

UDC 657.4:336

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SOCIAL INNOVATIONS IN THE EDUCATIONAL SPACE

AS A DRIVER OF ECONOMIC DEVELOPMENT OF MODERN SOCIETY

Abstract. The main provisions of the conceptualization of the introduction of social innovations in education and science, which constitute the internal content and is one of the main essential forms of economic development of modern society, are substantiated.

It has been studied that the leading countries in terms of the number of the most innovative companies in the world are industrialized countries, high-income countries, as the United Kingdom (not a member of the EU since 2020), Ireland, Cyprus. However, Bulgaria, Italy, Malta, Germany, Portugal, Slovakia, Hungary, Croatia and the Czech Republic remain the least educated countries in recent years.

There is a need for in-depth reforms of the education system and focusing on additional research missions. and business activities.

It has been proven that one of the most important and widespread elements of the architecture of innovation infrastructure in the world, which is a supply component, is higher education institutions (HEIs), and the largest number of leading universities is in the United States and the United States. Kingdom. The role of social initiatives in increasing the competitiveness of Ukrainian higher education institutions is highlighted. budget funds in the future. The normative basis for such implementation may be the EU Public Procurement Directive.

Based on a study of foreign experience in innovation, it was found that to stimulate innovation of domestic enterprises is important to improve the legislation governing issues related to innovation; improvement of innovation structure: creation of innovation centers, consulting centers, innovation banks; development of development programs and active state support of innovatively active enterprises and financial stimulation of competitiveness of Ukrainian universities and increase of motivational incentives for teachers of educational institutions.

Keywords: social sphere, innovations, innovation project, rating of world innovations, investments, sustainable development, innovations in education.

JEL Classification M41, H20, H44, A1

Formulas: 0; fig.: 1; tabl.: 7; bibl.: 13.

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СОЦІАЛЬНІ ІННОВАЦІЇ В ОСВІТНЬОМУ ПРОСТОРИ

ЯК ДРАЙВЕР ЕКОНОМІЧНОГО РОЗВИТКУ СУЧАСНОГО СУСПІЛЬСТВА

Анотація. Обґрунтовано основні положення концептуалізації впровадження соціальних інновацій в освіту і науку, що становлять внутрішній зміст та є однією з основних суттєвих форм економічного розвитку сучасного суспільства. Досліджено, що країнами-лідерами за кількістю найбільш інноваційних компаній у світі є промислово розвинені країни, країни із високим рівнем доходів. Установлено, що найбільш освічені країни, де рівень освіти населення лежить у межах понад 40%, є такі країни, як Велика Британія (з 2020 року не є членом ЄС), Ірландія, Кіпр. Однак Болгарія, Італія, Мальта, Німеччина, Португалія, Словаччина, Угорщина, Хорватія і Чехія залишаються найменш освіченими країнами за останні роки. Обґрунтовано необхідність проведення глибоких реформ системи освіти та фокусування уваги на додаткових місіях університетів з орієнтацією на дослідну і підприємницьку діяльність. Доведено, що одним із найбільш важливих і розповсюджених елементів архітектури інноваційної інфраструктури у світі, що належать до забезпечувальної складової, є заклади вищої освіти (ЗВО), а найбільша кількість університетів-лідерів — у Сполучених Штатах Америки та Об'єднаному Королівстві. Висвітлено роль соціальних ініціатив у зростанні конкурентоспроможності українських закладів вищої освіти.

Спрогнозовано, що впровадження в Україні європейської практики державної закупівлі внутрішніх інновацій із подальшим упровадженням їх у муніципальних, державних і комунальних установах сприятиме їхньому розвитку та забезпечить збільшення продуктивності та економію бюджетних коштів у майбутньому. Нормативною основою такого впровадження може стати Директива ЄС про державні закупівлі.

На основі дослідження зарубіжного досвіду інноваційної діяльності з'ясовано, що для стимулювання інноваційної діяльності вітчизняних підприємств досить важливим є удосконалення законодавства, що регулює питання, пов'язані з інноваційною діяльністю; удосконалення інноваційної структури: створення інноваційних центрів, консультаційних центрів, інноваційних банків; розроблення програм розвитку та активна державна підтримка інноваційно активних підприємств і фінансове стимулювання конкурентоспроможності українських університетів та збільшення мотиваційних заохочень для викладачів закладів освіти.

