MINISTRY OF EDUCATION AND SCIENCE OF UKRAINE

Strategic Action Plan of the
Ministry of Education and Science
of Ukraine by 2027

EDUCATION OF WINNERS

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EDUCATION OF WINNERS

The document was developed to update the strategic priorities and goals of the Ministry of Education and Science of Ukraine for the medium term until 2027, specifically addressing challenges related to the military aggression of the russian federation, fulfilling Ukraine's commitments in European integration, the provisions of the Sustainable Development Goals, and considering the results of public consultations on issues of education and science. It aligns with the Vision of Ukraine's Education and Science Future, using a Results-Based Management methodology.

The Ministry of Education and Science of Ukraine, as the central executive body, conducts its activities in accordance with the provisions of the program documents of the Cabinet of Ministers of Ukraine, the Association Agreement between Ukraine and the European Union, on the one hand, and the European Union, the European Atomic Energy Community and their member states, on the other hand, the National Economic Strategy by 2030, the Human Development Strategy, Strategies for Public Administration Reform of Ukraine for 2022–2025, the National Strategy for the Civil Society Development in Ukraine 2021-2026, the National Strategy for Barrier-Free Environment in Ukraine by 2030, the Strategy for reforming the school nutrition system for the period until 2027, the Strategy for implementing gender equality in the field of education until 2030, taking into account the provisions of the All-Ukrainian mental health program initiated by the First Lady Olena Zelenska, the Sustainable Development Goals of Ukraine for the period until 2030 and action plans regarding the implementation of the specified strategic documents.

The document was developed under the overall coordination of the Deputy Prime Minister for Innovation, Education, Science and Technology Development — Minister of Digital Transformation of Ukraine **Mykhailo Fedorov,** under the guidance of the Minister of Education and Science of Ukraine **Oksen Lisovyi** and the coordination of the First Deputy Minister of Education and Science of Ukraine **Yevhen Kudriavets.**
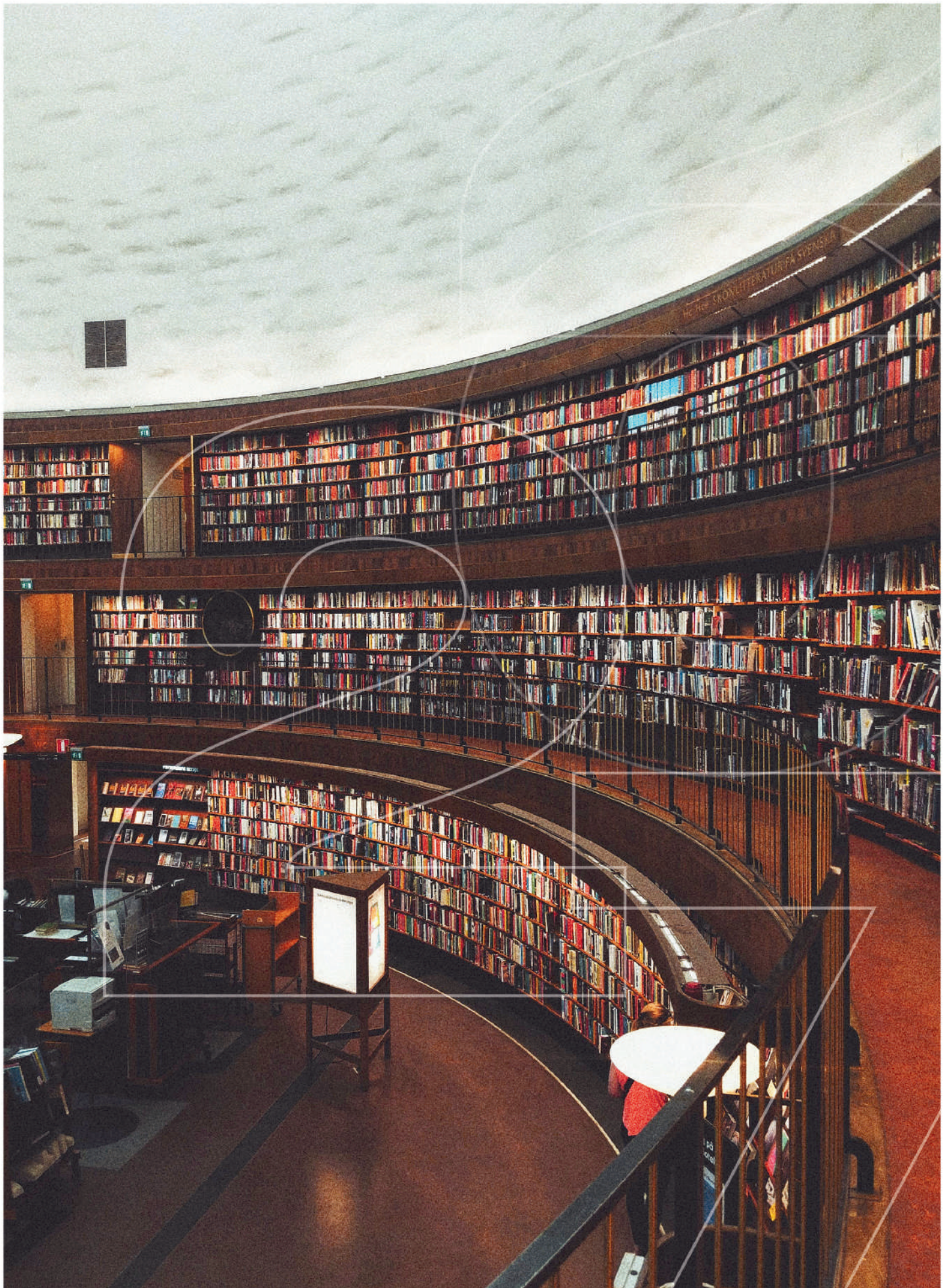
Civil servants of the Ministry of Education and Science of Ukraine from the following structural divisions worked on the document under the general coordination of the relevant deputies of the Minister of Education and Science of Ukraine:

- First Deputy Minister of Education and Science of Ukraine Yevhen Kudriavets, Directorate for Strategic Planning and Recovery; Directorate for European and Euro-Atlantic integration;
- Deputy Minister of Education and Science of Ukraine Yevheniia Smirnova and the Directorate for Early Childhood and Preschool and Inclusive Education;
- Deputy Minister of Education and Science of Ukraine Andrii Stashkiv and the Directorate for School Education;
- Deputy Minister of Education and Science of Ukraine Dmytro Zavhorodnii, Directorate for Vocational Education and Training and Directorate for Digital Transformation;
- Deputy Minister of Education and Science of Ukraine Mykhailo Wynnytskyi and the Directorate for Professional Pre-Higher and Higher Education;
- Deputy Minister of Education and Science of Ukraine Denys Kurbatov, Directorate for Science Development and Directorate for Innovations and Connections of Science with the Real Sector of the Economy;

As well as representatives of the Office of Partnership and Cooperation for the Recovery of the Education and Science System of the Ministry of Education and Science of Ukraine and the Recovery and Reform Support Team of the Ministry of Education and Science of Ukraine.

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Introductory word of the Deputy Prime Minister for Innovation, Education, Science and Technology Development

"

Education is a global direction that will have a long-term impact on the country's development. Changes in education are the foundation for Ukraine's economic breakthrough and the development of human capital.

If we aim for a trillion-dollar economy, innovative companies with high added value need to operate in Ukraine. They are created by individuals with analytical thinking who have studied STEM fields and languages. Without them, it is impossible to develop an innovative economy.

We aim to build one of the most flexible and fast-paced education systems in the world. It's about fostering innovation and cultivating different thinking in children. It is important for our children to implement innovations, become entrepreneurs, work efficiently, and think through values. To achieve an educational miracle, we need decisive and ambitious transformations at every level of education, from preschools to universities. We have outlined five directions for transformation: educational management, pedagogue, content and meaning of education, system and network, and the educational environment.

Another important tool for implementing changes will be the application «Mriia» (Dream). This is our experience in how technology can transform a complex education system. «Mriia» will help with self-realization, provide access to knowledge, and allow the building of individual educational trajectories. This year, we plan to launch the «Mriia» pilot in the first schools. Afterward, we will scale the application to other educational institutions.

Mykhailo Fedorov

Minister of Digital Transformation of Ukraine

" Education should prepare an individual for tomorrow, not even for today. Therefore, this process must be dynamic, as the world is constantly evolving. That's why it's not enough to just do a «cosmetic repair» of the education and science system. We need to transform it.

Create an education system that helps shape citizens for a country with an innovative economy, capable of protecting their family and state from external threats. At the same time, our science should be synonymous with «innovation» and «technology,» attractive for investments and partnerships. Ultimately, all of this is also about the development of human capital, our most valuable resource.

The education of the new Ukraine is about practical knowledge, developed soft skills, mental security, and freedom of choice. And importantly, it's about lifelong learning. Such changes at the systemic level require time and resources, complex decisions, and new approaches. In times of war, this is a double challenge, but also additional motivation, as the time for these changes has long since come.

Oksen Lisovyi

Minister of Education
and Science of
Ukraine
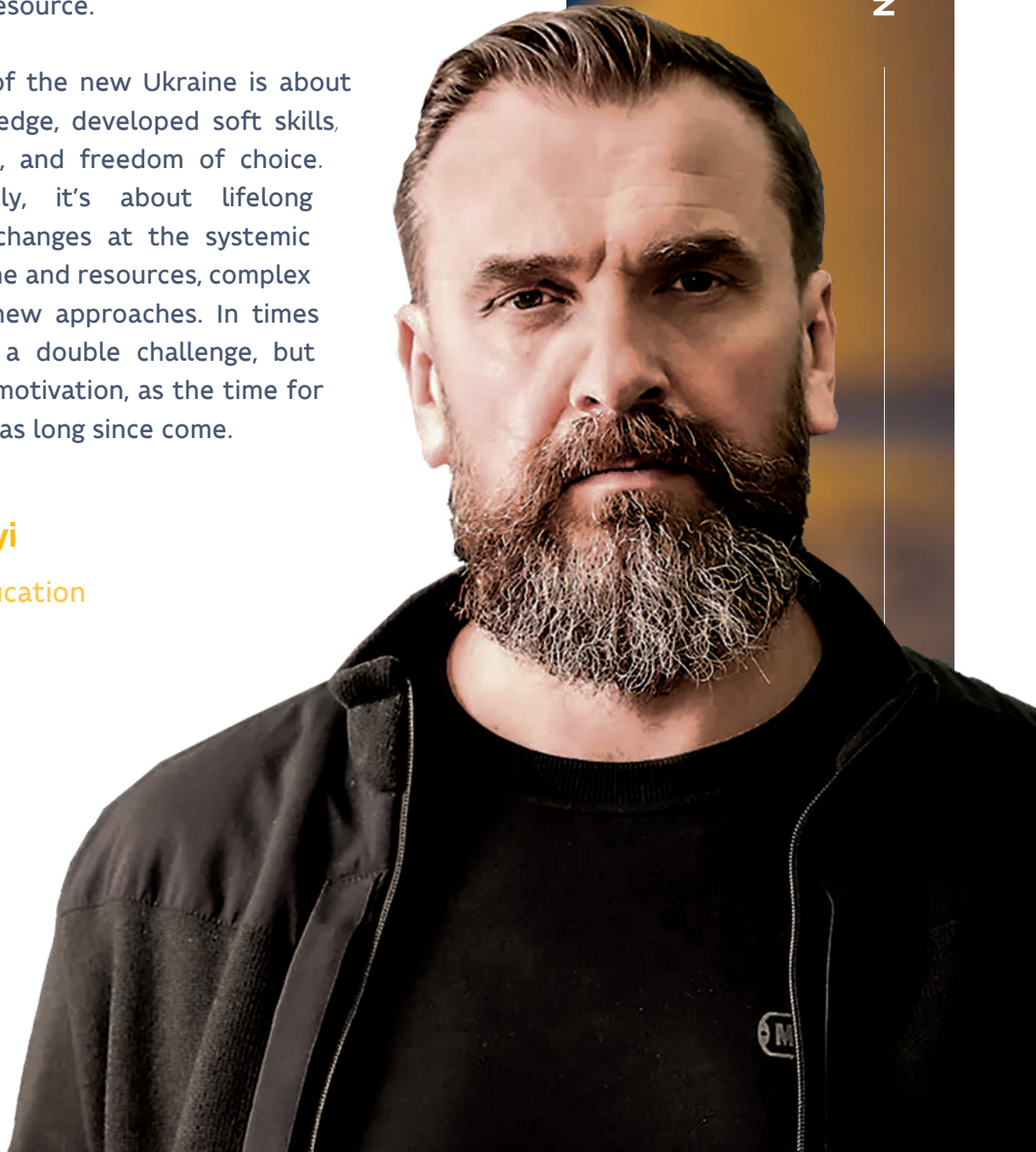
Introduction

INTRODUCTION

> Ukraine stands on the threshold of transformations. Today, the educational process in our country takes place to the sound of sirens, often during enemy shelling, in the absence of electricity and communications. Students lose the opportunity to study, teachers lose the opportunity to teach, and scientists lose the opportunity to conduct research. War, forced migration, on the one hand, and globalization and European integration, on the other, all require changes in approaches to education and science. Against the odds, education must become the key to mobilizing resources and opportunities for the future, helping people find their place in new realities.

What kind of future do we want?

For pedagogues and scientists —

dignified and safe working conditions, fair pay, a new paradigm of learning and personal development, mental health support.

For children —

safety, freedom of choice, wide opportunities for self-realization, modern environment for learning and development, high quality of education and an inclusive, barrier-free, friendly educational environment

For adults -

education that will guarantee accessibility and continuity of learning throughout life, will provide confidence and stability in times of change, the opportunity to acquire new qualifications and change the professional path, increase the quality of life.

The focus is on the individual at different stages of life. Our task is to build a system of education and science that respects every participant in the process, provides ample opportunities for development and realization of their potential.

The events of recent years - the pandemic and the full-scale invasion - negatively influenced education and science in Ukraine.

savED foundation

ukrinform

515
children have lost their lives
as of 04.01.2024

REUTERS

1 182
children are injured
as of 04.01.2024

savED foundation

3 436
educational institutions
are damaged
as of 18.01.2024

savED foundation

381
educational institutions are
destroyed as of 18.01.2024

savED foundation

12,72%
percentage of destroyed
and damaged educational
institutions out of all
educational institutions
as of 18.01.2024

5 483
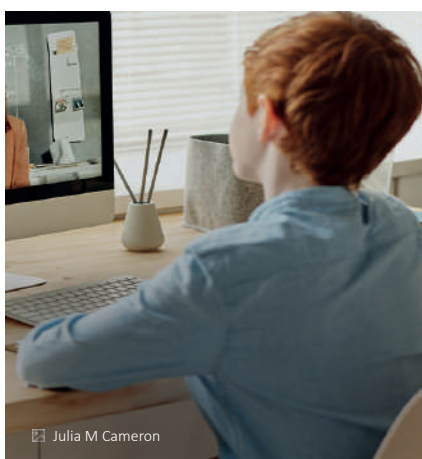educational institutions
are operating remotely
as of 18.01.2024

Julia M Cameron

4 973
educational institutions are
operating in a blended mode
as of 18.01.2024

Arthur Krijgsman

16 839
educational institutions are
operating in-person.
as of 18.01.2024

Суспільне медіа

1,182
scientific infrastructure
facilities are damaged
as of August 2023

REUTERS

112
scientific infrastructure
facilities are destroyed
as of August 2023

Current state of education and science

Ukraine is waging a tough war not only for its territory, but also for national and cultural identity, freedom, and the right to self-determination. Therefore, today the role of education and science consists not only in preparing students for life and further education, but also in forming their national consciousness, cross-cultural values, responsibility, subjectivity, and critical thinking. At the same time, the pandemic and the war are slowing down the processes of educational development and transformation of the educational system. For further effective management, it is necessary to take into account both the positive achievements that we have in the educational environment and the challenges caused by various factors.

The key challenges in the field of education and science can be divided into 3 groups: loss of human capital, destroyed infrastructure, need for transforming the content and organizing the educational process and scientific activity.

Challenges related to the loss of human capital

- Human victims among employees of education institutions, education and scientific institutions of scientific and industrial associations, state bodies (institutions) that provide support for the educational and scientific sphere; reduced capacity for effective educational/scientific activity and reduced work capacity due to psychological injuries.

- Low social prestige of the profession of a pedagogue and scientist, lack of stimulating career trajectories, insignificant share of young scientists and pedagogues in the personnel potential.

- Imbalance of demand on the labor market and supply on the part of the higher education system in some specialties (both a surplus and a shortage of trained specialists)

- A long-term decline in the birth rate, which has led to demographic crisis, excess infrastructure, and an imbalance between the demand for quality higher education and the network's capacity.

- Limited opportunities for the development of qualified management teams that would meet the needs of integrating Ukraine's higher education system into the European Higher Education Area.

- The absence of practical psychologists with an adequate level of training, professionals for providing corrective and developmental services, as well as experts (consultants) for inclusive resource centers, in educational institutions.

- Selective migration with the transition to emigration of competitive experienced specialists, including those with knowledge of foreign languages and recognition in the international professional community, insufficient incentives (including social welfare) for their return migration (relocation), as a result - a shortage in Ukraine of qualified academic staff.

- The risk of a shortage of qualified specialists in various fields in Ukraine.

- Absence in education institutions, or an insufficient level of training of practical psychologists, specialists for the provision of correctional-developmental and psychological-pedagogical services, as well as specialists (consultants) of inclusive resource centers

- Lack of sufficient incentives to involve young people in conducting scientific research, studying on postgraduate level (doctorate), studying foreign languages

- A decrease in the number of VET applicants, as well as a sharp change in their sex-age composition due to the war, with the simultaneous increase in the labor market needs for qualified workers, in particular, taking into account the need to rebuild the country as a result of the war

- Significant changes in the contingent of education seekers, pedagogical, scientific-pedagogical and scientific workers caused by the war (IDPs, persons who went abroad due to the war, persons staying in temporarily occupied territories), disruption of established scientific ties, complicated replacement procedures vacant positions in institutions of higher education and scientific institutions

- Lack of a register of scientists (researchers), relevant approaches to the assessment of their skills and capabilities, the results of their scientific (scientific and technical) activities (including the use of modern European approaches)

Challenges related to educational and research infrastructure

- Destroyed and damaged educational infrastructure, destroyed and damaged buildings of education institutions, education institutions make high-quality education impossible in many regions of Ukraine, do not allow to organize face-to-face education, which causes educational losses

- The insufficient number and poor equipment of shelters in education institutions does not allow creating safe conditions for the educational process. This makes it difficult to organize a full-fledged education, causes deepening of educational losses and gaps

- Insufficient supply of digital equipment and access to the Internet network of education institutions, educational and scientific institutions

- Absence of a network of qualification/certification centers and insufficient development of the network of adult education institutions, scientific centers

- Destroyed/damaged scientific institutions, including research laboratories, loss of scientific (scientific and technical) information, data, collections and archives. Threat to the functioning of strategically important research infrastructure facilities

- Low level of development of innovative infrastructure (effectively working technological, industrial, scientific parks, technology transfer system, etc.)

Challenges related to the content and organization of the educational process and scientific activity

- The outdated content of education, which is not gender-sensitive, sometimes contains discriminatory provisions, in particular stereotypical ideas about the social roles of men and women, signs of «hate speech», sexism

- The content of Early childhood and preschool education and the educational environment of Early childhood and preschool education institutions need to be updated and modernized in accordance with European Quality framework for Early childhood education and care and the principles of inclusion

- The need to bring the content of school education and the educational environment in line with the requirements of competence training within the framework of the reform of the NUS

- Insufficient alignment of educational programs and teaching tools with modern technologies leading to a mismatch of competencies of graduates from vocational and technical education institutions with the requirements of the contemporary job market.

- Loss of established or absence of collaborative relationships with businesses in professional and higher education.

- Asynchronization of efforts and programs between ministries and institutions involved in the training/retraining of war veterans.

- Ensuring educational services for children undergoing treatment or rehabilitation in healthcare institutions, including those who have suffered injuries, trauma, or war-related incidents.

- Imperfections in the basic and competitive funding systems for scientific research and development (financed through various government agencies, health ministries, and regional development banks), low implementation rates of their results in economic activities and societal practices, and non-compliance with norms of academic and research integrity.

- The need to update priority directions in the development of science, technology, and innovative activities, taking into account current challenges and aiming for their expansion, especially in the areas of defense and security, human capital development, and effective restoration of territories, among others.

- Educational losses resulting from prolonged learning of education applicants in conditions of both a pandemic and war.

- Lack of a cohesive system and low quality of psychological support for education applicants, educational staff, and other participants in the educational process in education institutions.

- Inadequate quality of inclusive education and insufficient accessibility of education institutions and establishments for individuals with disabilities and those from mobile population groups.

