

nus.org.ua 🕨

# "NEW UKRAINIAN SCHOOL"

**Grades 5 – 6: implementation challenges** 













### About the study

The study was organized and conducted by the "Smart Osvita" NGO supported by the International Renaissance Foundation along with the Ilko Kucheriv Democratic Initiatives Foundation and the Center for Political Sociology involving Institute of Educational Analytics, NGO Re:Osvita, and OsvitAnalityka Think Tank from Borys Grinchenko Kyiv University.

The writing team developed this document intending to consider the "New Ukrainian School" reform implementation status within the adaptation cycle of basic secondary education (grades 5-6), current key problems and needs, and possible ways of addressing them.

This report presents the views of the writing team and does not necessarily imply the same views of the International Renaissance Foundation.

This study was presented by the "Smart Osvita" NGO as part of the ENGAGE public activity promotion program funded by the United States Agency for International Development (USAID) and implemented by Pact in Ukraine. The study content is the sole responsibility of Pact and its partners and does not necessarily reflect the views of the United States Agency for International Development (USAID) or the US Government.













#### List of abbreviations

ACE Academy of Continuing Education

ATC amalgamated territorial community

CPDTS center for professional development of teaching staff

CSO/NGO Civil Society Organization/Non-Governmental Organization

ΕU European Union

ΙE individual entrepreneur

**IECM** Institute of Education Content Modernization

IGSE Institution of General Secondary Education

IPPE Institute of Postgraduate Pedagogical Education

LLC limited liability company

**MESU** Ministry of Education and Science of Ukraine

**NAES** National Academy of Educational Sciences

New Ukrainian School reform NUS

OECD Organization for Economic Co-operation and Development

ΡU **Public Union** 

Regional/Oblast Military Administration **RMA** 

SEN special educational needs

SSEQ State Service of Education Quality

UCEQA Ukrainian Center for Educational Quality Assessment

Ukrainian Institute of Education Development UIED

UNICEF United Nations International Children's Emergency Fund

UOS All-Ukrainian Online School



## "New Ukrainian School" in grades 5–6: implementation challenges

Author and project manager: Halyna Tytysh

Coordinators: Kateryna Kurovska, Viktoria Koval

Authors: Iryna Pasko, Volodymyr Bozhynskiy, Polina Bondarenko

**Expert support:** Lilia Hrynevych, Andriy Stashkiv, Ihor Khvorostianiy, Tetiana

Vakulenko, Vadym Karandiy, Serhiy Horbachov, Ivanna Kobernyk,

Oksana Makarenko, Olenka Severenchuk, Tetiana Lisova,

Kateryna Molodyk, Ivan Yuriychuk, Olena Zaplotynska, Hryhoriy

Baran, Iryna Kohut, Viktoria Koval

**Expert support** 

Recovery and Reform

Roman Shyian, RST Deputy Director;

Support Team (RST): Vasyl Tereshchenko, RST project manager on monitoring NUS

implementation; Iryna Klymenko, RST evaluation project manager; Olena Hloba, RST senior project manager (NUS coordination); Olena Kuzminska, RST project manager on teachers' professional development; Yuliya Romanenko, RST project manager on educational and training programs

development; Viktoria Topol, RST communications manager of

the NUS department.

Editing: Viktoria Koval, Halyna Hlodz

Proofreading: Ksenia Shpak

Layout: Roman Marchyshyn

Supported by International Renaissance Foundation

This report presents the views of the writing team and does not necessarily imply the same views of the International Renaissance Foundation.

P 19 "New Ukrainian School" in grades 5–6: implementation challenges/ joint authorship: I. Pasko, P. Bondarenko, V. Bozhynsky; edited by Halyna Tytysh; "Smart Osvita" NGO. Kyiv. 2024. 190 p.

The study was organized and conducted by the "Smart Osvita" NGO supported by the International Renaissance Foundation along with the Ilko Kucheriv Democratic Initiatives Foundation and the Center for Political Sociology involving the Institute of Educational Analytics, the NGO Re:Osvita, and the OsvitAnalityka Think Tank from Borys Grinchenko Kyiv University.

The writing team developed this document intending to consider the "New Ukrainian School" reform implementation status within the adaptation cycle of basic secondary education (grades 5-6), current key problems and needs, and possible ways of addressing them.

UDC 373.5.014.3.091.21(477)

No part of this document may be reproduced, stored in information and search systems, copied in any form, or by any means – electronic, mechanical, or otherwise – without written permission of the copyright holder, "Smart Osvita" NGO.

All Rights Reserved.

### Table of contents

STUDY METHODOLOGY	7
Sociological study methodology	8
Desk study methodology	13
THE MAIN STUDY RESULTS	14
Advanced training for teachers related to NUS implementation in grades 5-6	
Key findings	
Suggestions to address problematic issues	
Content of education and work practices of teaching staff	
Key findings	
Suggestions to address problematic issues	
Teachers' mental condition	
Key findings	
Suggestions to address problematic issues	
Educational losses	
Key findings	
Suggestions to address problematic issues	75
Reform communication and obstacles to its implementation	76
Key findings	76
Suggestions to address problematic issues	83
Regional peculiar features	85
Cases of self-reliance	87
Legal regulation of reform implementation	91
MAIN CONCLUSIONS	100
ANNEXES	102
Annex 1. NUS financing – 2022	102
Annex 2. Have the writing teams of curricula under the old State Standard and model programs for grades 5-6 of NUS changed?	110
Annex 3. Key findings and recommendations: summary	
Annex 4. Survey results in tables	
Annex 5. Guide to the first round of interviews	
Appex 6. Guide to the cocond round of interviews	روا
ADDOV 6 LILIOO TO TOO COCODO FOLIDO OF INFOY/IOWC	124



Since 2020, various external factors have been affecting the New Ukrainian School's reform and significantly complicating its implementation. For example, primary school students have spent a lot of time on distance learning, affecting their results to a great extent. However, NUS implementation in basic secondary school then faced even greater challenges: students began entering fifth grade under the new State Standard of Basic Secondary Education just six months after Russia's invasion.

Stress from threats posed by shelling and worrying about relatives fighting on the front or in Russian-occupied areas have become a common context of the educational process in Ukraine. Some educational institutions – along with their teaching staff – have ended up in occupied areas, other education specialists have enlisted to defend Ukraine, and those left have had to manage their hours between airstrikes and blackouts. Sequestration in favor of the military budget has deprived education of funds allocated for textbooks – in 2022, there was no subvention targeted for the NUS.



That said, the above-mentioned objective factors adversely affecting reform implementation for grades 5-6 are not the only ones. The author's team carried out a desk review of the reform implementation calendar and found backlogs that had been accumulating since even before the 2022 invasion. In particular, certain important changes to the educational legislation have not yet been

approved (detailed information is available in the "Legal regulation of reform implementation" section). Grade 5 textbooks not being printed for almost the entire academic year has caused problems and added to educational losses. Unlike for primary school, there were no funds allocated for training resources in secondary school, and the teachers did not receive bonuses for the NUS implementation. Moreover, there were reasons to assume that the training of teachers to work in certain subjects in grades 5-6 under NUS was not properly implemented due to a lack of funding and comprehensive in-person courses. While headed by Serhiy Shkarlet in 2022 and the beginning of 2023, the MESU regularly posted positive messages about "continuing reform," which did not quite line up with reality, and beyond that distorting the actual situation for the public.