Ключові слова: соціальна сфера, інновації, інноваційний проєкт, рейтинг світових інновацій, інвестиції, сталий розвиток, інновації в освіті.

Формул: 0; рис.: 1; табл.: 7; бібл.: 13.

Introduction. In modern conditions, there is practically not a single sphere in society that is not covered by innovation processes to some extent. The social sphere is one of those areas where innovation is simply necessary. After all, innovation is movement forward, finding new more effective, rational ways to solving problems, without new technologies we will stand still, while life goes on, the problems to solve are increasing in complexity and require new approaches.

The vast majority of the goals set by people and social communities cannot be achieved without social organizations and innovations in their activities, which determines their ubiquity and diversity. The most significant ones are:

- organizations for the production of goods and services (industrial, agricultural, service enterprises and firms, financial institutions, banks);
- organizations in the field of education (pre-school, school, higher educational institutions, institutions of additional education);
- organizations in the field of medical services, health care, recreation, physical culture and sports (hospitals, sanatoriums, holiday camps, stadiums);
- research organizations;
- legislative and executive authorities.

They are also known as business organizations performing socially useful functions: cooperation, cooperation, subordination (subordination), management, social control (social audit).

Research analysis and problem statement. Necessity clarifying the essence of social innovations in higher education and society has become an imperative for modern science. This the problem is widely represented in scientific research in economics, didactics and sociology. Named aspects scientific research is reflected in the works of foreign scientists. They were the first to believe that social innovation could be a real challenge for higher education M. Anderson, D. Domanski, J. Howaldt [1].

The purpose of the article is to substantiate the main provisions of the conceptualization of the introduction of social innovations in education and science, which constitute the internal content and are one of the main substantial forms of economic development of modern society.

Research results. In general, each organization exists in a specific physical, technological, cultural, political and social environment must adapt to it and co-exist with it. There are no self-sufficient and closed organizations. All of them, in order to exist, function, achieve goals, must have numerous connections with the surrounding world, so the dynamic development of countries at the present stage is impossible without comprehensive and continuous production and use of innovations as catalysts for general economic development due to the fact that the innovation factor has become a strategic imperative for the development of the world economy (at the beginning of the twentieth century the contribution of science and technology to economic development was estimated at 33%, compared to 70—80% at the beginning of the XXI century).

At the same time, in recent decades, the improvement of production, technical and social systems is determined by changes more of intellectual rather than physical nature of economic development (in developed economies, the value of industrial assets of companies is directly related to the ability of the latter to generate new knowledge; the knowledge economy, which is based on intellectual capital, becomes the main source of wealth for both companies and countries) [1, p. 25].

European countries have significant gross domestic R & D spending, which in most countries has positive growth dynamics. In particular, in Germany, the share of gross domestic R & D spending in 2011 was 2.8% of GDP, in 2014 — 2.87%, and in 2018 — 3.13%. In Belgium, the value of this indicator was 2.24% — in 2011, in 2014 — increased to 2.46%, and in 2018 — to 2.76% (*Table 1*).

Table 1

Share of gross domestic R&D expenditures in GDP, %

Year Country	2011	2012	2013	2014	2015	2016	2017	2018
Belgium	2.15	2.24	2.28	2.46	2.49	2.49	2.65	2.76
Germany	2.8	2.87	2.82	2.87	2.92	2.94	3.07	3.13
France	2.19	2.23	2.23	2.26	2.27	2.25	2.2	2.2
England	1.69	1.63	1.63	1.7	1.67	1.69	1.65	1.7
Italy	1.21	1.27	1.26	1.29	1.34	1.29	1.37	1.39
Austria	2.68	2.81	2.81	2.99	3.05	3.09	3.05	3.18
Czech Republic	1.56	1.78	1.90	1.97	1.93	1.68	1.79	1.93
Estonia	2.31	2.12	1.72	1.45	1.49	1.28	1.28	1.4
Poland	0.75	0.88	0.87	0.94	1.0	0.97	1.03	1.21
Ukraine	0.65	0.67	0.7	0.6	0.55	0.48	0.58	0.61

Source: compiled by the author on the basis of data [8].