Challenges related to the financing of education and science.

- Insufficient funding for the education and science system at all levels and ineffective utilization of budgetary funds.Critically low research and development intensity of GDP due to insufficient funding for scientific, technical, and innovative activities, decreasing almost every year.

- Ineffective use of budgetary funds.

- Insufficient level of skills in educational and scientific management regarding the engagement of non-budgetary sources for financing educational and scientific activities.

- The network of education institutions and research establishments from various governmental bodies, national institutions, and sectoral academies of sciences does not correspond to the scale and structure of the country's economy, requiring a balanced approach to their optimization and modernization of mechanisms for state funding.

Background of Priority Areas of Activity

Background of Priority Areas of Activity

Mission of the Ministry of Education and Science – the formulation of policies aimed at stimulating the development of education and science in Ukraine for intellectual, cultural, and professional development of individuals, the formation of high-quality human capital, and the cohesion of society to establish Ukraine as a stable democratic state, resilient to any external challenges, an equal member of the European community, building an effective, innovative, competitive economy, and ensuring high standards of living.

We shape our policy in response to societal problems that require solutions, while relying on a set of fundamental principles through which we strive to approach the development of any solution.

These principles are categorized into Ukrainian contexts, influenced by educational reforms and the need to overcome the consequences of war, and European contexts, crucial for us in the context of Ukraine's path towards European integration.

Ukrainian contexts that shape priorities in education policy and policy in the field of science and innovation include:

- Overcoming post-totalitarian, post-colonial, post-communist inertia in Ukrainian society that creates obstacles to any transformations.

- Ensuring comprehensive and equitable quality education and encouraging lifelong learning opportunities.

- Creating safe conditions, recovery, and response to the challenges of war.

- Addressing educational losses for education applicants.

- Support for Ukrainians abroad (diaspora, subjectivity of Ukraine, International Ukrainian School).

- International cooperation (educational diplomacy).

- Reintegration (policy for the return of Ukrainians from abroad, from de-occupied territories).

- National-patriotic education, civic education.

- Education for veterans.

- Anti-corruption and integrity.

- Gender equality, ensuring equal rights and opportunities for women and men.

- Preservation of mental health.

Key global contexts guiding Ukraine in educational policy and policy regarding science and innovation:

- preservation of environmental balance and climate (green transition);.

- digital transformation;

- smart, sustainable, and inclusive growth;

- social and territorial cohesion;

- resilience (health, economic, social, and institutional resilience);

- inclusivity;

- policies for the next generation, children, and youth.

Key Transformational Areas and Performance Indicators

" Our goal is not only to rebuild the devastated education and scientific institutions but also to transform the content and meanings of education as a whole. We aim to ensure sustainable continuous development of the education system to restore and build a competitive, innovative Ukraine.

Key Transformational Areas

1 Content and Meaning

2 Pedagogue and Scientist

3 System and Network

4 Environment

5 Management Capability

1. Content and Meaning:

The foundation of our system is built upon values and a vision of the future aimed at shaping a holistic and happy individual and professional, a citizen of Ukraine capable of successful self-realization and contributing to the development of society and the economy.

2. Pedagogue and Scientist:

our goal is to provide dignified working conditions, fair remuneration, and opportunities for continuous professional development for educators, teachers, practical psychologists, and staff of the Resource and Information Centers (RIC), lecturers, and researchers.

3. System and Network:

to create conditions for the formation of an efficient network of education institutions, taking into account the interests of participants of the educational process and the needs of communities.

4. Environment:

it is crucial to transform the educational environment in a way that stimulates development and innovation, making it comfortable and accessible. It should provide all participants in the learning process with maximum opportunities for personal development and self-realization.

5. Management Capability:

modernize education and science management through the implementation of best management practices and motivational systems.

Principles We Follow:

Person-Centered Education.

We aim for each individual to feel valuable and capable of achieving desired results by considering their needs, interests, and talents in the educational process.

Build Back Better:

The reconstruction of the educational infrastructure takes place considering the need for its transformation and development.

Lifelong Learning.

The education system creates conditions for the continuous learning and development of all citizens of Ukraine.

Eurointegration and Globalization.

Education in Ukraine should prepare citizens for an active role in the globalized world, promoting principles of tolerance and intercultural communication.

Education for Promotion of the Ukrainian Political Nation and Civil Society Development

The education system aims to instill respect for the Ukrainian language and culture, fostering civic responsibility, consciousness, integrity, kindness, and empathy, and respecting the dignity of every individual.

Education for worldview Formation,

 broadening perspectives, depth of thinking.

Collaboration with the Community:

Educational and scientific systems actively cooperate with the community, parents, authorities, the private sector, and non-profit organizations. Communities prioritize education and science, investing, recognizing that it is an investment in the well-being of residents.

Adaptability to a Rapidly Changing World:

Education should develop essential skills for high performance, including critical thinking, problem-solving, flexibility, and creativity.

Barrier-Free and Inclusive Education.

Every person, regardless of social status, ethnic origin, age, special educational needs, health status, or gender, has the right to quality education.

Science and Innovation:

The basis for high-tech economic development, an environment for intellectual creativity with a focus on practical results for communities, regions, and the country, and a significant contribution to global fundamental research.

Scientifically Oriented Learning:

Science and education should go hand in hand, with the education system oriented toward the latest scientific results, inventions, and discoveries. Integration with science should occur starting from primary school, with a focus on natural science education and fostering research activities throughout the entire educational trajectory.

MATRIX OF CHANGES

Preschool Education	School Education (1-9)	Academic Lyceum (10-12 grades)	Professional College
Transition from child care to child development	Creating a modern and effective network of education institutions		
Guaranteed placement in early childhood or preschool education institutions	Complete transformation of the school environment		Transformation of professional training infrastructure- creating hubs and modern dormitories
New salary payment system	Expansion of pedagogue certification		Introduction of new professions, modern content, and short-term programs
Easy entry into the profession	Reboot of the New Ukrainian School reform	New standard of profile education and opportunities for the credit-module system	Rebranding and a unified system of vocational education with results-based funding
Concept of national design for new early childhood and preschool education institutions	New salary payment system for teachers and administration in general secondary education institutions		Business conditions and financial autonomy

Changes in the Principles of Selection and Education of Education and Science Workers at All Levels
Digitalization and Quality Monitoring of Education
European integration and international educational diplomacy

Strategic Action Plan of the Ministry of Education and Science of Ukraine by 2027

University	Science	Out-of-School Education
Changing the funding formula- success criteria for higher education institutions: a combination of academic achievements and employment outcomes.	Audit and change of the basic science funding model	Network of educational centers in communities
Flexible educational pathways (credit system) + the opportunity to choose a specialization in the second year	Deregulation of business funds, international partners, and grant programs	System for compensating educational losses
Grants (vouchers) for education and a change in the approach to scholarships	Establishment of an ecosystem for competitive state funding of scientific research and development	Science centers as a tool for community and pedagogue development
Financial and managerial autonomy: removing tariff grid salaries + supervision boards	Autonomy of scientific institutions with subsequent creation of scientific clusters	Entrepreneurial education development system
Development of a network of innovation centers with a university core	Development of research infrastructure as part of the European network	

Changes in the Principles of Selection and Education of Education and Science Workers at All Levels
Digitalization and Quality Monitoring of Education
European integration and international educational diplomacy

Our strategic indicators:

99%
Percentage of children aged 3-5 enrolled in preschool/ early childhood education (currently 66.1%)

2% of GDP
Expenditure on research and development (currently 0.4%)

20%
Share of publicly accessible competitive science funding (currently <10%)

20%
Share of science funding from business and international grants (currently <10%)

1/15
Ratio of pedagogues to students (currently 1/10)

80%
Employment of graduates after vocational education

Top 20
Ukraine's ranking in the Global Innovation Index (currently 57th place)

70%
Employer satisfaction rate

45%
Percentage of 9th-grade graduates choosing vocational education and training (currently 36%)

Top 20
Ukraine's position in the PISA international education quality study (currently 39th place)

Top 20
Human Development Index (HDI) (currently 74th place)

Top 20
International Computer and Information Literacy Study (ICILS) (Ukraine has not participated yet)

Top 20
Trends in International Mathematics and Science Study (TIMSS) (Ukraine has not participated yet)

Top 200
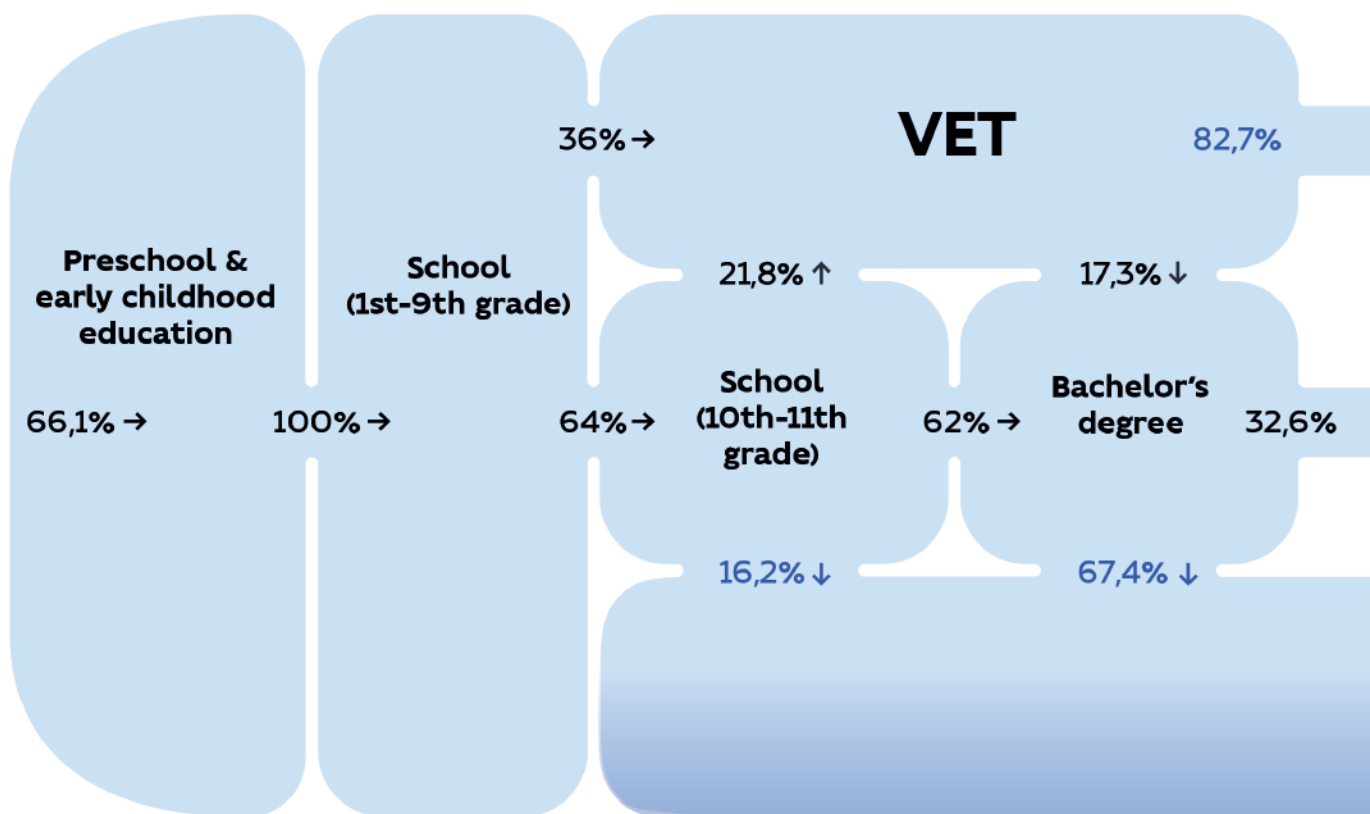5 Ukrainian universities in The Times ranking

Top 500
15 Ukrainian universities in The Times ranking (currently 1 university in the top 500)

90%
Employment of graduates after obtaining higher education

Current pathway to the job market

Preschool & early childhood education

School (1st-9th grade)

36% →

VET

82,7%

21,8% ↑

17,3% ↓

School (10th-11th grade)

Bachelor's degree

66,1% →

100% →

64% →

62% →

32,6%

16,2% ↓

67,4% ↓

Faster integration into the job market

Preschool & early childhood education

School (1st-9th grade)

45% →

VET

85%

20% ↑

15% ↓

Academic Lyceum

Bachelor's degree

99% →

100% →

55% →

70% →

33%

10% ↓

67% ↓

Job market

Master's degree 10%→ **Ph.D. candidate** 100%→

90%↓

55% Officially employed

Job market

Master's degree 10%→ **Ph.D. candidate** 100%→

90%↓

80% Officially employed
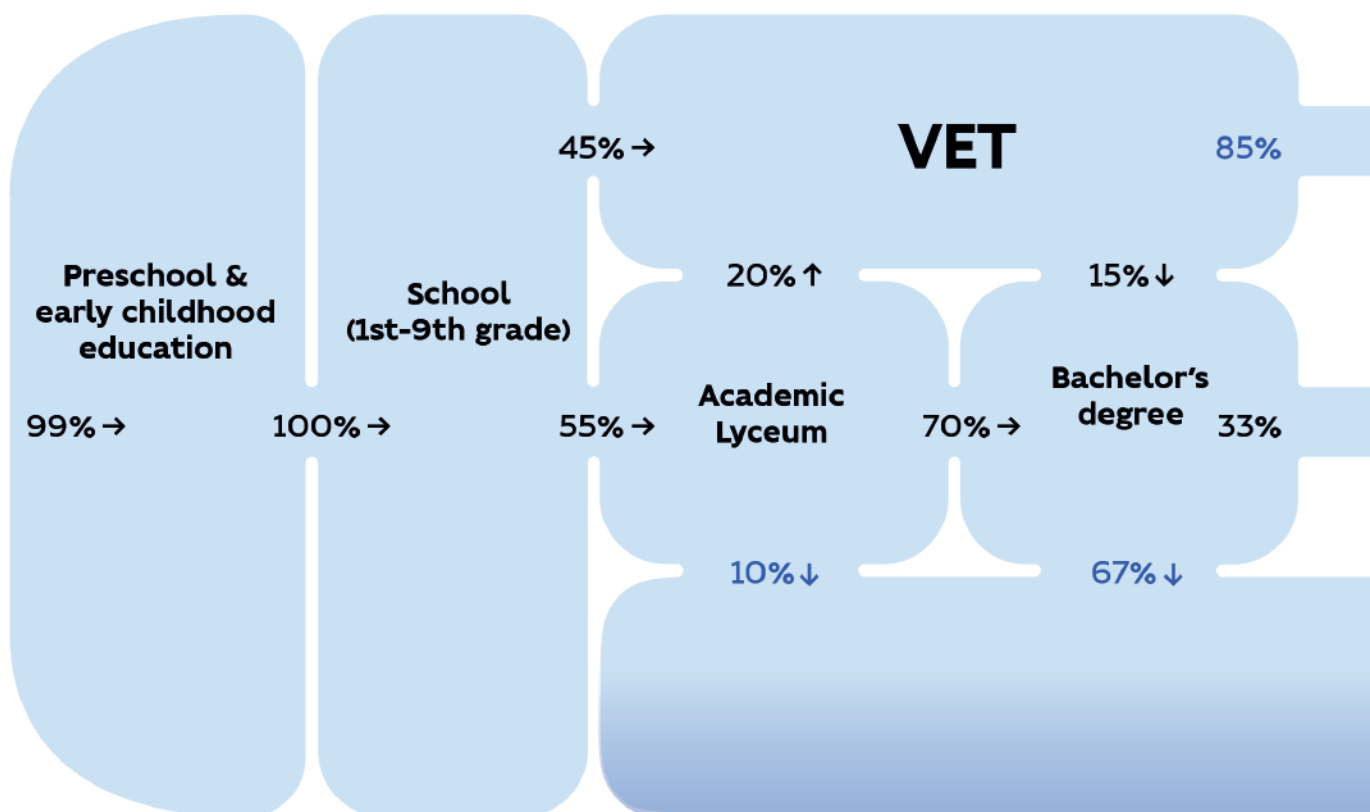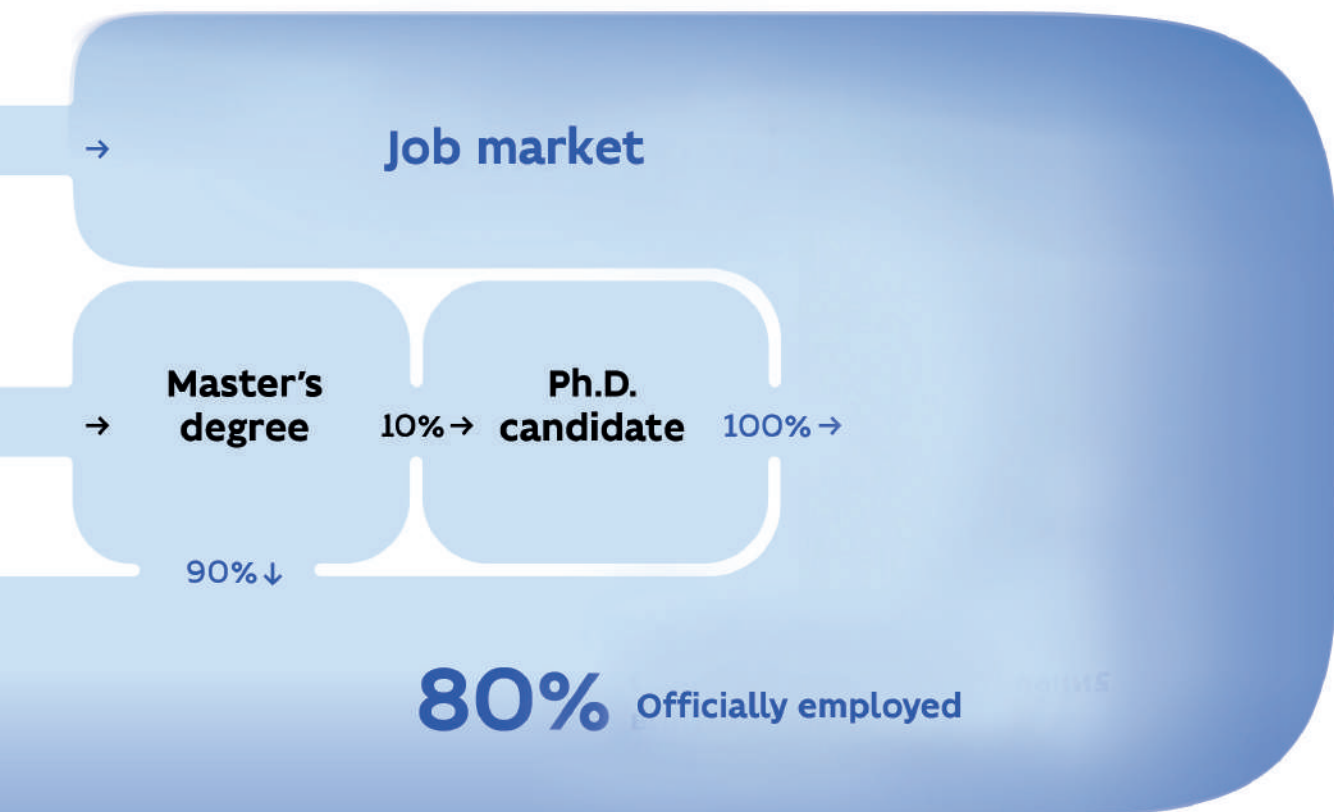
The future successful person.

Serhii, 18 years old

" I completed my 12th-grade studies at an academic lyceum of the New Ukrainian School. This institution offers a unique educational experience, providing me with the flexibility to choose my academic path. I delved into specific subjects, took integrated courses, and explored elective courses outside my main field, enabling me to concentrate on my interests and discover my true passions.

After the 9th grade, my friend Maksym and half of our classmates opted to enroll in a professional college, which is considered quite exciting nowadays.

During my time at the new lyceum, we had state-of-the-art facilities, including laboratories, modern interior design, a spacious schoolyard, a gym, and collaborative environments. The infrastructure was so modern and impressive that students from Germany and the USA, participating in exchange programs, were excited. Notably, we studied English alongside our native language, and some subjects were conducted in English. This proficiency allows me to communicate effectively with international friends, take additional English courses, and feel confident during English language interactions.