To learn the real situation with grades 5-6 of NUS, the study team decided to survey subject teachers working in basic secondary schools. We focused on the following topics: advanced training; curricula and textbooks; teaching methods; factors that hinder the reform implementation; issues related to evaluation of students' educational achievements under the new system; mental condition of the education process participants, and educational losses. Along with the sociological survey, the team conducted a desk study by analyzing regulatory documents, data from public sources, and responses to information requests sent to various institutions.

We hope that the study results and the developed recommendations will be helpful in the current situation when the NUS reform requires strong state support.





## STUDY METHODOLOGY

The study consisted of desk and sociological parts.

#### Desk part

- analysis of legislation;
- collection and analysis of information from RMA, ATC, IPPE, and ACE;
- analysis of the reform implementation timing;
- analysis of the standard educational program and its comparison with those based on the old State Standard of Basic Secondary Education;
- analysis of selected model programs.

#### Sociological part

- representative survey involving teachers of grades 5-6 (600 respondents);
- in-depth interviews (15 + 15).



# Sociological study methodology

#### In-depth interviews

During the field stage of the study held from October 9 to 22, 2023 and from January 8 to 15, 2024, the analytics of the Democratic Initiatives Foundation conducted **30 structured interviews involving teachers of grades 5–6** (15 interviews during the first round and 15 during the second). The sample of teachers involved in the interview as respondents differed from those involved as respondents to the survey.

The Foundation analysts independently contacted teachers and offered to participate in interviews, and found future respondents using the "snowball" method. None of the teachers contacted by the Foundation refused to participate in the interview. The saturation point was reached on the ninth interview respondent during the first round; and on the eighth during the second round. Interviews were conducted via phone call at a time convenient for the respondents. The conversations were recorded.

28 women and 2 men took part in the interview (only women took part in the first round of interviews). The **gender imbalance** is due to an uneven distribution of men and women in the field.

The geography of residence and employment of the respondents includes Kyiv, Lviv, Chernihiv, Chernivtsi, Cherkasy, Sumy, Kherson, Zaporizhzhia, Vinnytsia, Odesa, Ivano-Frankivsk, Zakarpattia, and Kirovohrad oblasts, and the city of Kyiv.

The sample of educational institutions features their location distributed by residential classification: capital city, oblast capitals, other towns, and villages.

At the time of the interview, the respondents were grade 5-6 NUS teachers of the **following subjects**: Ukrainian language and literature, mathematics, English, foreign literature, history, natural sciences, geography, and art.

On average, each interview lasted about 45–60 minutes, including the interviewer's introduction.

The guide for the first round included **five sections comprised of 15 open-ended questions**. The guide was intended to review the **following topics**:

- respondents' experience during advanced training;
- training selection criteria;
- experience in developing curricula based on the model;
- curriculum selection criteria;
- assessing textbooks used by respondents;



- challenges faced during distance education;
- emotional and mental condition of the respondent;
- experience in supporting students in a vulnerable emotional or mental condition;
- the respondent's experience in compensating for educational losses of students;
- understanding the NUS reform shortcomings and improving its implementation.

The guide for the second round included four sections comprised of 23 questions: 16 general open-ended questions, 3 open-ended questions that were asked only to respondents with experience teaching under a non-standard curriculum, and 4 general closed-type questions.

The guide for the second round was aimed to review and clarify (based on a representative study) the **following topics**:

- motivation to teach integrated courses or individual subjects;
- clear differences between textbooks under the new and old State Standards of Basic Secondary Education;
- request for instructional packages;
- respondents' understanding of the "feedback" concept;
- attitude to formative, point-based, and level-based assessment;
- attitude to the NUS reform;
- desired job conditions;
- desired conditions for assessing the teachers' qualifications and competencies;
- advantages and disadvantages of non-standard curricula (this data will be the basis for a separate future study).

A potential limitation of the first field stage of the study was **the imbalance caused by the selection of volunteers** (individuals who strongly opposed the survey and who could probably have opinions differing from those expressed by the respondents were not included in the sample). However, this effect is weakened by the sociologists having turned to the teachers rather than vice versa. To expand the respondents' experiences, we covered different regions of Ukraine, residential types, and teaching subjects.

That said, **teachers who left the country** due to military operations were not included in samples in all study stages.

During the interview, respondents did not show any signs of self-censoring their answers. To this end, the interview did not include any questions an educational institution's management might be able to use in pressuring the respondents, or other sensitive questions. Respondents were not asked their name, surname, age, or place of employment, although they could voluntarily provide this information during the interview. Communication with education professionals was direct, not involving the management of educational institutions.

The interview results were used to finalize the questionnaire, namely, the answer options, and to conduct a quantitative survey of teachers, the results of which were then used to refine the guide questions for the second round of in-depth interviews.



#### Quantitative representative survey

Empirical data for the second stage of the study was collected via quantitative survey and conducted by the Ilko Kucheriv Democratic Initiatives Foundation in cooperation with the Center for Political Sociology from October 23 to November 15, 2023.

600 teachers of grades 5 and 6 were interviewed by the face-to-face method using multistage sampling with random selection of locations and schools (first stages) and quota selection of respondents (final stage).

The questionnaire included **44 questions**. Teachers filled it out **independently** in front of interviewers, in educational institutions and their premises, without any third parties beyond the interviewer and respondent.

The sample frame reflects the demographic structure of teachers by macro-region and residential type according to the data of the Institute of Educational Analytics of the Ministry of Education and Science of Ukraine as of September 2022.

The sample did not include teachers who were not in the same location as their educational institution when the survey was conducted.

The number of teachers interviewed in each of the macro-regions of Ukraine is proportional to their share in the general totality within the country.

In the second stage, the **key oblasts** of each macro-region were selected. Given the teachers' proportion, three oblasts were selected in the Western (34.19%) and Central (38.09%) macro-regions:

- Western macro-region: Zakarpattia, Lviv, and Rivne oblasts;
- Central macro-region: city of Kyiv, Kyiv and Cherkasy oblasts.

With fewer teachers in the Southern (13.1%) and Eastern (14.62%) macro-regions, one oblast each was selected:

- Southern macro-region: Odesa oblast;
- Eastern macro-region: Dnipropetrovsk oblast.

In the third stage, questionnaires were **distributed in each macro-region between urban and rural teachers in proportion** to their total number in the relevant location classifications. In each macro-region, cities and villages were randomly selected; and their schools with NUS grades 5-6, respectively.

The maximum random error of the survey (excluding design effect) does not exceed 4% with a probability of 0.95.

The share of respondents who completed the questionnaire is 100%. The share of refusals to participate in the survey is 0%.

Below is the distribution of the general and sample selection of teachers of IGSE grades 5-11. Oblasts selected for the survey are highlighted in bold:



	The number of teachers in grades 5–11, according to the Institute of Educational Analytics	Share in the general structure (%)	Number of respondent s (planned)	The share of teachers in grades 5–11 by type of settlement and the related number of respondents
Volyn Oblast	7,674			
Zakarpattia Oblast	7,591			Urban: 25,662
Ivano-Frankivsk Oblast	8,407	WEST		45% Interviewed: 92
Lviv Oblast	14,613	57,508	205	
Rivne Oblast	7,954	34.19%		Rural: 31,846 <b>55</b> %
Ternopil Oblast	6,343			Interviewed: 113
Chernivtsi Oblast	4,926			
Vinnytsia Oblast	7,913			
Zhytomyr Oblast	6,501			
Kyiv Oblast	8,243			
Kirovohrad Oblast	4,419			Urban: 40,450 <b>63%</b>
Poltava Oblast	6,078	CENTRAL	220	Interviewed: 144
Sumy Oblast	4,550	64,067 <b>38.09%</b>		Rural: 23,617
Khmelnytskyi Oblast	6,554			37% Interviewed: 84
Cherkasy Oblast	5,532			interviewed. 0-
Chernihiv Oblast	4,729			
Kyiv City	9,548			
Zaporizhzhia Oblast	5,459			Urban: 14,500
Mykolaiv Oblast	4,528	SOUTH		66% Interviewed: 52
Kherson Oblast	2,075	22,031 <b>13.10%</b>	79	Rural: 7,531
Odesa Oblast	9,969	1001070		34% Interviewed: 27
<b>Dnipropetrovsk Oblast</b>	11,551	EAST		Urban: 19,858
Kharkiv Oblast	8,361			81% Interviewed: 71
Donetsk Oblast	3,876	24,596 <b>14.62%</b>	24,596 <b>88</b> <b>14.62</b> %	Rural: 4,738
Luhansk Oblast	808	- 110=70		19% Interviewed: 17
Ukraine	168,202	100%	600	

The share of women in the selection was 91.5%, men-7%. The rest did not state their gender.