Given the limited, and sometimes lacking resource base, it becomes clear that most countries are actively implementing advanced technologies, trying to increase the share of innovative products, in particular those that contribute to resource conservation. In Ukraine, the share of gross domestic R & D expenditures was 0.65% of GDP — in 2011, in 2014 — decreased to 0.6, and in 2016 — to 0.48%.

The process of development of any social community, including an organization, goes through renewal and creates prerequisites for the formation of new non-traditional components in society, innovative ways of social activity, while the form of this social development is innovation. Based on this, the need to develop social innovations of the organization is based on the inability to solve emerging problems by traditional methods, changing only the structure of employees' needs within the organization's, the values of organizational culture. The unresolved nature of certain social problems gives an impetus to the development of new tools and norms in the social sphere of domestic companies. Thus, according to the results of the analysis of the rating «The world's most Innovative Companies», compiled by Forbes (*Table 2 and 3*) [3], the leading countries in terms of the number of the most innovative companies in the world are industrially developed, the ones with a high level of income. Among the developing countries in the ranking are Brazil, China, India, Indonesia, Russia, and Thailand. At the same time, the BRIC countries stand out especially. Thus, the largest number of innovative companies is concentrated in the USA, Japan, China, France, the United Kingdom, Switzerland, South Korea, India, and Denmark.

Table 2

The most innovative companies in the world (Forbes, 2017)

Country	Total companies	Industry																
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
Australia	1	1																
Belgium	1		1															
Brazil	1			1														
Canada	1			1														
Chile	1				1													
China	6			2	1	2	1											
Denmark	3	1				1		1										
France	4	1		1				1	1									
India	3						1		1	1								
Indonesia	1									1								
Ireland	2					1					1							

Table 2 (continued)

Country	Total companies	Industry																	
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	
Italy	1							1											
Japan	9	1		1	2			1		1		1	1						
Netherlands	1														1				
Russia	2						1										1		
Saudi Arabia	1		1																
South Korea	3			1						2									
Spain	1				1														
Switzerland	3		1								1			1					
Thailand	1																1		
United Kingdom	4	1								1	1		1						
United States	50	8	10	9	5	6				2	3		3	2				1	1
Total	100	13	13	16	10	10	3	4	2	8	6	1	5	4	1	2	1	1	

Source: compiled by the author on the basis of data [5].

Table 3

The most innovative companies in the world: Industry

№	Industry
1.	Medical equipment and Health Care Services (Health Care & Equipment Services)
2.	Food, beverages, tobacco (Food, Beverage & Tobacco)
3.	Software & services
4.	Retail trade (Retailing)
5.	Pharmaceuticals, Biotechnology, Life Sciences
6.	Materials
7.	Consumer durable goods, clothing (Consumer Durables & Apparel)
8.	Telecommunications Services (Telecommunications Services)
9.	Household & Personal Products
10.	Commercial & Professional services
11.	technologies, hardware & Equipment
12.	Consumer Services
13.	Industrial goods (Capital Goods)
14.	Semiconductors, semiconductor devices (Semiconductors & Semiconductor Equipment)
15.	Retail trade in food and Consumer Goods (Food & Staples Retail)
16.	Cars, parts (Automobiles & Components)
17.	Mass Media (Media)

At the same time, according to the results of the analysis [3; 6], the United States have a significant advantage over other countries in terms of the number of the most innovative companies.

Majority of the most innovative companies in the world work in the field of «software and services» (16% of all companies in the rating), «medical equipment and healthcare services» (13% of all companies in the rating), «Retail Trade» (10% of all companies in the rating), «Pharmaceuticals and biotechnologies» (10% of all companies in the rating), «household goods» (8% of all companies in the rating). The above 5 areas account for 57% of all companies in the rating [3].

The first 10 positions in the Forbes rating belong to such companies as: Salesforce.com, Tesla (United States), Amazon.com Shanghai RAAS Blood Products (China), Netflix, Incyte (United States), Hindustan Unilever (India), Asian Paints (India), Naver (South Korea), Regeneron Pharmaceuticals (United States) [3].

The most innovative world Industry (see Table 3).

What is the driving cause of the economic crisis caused by the COVID-19 pandemic? Forbes' 18th annual ranking of the world's 2,000 largest public companies illustrates the scale of global shutdowns and serves as a warning of new challenges in the coming months. The market value of most of the Global 2000 companies in 2020 has fallen significantly compared to previous years.