As the lyceum was not in close proximity to my home, I commuted daily using the school bus My entire educational journey was accessible
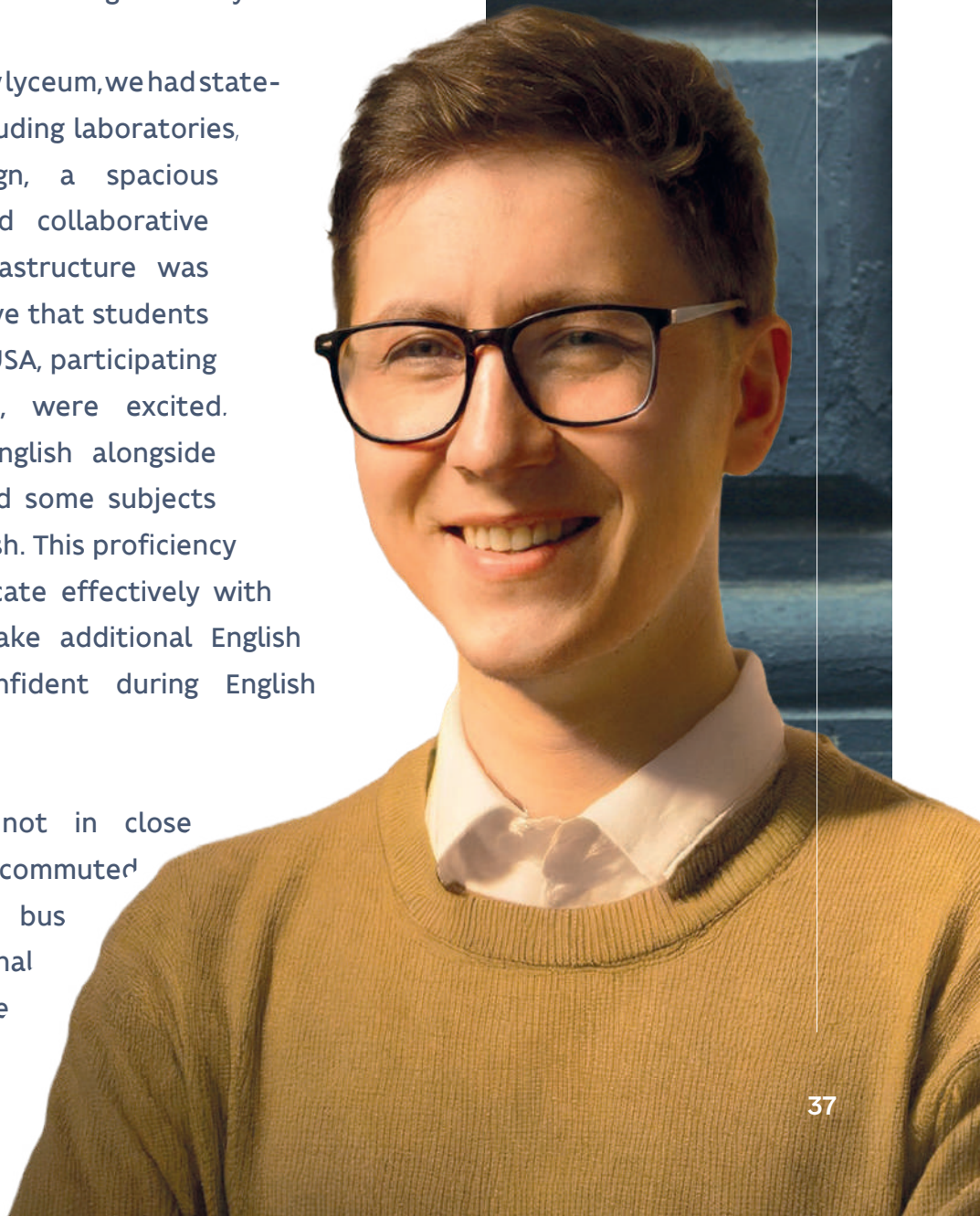
through the «Diia» platform, where parents could view grades, and I could track my program and achievements. Homework was assigned through the electronic system, eliminating the need for traditional paper documents. Our lyceum had its designated environment, serving as a co-working area and library, ensuring a safe and supportive environment. Teachers were not just educators but also mentors and friends.

We learned that the payment system underwent changes five years ago, motivating many teachers to incorporate English into their lessons, utilize technology, and explore innovative teaching methods. This shift broadened opportunities for students, emphasizing innovation and entrepreneurship. I've even developed an idea for my own startup while considering university studies.

My sister Nastia attends primary school, which is in a separate building. Each child is monitored by cameras, and parents receive notifications when their child arrives at school. The curriculum is modern, emphasizing English and focusing on emotional skill development. Nastia also uses the bus, and our parents can track its location. At the entrance, she scans her QR code on «Diia,» and parents receive a notification that their child is safe at school.

I've chosen to pursue further education at university to enhance my career prospects and possibly engage in scientific activities in the future.

Maksym, 18 years old

"" After completing the 9th grade, my decision was to enroll in a professional college. The school had provided extensive career guidance, and I had a clear understanding of the profession I wanted and why it was essential for me. In the college, I acquired both general secondary education and initiated my professional journey.

Presently, possessing vocational education is seen as prestigious, contributing significantly to our country's renewal and growth. My educational experience was in collaboration with local businesses, and I attended one of the 50 new professional education centers. We had access to modern equipment, state-of-the-art facilities, shared laboratories with businesses, and ongoing practical exposure in production. By the age of 16, I was actively engaged in real work. The curriculum was entirely contemporary, aligning with European standards, providing me with immediate knowledge applicable to the workplace. Throughout our education, we had the opportunity to gain practical experience in modern enterprises in European countries. My proficiency in English, intensively studied in school, proved beneficial; I could effortlessly communicate with foreigners and absorb the information they shared.

At present, I have the option to further enhance my qualifications and pursue an additional year to attain the status of a junior bachelor, enroll in a university, or enter the workforce. I am confident that should I choose the employment route, I can always acquire supplementary qualifications at one of the educational and practical centers in Ukraine.

Victoriia, 22 years old

" Today, I received my bachelor's degree. When I enrolled, I didn't have to choose a major immediately. This allowed me to explore different fields, and by the end of the second year, I decided to become an aircraft engineer.

I also managed to obtain an additional degree in management. While I could have completed my studies in 3 years, I chose to take more courses to have two degrees upon graduation. When I applied, I received a 70 scholarship from the government, and the remaining 30 was covered by a private fund, where I also won a grant. I had the option to choose between three types of universities: worldview-oriented, academic, or innovative. I opted for the latter. The grant award was based on my results in standardized testing, academic performance, out-of-school activiies, my vision for the future, and a coefficient related to the chosen field of study. During my studies, I had a 3-month mobility program in another region of Ukraine, and for one semester, I studied in another European country. Fluent in English, adapting to the learning environment abroad was seamless for me, earning admiration and respect from my professors. Overall, they are fascinated by Ukraine and our students.

All learning materials were accessible through an electronic system, and I could log in using the «Diia» platform.

My university is part of an innovative cluster, so education is also participation in a vast ecosystem. One of my friends came up with a business idea, and he received support from the university's venture fund and the technology transfer office. As a future aircraft engineer, I completed an internship in Boeing's laboratory at the university. My boyfriend is a graduate of the largest Presidential Military Academy in Europe, similar to the American West Point. Currently, I'm contemplating whether to pursue a master's degree or enter the workforce.

Yuliia, 42 years old, and Vlad, 40 years old, Lev, 2 years old

" We have three children. One of them recently started attending kindergarten. We managed to choose the best form of preschool education based on the child's needs.

With just two clicks, we enrolled our son in kindergarten, without unnecessary bureaucracy and corruption. The institution is located 15 minutes from home. The kindergarten has everything necessary for leisure and learning. It's a very modern and vibrant facility, «like from a picture.» It's something we could only imagine before. I am confident that our child is not only physically safe but also psychologically secure.

It's the best place for my child's development. We have an excellent teacher; she notices even the smallest achievements of the kids. I can consult with her on any question regarding my son. By the way, our teacher used to be an artist, and working with children is her dream. I can say for sure that she is in the right place - kids adore her. They run to kindergarten without tears. The prospect of elementary school no longer intimidates them, as all the necessary knowledge is acquired in kindergarten. They even started learning English, which is very engaging and interactive for the child. Sometimes my son and I speak English at home; he enjoys sharing his skills.

Three years ago, I changed my job and decided to acquire a new profession—it's easy and accessible today. Over 200 different centers across Ukraine provide such opportunities. My husband, Vlad, is a teacher. He has a decent salary, and its level depends on his competence and job effectiveness. The state offers him a continuous training and support program. His work is entirely digital; he has all the necessary equipment and conditions for teaching children.
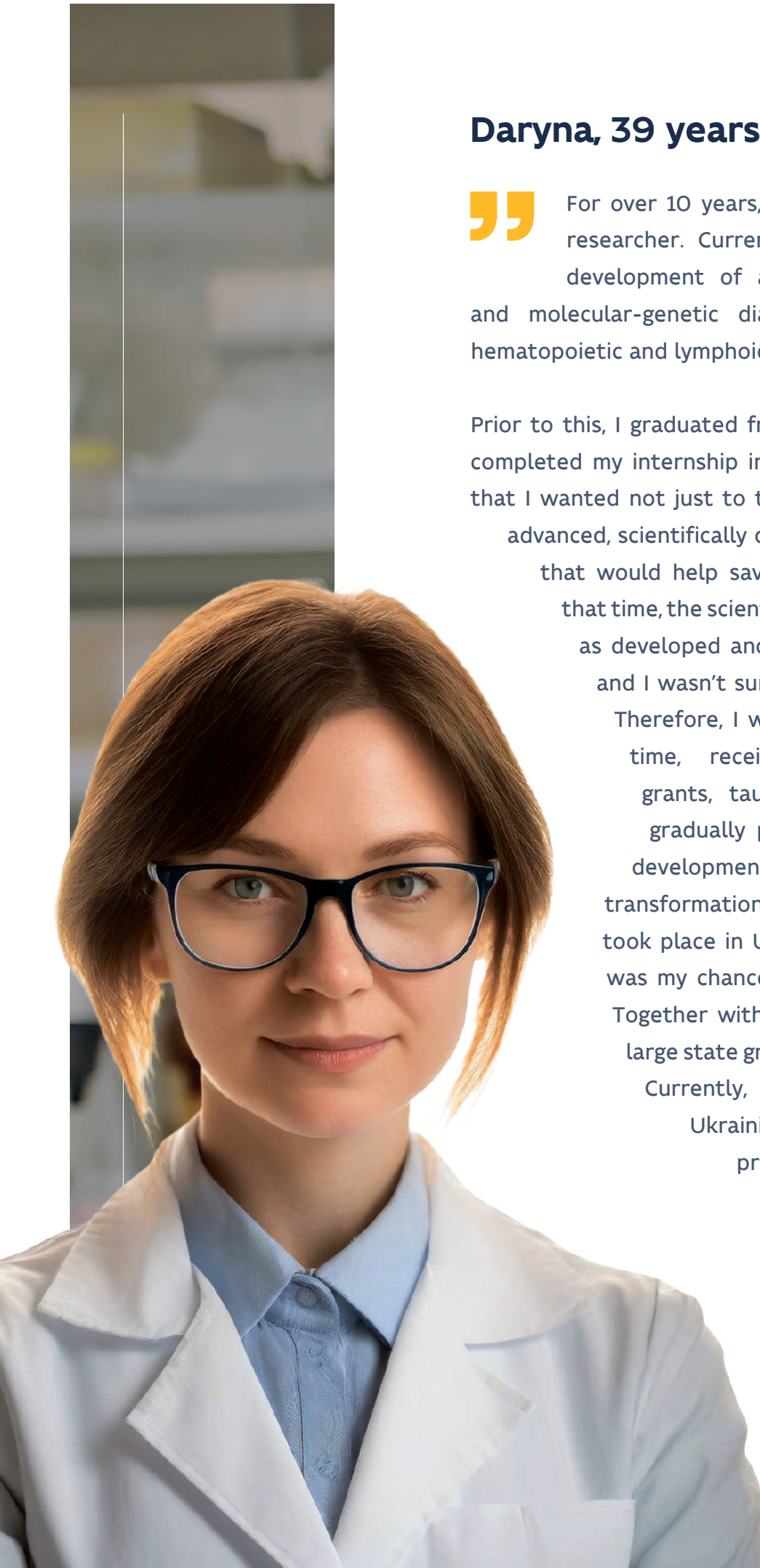
Daryna, 39 years old

" For over 10 years, I have been working as a researcher. Currently, I am involved in the development of advanced immunochemical and molecular-genetic diagnostic technologies for hematopoietic and lymphoid tissue tumors.

Prior to this, I graduated from medical university and completed my internship in Ukraine. There, I realized that I wanted not just to treat people but to create advanced, scientifically driven products in medicine that would help save more lives. However, at that time, the scientific field in Ukraine was not as developed and prestigious as it is today, and I wasn't sure if it was worth pursuing. Therefore, I worked in Europe for some time, received individual research grants, taught at a university, and gradually prepared materials for my developments. Then, when a thorough transformation of the scientific sphere took place in Ukraine, I realized that this was my chance and returned to Ukraine. Together with a team, we applied for a large state grant with our developments. Currently, I combine teaching at a Ukrainian university with in-depth practical scientific work. This is quite convenient since our university has become the hub of one of the modern national research centers, along with several other

education institutions and research clusters. We have state-of-the-art laboratories, equipment, reagents, access to necessary databases, and are fully integrated into the European research environment.

To conduct our research and developments, our group applied for competitions, as I mentioned before, and received grant funding covering a significant portion of the expenses. The remaining part was provided by international medtech companies that also have representations in Ukraine and are interested in our developments.

Last year, I was recognized as one of the best in the «National Researcher System» ranking, which uses the most effective international practices for individual assessment of scientists. This story is very motivating and serves as a showcase for international partners who follow our success and invite us to collaborate. I am, of course, very pleased to work here in Ukraine because I now have all the necessary tools for my developments to be useful and applicable in practical medicine. However, I still often travel abroad for business trips and actively exchange experiences with colleagues. English was a bit challenging at first because, when I was in school, it did not receive as much attention as it does today. But now there are many courses that can be easily taken to improve one's level. And then, it's essential to keep improving. Real communication with partners and colleagues from abroad adds practical experience and confidence.

Matvii, Minister of Education and Science of Ukraine, 2030

" Ukrainian education today is highly modern, and it exports its experience in military, medical, and STEM education.

The **Education of Winners** reform has provided new management with the opportunity to change the culture, pedagogues - to undergo certification, and receive decent remuneration. Our network is recognized as the most effective by the World Bank, with 9800 modern schools featuring new environments that create new roles and meaning for the development of an innovative economy. Ninety-six modern universities effectively compete in the European market, and 99 of children have access to early childhood and preschool education. Five hundred modern vocational education centers are selected by 50 of graduates and thousands of adults for mastering new professions. The new content has laid the foundation for a change in thinking, innovative development, and creativity. Human capital development, resilience, and sustainable development prevail in future plans.

The Ministry of Education and Science's strategic priorities by 2027

The Ministry of Education and Science's strategic priorities by 2027 are:

1. Early Childhood and Preschool Education
2. «New Ukrainian School» Reform
3. Modern Out-of-School Education
4. Transformation of Vocational Education and Training
5. Quality Higher Education
6. Development of Science and Innovation
7. European integration of Ukraine in education and science
8. Digital Transformation of Education and Science
9. Support and assistance for individuals with special educational needs

PRIORITY 1:

Early Childhood and Preschool Education

PRIORITY 1: Early Childhood and Preschool Education

Background

The first five years of a child's life are a crucial time when quality early childhood and preschool education lays the foundation for their future development. Early childhood and preschool education shapes a child's skills, values, and social adaptation, preparing them for school and future life.

Quality early childhood and preschool education contributes to the social integration of children and the formation of social skills, thereby promoting the creation of a more harmonious society. It provides equal opportunities for all children, helping to reduce social inequality.

The attendance of early childhood and preschool institutions by children allows parents to work, contributing to the financial stability of families and the development of the state's economy.

Access to quality education in early and preschool age is an important foundation for the development of human capital, as confirmed by numerous studies. In particular, Nobel laureate in economics James Heckman and a group of researchers have demonstrated the long-term impact of quality early childhood and preschool education on adults at the age of 30: it affects health, income, crime rates, and education.

Investments in early childhood and preschool education, according to scientists, are profitable at the level of 13.7%. In the Ukrainian context, research results show the impact of access to early childhood and preschool education on the success of further educational trajectories. Attendance of kindergarten influences, among other things, the level of literacy skills of primary school graduates (Ukrainian Center for Educational Quality Assessment Report, 2021).

Anticipated Outcomes

For Learners:

Ensuring quality and accessible early childhood and preschool education for all children, including those with special educational needs, in a safe, friendly, and inclusive educational environment, regardless of their place of birth and residence. Education is aimed at developing key competencies and cross-cutting skills necessary for success in further education and career.

For Pedagogues:

Motivation for professional activities through a new competitive remuneration system. The opportunity to develop their skills and improve the quality of the educational process. Providing access to modern teaching practices, state-of-the-art equipment, and digital resources for effective organization of the educational process and continuous professional growth.

For Parents:

The ability to entrust their children to professionals and start working. The opportunity to choose different types of institutions and new forms of education for the upbringing and development of children according to their educational needs and capabilities. Guarantees that their children will receive education in a safe and inclusive environment, taking into account the needs of each and every child.

For the State:

Creating opportunities for parents to easily enroll their children in kindergartens, thereby allowing them to work full-time and succeed in their professions. This will contribute to increased economic productivity and tax revenues, economic growth, and the improvement of the human capital index, providing the state with competitive professionals and national resilience.

Key initiatives

«My Little Fortress»

— every education institution should be equipped as a reliable shelter, friendly to all participants in the educational process, guaranteeing protection, collective and individual safety.

Safeguarding policy

— a project to develop a policy for protecting children from physical, psychological, and sexual violence.

Transformation of the remuneration system in early childhood and preschool institutions

— development and piloting of a new remuneration system for early childhood and preschool education workers.

State Preschool Education Standard

— updating the content of early and preschool-age children's education in accordance with the European Quality framework for Early childhood education and care. Ensuring real continuity between the stages of preschool and primary education. Updating the educational environment of early childhood and preschool education providers in accordance with the principles of universal design.

Early childhood and Preschool Education Digitization

— implementation of an electronic queue in all early childhood and preschool institutions in the country, upgrading the material and technical base, providing early childhood and preschool institutions with laptops and tablets to improve working conditions and communication with parents. Creating a distance kindergarten (online kindergarten) to provide access to early childhood and preschool education for children in frontline territories.

Quick Start

— development and implementation of a shortened training course for educators to facilitate access to the profession and partially address the staffing issue in the early and preschool education system.

Introduction of English Language in Early Childhood Preschool Education

— a project dedicated to the development and implementation of practices for learning English language in early childhood preschool education institutions, as this age is sensitive to language learning. To speak the language of the world, to be competitive, it is necessary to improve English proficiency, and it is advisable to start from an early age.

Alternative Forms of Early Childhood and Preschool Education

— a project designed to model effective solutions for alternative types of kindergartens and their further implementation in areas with different conditions (according to the security situation, infrastructure damage, the number of children, demographic situation, population composition, economic development, etc.).

Ultimate Goal:

Every child, including those with special educational needs (SEN), has access to quality Early Childhood and Preschool Education.

Performance Indicators:

1. Percentage of children aged 1 to 6(7) enrolled in early childhood and preschool institutions providing relevant services.
2. Number of children under 5 years old enrolled in early childhood and preschool institutions and structural units of legal entities of public and private law, % disaggregated by gender, and type of locality (SDG Indicator 4).

Strategic Objective 1.1:

Every child, especially those with SEN, in Ukraine, is guaranteed a place in the Early Childhood and Preschool Education system.

Performance Indicators:

1. Percentage of early childhood and preschool institutions equipped with civil defense protective structures.
2. Percentage of existing environments in relation to demand.

Operational Objective 1.1.1:

The educational environment of service providers in Early Childhood and Preschool Education is safe and inclusive.

Tasks:

1.1.1.1. Ensuring an inclusive and safe educational environment in early childhood and preschool institutions.

1.1.1.2. Providing conditions for teaching first aid skills to the pedagogical staff of early childhood and preschool institutions.

1.1.1.3. Development and implementation of safeguarding policy in the Early Childhood and Preschool Education system.

Operational Objective 1.1.2:

Conditions are created for a flexible and optimal network of various educational service providers for early childhood-age children and preschoolers

Tasks:

1.1.2.1. Development of methodological recommendations for founders based on the results of research on the accessibility of early childhood and preschool institutions for children with special educational needs.

1.1.2.2. Introduction of new forms of Early Childhood and Preschool Education.

1.1.2.3. Development and implementation of provisions on various types of activities in early childhood and preschool institutions.

1.1.2.4. Approval of procedures for admission, withdrawal, and transfer of children to state and municipal early childhood and preschool institutions.