Respondents' age				
18–20	30–39	40–49	50–59	Over 60
9%	20%	30%	27%	14%

The sample mostly includes teachers of the following subjects:

- Ukrainian language (20.5%) and Ukrainian literature (16.5%),
- mathematics (19%),
- foreign language (17%).

At the time of the survey conduct, the absolute majority (51%) of the respondents were teaching in-person. 47% of teachers were working in a mixed format, and 2% in a distance format.

55% of respondents had a higher professional degree, and 20% had a first-level professional degree. There were 10% of specialists of the second-level professional degree in the sample/ The remaining teachers – 15% – had a professional level of specialist.

56% of the surveyed teachers did not have any pedagogic rating. A quarter had a senior teacher grade. 19% of respondents had a resource teacher rating.



### Desk study methodology

The desk study was conducted from September to December 2023 by representatives of the "Smart Osvita" NGO (main part), Volodymyr Bozhynskiy, a researcher at the OsvitAnalityka Think Tank from Borys Grinchenko Kyiv Metropolitan University (analysis of the legislative framework), and NGO Re:Osvita.

In this part of the study, the team intended to clarify the following questions:

- whether there is a current backlog compared to the initial reform implementation plan, and if so, in what areas;
- which regulations should be adopted for more efficient reform implementation;
- according to statistical data, how many teachers have undergone advanced training to work in the secondary school adaptation cycle under the new State Standard;
- how did IPPE and ACE address the issue in 2022 given the lack of targeted subvention;
- how the general situation with funding, namely regarding printing textbooks, has affected the already introduced reforms;
- whether the ATC compensated for the lack of subvention on NUS from local budgets, sponsors, or grant funds;
- how the Standard Educational Program for grades 5–9 differs from the one designed in line with the old State Standard in terms of quantity (hours) and content (subjects);
- whether there are any content differences in basic secondary education designed in line with the new State Standard (exemplified by individual curricula and textbooks).

The following approaches were used to review these issues:

- collection and analysis of public data (legislation, State Standard of Basic Secondary Education, old and new Standard Educational Programs, standard curricula, model programs, pdf versions of textbooks, etc.);
- data collection via requests to field-specific institutions and organizations (MESU, IECM, RMA, IPPE/ACE, SSEQ, UCEQA);
- collected data comparison.

In this report, the desk study findings are mainly integrated with the conclusions of the sociological part, thus improving and supplementing the latter.





# THE MAIN STUDY RESULTS

In the first stage of the study, we examined the initial reform implementation calendar in detail and compared it with the actual implementation status. We found a serious backlog in some issues – for example, with model program development, and with textbook compilation and printing.



Detailed results of the analysis are available via the link.

It is again worth noting that nowadays, in 2024, it is almost impossible to divide certain systemic problems of the reform implementation (probably proving the necessity to review it) from the consequences of quarantine and war, which are devastating for education. Distance learning negatively affects primary school as children at this age are apt at management-organization and they need more socialization – interaction with the teacher and peers, and they are not so skilled and patient when using electronic gadgets for educational purposes. Moreover, the constant stress of war affects cognitive abilities even of those students who are in relatively safe regions, not to mention those who remain closer to the front line.

For obvious reasons, it is impossible to learn the opinion of those teachers who are in combat zones or Russian-occupied areas.



## Advanced training for teachers related to NUS implementation in grades 5-6

When initiating the study, the writing team assumed that secondary school teachers did not have sufficient knowledge to work in grades 5-6 of NUS. The following facts supported such a hypothesis:

- lack of funding in 2022 (due to the budget sequestration, it was impossible to hire practical coaches from among the IPPE/ACE employees);
- the mostly remote format of advanced training, making it impossible to review certain practical cases of classroom activities;
- lost time preparing for the reform implementation in grades 5-6 due to the previous MESU leadership's general attitude to NUS.

Given this assumption, we included certain questions in the sociological survey and in-depth interview guides so that we could clarify the situation with advanced training.

## **Key findings**

According to the survey results, 96% of teachers underwent targeted advanced training to work with NUS grades 5-6. Regardless of the macro-region of the respondent's employment, high rates of advanced training completion - more than 90% - were observed. All respondents of in-depth interviews had also undergone targeted advanced training.



According to the data provided by the Institute of Education Content Modernization upon the authors' request, in the 2021/2022 academic year, for the period from April 27, 2021, to August 26, 2022, the following advanced training courses related to the implementation of the new State Standard of Basic Secondary Education in grades 5-6 were held:

No.	Course title	The number of teaching staff who started training	Number of people who received certificates
1	Training on the Learning Together online platform (6 seminars in an online format, checkup tests)	3,000	1,700 (56.7%)
2	Online course "School for everyone"	15,800	8,552 (54.1%)
3	Online course "Assessment Without Devaluation"	11,503	5,028 (43.7%)
4	Advanced training for heads of pilot institutions	140	90 (64.3%)

The **online format**, which at first was introduced due to quarantine restrictions, and then again later due to security issues during martial law, could affect the quality of knowledge and interaction in study groups (teachers, as we can derive from their answers to the questionnaire, have a request for practical cases and experience exchange).

It is interesting that in each of the given examples, about half of the participants completed the course (received certificates) (56.7% – 54.1% – 43.7% – 64.3%). Such statistics are not exclusive of publicly available online courses: due to the need for self-control and time management, not all registered applicants complete them.

However, it is worth noting that the above **data by IECM is not representative** of advanced training by industry. Moreover, we do not know the number of people who have completed or just started Course 1 and also registered for and completed Courses 2 and 3 – perhaps these samples cross over, so some of the most active teachers could have completed all three courses. Thus, future data collecting would ensure a more accurate insight into the readiness of education specialists to work with NUS and the effectiveness of online advanced training.

Data provided by IECM for the period from **August 1, 2022 to July 1, 2023** are more representative. According to them, during the specified period, IPPE organized training related to the NUS implementation for more than 36 thousand people in all educational fields.

No.	Name of the educational field	The number of people who have completed training
1	Language and literature	10,720
2	Mathematics	4,320
3	Natural sciences	5,230



No.	Name of the educational field	The number of people who have completed training
5	IT	2,682
6	Social and health care	2,243
7	Civics and history	3,102
8	Arts	2,936
9	Physical education	2,452
	Total	36,113

A point worth special attention: this data would have given a general picture if we knew the number of teachers in Ukraine working in grades 5-6 by educational fields. Public institutions do not have such data available (the Institute of Educational Analytics only collects general statistics on teachers of grades 5-9, so it is impossible to determine the percentage of teachers involved in NUS reform implementation who have taken targeted training. Collecting such data could have helped visualize the general situation.