This was due to a major production shutdown. The past few months have been particularly difficult for airlines, whose demand has fallen lower than since September 11. American Airlines, for example, dropped from 372nd place to 967th, losing a staggering 2.2 billion in the first quarter. However, not all companies were affected by the pandemic. Major e-commerce players, including Amazon, Alibaba, and Walmart, have shown growth thanks to an increase in online purchases. The American company Service Now tops the list of the most innovative companies in the world.

According to the analysis of research results by INSEAD and WIPO [7], the highest level of innovation is characteristic of the industrialized countries of North America and Europe, the lowest – the countries of Africa. The list of leading countries in terms of innovation during 2010—2016 consistently included: USA, Sweden, United Kingdom, Singapore, Switzerland, Denmark, The Netherlands (*Table 4*).

Table 4

Leading countries in terms of innovative development parameters

№	Parameters of innovative development	Rating of countries	
		2011	2016
1.	Institutional conditions	1. Denmark 2. New Zealand 3. Canada 4. Hong Kong 5. Switzerland 6. Ireland 7. Australia 8. Iceland 9. Singapore 10. Finland	1. Singapore 2. Finland 3. New Zealand 4. Hong Kong 5. Norway 6. Canada 7. Denmark 8. Netherlands 9. Switzerland 10. Australia
		1. Singapore 2. Israel 3. Finland 4. Iceland 5. Sweden 6. Denmark 7. Republic of Korea 8. Austria 9. Australia 10. Ireland	1. Finland 2. Singapore 3. Republic of Korea 4. Denmark 5. Sweden 6. Switzerland 7. United Kingdom 8. Austria 9. Australia 10. Germany
2.	Human capital and research	1. Norway 2. Hong Kong 3. Canada 4. Australia 5. Sweden 6. Republic of Korea 7. Finland 8. New Zealand 9. United Kingdom 10. Bahrain	1. Singapore 2. Hong Kong 3. Norway 4. United Kingdom 5. Sweden 6. Australia 7. Japan 8. France 9. Republic of Korea 10. Spain
		1. Hong Kong 2. Singapore 3. United Kingdom 4. USA 5. Switzerland 6. Ireland 7. Denmark 8. South Africa 9. Canada 10. Malaysia	1. USA 2. Hong Kong 3. Canada 4. United Kingdom 5. Singapore 6. Denmark 7. Switzerland 8. Japan 9. Sweden 10. Australia

Switzerland, Sweden and the United Kingdom were the absolute leaders in terms of innovation among the countries of North America and Europe in 2011—2016. According to INSEAD and WIPO [7]:

- the most favorable institutional conditions for innovative development are created in Denmark, New Zealand, Canada, Hong Kong, Switzerland, Australia, Singapore, Finland, and the least – in Venezuela, Bolivia, and Africa;

- the most actively engaged in the development of human capital and its use in increasing the level of innovation are such countries as: Singapore, Finland, Sweden, Denmark, Korea, Australia, Austria; the least — Pakistan, Ethiopia and other African countries;

- Norway, Hong Kong, Australia, Sweden, Korea, Singapore demonstrate the greatest success in creating and ensuring the efficiency of infrastructure that promotes innovative development; Yemen and Africa are the least successful;

- the most favorable conditions for the development of the market for innovative products and services are created in Hong Kong, Singapore, the United Kingdom, the United States, Switzerland, Denmark, Canada, and the least — in Niger and other African countries;

- businesses are most actively involved in innovation in Singapore, Luxembourg, Switzerland, Finland, Sweden and the Netherlands, and the least — in African countries;

- Singapore, Luxembourg, the United Arab Emirates, Switzerland, Finland demonstrate the greatest success in creating innovative networks; the smallest — the countries of Africa.

In 2020, Ukraine ranked 45th in the Global innovation rating, improving its result of 2019 by two points, as stated in the Global Innovation Index report for 2020 (Fig.).