Operational Objective 1.1.3:

A system is in place for collecting relevant data on the number of early childhood-age children and preschoolers, including those with SEN, the number of Early Childhood and Preschool Education pedagogical workers by age category, educational activity entities, settlements, and regions.

Tasks:

1.1.3.1. Ensuring the collection of timely relevant data on the functioning of Early Childhood and Preschool Education.

1.1.3.2. Development of methodological recommendations taking into account the specificities of regions and communities, based on the collection of relevant data on the functioning of the Early Childhood and Preschool Education system.

Strategic Objective 1.2:

The field is provided with a sufficient number of highly qualified and motivated pedagogical staff.

Performance Indicators:

1. Percentage of early childhood and preschool pedagogical staff who have undergone training under updated qualification enhancement programs.
2. Percentage of institutions of professional per-higher and higher education that have updated training, retraining, and qualification enhancement programs for pedagogical staff.

Operational Objective 1.2.1:

The professional training system of pedagogical staff is updated (new quality and approach to training and retraining).

Tasks:

1.2.1.1. Update the professional standard of early childhood and preschool institution educators.

1.2.1.2. Update the higher education standard of Ukraine for the specialty 012 «Early Childhood and Preschool Education», especially regarding improving proficiency in the English language.

1.2.1.3. Pilot the new model of professional training for specialists in early childhood and preschool institutions.

Operational Objective 1.2.2:

Conditions are provided for quality professional development and career growth of Early Childhood and Preschool Education staff.

Tasks:

1.2.2.1. Development of new retraining models for quick entry into the profession.

1.2.2.2. Update the system of qualification enhancement for pedagogical staff.

1.2.2.3. Update programs for the qualification enhancement of pedagogical staff in early childhood and preschool institutions, including the introduction of programs on inclusion, psychological support, and a safe educational environment.

Operational Objective 1.2.3:

Conditions are provided for the quality training and professional development of managers of early childhood and preschool institutions and managers in the field of Early Childhood and Preschool Education.

Tasks:

1.2.3.1. Development of a Model Regulation on the contest for the position of municipal and state-owned early childhood and preschool institutions.

1.2.3.2. Creation of programs for the professional development of early childhood and preschool institutions principals and managers, including in project management, public-private partnerships, and public-private partnerships.

Strategic Objective 1.3:

Children, especially those with SEN, receive Early Childhood and Preschool Education following European quality and content standards.

Performance Indicators:

1. Approval of the State Standard for Early Childhood and Preschool Education.
2. Percentage of educational programs updated following the State Standard for Early Childhood and Preschool Education.
3. Percentage of early childhood and preschool institutions integrating the English language into the educational process.

Operational Objective 1.3.1:

The content of Early Childhood and Preschool Education is updated in accordance with the European Quality framework for Early childhood education and care and the Council of the EU Recommendations on Key Competencies for Lifelong Learning.

Tasks:

1.3.1.1. Development and approval of the State Standard for Early Childhood and Preschool Education.

1.3.1.2. Update educational programs following the State Standard for Early Childhood and Preschool Education.

1.3.1.3. Update the educational environment in early childhood and preschool institutions.

1.3.1.4. Create conditions for familiarizing and studying the English language in early childhood and preschool institutions.

Operational Objective 1.3.2:

Requirements for designing a three-component educational environment are developed.

Tasks:

1.3.2.1. Development of methodological recommendations on requirements for designing and organizing the educational environment of early childhood and preschool institutions based on the principles of accessibility and inclusiveness.
1.3.2.2. Approval of methodological recommendations on requirements for designing the educational environment in the field of education for early childhood-age children and preschoolers.

Operational Objective 1.3.3:

The structure and system of scientific and methodological support for the education of early childhood-age children and preschoolers have been updated.

Tasks:

1.3.3.1. Analysis of the functioning of the scientific and methodological support system for Early Childhood and Preschool Education, including its effectiveness and ensuring the principle of linking theory and practice.
1.3.3.2. Introduction of new approaches to the functioning of the scientific and methodological support system for the education of early childhood-age children and preschoolers at various levels (local, regional, state).
1.3.3.3. Approval of recommendations for the scientific and methodological support system for the education of early childhood-age children and preschoolers.

Operational Objective 1.3.4:

Early childhood and preschool institutions provide quality psychological support to participants in the educational process.

Tasks:

1.3.4.1. Establishment of centers for psychological support for educational workers and psychologists in early childhood and preschool institutions, especially based on the centers for the professional development of pedagogical staff.

1.3.4.2. Ensuring a proper level of psychological support in early childhood and preschool institutions.

1.3.4.3. Implementation of supervision and intervision for educational workers in early childhood and preschool institutions.

Operational Objective 1.3.5:

Early detection of special educational needs and quality support in the educational process for children with SEN.

Tasks:

1.3.5.1. Implementation of a training project and conducting training for specialists and experts involved in the early intervention system in all regions of Ukraine.

1.3.5.2. Ensuring the analysis and evaluation of the quality of early intervention services.

1.3.5.3. Development of methodological recommendations for creating a favorable environment for the development of children with SEN, providing necessary assistance in socialization and the educational process.

Strategic Objective 1.4:

The monitoring and evaluation system for Early Childhood and Preschool Education enables effective and prompt improvements in education quality and educational policies.

Performance Indicators:

1. Ukraine's participation in The Working Group on Early Childhood Education and Care (European Commission).
2. The number of early childhood and preschool institutions that have undergone institutional audits.

Operational Objective 1.4.1:

Implementation of Early Childhood and Preschool Education external quality monitoring system.

Tasks:

1.4.1.1. Development of tools for national and regional monitoring of early childhood and preschool institutions' quality based on different types of organizational activities.

1.4.1.2. Development and testing of the procedure for institutional audits of early childhood and preschool institutions.

1.4.1.3. Development of Early Childhood and Preschool Education quality monitoring system as part of EvaluEd based on a simplified international quality scale.

1.4.1.4. Ensuring Ukraine's participation in international research on the quality of Early Childhood and Preschool Education and policies in the field.

Operational Objective 1.4.2:

Implementation of an internal education quality system in early childhood and preschool institutions based on a scientific evidence-based approach.

Tasks:

1.4.2.1. Development of an internal education quality system in early childhood and preschool institutions based on different types of organizational activities.

1.4.2.2. Introduction of tools to support the internal quality monitoring system in early childhood and preschool institutions.

Strategic Objective 1.5:

The management and financing system of Early Childhood and Preschool Education at the regional and state levels is coordinated, efficient, and allows for the autonomy of education service providers.

Performance Indicators:

1. Increase in the salaries of pedagogical staff in early childhood and preschool institutions.
2. The number of early childhood and preschool institutions financing staff salaries using a new model.
3. The number of early childhood and preschool institutions utilizing an electronic document workflow system.

Operational Objective 1.5.1:

Update the model of funding education services for early childhood children and preschoolers.

Tasks:

1.5.1.1. Conduct an assessment of possibilities and efficiency for the implementation of new funding models for Early Childhood and Preschool Education services.

1.5.1.2. Develop a concept for a new payment model for the work of pedagogical staff in early childhood and preschool institutions.

1.5.1.3. Develop a new model for increasing salaries in the industry.

1.5.1.4. Implement new models of remuneration based on providing autonomy to early childhood and preschool institutions.

Operational Objective 1.5.2:

Ensure decent working conditions for Early Childhood and Preschool Education staff.

Tasks:

1.5.2.1. Develop a strategy to ensure decent working conditions for Early Childhood and Preschool Education staff.

1.5.2.2. Implement academic freedom and motivation for continuous professional development for staff in early childhood and preschool institutions.

Operational Objective 1.5.3:

Implement an effective electronic document workflow and partnership system in Early Childhood and Preschool Education.

Tasks:
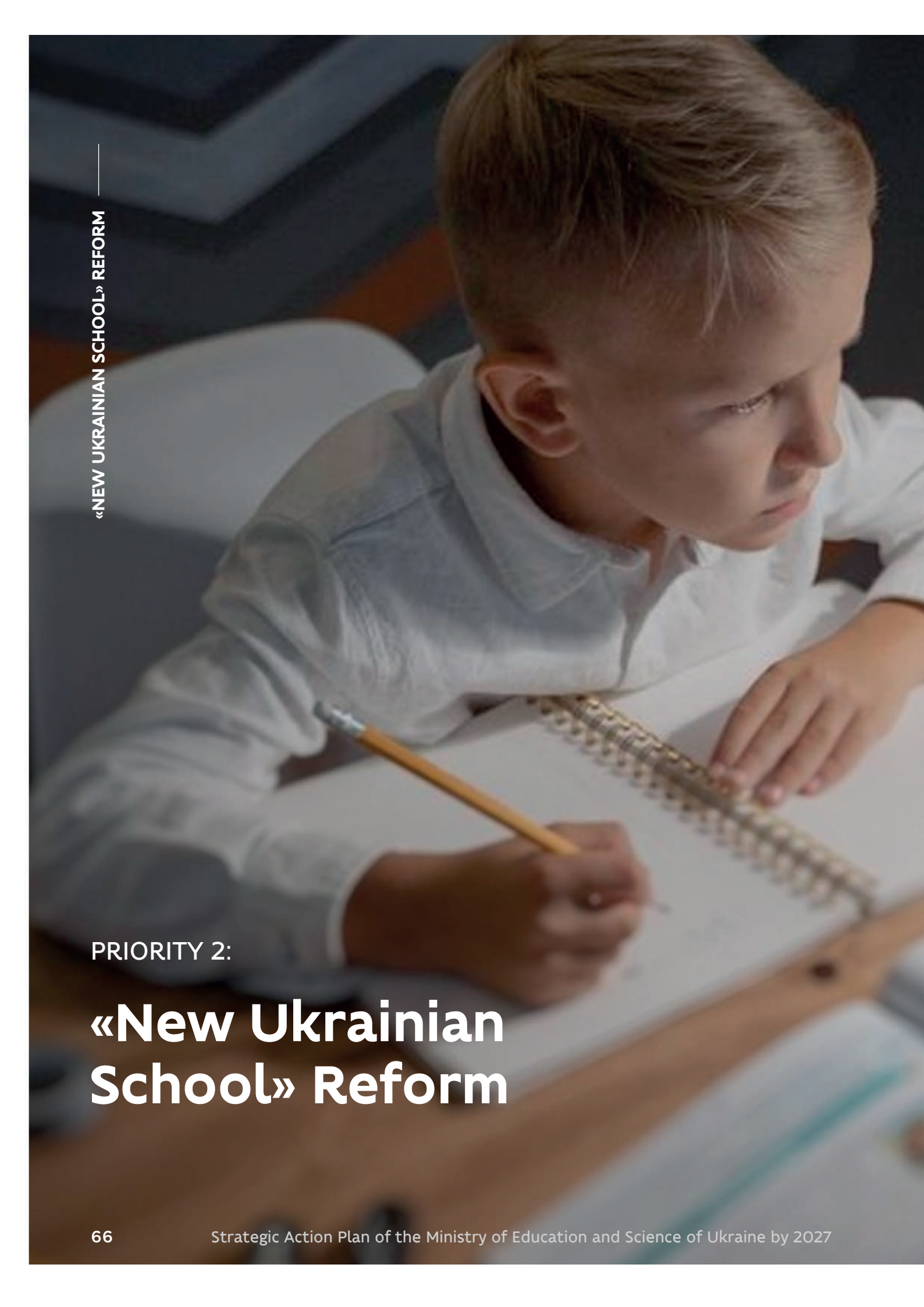
1.5.3.1. Reduce the list of mandatory paper documentation.

1.5.3.2. Develop an electronic document workflow between different levels of education management authorities.

1.5.3.3. Engage early childhood and preschool institution of various organizational types in the «Mriia» application.

Operational Objective 1.5.4:

Ensure interagency cooperation in the field of education, care, and protection of early childhood children and preschoolers.

Tasks:

1.5.4.1. Conduct an analysis of legislation and develop proposals for ensuring interagency cooperation to provide medical, psychological, social, and educational services in education.

1.5.4.2. Create equal conditions and opportunities for caring for children, especially those from socially vulnerable groups, with special educational needs, and internally displaced persons.

PRIORITY 2:

«New Ukrainian School» Reform

PRIORITY 2: «New Ukrainian School» Reform

Background

The «New Ukrainian School» reform began in 2016 with the adoption of the corresponding Concept and has been implemented in educational practice since 2018.

The key idea of the reform is child-centeredness, realized through:

- education content based on competency principles;
- establishing partnerships among all participants in the educational process;
- modern teaching practices and approaches to organizing student learning;
- providing a modern motivational educational environment;
- digitalization of education;
- equal access to education for children with special needs, including inclusive learning;
- school autonomy in organizing the educational process.

The reform is being implemented in stages.. Currently, grades 1-6 are taught under the new State Educational Standards, and a pilot experiment is ongoing in 7th grade.

The start of a full-scale war led to a significant reduction in education funding, including for reform implementation. As a result, the educational environment was not updated, teachers did not undergo proper training for the «New Ukrainian School» reform, and new textbooks were not printed. At the same time, understanding the importance of quality education for the reconstruction and development of Ukraine, a decision was made to focus on the full implementation of the «New Ukrainian School» reform in the basic school and preparation for the reform of profile education in Ukraine.

Anticipated Outcomes

For students:

learning for life, in-depth study of only necessary subjects, acquisition of key competencies and cross-cutting skills essential for future professional success in various life spheres, resilience.

For parents:

partnership with the school and participation in decision-making regarding the child's school life, quality feedback on the child's academic performance.

For pedagogues:

motivation for professional activities through a new system of remuneration, salary size, and qualification improvement; modern teaching practices, equipment, and digital resources for effective organization of teaching, professional growth, and innovative activities.

For the State:

a quality education system with modern practices ensuring high learning outcomes and meeting the social demands of the contemporary world, forming internationally competitive education quality.

Key Initiatives

Complete Transformation of School Environment.

Development of new modern models for organizing school environments. Reconstruction based on the «better than before» principle. Equipping classrooms in basic and profile schools according to modern requirements.

State Standard for Profile Upper-Secondary School.

Approval of the State Standard for Profile Secondary Education. Development and approval of educational and model programs.

Piloting of the Profile Education Model.

Development of a system for involving teachers and students in the pilot. Piloting models for organizing the educational process and educational materials under the new standard.

Safe Educational Environment.

Reconstruction of educational infrastructure through new projects. Creation of shelters in education institutions. Provision of students with quality and healthy nutrition.

Reboot of the «New Ukrainian School» Reform in the First and Second Cycles of Basic Education (Grades 5-9).

Training of school principals and pedagogues for the reform implementation. Updating equipment lists of classrooms according to the new «New Ukrainian School» educational programs. Furnishing classrooms. Approval of new assessment criteria. Implementation of educational and methodological materials electronic evaluation.

Strategy for Overcoming Educational Losses.

Development of a strategy for overcoming educational losses (separately for the occupied territories). Development of adapted educational programs (grades 5-11) for overcoming educational losses.

Professional Development of Pedagogic Staff.

Update of the teacher's professional standard. Revision of the certification regulations. Certification of elementary school teachers, Ukrainian language, mathematics, history, and other subjects teachers. Targeted professional development for «New Ukrainian School» teachers and psychologists. Targeted professional development for principals and deputy principals (as part of the new pay model implementation).

New Teacher and Principal Remuneration System.

Development of a new salary system for administration and teachers. Piloting the new payment system.

Formation of Monitoring System.

Nationwide external monitoring of the primary education quality. Investigation into the implementation of the «New Ukrainian School» reform in basic schools (grades 5-6). Nationwide monitoring research on the quality of education in general secondary education institutions in the conditions of martial law (grades 6/8). Preparation for participation in the Programme for International Students Assessment (PISA).

National Identity Component of Educational Content.

Updating educational materials on modern Ukrainian history. Development and implementation of new strategic narratives. Updating the program and content of the «Defense of Ukraine» course.

Ultimate Goal:

Every school student has access to quality education aimed at developing key competencies and cross-cutting skills necessary for life, social and emotional well-being, further learning, and self-development.

Performance Indicators:

1. Percentage of school students with access to in-person educational processes.
2. Percentage of 15-year-old general secondary education students who achieved Level 2 and above in key areas (reading, mathematics, science) according to the PISA scale, disaggregated by gender, type of locality, type of education, socio-economic status (PISA socio-economic status index (ESCS) SDG 4 indicator).

Strategic Objective 2.1:

School students study in a safe, modern, and inclusive educational environment.

Performance Indicators:

1. Percentage of education institutions where civil defense structures are equipped.
2. Number of restored, reconstructed, and repaired general secondary education institutions.
3. Number of school buses purchased with subsidy funds and local budgets.
4. Percentage of communities that have updated the network of general secondary education institutions.
5. Number of updated school cafeterias and food preparation facilities.

Operational Objective 2.1.1:

The updated design and restoration model of general education institutions ensures comfortable and safe conditions for learning and teaching.

Tasks:

2.1.1.1. Monitoring the restoration and repair of general education institutions.
2.1.1.2. Development of new approaches to the design and organization of the environment in general secondary education institutions.
2.1.1.3. Providing civil defense structures in education institutions to ensure access to quality education.

Operational Objective 2.1.2:

The updated network of secondary education institutions meets the educational needs of communities and adheres to the principles of «New Ukrainian School».

Tasks:

2.1.2.1. Development of a model of education institutions' network based on regional and community needs.
2.1.2.2. Transformation of general secondary education institutions' network according to regional plans.
2.1.2.3. Providing transportation for children to education institutions.

Operational Objective 2.1.3:

The updated modern educational environment of the «New Ukrainian School» ensures equal, fair, and safe conditions for quality learning.

Tasks:

2.1.3.1. Update the list of the Typical List of Teaching Tools and Equipment for classrooms and STEM laboratories.

2.1.3.2. Providing education institutions with teaching tools and equipment according to model educational programs.

2.1.3.3. Ensuring the modernization of technical equipment in classrooms for profile upper- secondary school.

Operational Objective 2.1.4:

The school nutrition system is restored and modernized.

Tasks:

2.1.4.1. Updating cafeteria and food preparation facilities in education institutions.

2.1.4.2. Attracting additional investments and developing partnerships to improve the organization of nutrition processes in education institutions.

2.1.4.3. Promoting the formation of a healthy eating culture and popularizing changes in the nutrition system in education institutions.

Strategic Objective 2.2:

School students receive quality education following the principles and approaches of «New Ukrainian School».

Performance Indicators:

1. Approved State Standard for Profile Upper-Secondary Education and corresponding model curriculum.
2. Percentage of primary and basic school students provided with «New Ukrainian School» textbooks.
3. Percentage of primary school graduates who have achieved the basic threshold of key competencies based on the nationwide external monitoring of the quality of primary education, disaggregated by gender, locality type (SDG 4 indicator).
4. Percentage of 6th and 8th-grade students in general education who have achieved a sufficient level in the Ukrainian language and mathematics (algebra and geometry) based on the nationwide monitoring study of the quality of education in conditions of martial law, disaggregated by gender, type of locality, type of education, socio-economic status (SDG 4 indicator).

Operational Objective 2.2.1:

Graduates of basic school possess competencies and transversal skills necessary for life and further learning.

Tasks:

2.2.1.1. Update the content of the social and health-saving domains in the State Standard of Basic Secondary Education.

2.2.1.2. Update the content of education in grades 5-9 by reviewing curricula and model educational programs.

2.2.1.3. Develop criteria for assessing the learning outcomes of basic secondary school students.

2.2.1.4. Organize the development of educational and methodological support for basic secondary education content.

2.2.1.5. Implement digital expertise in educational and methodological materials for basic secondary education.

Operational Objective 2.2.2:

The content of academic-oriented Profile Upper-Secondary Education is developed, tested, and prepared for implementation.

Tasks:

2.2.2.1. Develop and approve the State Standard for Profile Upper- Secondary Education.

2.2.2.2. Define models for organizing the educational process in Profile Upper-Secondary Education. involving international and national experts.

2.2.2.3. Organize the piloting of the State Standard for Profile Upper-Secondary Education.

2.2.2.4. Implement the State Standard for Profile Upper-Secondary Education. in lyceums with vocational direction of the profile upper-secondary education and academic orientation.

2.2.2.5. Introduction of a new model of State Summative Assessment and modernization of External Independent Assessment for graduates of profile upper-secondary education in education institutions of all types.

Operational Objective 2.2.3:

The educational assessment system at all levels of education is fair and informative.

Tasks:

2.2.3.1. Ensure the participation of 15-year-old students from Ukraine in the PISA-2025 monitoring study.

2.2.3.2. Study the dynamics of students' learning outcomes in primary school by monitoring reading and mathematical competencies.

2.2.3.3. Study implementation of the «New Ukrainian School» Reform in basic school.

2.2.3.4. Systematically study the learning outcomes in Ukrainian language and mathematics (6/8 grades).

2.2.3.5. Update the procedures for conducting the final state certification of students in 4th and 9th grades.

2.2.3.6. Study the quality of educational and methodological support for the content of secondary education through systematic surveys of pedagogical staff.