Given the funding problems, we had assumed most respondents underwent advanced training courses offered by public organizations or paid courses by various providers. However, the survey proved this not to be the case. IPPE/ACE are the top institutions providing advanced training related to the new State Standard of Basic Secondary Education implementation within the adaptation cycle.

Advanced training institutions	Underwent	Ready to recommend
Institutes of Postgraduate Pedagogical Education or Academies of Continuing Education	85.0%	81.3%
Civil society organizations (for example, Osvitoria PU, School for Democracy program, etc.)	21.7%	22.6%
Institute of Education Content Modernization	18.1%	23.4%
International partner organizations (for example, the Learning Together project)	6.6%	13.5%
Private individuals or organizations (IE, LLC, etc.)	5.6%	4.5%
Ukrainian Institute of Education Development	5.4%	8.9%
National Academy of Educational Sciences of Ukraine	1.6%	4.2%

Therefore, advanced training institutes have organized training for education specialists despite the lack of targeted funding. For example, in its response to the study team's request, the Chernihiv IPPE mentioned "numerous demands from the oblast's teachers" asking for additional training, in particular for educators-coaches. In their responses, some IPPEs noted that they were able to engage "external" practical coaches even before the 2022/2023 academic year. However, most of the courses that year were conducted by IPPE employees, and this could have led to teachers' dissatisfaction due to the lack of practical training (more detailed information is available below).



Based on the survey data, it should be noted that teachers are ready to recommend the courses they have completed to their colleagues. The fact that the percentage of people willing to recommend a course is sometimes higher than that of people who have completed it may be based on positive feedback from colleagues who have taken the course and/or the generally positive reputation of a particular provider.

It was important to determine factors influencing the choice of advanced training courses and whether this process is a "choice with zero options." Therefore, we added a question: "What was a key point for you when choosing a specific advanced training course to work with NUS grades 5-6?" Respondents could choose several options.

Factor	%
The course's practical focus	59.0
Availability of the content module relevant to my subject/integrated course	42.4
Previous experience of taking courses designed by this organizer	19.0
Feedback from colleagues	12.7
Attitude of management or department of education	8.4
This course was the only option available	5.9
Reviews on the internet	5.6
Attitude of the principal	5.2
Cost of courses	4.2
Other	0.2

The survey results evidence a **high demand for a practical focus of advanced training courses** related to the NUS implementation. Answers to the questions about skills and competencies crucial to a teacher are designed to clarify the meaning of the "practical focus" concept.

It should be noted that more than **86% of teachers** believe that the knowledge they acquired at advanced training **is sufficient** to implement NUS in grades 5-6 (this category includes those who chose "yes" (38.9%) or "somewhat yes" (47.4%) options in the related question). However, the answers to the following questions indicate that the **acquired knowledge may be insufficient and non-systematic. 8.5% of the respondents** believe that the knowledge they acquired in the courses is not enough. 5% of respondents could not answer. Respondents of different age groups gave similar answers to this question.

We assume that the quality of training of subject teachers, despite its mass character in 2023, is still not relevant, however, teachers are too **tired and exhausted** to directly admit they have knowledge gaps, so as not to be ordered to undergo additional training in their off time.

Namely, the survey respondents were **asked to choose from 13 skills, methods, and competencies** they reviewed in advanced training courses and learned to use during these classes.



None of the proposed options was chosen by more than half of the respondents, even though they were free to mark any number of answers.

Teachers usually chose the following skills as mastered ("learned to use in advanced training courses"):

Training content	%
Methods for evaluation of educational achievements	44.9
Key competencies development	39.0
Organizing group work in the classroom	36.9
Creating a comfortable environment for students	28.7
Activity approach	28.4
Learning support materials development	23.9
Curricula development	23.0
Organizing individual work in the classroom	19.9
New knowledge of the subject I teach	19.0
Developing cross-cutting skills common to various educational fields	19.0
Making up for educational losses and gaps	12.9
Diagnosing educational losses and gaps	12.7
Techniques of social and emotional support	12.2
None of the above	1.4

The skills that the respondents most often learned to use during advanced training courses related to working with NUS grades 5-6 rarely depended on the advanced training courses they completed of the three available. Therefore, it can be assumed that the three most popular providers of advanced training courses use the same curriculum and ensure the same quality of service.

We asked twice, using different wording, about issues teachers found most useful in advanced training courses in the questionnaire:

- "Which of the following topics within the scope of advanced training courses related to work with NUS grades 5-6 - do you deem the most relevant in the NUS context?" (up to three answers);
- "Below is a list of topics that can potentially be considered in advanced training courses related to work with NUS grades 5-6. Which would be most useful for you to learn?" (up to ten answers; in the second case, the list is expanded).



Teachers consider the following issues to be the **most relevant** in advanced training courses:

Training content	%
Modern approaches to teaching under NUS	64.8
Digital technologies for teaching activities	34.8
Implementing the NUS concept in basic secondary education	34.5
Evaluation of students' educational achievements in NUS academic subjects/integrated courses	28.1
Psychological and pedagogical prerequisites to organize the NUS educational process	24.8
Psychological aid to the educational process participants during wartime	17.2
Peculiar features of inclusive education implementation	16.8
State standard of basic secondary education	15.3
Standard educational program	11.8
The educational program of the institution	8.1
Standard curriculum	5.7
None of the above	0.9

Teachers consider the following issues to be the most useful in advanced training courses in the context of NUS implementation:

Training content	%
Modern approaches to teaching under NUS	55.4
Digital technologies for teaching activities	44.8
Evaluation of students' educational achievements in NUS academic subjects/integrated courses	42.1
Organizing group and individual work in the classroom	34.9
Activity approach	33.1
Peculiar features of teaching subjects/integrated courses within the relevant educational field	32.1
Implementing the NUS concept in basic secondary education	31.9
Making up for educational losses and gaps	29.1
Peculiar features of inclusive education implementation	28.6
Capability to create a motivating educational environment	25.1



Training content	%
Psychological aid to the educational process participants during wartime	24.6
Diagnosing educational losses and gaps	23.7
Learning support materials development	22.2
Psychological and pedagogical prerequisites to organize the NUS educational process	20.2
First aid skills	16.4
Standard educational program	16.2
State standard of basic secondary education	14.9
Curricula development	14.0
Promote development of cross-cutting skills common to various educational fields	13.0
Standard curriculum	12.7
The educational program of the institution	10.9
Unexploded ordnance safety	5.0
None of the above	0.7

The hypothesis about the shallowness and insufficiency of the acquired knowledge is illustrated by comparing several most common options marked by respondents as mastered, relevant, and useful for them (listed by popularity decrease):

Mastered	Relevant	Useful
Methods for evaluation of educational achievements	Modern approaches to teaching under NUS	Modern approaches to teaching under NUS
Key competencies development	Digital technologies for teaching activities	Digital technologies for teaching activities
Organizing group work in the classroom	Implementing the NUS concept in basic secondary education	Evaluation of students' educational achievements in NUS academic subjects/integrated courses
Creating a comfortable environment for students	Evaluation of students' educational achievements in NUS academic subjects/integrated courses	Organizing group and individual work in the classroom

The fact that methods of evaluation (as well as the group work organizing) were marked both as mastered and necessary may prove that teachers still lack this skill: they were taught to evaluate students' achievements "in a new way," however, we believe education specialists do not feel confident about this.



The request to study **modern approaches to teaching NUS** once again proves the need for more practical training. This conclusion is supported by the in-depth interviews of the first round when the respondents have noted the following **useful practical skills as mastered during the advanced training courses:** 

- to apply the evaluation system;
- to conduct exercises for emotional intelligence development;
- to use teaching methods relevant for NUS;
- to integrate subjects;
- to conduct practical classes in line with the teacher's profile;
- to motivate students to express and reason their opinions.

