alarm Loop detectors, but also to gradually upgrade existing fire monitoring systems in accordance with emerging socio-economic needs and opportunities. The use of modern and reasonably reliable GSM and Ethernet technologies for data transmission will significantly increase the speed of making operational management decisions at an early stage of fire development or in the event of a malfunction (emergency). Remote analytics is a new vector for the development of a direction to improve the level of fire safety not only for supervisory authorities, but also for further fundamental research.

References

1. Federal Law "Technical Regulations on Fire Safety Requirements" dated July 22, 2008 N 123-FZ (last edition) Art.83.

2. SP 484.1311500.2020. Fire protection systems. Fire alarm systems and automation of fire protection systems. Design norms and rules. Approved Order of the EMERCOM of Russia No. 582 of July 31, 2020

3. SP 486.1311500.2020. Fire protection systems. List of buildings, structures, premises and equipment to be protected by automatic fire extinguishing installations and fire alarm systems. Design norms and rules. Approved Order of the Ministry of Emergency Situations of Russia No. 539 dated July 20, 2020

4. Fedorov A.V., Chlenov A.N., Lukyanchenko A.A., Butsynskaya T.A., Demyokhin F.V. Systems and technical means of early fire detection: monograph. M.: Academy of GPS EMERCOM of Russia, 2009. 159 p.

5. Aspiration detector FAL v4 (Operating manual). CJSC "PO SPETSAVTOMATIKA", 2021. P. 5-7.

6. Instructions for connecting the aspiration FAL v4 detector to the TELEOFIS RX 108-R2 GSM modem. 2020. p. 2-3.

7. Operating manual for the site station PAK "Strelets-Monitoring", ed. 3.1, 2016, p. 5-8.

NOTES

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国际科学大会的材料

2022年1月26日，中国北京

编辑A.A.Siliverstova
校正A.I.尼古拉耶夫

2022年1月26日，中国北京
USL。沸点：98.7。 订单253.流通500份。

在编辑和出版中心印制
无限出版社