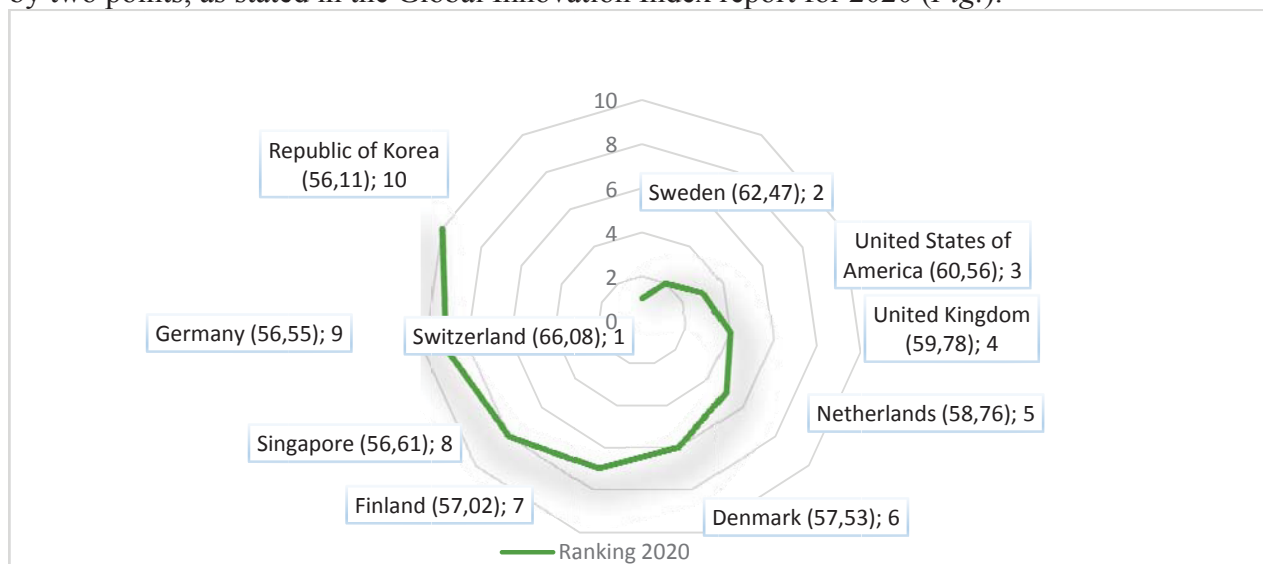


Fig. Top-10 leading countries according to the results of the «Global Innovation Index» for 2020

Source: author’s development based on the results of the Global Innovation Index report of 2020 [4]. The rating is based on the «Global Innovation Index», which takes into account such parameters as research, human capital, institutions, infrastructure, business development, knowledge and technology, and creativity. In the overall table of 131 countries, Ukraine ranked 45th in 2020 (between Thailand and Romania, Russia ranked 47th).

At the same time, according to a number of individual index indicators, Ukraine possesses higher ranks. This includes, in particular, the formation of knowledge (39) and the development of Higher Education (32).

At the same time, Ukraine has a lot to strive for in terms of regulatory environment (76), information and communication technologies (82), state institutions (93), infrastructure (94), creative goods and services (95), as well as environmental sustainability (99).

Switzerland ranks first in the 2020 ranking (see *Fig.*). It is followed by Sweden, the United States, the United Kingdom and the Netherlands. In 2020, Europe continues to lead. Sixteen innovation leaders in the top 25 are European countries, seven of them are in the top 10. Thus, the Czech Republic again got into the top 25 (24th, 26th in 2019), Italy (28th place, growth by 2), Portugal (31st place, growth by 1), Bulgaria (37th, growth by 3), Poland (38th, growth by 1), Croatia (41st, growth by 3), Ukraine (45th, growth by 2) and Romania (46th, growth by 4). Six innovative economies were below the top 50: Serbia (53rd Place), North Macedonia (57th place), Belarus (64th place) and Bosnia and Herzegovina (74th place).

In addition, Ukraine entered the top 3 out of 29 innovative economies of countries from the group with lower middle income (up to 6 6,000), located between Vietnam and India.

In 2020, Uzbekistan ranked 93rd, improving its indicator by 66% compared to 2019 and becoming the only economy in Central Asia that entered the GII (Global Innovation Index) in 2020. The highest ratings of Uzbekistan are included in the sub-index of innovation introduction (81), human capital and research (77), infrastructure (72) and market development (27).