Operational Objective 2.2.4:

Students in classes are taught in the languages of national minorities that are official languages of the European Union and receive quality education.

Tasks:

2.2.4.1. Develop a Roadmap to improve the quality of teaching in the state language and languages of indigenous peoples and national minorities in Ukrainian general secondary education institutions.

2.2.4.2. Provide textbooks on academic subjects and integrated courses, educational guides and translated textbooks to general secondary education institutions that have classes (groups) taught in the languages of indigenous peoples and national minorities.

2.2.4.3. Organize and conduct consultations with representative organizations of indigenous peoples and national minorities on education issues, and facilitate cooperation with international organizations.

2.2.4.4. Strengthen cooperation with the Office of the Council of Europe in Ukraine on meeting the educational needs of indigenous peoples and national minorities.

Strategic Objective 2.3:

The content of education is adapted and transformed in response to the challenges of war.

Performance Indicators:

1. The number of school students who received history textbooks for the 11th grade with updated national narratives;
2. The number of developed projects to preserve the national identity of children abroad;
3. The number of adapted and/or developed programs for compensating educational losses;
4. The number of partner schools of the State Lyceum «International Ukrainian School.»

Operational Objective 2.3.1

The content of education corresponds to the national ideas of the state and contributes to the formation of the national identity of students.

Tasks:

2.3.1.1. Develop and implement new strategic narratives for the formation of national identity.

2.3.1.2. Update educational materials on modern Ukrainian history.

2.3.1.3. Update educational programs and educational and methodology materials for the course «Defense of Ukraine.»

Operational Objective 2.3.2:

School students studying abroad are involved in the national education system.

Tasks:

2.3.2.1. Create conditions for the education of children abroad in Ukrainian education institutions.

2.3.2.2. Expand the functionality and institutional capacity of the International Ukrainian School.

2.3.2.3. Develop a system for transferring learning outcomes for school students who studied abroad.

2.3.2.4. Develop a system of interaction with children abroad to preserve their national identity.

Operational Objective 2.3.3:

An effective and sustainable system for compensating educational losses meets the educational needs of students affected by war, displacement, or the pandemic.

Tasks:

2.3.3.1. Develop a strategy for compensating educational losses in the general secondary education system- Catchup.

2.3.3.2. Develop recommendations for overcoming educational losses in de-occupied territories.

2.3.3.3. Formulate proposals for updating the content of educational programs according to the needs of wartime/post-war periods.

2.3.3.4. Develop/update and implement educational programs and teaching materials in line with the needs of wartime/post-war periods.

Strategic Objective 2.4:

Pedagogical teams of education institutions work based on partnership principles and implement the principles and approaches of «New Ukrainian School».

Performance Indicators:

1. The number of education institutions transferred to the new system of remuneration;
2. The number of certified teachers;
3. Reduction in the number of vacancies for pedagogical staff;
4. The number of pedagogical staff in basic secondary and profile upper-secondary schools who completed professional development for "New Ukrainian School".

Operational Objective 2.4.1:

The new remuneration system contributes to the prestige of the teaching profession and creates competitive conditions in the pedagogical community.

Tasks:

2.4.1.1. Develop the concept of a new teacher remuneration system.

2.4.1.2. Pilot the implementation of the new remuneration system.

2.4.1.3. Implement the new remuneration system in all general secondary education institutions.

Operational Objective 2.4.2:

The updated teacher certification model ensures "New Ukrainian School" is staffed with highly qualified professionals.

Tasks:

2.4.2.1. Update the occupational standard for teachers.

2.4.2.2. Update the regulation on the certification of pedagogical staff.

2.4.2.3. Develop a certification program for history teachers.

2.4.2.4. Organize the certification of primary school teachers, Ukrainian language teachers, mathematics teachers, and history teachers.

Operational Objective 2.4.3:

Teachers organize the educational process based on competency, activity-oriented, and personality-oriented approaches.

Tasks:

2.4.3.1. Ensure the training of teaching staff according to new programs/qualifications in line with NUS needs and requirements.

2.4.3.2. Provide targeted professional development for "New Ukrainian School" teachers and psychologists, including academic integrity.

2.4.3.3. Initiate amendments to the Classifier of Professions and Typical Staffing Norms of General Secondary Education Institutions to introduce the position of career advisor.

2.4.3.4. Develop and implement programs for the training of career advisors.

Operational Objective 2.4.4:

Education managers are leaders of school teams implementing the educational process based on "New Ukrainian School" principles and effectively responding to current challenges.

Tasks:

2.4.4.1. Ensure targeted professional development for principals and deputy principals within the pilot implementation of the new remuneration system.

2.4.4.2. Ensure targeted professional development for principals and deputy principals of academic and professional lyceums.

2.4.4.3. Introduce the practice of supervision- professional support and assistance to pedagogical staff in general secondary education institutions.

PRIORITY 3:

Out-of-School Education Concept

PRIORITY 3: Out-of-School Education Concept

Background

In the context of contemporary challenges, especially during the state of war, modern out-of-school education in Ukraine plays a crucial role in compensating educational losses, providing education in de-occupied and frontline territories where offline education is inaccessible, and in the swift formation and implementation of new educational methodologies and approaches.

The significance of this segment of education lies not only in imparting knowledge and skills but also in shaping strong moral and civic positions among the youth. Strategic and operational goals encompass a wide range of tasks, from the development of scientific-practical environments to ensuring the quality preparation of educators for the implementation of military-patriotic education and scientific education tools.

Particular attention should be given to the implementation of innovative teaching methods, such as the STEM approach, promoting the development of critical thinking, creativity, and innovative abilities. The realization of these approaches will help students better adapt to the rapidly changing conditions of the modern world.

An important aspect is also the social-psychological support and rehabilitation, especially in the context of armed conflict. out-of-school education institutions should become places where children and youth can receive necessary support and restore internal balance.
Overall, out-of-school education in Ukraine should become an effective tool for developing natural competencies, national identity, nurturing patriotism, and shaping the future professional potential of the country.

Anticipated Outcomes

For Children and Youth:

comprehensive coverage with quality out-of-school education fostering the development of individual abilities, addressing educational losses and instilling military-patriotic values and career orientation.

For Society:

establishment of resilient education centers in the de-occupied territories, affirmation of Ukrainian national and civic identity, support for social-rehabilitation programs, development of skills and competencies.

For Educators:

professional development opportunities, integration of innovative approaches and methodologies in out-of-school education into school programs.

For the State:

creation of scientific interactive environments and centers for compensating educational losses, Implementation of effective funding and management models for out-of-school education.

Key Initiatives

The concept of out-of-school education

implies creating of a new system of out-of-school education management, building a network of institutions, funding formulas, and approaches to organizing work in extracurricular education institutions.

Museum of Mathematics

is an example of creating a Science Center as a tool for community development and professional development for teachers.

Center for the Olympic Movement

is a sole center that would support the Olympic movement in communities and create new educational opportunities to encourage students to engage in research and scientific activities.

Ultimate Goal:

Citizens of Ukraine receive quality Out-of-School Education that promotes the development of individual talents and abilities, affirmation of Ukrainian national and civic identity, military-patriotic education, and effective career guidance.

Performance Indicators:

1. Percentage of children and youth covered by out-of-school education.
2. Number of created scientific interactive environments in the out-of-school education system.

Strategic Objective 3.1:

Education applicants receive quality Out-of-School Education with updated content and methods in a safe and innovative educational environment based on Ukrainian national and civic identity.

Performance Indicators:

1. Number of staff of out-of-school education institutions and local government bodies who have undergone training in relevant workshops and courses.
2. Number of children and youth involved in social rehabilitation and health programs based on out-of-school education institutions and higher education institutions' structural units.
3. Approval of the Military-Patriotic Education Strategy for children and youth in the education system of Ukraine.

Operational Objective 3.1.1:

The management and financing system of Out-of-School Education at the local, regional, and state levels is coordinated and effective.

Tasks:

3.1.1.1. Organize training for staff of out-of-school education institutions and representatives of local self-government aimed at enhancing higher education institutions' capacity to participate in grant programs and projects using modern approaches and tools.

3.1.1.2. Develop and make changes to legislative acts to support the financial autonomy of out-of-school education institutions of various forms of ownership and simplify the registration of private out-of-school education institutions.

Operational Objective 3.1.2:

Educational activities of out-of-school education institutions meet the needs of the wartime/post-war period and incorporate the best national and international practices based on Ukrainian national and civic identity.

Tasks:

3.1.2.1. Analyze international practices in the organization and functioning of out-of-school education institutions/groups; develop recommendations for implementing best out-of-school education practices at the local and state levels.

3.1.2.2. Ensure out-of-school education institutions have access to innovative teaching tools and methods in line with the best international practices.

3.1.2.3. Develop and implement educational programs according to the needs of the wartime/post-war period.

3.1.2.4. Develop and approve the Military-Patriotic Education Strategy for children and youth in the education system of Ukraine.

3.1.2.5. Organization of remote access to education in out-of-school education institutions and compensating for educational losses and gaps in extracurricular education.

Operational Objective 3.1.3:

The content of Out-of-School Education is based on the implementation of modern approaches (military-patriotic education, STEM approach, competency-based approach, entrepreneurial education, education for sustainable development and recovery).

Tasks:

3.1.3.1. Implementation of STEM education, entrepreneurial education, military-patriotic education, and education for sustainable development and recovery.

3.1.3.2. Creation of scientific interactive environments in the out-of-school education system.

3.1.3.3. Establishment of the National Center for Compensating Educational Losses in Mathematics, the «Museum of Mathematics».

Operational Objective 3.1.4:

Out-of-school education applicants realize higher education institution potential through participation in national and international Olympiads, competitions, and contests.

Tasks:

3.1.4.1. Establishment of the Olympiad Movement Center.

3.1.4.2. Organization and conduct of annual exhibitions-competitions of youth innovative projects with the possibility of higher education institutions' further support.

Operational Objective 3.1.5:

Participants of the educational process receive social-psychological support, rehabilitation services, and health services in out-of-school education institutions and higher education institutions' structural units.

Tasks:

.3.1.5.1. Formation of proposals for the organization of the implementation of social rehabilitation and health programs in out-of-school education institutions and higher education institutions' structural units.

3.1.5.2. Implementation of social rehabilitation and health programs based on out-of-school education institutions and higher education institutions' structural units.

Strategic Objective 3.2:

Out-of-school education is a center of community development, and its work is effectively funded and moderated at the state and local levels.

Performance Indicators:

1. The Concept of extracurricular education is developed.
2. Number of employees at out-of-school education institutions and local self-government bodies who have improved their skills at respective trainings and courses.

Operational Objective 3.2.1.

The management and financing of out-of-school education at local, regional and national levels is coherent and effective.

Tasks:

3.2.1.1. Development, approval and implementation of the Out-of-School Education Concept.

3.2.1.2. Creation of a network of out-of-school education institutions and their structural units at the communities' level.

3.2.1.3. Development and amendment of regulations to promote financial autonomy of out-of-school education institutions of different forms of ownership and to simplify registration of private out-of-school education institutions.

Operational objective 3.2.2

Participants of the educational process have access to recreation and active leisure in the summer in out-of-school educational institutions and their structural subunits.

Tasks:

3.2.2.1. Develop recommendations for organizing summer recreation and active leisure in communities.

3.2.2.2. Develop recommendations for the socialization and integration of IDP children in communities.

Operational Objective 3.2.3

Out-of-school education is provided by highly qualified teaching staff.

Tasks:

3.2.3.1. Teaching staff are motivated and paid competitive salaries to ensure quality education.

3.2.3.2. Carrying out professional training of teaching staff according to educational programs that take into account the most effective Ukrainian and international experience.

3.2.3.3. Development of a professional standard for the head of a study-group at an out-of-school education institution.

3.2.3.4. Updating the system of vocational guidance, training and professional development of pedagogical staff in out-of-school education institutions.

3.2.3.5. Organization of training for employees in out-of-school education institutions and representatives of local governments to strengthen their capacity to participate in grant programs and projects, taking into account the latest approaches and tools.

PRIORITY 4:

Transformation of Vocational Education and Training

PRIORITY 4: Transformation of Vocational Education and Training

Background

The reform «Modern Vocational Education and Training» began in 2019 with the adoption of the Concept of implementing state policy in the field of vocational (vocational-technical) education «Modern Vocational Education and Training» by 2027.

The goal of the Concept is to implement a reform of vocational (vocational-technical) education that will ensure the accomplishment of three fundamental tasks:

- Decentralization of management and financing in the field VET.
- Ensuring the quality of vocational education and training.
- Establishment of public-private partnerships in the field of vocational education and training and the connection with the labor market.

The reform is implemented in three stages during 2019–2027. The Law of Ukraine «On Professional Pre-higher Education» (2019) introduced significant innovations for the sustainable development of society. It includes a student-oriented approach to organizing the educational process, allowing each student to build their own individual educational trajectory with various forms of education: dual, network, etc.

In the context of the military aggression by the russian federation, vocational education and professional pre-higher education in Ukraine have suffered significant losses, profoundly affecting their stakeholders, infrastructure, and functioning mechanisms. The war has had destructive consequences for the system, including:

- destruction or damage of vocational and professional pre-higher education institutions.
- destroyed, damaged, or confiscated equipment in education institutions in temporarily occupied territories.
- partial loss of personnel potential in education institutions associated with changes in residence, including relocation abroad, mobilization into armed formations, and their presence in territories of Ukraine with active hostilities.

- inadaptability of educational programs and study durations to the needs of learners considering the implementation of the right to lifelong education and state requests for the reconstruction/recovery of the economy/infrastructure.
- loss of connections between institutions of vocational education and businesses due to destruction, closure, or relocation of enterprises to other regions, resulting in low business activity in the process of implementing state-private partnership programs and projects.

Simultaneously, given the significance of quality education for the reconstruction and further development of Ukraine, the reform of vocational education and the establishment of professional pre-higher education in Ukraine continue.

Anticipated Outcomes

For Education Applicants:

access to quality vocational and professional pre-higher education; learning and acquiring practical skills and competencies for a quick entry into the job market; development of personal and professional interests; preparation for entrepreneurship or self-employment based on acquired knowledge; opportunities for career development and advancement in the future.

For the State:

stimulating economic development, social stability and formation of the competitiveness of workers in the job market for the recovery and rebuilding of the country.

For Pedagogical Staff:

increase in salary, experience, and performance; renewal and development of professional skills; ability to implement innovative teaching methods and use innovative approaches; exchange of experiences for improving professional development and enhancing working conditions.

For Parents:

established partnership with institutions providing vocational education and training for effective support and collaboration; understanding the labor market demands and future career prospects for their children.

Key Initiatives:

1. Passing the Law of Ukraine «On Vocational Education» by the Verkhovna Rada of Ukraine.

This law defines the legal, organizational, and economic principles of the functioning and development of the vocational education system in Ukraine.

Modernization of the Network of Vocational and Professional Pre-Higher Education Institutions.

Formation of an optimal network of institutions, taking into account methodological recommendations for forming the network.

Ensuring the return of educational opportunities and the development of education in de-occupied territories.

Creation and implementation of state policy regarding the return of vocational and professional pre-higher education to de-occupied territories.

Financial Management.

Introduction of a subsidy for the development of institutions, updating typical staffing tables, improvement of the regulatory framework for calculating the cost of paid services, and the expansion of the list of these services.

Formation of new approaches to motivation and remuneration of pedagogical staff and managers.

Change in the system of remuneration for pedagogical staff in vocational and professional pre-higher education institutions, implementation of a grading system based on criteria of responsibility, experience, qualification, and achievements.

Enhancement of pedagogical mastery.

Organization of qualification enhancement and internships for the implementation of modern teaching methods.

Deepening connections between institutions of vocational education and businesses.

Optimization of the process of developing partnership relations with enterprises for the training of personnel meeting modern labor market needs.

Adaptation and modernization of educational programs.

Оновлено зміст програм з урахуванням потреб сучасного ринку праці та впровадження нових професій і спеціальностей.

Development of inclusive education.

Ensuring equal opportunities for access to vocational and profile upper-secondary education for all population categories.

Ultimate Goal:

Citizens of Ukraine have access to quality Vocational Education and Training and professional pre-higher education, a wide range of educational opportunities, and the labor market receives competitive workers for the country's recovery and reconstruction.

Performance Indicators:

1. Increase in the percentage of school graduates choosing vocational education and training schools and/or professional pre-higher education.
2. Increase in revenue to the special fund of VET schools and professional pre-higher education institutions from educational and production activities.
3. Growth in the percentage of applicants of VET schools and professional pre-higher education among the adult population.

Strategic Objective 4.1:

The network of VET schools and professional pre-higher education institutions is effective and has modern infrastructure.

Performance Indicators:

1. Number of established educational and practical centers in VET schools and professional pre-higher education institutions, including those funded by partners.
2. Average capacity use of VET schools and professional pre-higher education institutions increased by 20%.
3. Number of VET schools granted the status of Centers of Excellence.

Operational Objective 4.1.1:

1. Form an effective network of VET schools and professional pre-higher education institutions, considering demographic situations, economic needs, and citizens' priorities.

Tasks:

4.1.1.1. Modeling the updated network of state and municipal VET schools and professional pre-higher education institutions, considering the introduction of profile secondary education.

4.1.1.2. Approval of methodical recommendations for forming the network of VET schools and professional pre-higher education institutions.

4.1.1.3. Modernization of the network of state and municipal VET schools and professional pre-higher education institutions following methodical recommendations, considering possible changes in ownership.

Operational Objective 4.1.2:

Institutions have modern educational, production, and social infrastructure.

Tasks:

4.1.2.1. Reconstruction of 6 VET schools and granting them the status of Centers of Professional Excellence under the European Investment Bank project.

4.1.2.2. Establishment of Centers of Excellence in each region as innovation implementation centers in VET.

4.1.2.3. Development of a network of educational and practical centers based on VET schools and professional pre-higher education institutions funded by state and local budgets and private partners, including the normative provision of paid services.

4.1.2.4. Attraction of funding (including international technical assistance) for updating the educational environment, educational, production, and social infrastructure of VET schools and professional pre-higher education institutions, considering accessibility, inclusivity, energy efficiency and safety.

4.1.2.5. Reconstruction and restoration of destroyed and damaged VET schools and professional pre-higher education institutions due to the armed aggression of the russian federation against Ukraine.

Strategic Objective 4.2:

VET schools and professional pre-higher education ensure the acquisition of educational and professional competencies for personal development and successful careers.

Performance Indicators:

1. Number of updated state educational standards used in VET schools and professional pre-higher education institutions.
2. Number of applicants of VET schools and professional pre-higher education who underwent external independent assessment of professional qualifications.
3. Number of educational staff and managers of VET schools who underwent training under updated qualification enhancement programs, including educational management programs.

Operational Objective 4.2.1:

The content of VET and professional pre-higher education meets the labor market requirements and is constantly updated.

Tasks:

4.2.1.1. Development, approval, monitoring, and periodic review of the State Standard of Vocational Education and Training, state educational standards for specific professions in VET, and standards of professional pre-higher education on a competency basis, considering harmonization with professional standards.

4.2.1.2. Development, piloting, and approval of typical educational programs of profile upper- secondary education of vocational direction.

4.2.1.3. Training of applicants of VET schools and professional pre-higher education institutions in the use of modern technologies and equipment, including at enterprises, educational and practical centers, and Centers of Excellence.

4.2.1.4. Cultivation of a culture of continuous professional improvement, including lifelong learning, qualification enhancement, and obtaining partial qualifications (micro-credentials) through short-term educational programs, especially for veterans and internally displaced persons.

4.2.1.5. Introduction (modernization) of a mandatory multilevel English language course for VET and professional pre-higher education applicants.

4.2.1.6. Updating methodological recommendations for forming regional orders, taking into account the results of regional labor market research.

Operational Objective 4.2.2:

Graduates of VET schools and professional pre-higher education institutions have acquired the necessary competencies for effective career building and entrepreneurship.

Tasks:

4.2.2.1. Support the development and continuous improvement of the dual form of education, workplace learning, expanded practical training, as well as student and pupil entrepreneurship and startup support.

4.2.2.2. Implementation of a system of external independent assessment of professional qualifications, including the establishment of a network of qualification centers that provide assignment of professional qualifications based on VET schools and professional pre-higher education institutions.

4.2.2.3. Organization of monitoring of the professional careers of graduates of VET schools and professional pre-higher education institutions.

4.2.2.4. Development of a network of career centers in institutions, introduction of the institute of career consultants among the staff of VET schools and professional pre-higher education institutions.

Operational Objective 4.2.3.

Pedagogical excellence of teachers and masters in VET and professional pre-higher education is continuously improved, taking into account international experience and the latest scientific achievements.