At that, according to the respondents' reports, advanced training courses lacked:

- practical tips and cases during lectures;
- skills in using new computer technologies;
- a more detailed explanation of the NUS evaluation methods;
- a more profound and detailed review of individual topics, such as computer literacy;
- learning by observing other teachers conducting lessons in NUS classes.



It is mostly theory and always only theory cross-cutting lines, developing competencies, and the like. As to practical tips on how to apply all of this properly, how it would be better to present it to children, well, there is not enough practice. We need more examples, more elements, ways to do the things presented, and more methodology.

(Respondent 3 of the first round, a teacher of geography and natural sciences)

Respondents of the second round of in-depth interviews also requested more specific and accurate recommendations that they may use in practice when working in NUS classes.



Here, for example, opinions about the formative assessment mentioned earlier. I don't know how many times I've watched different webinars and courses to figure everything out for myself; they all give nice, very beautiful, bright presentations, everything is fascinating and pompous, but no specific details are included. The teacher spent two hours at that event and left without any idea what to do next.

(Respondent 10 of the second round, a teacher of Ukrainian language and literature)

The fact that most education specialists underwent targeted advanced training to work with grades 5-6 of NUS offered by IPPE/ACE may be evidence not of the popularity or high level of quality of services provided by these institutions, but of a systemic **problem with the funds' allocation on advanced training**. The "money follows the teacher" mechanism rarely works in practice. More details are available in relevant <u>publications</u> on the NUS website.





Despite the lack of targeted funding from the state, 22% of teachers underwent courses offered by NGOs, which can be considered a success.

Given such remarks, we reviewed the Standard program for the advanced training of teachers of general secondary education institutions implementing the new State Standard of Basic Secondary Education (approved by the Order of the Ministry of Education and Culture No. 904 dated October 12, 2022, when it had already been implemented for a month and a half; and when the program of



the publicly available course of Osvitoria PU "NUS: basic secondary education" had also been approved - the modules, except for the third one, were generally in line with the Standard program). Advanced training institutions should develop their documents based on this standard program. It probably does not meet the teachers' demands as they are mostly interested in modern





approaches to work in NUS and specific methods and techniques to teach subjects. According to this program, 16 hours are allocated to organize educational processes related to subjects or integrated courses, and only 2 hours to modern approaches.

Topic	Recommended hours	Comment
Modern approaches to teaching under NUS	2 hours	Should be increased
Professional teacher development within NUS (challenges and opportunities for the professional development of teaching staff)	12 hours	It is recommended to reduce or reallocate

Advanced training institutions can change the scope of certain modules, however, the program would be more efficient if it were initially developed with a targeted allocation of hours in line with the needs of education professionals.

The survey showed that the perception of the most useful topics for the advanced training courses varies depending on the type of settlement where the respondent teaches:

- 1. Kyiv's teachers have a significantly lower demand to learn ways to implement the NUS Concept in basic secondary education compared to teachers from other settlements: 17.5% to the average value of 32%. This may prove the lack of basic understanding of the NUS concept and philosophy as such in rural regions.
- 2. Teachers from Kyiv schools were less likely to note the relevance of studying the NUS Concept implementation in basic secondary education compared to teachers from other settlements, although they more often mentioned the need to learn the basics psychological support provision to persons involved educational process during wartime: 17% and 33% of teachers in Kyiv compared to an average of 38% and 16% in other settlements, respectively.



3. Apart from that, there are twice as many requests to learn the specific features of inclusive education implementation in Kyiv: 52% compared to an average of 26.5%. This may be caused both by a clear need (statistically, a larger number of the population may include more children with SEN) and by the desire - and capabilities - to implement the NUS philosophy more comprehensively.

Another problem is advanced training related to online teaching. The survey proved that education specialists still need to master digital technologies. However, even given that a significant share of schools works in a distance or mixed format (or will have to apply these at any moment), less than half of the respondents (44%) were explained detailed methods of teaching online in advanced training courses. About 40% were explained methods of distance teaching only briefly (the answer did not depend on the format of the current respondents' teaching activities), the rest did not have such a topic or could not recall such an experience (15.3% in total).

Answers to questions from other sections, including the results of in-depth interviews, proved that teachers still urgently need both support for online teaching (methodology and equipment) and ready-made materials to work in this format.

When initiating the study, we assumed that a certain part of teachers would miss advanced training related to work in grades 5-6 of NUS due to a **financial factor** – the need to pay for the courses themselves. However, this assumption proved true only partially: IEs and LLCs make up a small share of the total sample of advanced training providers. For 16.5% of respondents, a financial barrier could be a possible obstacle to their professional development: they reported that they had to pay for advanced training courses out of pocket.

For 75% of respondents, advanced training courses related to work in grades 5-6 of NUS were completely free: these costs were covered by the state. Almost 5% of teachers completed advanced training courses at the expense of donor organizations.

Respondents rarely had to spend money on travel (2%) or accommodation (1%) when taking courses. Teachers from rural and township educational institutions have the most experiences completing advanced training courses out of pocket, especially in the west of the country.

8% of teachers had to pay for a certificate of course completion. This figure should be analyzed based on the respondents' answers to a sensitive question intended to determine cases of academic dishonesty during advanced training:



There are many reasons for teachers to buy advanced training certificates without actually taking the courses. Sometimes it is the only option. For example, the course provider demanded payment in the absence of any real training, or it was not possible to undertake advanced training due to family reasons. Were you ever forced to pay for an advanced training certificate in the absence of any real course?

At least 6% of teachers from the sample affirmatively answered this question. However, this number may be as high as 16% because another 10% chose the "not sure" option.



Given the question's sensitivity, the respondents might be reluctant to answer it even with assurances of confidentiality. It is unlikely that 10% "not sure" answers were truly caused by misunderstanding the question, since it was clear and related to personal experience only.

The problem with funding allocation on targeted advanced training seems to be directly related to the course content available/sought by the respondents. During in-depth interviews, several female respondents from different parts of the country who have completed various advanced training courses complained about the following: the lack of expertise on the part of the course lecturers and also their lack of practical experience in teaching schoolchildren. It should be noted that the mentioned lack of expertise was not a systematic problem of specific course organizers but that of individual lecturers.



It was as if the lecturers lacked understanding of what they had to explain to us, the teachers. Although they talked a lot, there was almost no specific information in that.

> (Respondent 4 of the first round, a teacher of Ukrainian language and literature)



I'm sorry, but if a person has never worked at a school, one is a bit surprised by their lesson planning, for example, that they can do it and that they believe a child can do it. Because you just realize that a child is not capable of doing it. It would be preferable if the course lecturers were people who have worked at a school.

> (Respondent 11 of the first round, a teacher of Ukrainian language and literature)

As we have already noted, due to the 2022 budget sequestration, IPPE and ACE, the main providers of advanced training services, were unable to engage other coaches apart from their personnel in most cases. This obviously affected the quality of the services provided. Within the desk study, we sent information requests to IPPEs and ACEs in all oblasts. We were primarily interested in those who worked as coaches when there was no targeted funding for advanced training related to NUS implementation (2022/2023 academic year). The Donetsk and Chernivtsi IPPEs and Odesa ACE did not respond.

In most institutions, training related to the new State Standard of Basic Secondary Education implementation was conducted both by IPPE/ACE employees and third-party coaches – and in some cases, we were talking about the period before the 2022-2023 academic year, when the relevant financing was not allocated.