According to the results of 2020, the top three most innovative economies in the Northern Region of Africa and Western Asia remain unchanged. Israel, ranking 13th in the world (down 3 compared to 2019), continues to be the largest innovative economy in the region, Cyprus (29th place, rating down 1) and the United Arab Emirates (34th place, rating up 2 compared to 2019). These three economies are the only ones in the region that are among the top 50 overall indicators of the GII. According to 2020 data, seven countries in the region are improving their GII rankings: the United Arab Emirates (34th place), Armenia (61st place), Tunisia (65th place), Saudi Arabia (66th place), Jordan (81st place), Azerbaijan (82nd) and Lebanon (87th). Among the economies of North Africa only Tunisia ranks 65th,

In addition, Kuwait (78th) and Georgia (63rd) have a slight increase in the rating.

Engineering firms and consulting firms are another important structural element of the supporting component of innovation infrastructure. These elements of innovation infrastructure have been most developed and are most effective in the United States and the United Kingdom.

The most famous engineering firms in the world are American Fluor, Jensen Hughes, Affiliated Engineers, IMEG/KJWW/TTG, Syska Hennessy Group, Henderson Engineers, Simpson Gumpertz & Heger, Vanderweil Engineers, Walter P Moore, AKF Group, Smith Seckman Reid, TLC Engineering for Architecture, environmental systems design, etc. The most well-known consulting firms are McKinsey & Company, Bain & Company, The Boston Consulting Group, Inc., Deloitte Consulting LLP, PricewaterhouseCoopers Advisory Services LLC (PwC Advisory Services), Oliver Wyman, The Brattle Group, Cornerstone Research, A. T. Kearney et al.

In economically developed countries, the strategic factor of economic development are precisely the intellectual factors of economic growth in the form of Innovation capital, an intellectual product. It is generally accepted that capital investment in an employee is just as profitable as investment in any other factor of production. In the context of economic globalization, the basis of competitiveness and the factor of accelerated intensive growth is the use and generation of new knowledge. In the «Science — Education — production» chain, education is of particular importance, which is both a source of replenishment of science with personnel and a factor in providing the population with modern knowledge.

Table 5 shows that sources of financing for research expenditures were used from such sources as funds from the business sector, the public sector, the higher education sector, and the private non-profit sector. In 2016, the share of this source of financing accounted for 73.3% of all sources of financing for research expenses of enterprises in Bulgaria, 53.7% in Spain, and 74.1% in Hungary. There is almost no funding from the private non-profit sector.

Regarding the level of education in the EU countries, based on the analysis of the data in *Table 6*, it was found out that the most educated countries are those with the level of population's education above 40%. To them refer the United Kingdom (since 2020 it is not a member of the EU), Ireland, Cyprus. However, Bulgaria, Italy, Malta, Germany, Portugal, Slovakia, Hungary, Croatia and the Czech Republic remain the least educated countries in recent years.

Table 5

Sources of financing research costs, %

Name of the European country	Business sector			Public sector			Higher education sector			Private non-profit sector		
	Period											
	2010	2015	2016	2010	2015	2016	2010	2015	2016	2010	2015	2016
Bulgaria	50.3	73.4	73.3	37.3	20.7	21.2	11.8	5.4	5.2	0.7	0.5	0.3
Estonia	50.2	46.1	51.5	10.6	10.8	11.4	38.0	41.4	35.5	1.2	1.8	1.5
Spain	51.5	52.5	53.7	20.1	19.1	18.5	28.3	28.1	27.5	0.2	0.2	0.2
Latvia	37.0	24.7	24.5	23.0	25.6	31.8	40.0	49.7	43.8	0.0	0.0	0.0
Lithuania	29.4	27.4	35.0	17.5	17.1	26.1	53.1	55.5	38.9	0.0	0.0	0.0
Germany	67.1	68.7	68.0	14.8	14.1	13.7	18.2	17.3	18.3	0.0	0.0	0.0
Poland	26.6	46.6	65.7	35.9	24.4	2.5	37.2	28.9	31.4	0.3	0.2	0.4
Romania	38.3	44.0	55.2	36.8	38.3	33.3	24.5	17.4	11.3	0.4	0.3	0.2
Slovakia	42.1	28.0	50.4	30.0	27.9	21.4	27.6	43.8	27.7	0.3	0.4	0.5
Slovenia	67.8	76.3	75.6	18.2	13.5	13.5	13.9	10.2	10.9	0.1	0.0	0.0
Hungary	59.8	73.4	74.1	18.5	13.3	13.4	19.9	12.1	11.1	0.0	0.0	0.0
Czech Republic	57.7	54.3	61.1	21.7	20.4	18.2	20.0	24.9	20.4	0.6	0.4	0.2

Source: compiled from data from [1].