Tasks:

4.2.3.1. Creation and active use of electronic educational resources and online courses in the educational process of VET schools and professional pre-higher education institutions.

4.2.3.2. Application of virtual and augmented reality technologies, simulators, etc., for teaching and practical skills development in VET schools and professional pre-higher education institutions.

4.2.3.3. Implementation of modern effective educational technologies in VET schools and professional pre-higher education institutions, ensuring a high level of assimilation of educational material and practical skills formation, including the use of artificial intelligence.

4.2.3.4. Facilitation of internal and international mobility of VET schools and professional pre-higher education applicants for access to cutting-edge technologies and equipment.

4.2.3.5. Providing conditions for involving successful practitioners as teachers and supervisors in the practical training of education applicants in VET schools and professional pre-higher education institutions.

| Strategic Objective 4.3.

VET schools and professional pre-higher education institutions are attractive and prestigious for learning and working.

Performance Indicators:

1. Number of individuals covered by promotional campaigns in the field of VET and professional pre-higher education.
2. Number of pedagogical staff in VET and professional pre-higher education institutions who have undergone training in new ni qualification improvement and internship programs.
3. Number of managers of VET and professional pre-higher education institutions who have undergone training in educational management programs.
4. Number of principals appointed through the new competitive procedure.

Operational Objective 4.3.1.

Applicants of VET schools and professional pre-higher education institutions make informed choices regarding professional careers and educational trajectories.

Tasks:

4.3.1.1. Promotion of educational and vocational programs of VET schools and professional pre-higher education institutions.

4.3.1.2. Development of the Concept of Professional Orientation in the education system.

4.3.1.3. Implementation of career guidance events for students in grades 7-12 of general secondary education.

Operational Objective 4.3.2.

Pedagogical staff of VET schools and professional pre-higher education institutions are professional and motivated.

Tasks:

4.3.2.1. Development and implementation of new programs for qualification improvement and training of pedagogical staff, including training programs in mentoring, facilitation, coaching, inclusion, project management, development of short-term programs, electronic educational materials, etc.

4.3.2.2. Introduction of certification for various categories of pedagogical staff of VET schools and professional pre-higher education institutions.

4.3.2.3. Organization of an annual nationwide competition for pedagogical excellence for staff in VET schools and professional pre-higher education institutions.

4.2.2.4. Increase in the remuneration of pedagogical staff and change in the remuneration system in VET schools and professional pre-higher education institutions.

4.2.2.5. Implementation of production internships for pedagogical staff of VET schools and professional pre-higher education institutions.

Operational Objective 4.3.3.

Management of VET schools and professional pre-higher education institutions is carried out by motivated, competent, and effective managers.

Tasks:

4.3.3.1. Implementation (modernization) of the competitive selection procedure for managers of VET schools and professional pre-higher education institutions.

4.3.3.2. Organization of training for managers of state and municipal VET schools and professional pre-higher education institutions newly appointed to the position, as well as the managerial reserve, under educational management programs.

1. 4.3.3.3. Development of a motivation and remuneration system for managers of VET schools and professional pre-higher education institutions (grade system).
2. 4.3.3.4. Implementation of key performance indicators for managers of VET schools and professional pre-higher education institutions.
3. 4.3.3.5. Conducting internal and international educational trips for managers of VET schools and professional pre-higher education institutions to familiarize them with best management practices using budgetary funds and other sources.

Strategic Objective 4.4.

Institutions effectively utilize their organizational, academic, and financial autonomy and receive results-oriented funding.

Performance Indicators:

1. Adoption of the Law of Ukraine «On Vocational Education and Training».
2. Number of VET schools and professional pre-higher education institutions with established supervisory boards.
3. Extent of venues to special funds of VET schools and pre-higher education institutions.

Operational Objective 4.4.1.

The state policy in the field of VET schools and professional pre-higher education is formulated and consistently implemented.

Tasks:

4.4.1.1. Development and adoption of the draft law «On Vocational Education and Training».

4.4.1.2. Preparation and approval of the Development Strategy for Vocational Education and Training and Professional Pre-higher Education until 2035.

4.4.1.3. Implementation of specialized laws and the realization of the Development Strategy for Vocational Education and Training and Professional Pre-higher Education.

4.4.1.4. Formulation and implementation of state policy regarding the reintegration of VET and professional pre-higher education in de-occupied and recovery territories.

Operational Objective 4.4.2.

Management in VET schools and professional pre-higher education institutions is effective.

Tasks:

4.4.2.1. Involvement of stakeholders in the management of VET schools and professional pre-higher education institutions, delegation of a significant part of the founder's functions to them by establishing supervisory boards for state and municipal institutions.

4.4.2.2. Revision of the list of indicators for statistical reporting in the field of VET and professional pre-higher education and algorithms for their collection.

4.4.2.3. Digital transformation of operational processes in VET schools and professional pre-higher education institutions.

4.4.2.4. Implementation of an automated mechanism for data collection and analysis about the system of VET in the «AICEM» system (Automated Information Complex of Education Management) and advanced vocational education in the USEDE system (Unified State Electronic Database of Education).

Operational Objective 4.4.3.

Improvement of financial management in VET schools and professional pre-higher education institutions contributes to their higher education institution development and achievement of target performance indicators.

Tasks:

4.4.3.1. Conducting a study on the revenues and expenditures of state and municipal VET schools and professional pre-higher education institutions.

4.4.3.2. Implementation of a development subsidy for VET schools and professional pre-higher education institutions.

4.4.3.3. Update of typical staff schedules for VET schools and professional pre-higher education institutions.

4.4.3.4. Improvement of the legal framework for calculating the cost of paid services provided by VET schools and professional pre-higher education institutions, expanding the list of such services.

4.4.3.5. Legislative regulation of opening accounts for VET schools and professional pre-higher education institutions in state banks.

4.4.3.6. Introduction of formula-based funding for VET schools.

Strategic Objective 4.5.

VET schools and professional pre-higher education institutions have established partnerships with businesses.

Performance Indicators:

1. Number of projects implemented by VET schools and professional pre-higher education institutions within public-private partnerships.
2. Number of VET schools and professional pre-higher education institutions implementing VET programs in a dual format.
3. Number of VET schools and professional pre-higher education institutions participating in international projects.

Operational Objective 4.5.1.

The list of professions and specialties for which training is carried out in VET schools and professional pre-higher education institutions under the state (regional) order is formed based on the analysis of labor market needs.

Tasks:

4.5.1.1. Development of a regulatory framework and creation of tools for conducting an annual survey of graduates and employers, including determining the demand for specialists and skills/competencies.

4.5.1.2. Involvement of businesses in the development of educational and vocational programs for VET and professional pre-higher education to ensure modern education content.

4.5.1.3. Promotion of the implementation of dual forms of education and work-based education for VET and professional pre-higher education students.

4.5.1.4. Introduction of education for new professions and specialities, including IT and green energy.

Operational Objective 4.5.2.

VET schools and professional pre-higher education institutions autonomously implement projects within public-private partnerships.

Tasks:

4.5.2.1. Normative regulation of the procedure for concluding public-private partnership agreements in the field of education.

4.5.2.2. Development of a regulatory framework allowing employers to provide training jointly with education institutions on a partnership basis, including in a dual format of education.

4.5.2.3. Dissemination of best practices (exchange of experience) in the field of public-private partnerships among VET schools and professional pre-higher education institutions.

Operational Objective 4.5.3.

VET schools and professional pre-higher education institutions actively participate in international projects, contributing to the implementation of innovations and modern technologies.

Tasks:

4.5.3.1. Attainment of official membership of Ukraine in WorldSkills, EuroSkills, and the regular organization of the All-Ukrainian nationwide competition of professional skills «WorldSkills Ukraine.»

4.5.3.2. Creation of conditions for the full participation of VET schools and professional pre-higher education institutions in projects under the EU Erasmus+ Program.

4.5.3.3. Revision of the regulations on the organization and conduct of the All-Ukrainian national competition of professional skills «WorldSkills Ukraine.»

4.5.3.4. Establishment of an expert base for the All-Ukrainian nationwide competition of professional skills «WorldSkills Ukraine» and organization of higher education institution training.

4.5.3.5. Involvement of VET schools and professional pre-higher education institutions in participation in other international projects.

PRIORITY 5:

Quality Higher Education

PRIORITY 5:
Quality Higher Education

Background

In Ukraine, the transformation of the higher education system has been ongoing since 2014. The «Law on Higher Education» outlines three priorities for this transformation:

1. Integration into the European Higher Education Area: This involves adopting a three-level system (bachelor, master, doctor of philosophy), harmonizing fields and specialties, implementing a competency-based approach to designing educational programs, tracking educational trajectories through ECTS credits, and integrating into the European quality education network.

2. Autonomy of Higher Education Institutions: This encompasses academic and personnel autonomy, transitioning to the reputation of an institution as the basis for its competitiveness (including a shift away from state diplomas, increased focus on international rankings), and achieving financial autonomy, which involves a change in governance systems within higher education institutions.

3. Subjectivity as a Principle of Educational Process Organization and Goal: By emphasizing student-centricity in the early stages of reforms, a competency-based approach to curriculum development has been introduced, highlighting the role of student self-governance in higher education institutions. Initiatives such as dual form educational programs have been initiated. Furthermore, the principle of subjectivity is expected to extend to the development of campuses, enhancing opportunities for the self-realization of educators, facilitating their career growth, providing dignified working conditions, and enabling possibilities for scientific innovations and integration into international academic networks.

Anticipated Outcomes

For Students:

education that fosters subjectivity for success in life. Programs offering broad opportunities for choosing one's trajectory and pace. Modern environments with practical experience, access to advanced technologies, and comfortable communities to be proud of.

For Faculty:

maximum opportunities for self-realization in a comfortable higher education institution. Well-equipped institutions recognized as centers of independent thought. Motivated students and ensured decent salaries and career growth.

For the State:

trust in the higher education system shown in the prestige of the teaching profession. Attractiveness of higher education to domestic and foreign applicants. Ukrainian higher education institutions are positioned in top international rankings. Key role in the national innovation system and continuous human capital development.

Key Initiatives:

Higher Education Standards Update

to facilitate individual learning trajectories and greater discipline flexibility, aligning with labor market needs through the development of dual education, enhancing measurement quality through the standardization of programs in regulated professions.

Introduction of Individual Learning Trajectories

allowing variable learning paces, increasing discipline choices and easing recognition of informal and non-formal education results, harmonizing the Ukrainian higher education system with European practices, including results from academic mobility.

Network Modernization

by consolidating higher education institutions, investing in the development of educational and scientific equipment, implementing dual education programs and developing modern environments (campuses), establishing innovation and excellence centers in collaboration with regional clusters and the university core.

Revamping Higher Education Financing

Approaches by supporting institutional autonomy and enhancing the agency of students, transforming the mechanism of state orders for professions predicted by the government (e.g., medicine, education, nuclear energy), introducing a system of state grants for professions contributing to human capital development, allowing more students to access state support through co-financing mechanisms.

Introduction of a New Governance System

by gradually strengthening the role of supervisory boards in higher education institutions, increasing autonomy by changing the status of institutions, removing them from the tariff grid, envisaging experimental implementation of new approaches initially in a limited number of institutions.

Ultimate Goal:

Higher education institutions are environments of maximum opportunities for further self-realization of higher education applicants, and Ukraine is recognized as a state with high-quality education and world-class scientific innovations.

Performance Indicators:

1. Attractiveness of Ukrainian higher education for citizens of Ukraine and foreigners, which is measured by the number of citizens of OECD countries studying in Ukraine, and indicators of surveys of Ukrainian students and foreigners.

2. Number of higher education institutions entering the top 1000 in one of the international rankings (QS World University Rankings, The Times Higher Education World University Rankings or Academic Ranking of World Universities, or in their industry sectors, etc.).

3. Level of employment of graduates of bachelor's programs (not lower than 90%) and the level of competition for a place in master's and postgraduate programs, as well as during competitions for the positions of teachers in higher education institutions (number of willing applicants per vacancy).

4. Percentage of students following an individualized educational path.

Strategic Objective 5.1:

Higher education institutions are modern, comfortable, inclusive, and attractive for learning and academic careers.

Performance Indicators:

1. Number of new and upgraded research and educational laboratories by 2027.
2. Number of higher education institutions that have modernized the educational environment, taking into account the needs of individuals with special educational needs.

Operational Objective 5.1.1:

Modern, technological, inclusive educational environments, and infrastructure provide conditions for the productive activity of all participants of the educational process.

Tasks:

5.1.1.1. Creation of legislative preconditions for the modernization of the higher education institution network.

5.1.1.2. Communication of the key concepts of modernizing the network of institutions of vocational and higher education, defining the procedure for higher education institution consolidation.

5.1.1.3. Modernization of the network of institutions of pre-higher and higher education through higher education institution consolidation and investments in their infrastructure.

5.1.1.4. Approval of a state program for the restoration and development of dormitory networks for the accommodation of higher education institution students.

Strategic Objective 5.2:

Educational and scientific activities contribute to the self-realization of all members of the academic community.

Performance Indicators:

1. Percentage of citizens aged 18–65 who, according to surveys, completely or predominantly positively assess the quality of higher education in Ukraine.
2. Percentage of employment of graduates of higher education institutions within 12-36 months after graduation.
3. Percentage of employment in the field for «regulated» specialties.
4. Number of educators and researchers involved in international work.
5. Number of projects funded by Erasmus+ as a tool for internationalization, reform and modernization of the higher and professional higher education system in Ukraine;
6. Number of educational programs for the third level of higher education in joint cooperation between higher education institutions and institutes of the National Academy of Sciences and national sectoral academies of sciences.

Operational Objective 5.2.1:

Higher education applicants demonstrate higher education institution subjectivity in choosing an educational trajectory and ensuring the activities of the higher education institution community, which continues after graduation.

Tasks:

5.2.1.1. Legislative expansion of opportunities for creating interdisciplinary educational programs at the bachelor's level with a flexible duration of completion.
5.2.1.2. Introduction of a free educational trajectory for higher education applicants and conscious choice of specialization during the learning process.
5.2.1.3. Development of a toolkit for recognizing the results of informal and non-formal education in the formal education system.
5.2.1.4. Expansion of general competencies in higher education standards.
5.2.1.5. Implementation of a policy of comprehensive support for volunteering, social projects, and student self-government in higher education institutions, involving funds from higher education institutions for the implementation of community projects.
5.2.1.6. Creating conditions for the development of associations of graduates of professional pre-higher and higher education institutions.

Operational Objective 5.2.2:

Higher education institutions provide access to practice bases, international scientific connections, and various career opportunities that meet the economy's needs for qualified specialists.

Tasks:

5.2.2.1. Legal support for learning through practical experience (workplace learning) to obtain education in educational-professional programs in higher education.

5.2.2.2. Support for the development of English-language educational programs in higher education institutions in Ukraine, as well as joint (double) educational programs with universities from OECD countries.

5.2.2.3. Creation of a new regulatory framework for contracting the first job for graduates who studied with state or local budget funds.

5.2.2.4: Launch master's, Ph.D., and doctoral programs in leading higher education institutions and research institutions in Ukraine and abroad (within programs funded by the President of Ukraine's Fund).

5.2.2.5: Implementation of regular remote enrollment of foreigners in Ukrainian universities.

5.2.2.6: Training of teachers on creating elective courses that foster intercultural awareness and civil competence in higher education applicants.

5.2.2.7: Increasing opportunities for studying foreign languages in universities and recognizing results obtained abroad, raising requirements for proficiency in foreign languages.

5.2.2.8: Providing opportunities for international collaboration among teachers and researchers, including through academic mobility and the implementation of joint projects.

5.2.2.9: Enhancing the utilization of projects funded by Erasmus+ as a tool for internationalization, reform, and modernization of the higher and postgraduate education system in Ukraine.

Operational Objective 5.2.3:

The higher education structure (levels, degrees, qualifications, etc.) ensures comparability and recognition of Ukrainian educational qualifications in Europe and worldwide.

Tasks:

5.2.3.1. Aligning the list of fields of knowledge and specialties (with higher education institutions substantial generalization) with the International Standard Classification of Education.

5.2.3.2. Developing program learning outcomes for "regulated" specialty educational programs.

5.2.3.3. Aligning the training of specialists in professions requiring additional regulation with EU requirements and recommendations.

5.2.3.4. Completion of competency-based higher education standards at all levels, developing the concept of the next generation of higher education standards (strengthening responsible regulation of "regulated" and liberalizing standard requirements for other specialties), considering the competency frameworks of the EU in the standards.

5.2.3.5. Ensuring the revision and updating of legislation, strategic documents, and regulatory framework, taking into account new goals of the Bologna Process outlined in the Rome Communique.

5.2.3.6. Ratification of the Global Convention on the Recognition of Higher Education Qualifications.

5.2.3.7. Establishing mechanisms for accrediting joint (double) educational programs as well as institutional accreditation of institutions of higher education at the National Agency for Higher Education Quality Assurance.

5.2.3.8. Developing and adopting the Law of Ukraine "On the National Qualifications Framework".

5.2.3.9. Ensuring the alignment of the National Qualifications Framework with the European Qualifications Framework.

Operational Objective 5.2.4:

Scientific research and innovations define the content and development of educational programs and contribute to the improvement of Ukrainian higher education institutions' positions in global rankings.

Tasks:

5.2.4.1. Development of an innovative center network with a university core.

5.2.4.2. Development of joint third-level education programs in cooperation between higher education institutions and institutions of the National Academy of Sciences of Ukraine and national branch academies.

5.2.4.3. Prioritizing scientific cooperation between higher education institutions and research institutions in competitive funding for research.

5.2.4.4. Introduction of grants to attract academic staff from foreign higher education institutions and research institutions, and renowned public figures to participate in teaching and research activities in Ukrainian higher education institutions.

5.2.4.5. Strengthening direct cooperation between the Ministry of Education and Science and the relevant Directorate-General of the European Commission (DG-EAC), as well as with related directorates in areas where integrating higher education institutions into the modern agenda will identify higher education institution growth points and potential areas for innovation in universities and/ or with higher education institution participation, including European Green Deal and recovery (DG FISMA, DG ENER), A Europe Fit for the Digital Age (DG INFSO), Health and Food Safety (DG SANTE), the role of universities in urban renewal and reconstruction (DG REGIO).

Strategic Objective 5.3:

Citizens, the state, and businesses trust the educational, scientific, and innovative activities of higher education institutions.

Performance Indicators:

1. Share of various participants in the educational process who have not observed corruption, discrimination, and academic misconduct.
2. Percentage of applicants entering higher education institutions through independent entrance exams, targeted placement, and national (wide) competition.
3. Extent of revenues based on the results of scientific and scientific-technical work under economic contracts and the results of providing scientific services per academic and research staff member at the main place of work.

Operational Objective 5.3.1:

Admission and education in higher education institutions are honest and transparent; applicants have the opportunity to choose education consciously and informed; the accessibility of higher education is maximally ensured for all strata of the population.

Tasks:

5.3.1.1. Admission to higher education institutions is based on external independent assessment or entrance exams using organizational and technological processes of external independent assessment in exams at higher education institutions, except for a limited list of applicants for unconditional medical reasons determined jointly by the Ministry of Education and Science and the Ministry of Health, and for persons recognized by law as participants in hostilities who defended the independence, sovereignty, and territorial integrity of Ukraine.

5.3.1.2. Implementation of a co-financing mechanism for obtaining education through state grants, providing financial support (through competition) to more than half of the applicants.

5.3.1.3. Ensuring the choice of a guaranteed first job and a scholarship at the level of the minimum wage during the education period for graduates of educational programs obtaining professional pre-higher or higher education under the state order.

5.3.1.4. Expanding the list of specialties for which the Unified Entrance Exam is applied for admission to the master's program and/or the Unified State Qualification Exam for graduation.

5.3.1.5. Complete elimination of interdepartmental barriers in targeted placement of state order, using a single unified qualification exam to enter the master's degree.

5.3.1.6. Implementation of regular anonymous surveys of students, teachers, employers, and other stakeholders in all higher education institutions, along with mechanisms for responding to the results obtained.

Operational Objective 5.3.2:

Participants in the educational process demonstrate intolerance towards corruption, discrimination based on various characteristics, and academic misconduct.

Tasks::

5.3.2.1. Development of a methodology and regular implementation of surveys among participants in the educational process regarding incidents of corruption, discrimination, and academic misconduct.

5.3.2.2. Ensuring a wide range of digital tools for the instrumental part of checking academic integrity.

5.3.2.3. Implementation of an open registry of instances of discrimination and academic misconduct in higher education institutions.

Strategic Objective 5.4:

High societal status and prospects for professional development contribute to the attractiveness of an academic career for academic staff and recognition of higher education institutions as centers of innovation and free intellectual development.