Nowadays, given the subvention reinstatement, IPPE and ACE conduct or complete the training of the involved coaches. The regional supervisors over the NUS implementation are involved in this training ("Standard Regulation on Supervision over the New Ukrainian School Concept Implementation"). Coaches are usually teachers of pilot and other oblast schools, authors of model programs and textbooks, employees of CPDTS, inclusive resource centers, or civil society



organizations, and teachers of higher education institutions. Such a variety of professionals allows to cover many aspects of the NUS teachers' activities, however, this is a generalized list: not all oblasts could engage third-party coaches from said institutions.



Lviv IPPE responded with an important remark that "future coaches were suggested by the education authorities of territorial communities." This practice seems to be efficient: communities are aware of the most active and experienced education specialists, who are motivated to develop, share, and exchange experience, etc. This approach is worth recommending.

On the other hand, to the question about the **training taken by coaches**, not from the IPPE/ACE teaching staff, one of the institutes responded that "it does not know and has no obligation to know about the training of non-Institute employees within their non-formal education." We believe it is still necessary to collect such information before engaging a coach as it is documentary evidence of the employee's qualifications enabling them to perform their duties in a quality manner.

Most IPPE/ACE employees acting as coaches for teachers before the previous academic year had undertaken training under the "New Ukrainian School: Transition to the Next Level" program, and also the additional module thereto (training organized by the MESU of Ukraine, IECM, UIED, NAES of Ukraine, the Learning Together project financed by the Ministry of Foreign Affairs of Finland and the EU, the MESU Reform Support Team, the European Wergeland Centre, the LEGO Foundation, and the British Council).

Other courses include the program "School as a Learning Organization: Together for Effective Teaching. How can mentors help teachers as their peer members of the school community?" (within the Learning Together project); the course "Evaluation under NUS" (Osvitoria PU); and the coaching course "IGSE Academy of Effective Management" (within the Learning Together project).

Regional educational coordinators have undertaken several courses from various providers, namely, from civil society organizations and higher education institutions. In November 2023, regional coordinators joined the "New Ukrainian School: Reboot" course from the MESU Reform Support Team.



The MESU explained that it expects all teachers implementing NUS in grades 5-6 (even those who have already taken courses in previous years) and teachers of pilot grades 7 to undergo training when funding is reinstated. We deem it important to monitor the number (and percentage of the total number) of teachers of grades 5-6 who will undergo such training, as well as to ask them about its usefulness, ways to improve it, etc.

The respondents within the first round of in-depth interviews made the following suggestions as to the improvement of advanced training courses related to the NUS implementation in secondary schools:

- courses should be in-person to make them more effective;
- lecturers must have teaching experience and provide practical advice given the real situation in schools, namely, with equipment;
- more time should be allocated to master the material (reducing the intensity of activities by increasing the duration of the courses);
- following the training, the respondents need a manual with the course materials (containing examples of the learned methods and approaches application, a list of competencies, practical advice on ways to develop them, and examples of exercises to be used in classes with children).





A collection of specific exercises, methods, and various techniques to exemplify what they - by "they," the NUS program compilers - plan to do with the child at school, the interaction between the student and the teacher. You do this and that in such and such a lesson, at such and such a stage of the lesson. Apparently, training teachers to work in grade 5 appeared to be not as effective as they theoretically planned.

> (Respondent 4 of the first round, a teacher of Ukrainian language and literature)

Therefore, the efforts of teachers and IPPE employees in 2022, and specifically, funding reinstatement in 2023 (Resolution of the Cabinet of Ministers No. 1023 dated September 19, 2023) "On providing educational subvention from the state budget to local budgets (special fund of the state budget) in 2023," UAH 60 million), ensured at least a sufficient level of advanced training to continue the NUS reform implementation (learning general principles, mastery of certain



approaches, evaluation techniques, etc.). In the future, such activities should be improved to become as practice-oriented as possible, primarily in terms of distance learning, to ensure teachers have effective ready-made tools for work, namely for evaluation and to reduce their load given the current constant stress.

## Suggestions to address problematic issues

Situation analysis allowed us to identify the following key recommendations.

- 1. involve practical coaches, namely, subject teachers from pilot schools, when conducting advanced training based on IPPE;
- 2. Review the approximate allocation of hours in the Standard Advanced Training Program for Teachers related to the new State Standard of Basic Secondary Education Implementation and add topics more relevant for education specialists; a similar program for the IGSE principals also requires revision.
- 3. Suggest the institutions involved in advanced training reduce the volume of the course material, make it more detailed, and issue a manual with these materials also in digital form.
- 4. Regulate the advanced training market. One relevant tool can be a state platform uniting all advanced training service providers with the option of collecting feedback from participants, as well as quality control mechanisms over the integrity of the advanced training process.
- 5. After regulating the advanced training market, launch the "money follows the teacher" mechanism, beyond just on paper, so that this already fair market becomes available to teachers.
- 6. Promote partnerships between civil society organizations and IPPE/ACE in the field of advanced training related to NUS introduction in secondary schools. IPPE and ACE can adopt and implement the experience of online courses offered by civil society organizations to improve their solutions.



- 7. Apply the successful practice of mass advanced training for teachers working in NUS primary school. Including:
  - online course to
    - explain the NUS philosophy to teachers and the difference between the old and new educational systems,
    - present teaching methods in specific educational areas under the new State standard of basic secondary education,
    - introduce modern teaching methods and tools to education specialists,
    - include a separate module dedicated to formative assessment and feedback;
  - work with trained coaches locally to consolidate theoretical and practical skills.
- 8. Wherever applicable given the security situation, renew an in-person or mixed format in advanced training, in particular, by NUS coaches working with teachers.
- 9. Improve supervision at NUS: external tests of teachers' knowledge gained in advanced training courses, support provision to address problems and questions. Such a task can be undertaken by CPDTS, Centers for Professional Development of Teaching Staff. MESU should motivate communities to establish a CPDTS or enter into service agreements with CPDTSs of other communities.
- 10. Then, analyze (within a separate study) the professional standards and curricula of higher education institutions of the pedagogical industry, to find out whether their programs contain the philosophy of the "New Ukrainian School" reform, specific aspects of its implementation, namely, assessment (formative, level-based, etc.), as well as to examine the readiness of graduates of such higher education institutions to work in NUS. Use the results to recommend such higher education institutions the following: add program modules directly dedicated to NUS, among other things, evaluation issues.

Collecting data from IPPEs from different regions allowed us to draw up a comprehensive list of categories of people engaged as coaches and mentors there (subject to funding availability).

- teachers of pilot schools;
- teachers of regional schools, known for introducing advanced teaching methods (candidates must be submitted by ATCs);
- developers of model programs;
- authors of textbooks:
- employees of CPDTS and inclusive resource centers;
- members of civil society organizations;
- teachers of higher education institutions, namely the pedagogical field (this option is mutually beneficial given that their representatives will be able to introduce new approaches to future teacher training at their places of primary employment based on their experience).

In our opinion, recommending this general list as a reference would cover most of the teachers' needs - both in methodological and practical knowledge of the subject, development of critical thinking, civic consciousness, etc.:



## Content of education and work practices of teaching staff

The writing team added this section to the study to find out the following:

- how teachers evaluate changes in their work practices, and
- 2. in curricula and textbooks:
- 3. their comments on the educational content;
- 4. percentage of education specialists who started teaching integrated courses instead of individual subjects.

This was taken as a basis to add questions to a questionnaire and guides, as well as to define areas of the desk study.