Table 6

Top-10 universities in the world

Place in rating	Year 2018—2020	
	1.	Massachusetts Institute of Technology
2.	Stanford University	USA
3.	Harvard University	USA
4.	Cambridge University	United Kingdom
5.	California Institute of Technology (Caltech)	USA
6.	University of Oxford	United Kingdom
7.	UCL (University College London)	United Kingdom
8.	ETH Zurich — Swiss Federal Institute of Technology	Switzerland
9.	Imperial College London	United Kingdom
10.	University of Chicago	USA

Source: compiled and calculated by the author on the basis of data [5].

Thus, based on the analysis of such indicators as the education index, it is advisable to note that positive trends in these indicators occur in many countries of the European Union. It becomes clear that one of the ways of improvement is motivation in enterprises and organizations of employees and managers [9, p. 225].

One of the most important and widespread architecture elements of innovation infrastructure in the world, which belongs to the providing component, are institutions of Higher Education (HEE). The most competitive universities in the world are: Massachusetts Institute of Technology, Harvard, Cambridge, Stanford, California Institute of technology, Oxford, University College London, Imperial College London, Swiss Federal Institute of technology (see *Table 6*).

The largest number of leading universities is located in the United States and the United Kingdom (*Table 7*).

In 2008—2019, the largest share of the most reputable, efficient and competitive universities in the world was concentrated in Europe (an average of 38.2%), Asia (an average of 25.4%) and North America (an average of 19.8) [10; 11].

For comparison, Latin America accounted for an average of 9.9% of the best universities in the world, Oceania — 4.6%, and Africa — 2.4%.

Countries ranking top in the number of most competitive universities

Country	Number of universities in the ranking		Absolute deviation
	year 2015	year 2019	
USA	154	154	0
Japan	38	39	1
China	30	33	3
Germany	43	43	0
France	41	39	-2
United Kingdom	71	71	0
South Korea	26	30	4
Taiwan	15	15	0
Switzerland	8	8	0
Netherlands	13	13	0
Ireland	8	8	0
Sweden	8	8	0
India	14	14	0
Hong Kong	7	7	0
Canada	26	26	0
Belgium	7	8	1
Spain	18	21	3
Israel	6	6	0
Finland	9	10	1
Denmark	5	5	0
Italy	26	28	2
Australia	33	35	2
Brazil	22	22	0

Source: compiled by the author on the basis of data [5].

So, if in the United States in 2019 there were 154 of the 1000 most competitive universities in the world, in the United Kingdom — 71, in other countries 3—30 times less. It should be noted that in 2016—2019, only 8 universities in Ireland and Sweden were ranked among the 1000 most competitive universities in the world, 7 universities in Hong Kong, 6 universities in Israel and 5 universities in Denmark [12]. The disparities between countries in the development of research institutes are also similar. Based on the study of foreign experience in innovation, it was found out that in order to stimulate the innovation activity of domestic enterprises, state incentives using world experience are of great importance, namely:

- improvement of legislation regulating issues related to innovation activities;
- improvement of the innovation structure: creation of innovation centers, consulting centers, innovation banks; working out development programs;
- active state support for innovatively active enterprises.

Conclusions. The introduction of innovations in the social sphere should ensure the creation of productive and durable assets. Education and science should become priority sectors of investment social projects. The list of public investment projects in the field of «Education and Science» currently contains 15 existing projects, which are financed outside the public sector. Introduction in Ukraine of the European practice of public procurement of internal innovations with their further introduction in municipal, state and municipal institutions, will promote their development and will provide increase in productivity and economy of budgetary funds in the future. The normative basis for such implementation could be the EU Public Procurement Directive.

Creating demand for new products and services at the state level will stimulate innovation activity in the economy and promote the entry of new technologies into the market.

Another challenge for modern innovation processes are imperfect processes of public investment management, which leads to unproductive losses of more than a third of resources, as evidenced by the IMF analysis. Therefore, investments in the optimization of state infrastructure will play a key role in the post-quarantine economy

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Статтю рекомендовано до друку 06.06.2021

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The article is recommended for printing 06.06.2021

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