Performance Indicators:

1. Average salary in higher education in 2027.
2. Maximum teaching workload per full-time academic staff member (hours per year).
3. Percentage of master's graduates entering for the third level of higher education.
4. Percentage of total institution revenue coming from donations and contracts with alumni.
5. Number of press, local and state government, and business inquiries to university staff for assessments, comments, and consultations (fulfilling the third mission of universities).

Operational Objective 5.4.1:

University lecturers have a decent social status, competitive salary, academic freedom, and motivation for continuous professional development.

Tasks:

5.4.1.1. Reduction of the maximum teaching workload per full-time academic staff member to 400- 500 hours per year.

5.4.1.2. Reforming the remuneration system based on granting higher education institutions more personnel and financial autonomy.

5.4.1.3. Implementation of a continuous professional development program for academic staff, ensuring the development of digital competencies for academic staff.

5.4.1.4. Support for the institutional development of university analytical centers, science museums, youth and cultural centers in higher education institutions.

5.4.1.5. The development of adult education programs in higher education institutions that ensure the development of communities, retraining (especially veterans), and intellectual development of the population aged 40+.

Strategic Objective 5.5:

Management in the higher education system is based on the principles of autonomy and responsibility.

Performance Indicators:

1. Level of university autonomy (according to the criteria of the European University Association).
2. Percentage of higher education institution students studying on co-financing terms for higher education.
3. Percentage of higher education institution leaders with key performance indicators in higher education institution contracts and the percentage of those who achieve them.
4. Leaders in higher education are professional, authoritative, and ethical, collaborating with other leaders at the national and international levels.

Operational Objective 5.5.1:

Autonomy of higher education institutions operates through an effective and fair governance system (supervisory boards, accountability to the community).

Tasks:

5.5.1.1. Expansion of the powers of supervisory boards of higher education institutions and defining the procedure for public control over higher education institutions activities.

5.5.1.2. Improvement of the procedure for the election of rectors, introduction of mechanisms for crisis management.

5.5.1.3. Updating the targeted performance indicators of higher education institutions, the achievement of which should be ensured by its leader, and implementation of mechanisms for verifying the achievement of such indicators.

5.5.1.4. Engagement of independent evaluation and quality assurance institutions in monitoring and auditing the activities of institutions.

Operational Objective 5.5.2:

Autonomy of higher education institutions ensures the capitalization of achievements and meritocracy.

Tasks:

5.5.2.1. Legislative provision for expanding the financial autonomy of higher education institutions.

5.5.2.2. Legislative provision for independent determination by higher education institutions of the number of staff and regulation of job responsibilities (personnel's autonomy).

5.5.2.3. Amendments to legislation legalizing permanent funds (endowments) in higher education institutions.

5.5.2.4. Digital transformation of management, regulation, and monitoring processes in higher education institutions, and effective use of digital (distance) technologies in the educational process.

5.5.2.5. Improvement of the higher education analytics and statistical information system in line with international practices.

Operational Objective 5.5.3:

Modernization of infrastructure based on transparent competitive funding, and the distribution of funds among higher education institutions is based on higher education institution performance results.

Tasks:

5.5.3.1. Modernization of the distribution formula based on performance results, taking into account the impact of the state of war.

5.5.3.2. Implementation of funding distribution for higher education institutions based on a second-generation formula.

5.5.3.3. Improvement of competitive funding for the development of higher education institutions.

Operational Objective 5.5.4:

Financing of higher education is diversified: state orders and targeted support are allocated selectively, grants are provided to the most successful, and preferential study loans are accessible and repaid to the state.

Tasks:

5.5.4.1. Introduction of budget co-financing for higher education and new approaches to scholarship provision.

5.5.4.2. Introduction of budget financing for the acquisition of professional pre-higher and higher education through state banks.

5.5.4.3. Modernization of the higher education financing model based on state orders.

5.5.4.4. Improvement of providing special state support by enhancing its targeting and monetizing the payment of educational services for higher education acquisition for underrepresented, unprotected, and vulnerable population groups, especially considering the consequences of war.

PRIORITY 6:

Development of Science and Innovation

PRIORITY 6: Development of Science and Innovation

Background

The first steps of science sector reforms began in 2014 with the aim of creating a new effective management and financing system. It was oriented towards providing Ukrainian scientists with opportunities and proper conditions for professional realization, development, integration into the European and global research space, and the construction of an innovative ecosystem.

The current stage of reform involves changes in the financing system by expanding channels and instruments, both budgetary and non-budgetary, to support scientists. It also aims at creating conditions for the effective use of international opportunities, enhancing collaboration with the real sector of the economy, reducing bureaucratic constraints, and implementing digital transformation. The impact of evaluation results on scientific activities on the distribution of basic funding, development of research and innovation infrastructure, and direct phased state support for innovative activities are also anticipated.

The full-scale invasion by the russian federation in 2022 exacerbated the long-term trend of insufficient investment in scientific research and development. It caused damage to infrastructure and weakened human capital. By the end of 2023, according to various estimates, 15–20% of research infrastructure was damaged or destroyed, and up to 10% of scientific human capital either left professional activities, changed their country of residence, or remained but changed their professional field.

Additionally, state investments in the development of science and innovation were minimized. As of 2023, research expenditures in Ukraine accounted for only 0.18% of GDP. For comparison, the average level of science funding in European Union countries is approximately 2.2% of GDP. Expenditures on research and development are a key factor in the sustainable growth of the modern economy. Bringing new ideas to the market contributes to job creation, increased labor productivity, and efficient resource utilization.

Highly qualified human resources are necessary to support the scientific research and innovation potential and competitiveness of Ukraine, particularly in the context of digital and «green» transitions. The full-scale invasion has led to a significant increase in demand for innovations, especially in defense (weapons systems, equipment, and technology) and medical technologies, aiming to save lives and improve the quality and duration of life for both military and civilian populations. Consequently, there has been a notable increase in the demand from the government and businesses for effective collaboration with the scientific community.

Anticipated Outcomes:

For Scientists:

access to modern research and innovation infrastructure, digital resources for effective scientific, technical, and innovative activities; deepened collaboration with the real sector of the economy, integration into European and global research environments; streamlined processes for efficient use of working time and motivation for professional activities through the removal of pay restrictions.

For Society:

access to scientific results and innovations crucial for the reconstruction and support of Ukraine's transformation process; defense technologies for safeguarding Ukrainians and the sovereignty of the state; modern and rapid reconstruction of infrastructure and housing considering both «green» trends and «smart» city technologies; improvement in the quality of life through modern medtech and biotech solutions, aiding in overcoming war-related injuries, fostering resilience, and building a new approach to enhancing life quality and human capital development.

For the State:

active economic development through the creation and implementation of innovative products, goods, and services; commercialization of scientific results and technology transfer; establishment of technological productions and high-productivity jobs; growth and development of human capital, fostering innovative entrepreneurship and international cooperation; sociocultural development, creating conditions for increased citizen income, a comfortable living environment, social support, and adaptation of vulnerable population groups; development of health and education systems, addressing issues of accessibility, aging population, and various forms of migration in the context of security and globalization.

Key Initiatives:

Basic state funding system encourages

research quality, focusing on its impact on defense capabilities, recovery, and reconstruction of Ukraine. Shifts from state accreditation of scientific institutions and higher education to the implementation of «performance-based research funding,» linking funding to achieved results.

Applied Research and Development target specific science-intensive issues in defense, security, economy, and society;

update priority directions for science and technology development, focusing on the activation of defense and security technologies; introduces a new mechanism for state orders for scientific and technical products and establishes a «National Researchers System» to financially support outstanding Ukrainian scientists based on their previous scientific achievements.

Streamlining and Deregulation of scientific activities

to effectively utilize researchers' time and resources; simplify reporting systems, regulates the size and direction of indirect (administrative) costs for research projects, especially those funded by the state budget; enhances financial and managerial freedom for Principal Investigators (PI), creating conditions for international mobility of scientists.

Creating favorable conditions and removing barriers for attracting non-budgetary funds

(business and foreign sources) for research and the creation of science-intensive innovations. Establishing a special legal framework, «Science City,» to stimulate the development of the science and innovation economy.

Internationalization of Ukrainian science enhances competitiveness by increasing the involvement of Ukrainian scientists in international partnerships and projects,

develops and structures support infrastructure for Ukrainian organizations participating in EU programs such as «Horizon Europe» and «Euratom», activates participation of Ukrainian researchers in international programs supporting science and innovation.

Comprehensive digitalization, building a nationwide system for collecting and analyzing data in the field of science.

Development, supplement with necessary modules, content, and optimization of the operation of the National Electronic Scientific Information System (URIS).

Access to research infrastructure ensures access to evolving and efficiently utilized Ukrainian research infrastructure

as part of the European network. Assessing losses, developing the Ukrainian research infrastructure network as part of the European network, and systematically developing a network of regional centers for shared use of scientific equipment, creating internationally recognized Centers of Excellence.

Innovation ecosystem development stimulates the development of science-intensive innovation ecosystems in higher education institutions and research institutions,

encouraging the development of innovation infrastructure potential in higher education institutions/national universities. Development of an innovative strategy and significantly updates the regulatory framework in the field of innovation.

Ultimate Goal:

The effectiveness of research by Ukrainian scientists will contribute to the growth of the knowledge-intensive share in GDP.

Performance Indicators:

1. Knowledge-intensive share in GDP (%);
2. Ratio of the number of projects funded by the state budget R&D to the number of implemented and working in the real sector of the economy;
3. Quantity, impact, and citation of publications by Ukrainian scientists in international scientometric databases.
4. Number of new elements of research and innovation infrastructure created.

Strategic Objective 6.1:

Research infrastructure in Ukraine is systematically developed, efficiently utilized, and integrated into the European research environment.

Performance Indicators:

1. Number of shared-use research equipment centers, centers of excellence; state key laboratories, national research centers, including those joining international research infrastructure associations;
2. Number of implemented recommendations based on the results of international PSF (Policy Support Facility) analysis of the state of research infrastructure;
3. Percentage of scientific institutions and higher education institutions that have successfully passed state certification in conducting scientific (scientific-technical) activities according to the updated methodology.
4. The number of external research projects and scientists using the equipment at centers for collective use of scientific equipment.

Operational Objective 6.1.1:

State certification of scientific activities of scientific institutions (SI) and higher education institutions ensures higher education institution development and efficient operation.

Tasks:

6.1.1.1. Conducting a pilot international evaluation of the research activities of higher education institutions and SI, using the best existing international practices and approaches.

6.1.1.2. Development and approval of the methodology for evaluating the effectiveness of scientific (scientific-technical) activities of scientific institutions and higher education institutions in conducting scientific (scientific-technical) activities by these institutions in specific scientific directions during state certification.

6.1.1.3. State certification of scientific institutions and higher education institutions in conducting higher education institutions scientific (scientific-technical) activities according to the national Methodology, taking into account the best international experience.

Operational Objective 6.1.2:

The restored and modernized network of research and innovation infrastructure ensures increased efficiency of fundamental and applied scientific research and scientific-technical (experimental) developments.

Tasks:

6.1.2.1. Conducting an audit of the state and prospects of research infrastructure development using relevant EU tools (PSF).

6.1.2.2. Updating legislation and regulatory framework for the functioning and development of research infrastructure.

6.1.2.3. Mobilizing resources from international partners and initiating the restoration of research infrastructure.

6.1.2.4. Systematic development of the network of regional shared-use centers for research equipment and the creation of Centers of Excellence of the international level.

6.1.2.5. Legislative regulation of elements and principles of innovation infrastructure development.

6.1.2.6. Priority infrastructure support for the development of key research and innovation areas: security technologies, cyber security; atomic and green energy; materials science; medical and biotechnology; immersive technologies, artificial intelligence; agricultural technologies; Antarctic research, etc

6.1.2.7. Optimization of the activities of the National and sectoral academies of sciences of Ukraine.

6.1.2.8. Establishment of a network of regional innovation infrastructure ensuring the implementation (commercialization) of developments by scientists and innovators.

6.1.2.9. Provision of financial support for the development of scientific, scientific-technical, and innovative activities by the best research and innovation infrastructures.

Strategic Objective 6.2:

Research and development are maximally focused on solving global scientific problems and specific knowledge-intensive tasks in defense, security, economy, and Ukrainian society.

Performance Indicators:

1. Number and amount of funding for international agreements (contracts) for the implementation of research funded by non-residents of Ukraine;
2. Amount of funding from the state budget for research and development commissioned by key ministries and state services;
3. Number of implemented developments and/or technologies based on the results of the state order completion;
4. Number and amount of funding for the implementation of research works contracts funded by businesses, enterprises, and organizations of the non-governmental sector of Ukraine.

Operational Objective 6.2.1:

An updated system of scientific, scientific-technical, and innovation activities ensures the resolution of global scientific problems and specific knowledge-intensive tasks in defense, security, economy, and Ukrainian society.

Tasks:

6.2.1.1. Development of an updated system of priority directions for the development of science and technology, as well as innovation activities, particularly to activate the development of security technologies.

6.2.1.2. Building institutional capacity to support the innovation ecosystem and development of innovative potential in prioritized sectors of Ukraine.

6.2.1.3. Development of a roadmap for popularizing science and innovation in Ukraine.

6.2.1.4. Creating conditions to increase the implementation (commercialization) of scientific research results.

Operational Objective 6.2.2:

A comprehensive system for ordering relevant research and developments from key ministries is aimed at fulfilling tasks in defense, security, economy, and Ukrainian society.

Tasks::

6.2.2.1. Creating a new mechanism for forming state orders for relevant scientific-technical (experimental) developments and scientific-technical products.

6.2.2.2. Funding joint projects of science and business on co-financing terms.

Operational Objective 6.2.3:

The internationalization of Ukrainian science ensures the growth of competitiveness of Ukrainian scientists and higher education institution results, increasing the number of international partnerships and projects with higher education institution participation.

Tasks:

6.2.3.1. Development of an updated version of the Roadmap for integrating Ukraine into the European Research Area.

6.2.3.2. Deepening Ukraine's cooperation with OECD bodies responsible for science, technology, and innovation policy, particularly regarding adherence to OECD standards in these areas.

6.2.3.3. Creating conditions to expand the international mobility of scientists, primarily for the implementation of scientific projects (Horizon, NATO, COST, Erasmus, EUREKA, etc.).

6.2.3.4. Developing systematic cooperation with the Ukrainian scientific diaspora.

6.2.3.5. Implementation of the national plan for open science (Open Science) and the roadmap for the use of science, technology and innovation to achieve the SDGs.

6.2.3.6. Ensuring access for higher education institutions and research institutions to international electronic databases (bibliographic, abstract, scientometric, full-text).

| Strategic Objective 6.3:

The scientific personnel potential is capable of conducting high-level qualitative research and ensuring the creation of competitive scientific developments.

Performance Indicators:

1. Total number of employees involved in scientific research and development, including those funded from non-budgetary sources, separately those who are scientific supervisors of such projects;
2. Share of scientific employees conducting scientific research and developments at primary employment;
3. Share of employees regularly conducting scientific research in laboratories of leading foreign universities and/or research institutions;
4. Proportion of young scientists in the total number of research staff;
5. Share of heads of research institutions for whom key performance indicators (KPI) have been defined, following updated legislation.

Operational Objective 6.3.1:

Expanding the financial and managerial autonomy of research institutions provides researchers with the opportunity to increase the efficiency of higher education institution professional activities and freedom of scientific creativity.

Tasks:

6.3.1.1. Implementation of a pilot project to change the status of research institutions with expanded financial and managerial freedom;
6.3.1.2. Introduction of key performance indicators (KPI) for the heads of research institutions.

Operational Objective 6.3.2:

Streamlining and deregulation of scientific activities allow scientists to use higher education institution time and resources effectively, flexibly use funds, and ensure the development of the sector.

Tasks:

6.3.2.1. Creating conditions for effective scientific and scientific-technical expertise.

6.3.2.2. Amendments to public procurement legislation to simplify the procurement of services for scientific and scientific-technical work and the purchase of scientific instruments, equipment, spare parts, consumables, reagents, and samples purchased abroad to support higher education institutions' own scientific and scientific-technical activities financed from extrabudgetary sources.

Operational Objective 6.3.3:

Expanded opportunities for financial remuneration and organizational support for scientific workers, especially young scientists, based on the results of their professional activities.

Tasks:

6.3.3.1. Deregulation of project administration, changing the system of remuneration for scientists (removing tariff grid, restrictions on remuneration within the funding of a scientific project).

6.3.3.2. Expended organizational support of project activities at the level of higher education institutions, scientific institutions and their administrations;

6.3.3.3. Improvement of state financial support for young scientists.

Strategic Objective 6.4:

The funding system for the scientific sector is multi-channel and efficient, contributing to the quality of research at various levels.

Performance Indicators:

1. The share of competitive state funding in the total funding for scientific activities from the special fund of higher education and research institutions.
2. The ratio of funding from non-budgetary sources (business funds, international partners) to the existing state funding for scientific research in higher education and research institutions.

Operational Objective 6.4.1:

The system of state basic funding encourages research quality.

Tasks:

6.4.1.1. Creation of a new model of basic funding for research institutions dependent on higher education institution performance (Performance-based Research Funding).

6.4.1.2. Update the mechanism for the distribution and direction of basic funding based on the results of the state accreditation of higher education institutions.

Operational Objective 6.4.2:

Barriers are removed, and legislative conditions are created to attract non-budgetary funds for research and the creation of knowledge-intensive innovations.

Tasks:

6.4.2.1. Creating conditions for a broad involvement of non-budgetary funds (business and international).

6.4.2.2. Unlocking funding directions for projects of the National Research Foundation of Ukraine,, streamlining its activities and debureaucratization of the processes of its activities.

6.4.2.3. Establishing a separate legal regime for conducting scientific and innovative activities under the «Science.City» framework.

Operational Objective 6.4.3:

The ecosystem of competitive state funding for scientific research and developments influences defense capability, recovery, and reconstruction of Ukraine.

Tasks:

6.4.3.1. Creation of multi-channel competitive funding adapted to the needs of different types of research and development (fundamental, applied, innovative) and at various stages of a scientist's career.

6.4.3.2. Establishment of a National Researcher System to provide individual support for the best scientists, especially young researchers, regardless of the results of accreditation of higher education institutions.

6.4.3.3. Regulation of extents and directions of allocation of indirect (administrative) costs of scientific projects, especially those funded by the state budget.

6.4.3.4. Build the capacity of the National Research Foundation of Ukraine, diversify its areas of activity and de-bureaucratize its processes.

6.4.3.5. Create conditions for effective scientific and technical expertise with the involvement of the best Ukrainian and foreign experts.

PRIORITY 7:

European Integration of Ukraine in the Fields of Education and Science

PRIORITY 7: European Integration of Ukraine in the Fields of Education and Science

Background

Amidst a full-scale war with russia, Ukraine is simultaneously taking significant steps toward European integration. In 2022, Ukraine gained candidate status for EU membership, and the EU Council's decision on December 14, 2023, to open negotiations marked a historic moment in this process. The Association Agreement with the EU, already in effect, and active integration processes, open new opportunities for the educational and scientific community.

Universities and research institutions in Ukraine play a crucial role in shaping the values of an open society, leveraging European experiences and practices. This involves implementing interdisciplinary educational programs, facilitating academic mobility, promoting international scientific collaborations, and building a quality educational infrastructure.

Using educational and scientific integration as a tool to support Ukraine's European aspirations at this critical moment is vital. Special attention should be given to involving youth and scientists in EU processes, encouraging Ukrainian institutions to participate in EU programs like Erasmus+ and Horizon Europe. This not only fosters a better understanding and acceptance of European values but also ensures the exchange of critical experiences and knowledge for Ukraine's development.

Moreover, it's essential to recognize that education and science can serve as key instruments for the country's recovery after the war. Integration with the European Union in these spheres can significantly enhance the quality of education, science, and innovation in Ukraine, contributing to faster economic recovery and social stabilization.

The importance of international cooperation at this pivotal moment cannot be overstated. Ukraine must actively leverage opportunities to establish strong partnerships with European educational and scientific institutions. This will not only strengthen the scientific and educational potential but also enhance Ukraine's international image as a country actively and effectively progressing toward European integration.

In conclusion, the role of education and science in Ukraine's European integration process should be viewed as a strategic investment in the country's future. This entails not only raising the level of education and scientific research but also shaping societal values such as democracy, human rights, and the rule of law – the foundation for any modern, thriving state.

Anticipated Outcomes:

For Participants in Education and Researchers:

Increased awareness of the benefits and active utilization of opportunities for integration into the EU.

For International Cooperation:

Effective integration of Ukraine into European educational and scientific programs.

For State Policy and Legislation:

Full harmonization with EU law (acquis) in the fields of education and science.