## **Key findings**

The standard educational program for grades 5-9 based on the new State standard of basic secondary education was approved on February 19, 2021. On January 13, 2021, MESU published it for public discussion, with the deadline for proposals set to January 28, 2021 (11 business days). Serhiy Horbachov, education ombudsman, noted in his letter to Serhiy Shkarlet, the then Minister of Education and Science, the said deadline was "insufficient for the quality processing of this document"... "intended to determine the content of general secondary education in Ukraine in the coming years."







The program was mostly criticized for its workload section - neither the students' load reduced nor the mandatory integration of several subjects took place. Ivanna Kobernyk, educational expert and "Smart Osvita" NGO co-founder, noted that the MESU did not respect the comments received following the public discussion, and the project remained unchanged. Moreover, the significant reduction of hours in variable components contradicts the principles of IGSE autonomy, which the NUS reform was intended to expand and improve.

Maximum permissible workload in the old (2011, re-approved in 2018) and the new Standard educational programs for grades 5-9 has not changed:

Hours per week	grade 5	grade 6	grade 7	grade 8	grade 9
Standard educational program, 2011–2018	28+3	31+3	32+3	33+3	33+3
Standard educational program, 2021	28+3	31+3	32+3	33+3	33+3



3 additional hours in each line are the mandatory three phys ed lessons per week, which are funded but not included in a student workload calculation. This quota was first set in the old standards of education but not supported by the then-current state sanitary regulations applicable to the operation and maintenance of general education institutions. They included Table 3 with no exception for physical training lessons:

#### Maximum total number of hours (lessons) of the students' weekly load

Grades		invariant and variable components of um (lessons)	
	5-day school week	6-day school week	
1	2	3	
1	20.0	22.5	
2	22.0	23.0	
3	23.0	24.0	
4	23.0	24.0	
5	28.0	30.0	
6	31.0	32.0	
7	32.0	34.0	
8	33.0	35.0	
9	33.0	36.0	
10-12	33.0	36.0	

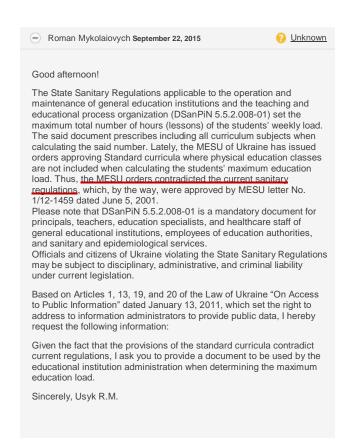


The order on standard curricula for the 2001–2005 academic years contained no exception for physical education. However, the orders on standard curricula based on the old state standards (for example, the Standard of Basic Secondary Education, 2011) was prescribed not to include physical education classes in the maximum load calculation. Information request dated September 22, 2015, filed by a citizen to the MESU is publicly available:









The citizen received a formal response, which did not clarify the issue in question:

Usyk R. M. foi+request-6375afe2d2fd@dostup.pravda.com.ua Dear Roman Mykolaiovych! In response to your request for public information No. ZPI-U-756 dated 22 September 2015 as to standard curricula of general educational institutions, the Ministry of Education and Science of Ukraine, within its competence, informs you the following. Standard curricula of general educational institutions, regardless of their subordination, types, and ownership, are approved by the Ministry according to the Basic curriculum of general educational institutions, which is one of the components of the State Standard. The State Standard of Basic and Comprehensive Secondary Education, approved by Resolution of the Cabinet of Ministers of Ukraine No. 24 dated January 14, 2004, and the State Standard of Basic and Comprehensive General Secondary Education, approved by Resolution of the Cabinet of Ministers of Ukraine No. 1392 dated November 23, 2011, determine that the hours provided for physical training lessons within "Health and Physical Education" section are not included in students' maximum load calculation. O. Derevianko Sincerely yours, The Deputy Minister, Chief of Staff



This standard was not amended in the new Standard Educational Program or Standard Curriculum. We deem this to be a manipulative approach to create an illusion that students spend less time in school than they really do. The maximum weekly load of students of grades 5-6, physical education lessons inclusive, is the following:

- grade 5: 28 hours + 3 hours of phys ed = 31 hours: 5 = 6 lessons 4 days a week, 1 day - 7 lessons;
- **grade 6:** 31 hours + 3 hours of phys ed = 34 hours : 5 = 7 lessons 4 days a week, 1 day - 6 lessons.



According to Article 10 of the Law of Ukraine "On Complete General Secondary Education": "The continuous educational activity of students of general secondary education institutions cannot exceed 35 minutes (1st grade), 40 minutes (2-4th grades), 45 minutes (5-12th grades), except for cases set by legislation."

If the lesson lasts 45 minutes, the students of grade 5 have 4.5 hours of educational activity four days a week (45 x 6 : 60), and one day a week - 5 hours 15 minutes. For students of grade 6, the second option is applicable for four days a week. If we include breaks and time for homework preparation in the calculation, we see that children's daily study time is comparable to a full working day of an adult - 8 or more hours. It should be pointed out here that these students are 10-12 years old. It is absurd to pretend that phys ed classes should not be included, as if they do not affect the physical condition of children and their cognitive abilities.

It should be noted that the Standard Curriculum-2021 features a concept of recommended, minimum, and maximum number of hours per educational area. The minimum and the maximum amounts are substantially different:

- in grade 5 23.5 hours per week (all values here and below include PT);
- in grade 6 24.5 hours per week;
- in grade 7 26.5 hours per week;
- in grade 8 29.5 hours per week;
- in grade 9 29.5 hours per week;

This load is obviously more acceptable as it features the following number of lessons per day, for example:

- grade 5 5 lessons 4 days a week, one day – 4 lessons by the numerator and 3 lessons by the denominator;
- grade 6 5 lessons 3 days a week, one day - 6 lessons by the numerator and 5 by the denominator, one day - 6 lessons.

However, there are two obstacles hindering the minimum load application. Firstly, it can incur parents' displeasure, thinking their children are not gaining enough knowledge. Secondly - and most importantly - the number of hours is directly linked to the rates, and the rates are the salaries of the teaching staff. The current salary accounting method literally forces schools to introduce as high of an education load as possible.



The variable component of the Standard Curriculum-2021 has indeed been reduced (the number of hours in subjects, optional, and additional classes the school can offer to choose from).

Hours per week	grade 5	grade 6	grade 7	grade 8	grade 9
Standard curriculum, 2011-2018	3.5	3.5	2.5	3	3
Standard curriculum, 2021	2	2	1	1	0.5

At that, the new curriculum allows for the redistribution of reserve hours between the components of one or different educational areas, or variable educational components. Reserve hours are the difference between the recommended and the minimum number of study hours in each educational area. The number of study hours allocated for variable components in the curriculum of the educational institution is not included in the maximum amount set for any educational area.

Hours per week (PT inclusive)	grade 5	grade 6	grade 7	grade 8	grade 9
Minimum hours	23.5	24.5	26.5	29.5	29.5
Recommended hours	29	32	34	35	35.5
Difference	5.5	7.5	7.5	5.5	6

On one hand, the possibility to reallocate reserve hours adds to the schools' autonomy. On the other hand, it can cause conflicts within an educational institution: hours "owned" by one specialist can be "given" to another, and hours mean money. This gives rise to suspicions of favoritism on the part of the administration - or a truly unfair allocation of hours setting aside the students' educational needs.