For the Overall Development of the Country:

Strengthened mutual recognition of educational and scientific qualifications between Ukraine and the EU. Ensured the provision of quality education and scientific activity at the European level.

Ultimate Goal:

Participants of the educational process and researchers understand the benefits and take advantage of the opportunities of Ukraine's integration into the European Union.

Performance Indicators:

1. Number of EU-level targets used to monitor the success of sectoral policies.
2. Number of EU sectoral programs in which Ukraine participates.
3. Number of Ukrainian citizens participating in EU educational and scientific programs/tools/opportunities.
4. Number of joint projects in the fields of education, science, and innovation carried out by Ukrainian institutions and organizations.

Strategic Objective 7.1:

Ukraine's state policies and legislation in the fields of education and science are harmonized with the EU acquis.

Performance Indicators:

1. Progress in implementing the Association Agreement between Ukraine and the EU in the «Education, Training, and Youth,» «Science, Technology, and Innovation, Space» directions (%).
2. Number of reports on the primary assessment of the implementation of EU law acts in the fields of education and science.
3. Number of bilateral Ukraine-EU bodies meetings.

Operational Objective 7.1.1:

Ukraine's educational and scientific legislation aligns with EU acquis.

Tasks:

7.1.1.1. Ensuring the implementation of the Association Agreement between Ukraine and the EU in the fields of education and science.

7.1.1.2. Conducting a primary assessment of the implementation status of EU legal acts in the fields of education and science.

7.1.1.3. Ensuring the implementation of EU legal acts.

Operational Objective 7.1.2:

State policies in the fields of education and science take into account EU supranational goals and priorities.

Tasks:

7.1.2.1. Building the necessary skills and knowledge among policymakers on European integration issues.

7.1.2.2. Formulating state policy based on disaggregated relevant data, shaped according to EU methodologies and approaches.

7.1.2.3. Incorporating the goals, priorities, and key indicators of EU strategic planning documents into the strategic documents of state policy areas.

7.1.2.4. Streamlining and increasing transparency and public involvement/information regarding the formation and implementation of educational policies.

7.1.2.5. Providing expert support from international partners on issues related to the implementation of EU acts.

Operational Objective 7.1.3:

The negotiation process with the European Commission on Chapters 25 «Science and Research» and 26 «Education and Culture» regarding Ukraine's full EU membership is successfully completed.

Tasks:

7.1.3.1. Creating legislative and institutional conditions, as well as infrastructure for Ukraine's participation in EU educational and scientific programs.

7.1.3.2. Ensuring Ukraine's compliance with recommendations and criteria set for candidate countries for EU membership in the fields of education and science.

7.1.3.3. Ensuring effective communication with stakeholders regarding the completion of tasks in the European integration sphere.

Strategic Objective 7.2:

Ukraine collaborates with EU member states in the fields of education and science, utilizing the best European practices and standards.

Performance Indicators:

1. Number of double-degree programs with European education institutions.
2. Number of developed and approved competency-based education standards.
3. Number of acts regulating the issues of mutual recognition of qualifications in Ukraine and the EU.
4. Number of European research infrastructures in which Ukraine participates.

Operational Objective 7.2.1:

Ukrainian education institutions use the best European practices and provide quality services according to European standards.

Tasks::

7.2.1.1. Implementing interdisciplinary programs and double-degree programs by Ukrainian higher education institutions in collaboration with European universities.

7.2.1.2. Developing an effective quality assurance system for higher education in line with EU standards.

7.2.1.3. Ensuring mutual recognition of learning outcomes obtained in Ukraine and EU countries.

7.2.1.4. Introducing educational programs for training specialists in the field of European integration.

Operational Objective 7.2.2:

Qualifications obtained in Ukraine are recognized in the EU.

Tasks:

7.2.2.1. Aligning the training of professionals in regulated professions with the EU requirements and recommendations.

7.2.2.2. Incorporating EU recommendations on qualification recognition into the educational process and legislation.

7.2.2.3. Ensuring the alignment of the National Qualifications Framework with the European Qualifications Framework.

Operational Objective 7.2.3:

Entities engaged in scientific and research activities conduct research, scientific, and research and development work in accordance with European approaches and practices.

Tasks:

7.2.3.1. Creating extensive opportunities for scientific institutions and higher education institutions to receive grant funding on a competitive basis.

7.2.3.2. Integrating Ukraine's research infrastructure into the European Research Area.

7.2.3.3. Updating the Roadmap for Ukraine's Integration into the European Research Area.

Strategic Objective 7.3:

Participants of the educational process and researchers know and share EU values and utilize opportunities in the European educational and research environment.

Performance Indicators:

1. Number of EU working groups/committees with Ukrainian representatives delegated.
2. Number of education institutions in EU countries with established «Ukrainian studies.»
3. Number of information events and tools for popularizing EU opportunities and programs.
4. Number of joint research collaborations between Ukrainian and European institutions.
5. Number of partner schools of the International Ukrainian School.

Operational Objective 7.3.1:

Ukrainian educators and researchers advocate for national education and science.

Tasks:

7.3.1.1. Ensuring Ukraine's representation in EU working groups, committees, and other bodies.

7.3.1.2. Initiating «Ukrainian studies» in education institutions in EU member states.

7.3.1.3. Developing the capacity of the State Lyceum «International Ukrainian School» as a center for promoting Ukrainian culture.

7.3.1.4. Facilitating communication between educators and researchers with the Ukrainian diaspora in EU countries.

Operational Objective 7.3.2:

Participants in the educational process and researchers are aware of and understand collaboration opportunities within EU instruments.

Tasks:

7.3.2.1. Disseminating information about opportunities within EU instruments on EU portals, especially in Ukrainian language.

7.3.2.2. Implementing courses for educators and researchers on learning English and project management.

7.3.2.3. Holding events to inform about opportunities in European educational and research environments.

7.3.2.4. Providing opportunities for international collaboration among educators and researchers, including through academic mobility and joint projects.

Operational Objective 7.3.3:

Participants in the educational process and researchers act as catalysts for the spread of European values in Ukraine.

Tasks:

7.3.3.1. Implementing an educational module on EU values within the training and professional development of pedagogical and academic staff.

7.3.3.2. Conducting information campaigns to attract students from EU countries to the Ukrainian education system.

7.3.3.3. Developing mechanisms for educators and researchers from EU member countries working in Ukraine to spread best practices and EU values.

PRIORITY 8:

Digital Transformation of Education and Science

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Background

Due to russia's armed aggression, a large number of Ukrainian schools have been damaged or destroyed, with thousands closed. Over 1.6 million children in Ukraine have shifted to distance learning, and one-third of them lack access to online education due to the absence of technical means or connectivity. This lack of access deepens educational losses and affects the psychological well-being of children. The future of the country and the development of society are at risk without proper education for the young generation. Therefore, restoring access to education is a priority for the state.

Digital transformation is seen as a way to ensure the continuity of the educational process. The Ministry of Education, together with development partners, is actively working on forming a corresponding ecosystem.

This ecosystem consists of five components:

1. Infrastructure (provision of education and participants in the educational process with computer equipment, software, access to broadband internet, multimedia equipment, and STEM laboratories).
2. Digital Pedagogy and Mastery of Digital Tools (training and development of digital competencies for pedagogical, scientific-pedagogical staff, scientists, managers of educational and scientific institutions, as well as educational and scientific managers).
3. Digital Content (implementation of electronic textbooks, interactive educational materials and applications, creation and development of digital educational and scientific platforms to ensure access to quality materials).
4. E-Services for Citizens and Transparent Management Processes (development of an Automated Information Complex of Educational Management, a Unified State Electronic Database on Education for transitioning to digital counterparts of paper documents in business processes and reporting for all levels of education institutions, National Electronic Scientific Information System (URIS), creation of convenient educational e-services for citizens based on the «Diia» portal and the «Mriia» educational application).
5. Quality and Reliable Data (centralized data collection about students, teachers, scientists, and research institutions).

Anticipated Outcomes:

For Children:

favorable conditions for continuous learning, with a safe and digital educational environment. Participants in the educational process have necessary computer equipment, use modern digital content, and possess required digital tools for learning in remote and blended forms, contributing to their development and self-improvement. Establishment and support of learning environments for children in communities and cities that lack access to offline learning (digital education centers).

For Pedagogues and education Managers:

streamlined education bureaucracy, including the transition to digital counterparts of document management in education institutions and communities; creation of electronic educational services for citizens; centralized data collection in the field of education and science for making quality decisions at every level of public administration; availability of necessary digital infrastructure; pedagogues have the opportunity to use modern digital tools and content in their work, as well as enhance their digital competency.

For the State:

stablishment of a digital ecosystem of solutions in the field of education and science contributing to the multiplication of Ukraine's human capital; elevation of the country's socio-economic development; strengthening competitiveness and formation of a positive international image as a digital nation; ensured equal access to quality education and teaching; creation of convenient e-services in the field of education and science for citizens.

Key Initiatives:

Provision of educational stakeholders, including students and teachers,

with computer equipment to ensure access to distance education («Device Coalition» Initiative)

Development of Digital Educational Centers

safe environments for learning and recreation for education seekers, contributing to the restoration of access to education and the socialization of children.

Ensuring education institutions have the necessary digital infrastructure

and access to broadband internet, particularly in de-occupied territories, rural areas, and remote communities.

Creation of Digital Educational and Scientific Platforms

(enriching them with interactive educational materials, online courses, video lessons, and other tools and resources to provide access to education and information).

Stimulation of Educational Information Systems,

launching e-services for participants in the educational process and citizens in general, based on the «Diia» portal, and introducing the educational application «Mriia».

Enhancing the digital competence of pedagogical, scientific-pedagogical staff,

scientists, educational and scientific managers, and administrators.

Streamlining the education and science

system by developing electronic management for key processes through automation and optimization in education institutions and education management bodies. This will facilitate centralized data collection and analysis of information about participants in the educational process, as well as scientists and research institutions.

Ultimate Goal:

Participants in the educational process, scientists, and education managers in Ukraine use modern technologies in an accessible digital environment.

Performance Indicators:

1. The number of participants in the educational process using computer equipment in the educational process.
2. The number of users of electronic information collection and processing systems in the field of education.
3. The number of authorized users of the National Electronic Scientific Information System.

Strategic Objective 8.1:

Accessible and modern digital educational environment in education institutions.

Performance Indicators:

1. The number of education institutions with access to the high-speed Internet.
2. The number of created STEM laboratories and classrooms equipped with multimedia equipment in education institutions».
3. The percentage of teaching staff equipped with a personal computer.
4. The number of computers transferred to general secondary education institutions for the needs of the students from vulnerable categories.

Operational Objective 8.1.1:

Education institutions are equipped with technology to create a digital educational environment.

Tasks:

8.1.1.1. Providing education institutions with modern computer equipment and software.

8.1.1.2. Providing general secondary education institutions and VET schools with STEM laboratories.

8.1.1.3. Equipping professional pre-higher and higher education institutions with multimedia equipment and modern communication tools.

8.1.1.4. Ensuring the introduction of a full-time system administrator position in general secondary education institutions and VET schools.

8.1.1.5. Creating a network of digital educational centers.

Operational Objective 8.1.2:

education institutions have access to the high-speed Internet.

Tasks:

8.1.2.1. Ensuring the connection of education institutions to the broadband Internet.

8.1.2.2. Providing access to the broadband Internet in the educational premises of education institutions.

8.1.2.3. Providing filtering for the Internet content in education institutions.

Strategic Objective 8.2:

Digital educational content is developed to implement state educational standards.

Performance Indicators:

1. The number of education institutions using modern digital educational content.
2. The share of educational programs provided with electronic educational resources.
3. The number of updated electronic educational resources in computer science.
4. The number of educators, academic, and scientific staff who have enhanced their digital competence.
5. The percentage of education applicants who have increased their level of digital competence.

Operational Objective 8.2.1:

Educational programs and electronic educational resources in the field of information and communication technologies (ICT) and STEM meet current requirements.

Tasks:

8.2.1.1. Оновлення навчальних програм з інформатичної освітньої галузі для закладів загальної середньої освіти.

8.2.1.2. Розроблення й запровадження варіативних та інтегрованих курсів зі STEM-освіти в закладах загальної середньої та професійної (професійно-технічної) освіти.

8.2.1.3. Сприяння у створенні гуртків у закладах загальної середньої освіти та груп у закладах позашкільної освіти з розвитку цифрових компетентностей здобувачів освіти.

Operational Objective 8.2.2:

Accessibility of digital educational content is ensured for educational process participants.

Tasks:

8.2.2.1. Development and implementation of new distance courses on the web platform «All-Ukrainian School Online».

8.2.2.2. Providing free access for education applicants and pedagogues to electronic textbooks.

8.2.2.3. Implementation of an interactive online learning system in the field of information and communication technologies.

8.2.2.4. Providing professional development opportunities for pedagogues and scientific-pedagogical staff in developing digital competencies.

| Strategic Objective 8.3:

Data and services exchange in the field of education and science are accessible and reliable.

Performance Indicators:

1. The number of individuals with access to higher education institution educational data in real-time in the electronic cabinet on the Diia Portal / via the «Mriia» application.
2. The number of scientists with access to data in the field of science through the National Electronic Scientific Information System (URIS).
3. The share of general secondary education institutions with implemented electronic document flow.
4. The percentage of education certificates and their supplements ordered via the Diia Portal.
5. The number of higher education institutions and research institutions registered in the National Electronic Scientific Information System (URIS).

Operational Objective 8.3.1:

Data in the field of education and science are available to stakeholders according to higher education institution needs and used for decision-making at all levels.

Tasks:

8.3.1.1. Improvement of the monitoring system for the employment of graduates of higher education institutions.

8.3.1.2. Improvement of the accounting of pedagogical and academic staff.

8.3.1.3. Ensuring access to educational data and services in a single cabinet on the Diia Portal / via the «Mriia» application.

8.3.1.4. Ensuring access to open data from the National Electronic Scientific Information System and transitioning reporting procedures in the field of science to a paperless format.

Operational Objective 8.3.2:

Electronic information interaction is organized between state electronic information resources in the field of education, science, and innovation and other state information and communication systems.

Tasks:

8.3.2.1. Providing access to educational analytics and data following legal requirements.

8.3.2.2. Ensuring effective interaction between state registers and information and communication systems in the field of education.

Operational Objective 8.3.3:

Services in the field of education and science are of high quality, accessible, and convenient.

Tasks:

8.3.3.1. Ensuring the digitization of the educational management processes based on the Automated Information Complex of Educational Management (AICEM).

8.3.3.2. Launching the educational mobile application «Mriia».

8.3.3.3. Implementation of a Unified Interdepartmental Information System for the admission of foreign applicants to VET schools, professional pre-higher, and higher education institutions.

8.3.3.4. Implementation of a centralized system for registration of children, education applicants, pedagogical staff, and education institutions.

8.3.3.5. Ensuring paperless receipt of services by education institutions and research institutions in the National Electronic Scientific Information System.

8.3.3.6. Implementation of digital solutions for assessing educational achievements, including in a remote mode.

PRIORITY 9:

Support and Assistance for Persons with Special Needs

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Background

The key idea of the «New Ukrainian School» reform, ongoing since 2016, is to ensure equal access to quality education for all children, including those with special educational needs.

The state guarantees full general secondary education for all learners and the absence of discrimination based on any criteria, including health status and special educational needs. In recent years, there has been a significant increase in the number of children with special educational needs in general secondary education institutions.

From 4180 in 2017, it rose to 33861 in 2023. In preschool education institutions in 2017, there were 210 preschool education institutions with 275 inclusive groups. In 2022, there were already 3017 preschool education institutions with 5676 groups, educating 10,216 children. Since October 2022, the state institution «School of Superheroes» has been effectively providing educational services for 11609 children undergoing inpatient treatment or rehabilitation in healthcare institutions. Due to the full-scale aggression of the russian federation, the number of children physically affected, receiving psychological traumas, requiring additional support and services, is increasing every day.

Additionally, the number of individuals needing support in the educational process is growing. Therefore, there is a need to respond quickly to new challenges: opening inclusive classes and groups, training educators to provide necessary support in the educational process, creating an inclusive educational environment in all education institutions, ensuring the provision of educational services for children undergoing inpatient treatment or rehabilitation, and creating conditions for the integration of veterans.

Anticipated Outcomes:

For Education Applicants:

all children and adults, regardless of educational needs, health status, or other conditions, should have the opportunity to receive quality educational services and support in the educational process tailored to their individual needs and interests; all education applicants should acquire skills that help them adapt to real-life situations and employment; individuals with special educational needs should receive necessary support and assistance from educational professionals and other experts.

For Parents:

parents receive individualized support for their children, aimed at developing their potential and learning, irrespective of health status, location, or the presence of special educational needs. The ability to choose education institutions and forms of learning, as well as receive educational services regardless of the child's location, health status, or special educational needs. Confidence that their children receive quality educational services in a safe and supportive environment, regardless of special educational needs, health status, or location.

For Pedagogues:

the opportunity to work with various education applicants, including children with special educational needs, allows pedagogues to broaden their professional experience and enhance their skills. Engagement in inclusive education contributes to the professional development of teachers as they study new methods and tools for working with diverse students. Educators experience psychological satisfaction in their role in the development of each education applicant, providing them the opportunity to succeed regardless of their characteristics.

For the State:

providing education for everyone, irrespective of health status, the presence of special educational needs, or other conditions, contributes to citizens' confidence in the future and government support for them and their families in any circumstances, fostering the development of a tolerant and open society.

Key Initiatives:

«Touchpoint» Program:

state program for education and psycho-pedagogical support for veterans who have lost their sight due to war.

National Strategy for Inclusive Education:

development and approval of a national strategy for inclusive education, along with an action plan.

Concept of Special Education Transformation:

development and approval of the concept of transforming special education, accompanied by an action plan.

«Education for Veterans» Portal:

creating conditions for the adaptation of war veterans to civilian life through the acquisition of new skills and competencies, introducing a supportive environment where veterans can find social support, engage in communication, enhance social connections, and interact with society through participation in educational events.

State Institution «School of Superheroes»:

provision of educational services for children undergoing inpatient treatment or rehabilitation in healthcare institutions.

Ultimate Goal:

All persons who need it receive the necessary support in the educational process and educational services, psychological and pedagogical support and support for successful integration into society.

Performance Indicators:

1. Number of veterans involved in the educational process.
2. Share of special education institutions transformed to meet the needs of individuals with special needs.
3. Number of children who have undergone a comprehensive psychological-pedagogical assessment of personal development in Inclusive Resource Centers (IRCs).
4. Number of children who received educational services in the «School of Superheroes» state institution.
5. Number of educational services provided in the «School of Superheroes» state institution.

Strategic Objective 9.1:

Students with special educational needs receive quality educational services in education.

Performance Indicators:

1. Number of IRCs and education institutions providing education for children with special needs.
2. Percentage of children with special needs receiving inclusive education.
3. Percentage of educators informed about working with children with special needs.

Operational Objective 9.1.1:

Opportunities and conditions for quality education for individuals with special needs are provided, as well as for students who require support in the educational process.

Tasks:

9.1.1.1. Ensuring the development of a safe educational environment in education institutions providing inclusive education.

9.1.1.2. Providing inclusive resource centers with tools for identifying special educational needs of early childhood and school-age children.

9.1.1.3. Providing psychological-pedagogical support and offering correctional and developmental services to children with special needs according to higher education institution needs.

Operational Objective 9.1.2:

The educational process is organized, considering the diversity of needs of all participants in the educational process.

Tasks:

9.1.2.1. Providing training for pedagogical staff in education regarding the implementation of the educational process for applicants with special needs at different levels of support.

9.1.2.2. Meeting the educational needs of children in the educational centers of the State Institution «School of Superheroes.»

9.1.2.3. Developing materials and an information system for informing parents about identifying special educational needs in early childhood, preschool and school-age children.

Strategic Objective 9.2:

Veterans receive quality educational services and psychological support, facilitating higher education institution adaptation to civilian life.

Performance Indicators:

1. Number of education institutions providing educational services to veterans.

2. Number of veterans who received educational services.

3. Number of veterans receiving psychological support while receiving educational services.

Operational Objective 9.2.1:

Veterans have the opportunity to use an online platform with educational opportunities.

Tasks:

9.2.1.1. Creating a comprehensive online platform with accessible educational opportunities for veterans.

9.2.1.2. Consolidating educational programs of formal and non-formal education institutions of VET, professional pre-higher, higher education, and other events on the platform with educational opportunities for veterans.

Operational Objective 9.2.2:

Education institutions provide educational services to veterans.

Tasks:

9.2.2.1. Creating a favorable environment where veterans can find social and psychological support, communication, understanding, improve social connections, and interact in society through participation in educational events organized by education institutions.

9.2.2.2. Involving veterans in acquiring new skills and competencies through participation in educational and other events organized by education institutions.