When comparing the number of subjects in grades 5-6 under the old and new curricula, we observe the following:

Under the curriculum for grades 5-9, 2011- 2017		Under the NUS program for grades 5–9				
Hours		Subjects Hou		urs		
Subjects	grade 5	grade 6		grade 5	grade 6	
Language and l	Language and literature area			Language and literature area		
Ukrainian	3.5 3.5		Ukrainian	4	4	
	3.5	3.5	Ukrainian literature	2	2	



Under the curr 9, 2	iculum for 2011-2017	grades 5-	es 5- Under the NUS program fo		for grades 5–9	
Cubinata	Но	urs	Cubinata	Но	urs	
Subjects	grade 5	grade 6	Subjects	grade 5	grade 6	
			Foreign language	3.5	3.5	
Ukrainian literature	2	2	Second foreign language (variable component)	minimum 2	minimum 2	
			World Literature	1.5	1.5	
Faraign				OR		
Foreign language	3	3	Integrated literature course	approximately 3.5 (2+1.5)	approximately 3.5 (2+1.5)	
World Literature	2	2	Integrated course in Ukrainian language and literature	approximately 6 (4+2)	approximately 6 (4+2)	
			Integrated language and literature course (Ukrainian language and literature, world literature)	approximately 7.5 (4+2+1.5)	approximately 7.5 (4+2+1.5)	
Soci	al science		Civil and historical area			
History of	1	1 1	Introduction to the History of Ukraine and Civics	1		
Ukraine			History of Ukraine. World History		2	
			History of Ukraine			
World History (i	i		World History			
grade 6, the integrated cour			Civic Education			
"World History. History of		1	Legal Science			
Ukraine" is available)				OR		
Fundamentals of Legal Science			Studying history and society/Ukraine and the world: an introduction to history and civic education	1	2	
	Art			Art area		
Musical arts	1	1	Musical arts	1	1	
Graphic arts	1	1	Graphic arts	1	1	



Under the curr 9, 2	riculum for 2011-2017	grades 5-	Under the NUS program for grades 5–9			
	Но	urs	C. L.	Hou	rs	
Subjects	grade 5	grade 6	Subjects	grade 5	grade 6	
	OR			OR		
Art	2	2	Art	2	2	
Mat	hematics		Mathe	ematical area		
Mathematics	4	4	Mathematics	5	5	
Algebra			Algebra			
Geometry			Geometry			
Natur	al Sciences	;	Natura	l sciences area		
Natural Sciences	2		"Discovering nature"/"Environment"	2	2	
Biology		2	Biology			
Geography		2	Geography		2	
Physics			Physics			
Chemistry			Chemistry			
Tec	hnologies		Technology area			
Labor and Professional Training	2	2	Technologies	2	2	
Computer science	1	1	-			
Health and F	Physical Edu	ucation	Physical education			
Fundamentals of Health Science	1	1	Physical education	3	3	
Physical education	3	3	Comput	er Sciences area		
			Computer science	1.5	1.5	
			Social and	d health care area		
			Ethics / Culture of good-neighborly relations / Other moral guidance courses	0.5	0.5	
			Entrepreneurship and financial literacy			
				OR		
			"Healthcare, Safety, and Welfare"	1	1	



	der the curriculum for grades 5- 9, 2011-2017		Under the NUS program for grades 5–9			
Cubiosts	Но	urs	Subjects -	Hours		
Subjects	grade 5	grade 6		grade 5	grade 6	
			Available interdisciplina grades 5–6:  1. Robotics 2. STEM 3. Dramatic art and The educational institut hours given the load set subjects.	I theater ion determines	the number of	
Total subjects:	13/12 (if "Arts" is integrated)	15/13 (if "Arts" and "World History. History of Ukraine" are integrated)	Total subjects (subject to lack of integrated courses or a variable component):	14	15	

Integrations in grades 5-6 have allowed reducing the **number of subjects** but the situation with the hourly load remains almost unchanged.

This is a difficult issue, however, the Standard Educational Program for Basic Secondary School still should be revised at least in its regulation part (manipulative exclusion of the physical training lessons from the maximum load calculation; scarce variable component). Further study proves that the content part also requires revision.

Attempts to solve the problem of actual load reduction within the program for grades 5-9 are hindered by the lack of a curriculum for the senior profession-oriented school, apart from the aforementioned issues. Unless the exact subjects and their scope to be studied in grades 10-12 are approved, there still is a risk that children will "fail to learn" something in grades 5-9. We assume that author teams of model curricula will try to "pack" these with educational material to the maximum possible extent.

#### Work practice

69% of teachers acknowledge that their work practices and techniques have changed after the NUS introduction, and 12.5% of them note that these changes were significant.

On the contrary, 20% of respondents believe their work practices and techniques have not changed after the NUS introduction.

11% of respondents could not evaluate potential changes, however, 5.5% of them did not do this because they had no experience of working in NUS classes (it should be recalled that the survey took place in October-November 2023, only two months after the academic process started). It should be noted that the change in methods and techniques did not depend on the respondents' age, however, teachers in villages and towns noticed changes less often: 63% compared to the average of 73%.



The most popular approaches to conduct classes in grades 5-6 are as follows (regardless of age, subject, category, advanced training courses, or type of settlement):

- problem-solving learning (52.5%);
- project learning (49%);
- integration of different subjects (39%);
- development of individual student learning curves (25%);
- design of a student portfolio (14%);
- learning "by request" (11%).

It was interesting to learn how teachers shape cross-cutting skills and competencies. We learned that:

- most respondents (46%) do not share the responsibilities related to shaping students' cross-cutting skills and competencies (the lowest indicator is in the west of the country);
- almost a quarter (26%) of respondents share responsibilities related to shaping students' cross-cutting skills and competencies but from their initiative;
- almost the same number (28%) share responsibilities based on top-down management instructions (mostly in the south of the country).

The practice of sharing responsibilities related to shaping cross-cutting skills and competencies requires additional study to determine its efficiency. If in schools where teachers shared said responsibilities a higher level of students' educational achievement was observed, it would be feasible to design methodological recommendations for such a practice.

It should also be noted that in the first round interviews, some teachers expressed their disapproval of the "excessive" play activity, which is one of the key NUS approaches:



Games, project activities, and other similar creative tasks cannot be the basis of every lesson. In my opinion, there should also be the usual study process, and material consolidation, as well as the acquisition of some basic knowledge.

> (Respondent 4 of the first round, a teacher of Ukrainian language and literature)

This issue should be studied additionally as it may evidence the teachers' psychological reluctance to conduct such activities and "unwillingness" to have more informal interactions with students, which should be managed.

We believe that similar problems also cause criticism related to the lack of "leverage" over children in the NUS, observed during the second round of in-depth interviews. According to one respondent, NUS deprives teachers of the opportunity to demand homework or scold students for a low level of knowledge.





Earlier, we could say something like you must, you are obliged to. With NUS, we should support any tiny improvement and praise the kid like a hero. Roughly speaking, you cannot punish the child. You cannot tell that they are bad students or failed to learn something, that they should have learned the material. The parents will then go to the principal and complain about the things a teacher has said, given that their kid is so smart. According to NUS, you cannot assign homework or demand this homework to be done.

(Respondent 12 of the second round, a teacher of English language)

This issue should also be additionally studied as it seems that teachers perceive – and therefore continue to educate – "NUS children" as people having rights but no responsibilities. Such an approach clearly contradicts the reform philosophy as citizens educated under this system should realize the concept of responsibility for the consequences of their actions. It is also obvious that there is a huge difference between developing a sense of responsibility and a sense of shame and guilt (which are tools to influence the child's behavior).

On the other hand, one respondent of the second round, who deems the reform to be generally positive, noted that she subconsciously applies methods she uses to conduct lessons under the NUS reform to classes studying under the old curriculum.



You just don't realize the extent this absorbs the teacher nowadays. I hardly notice that a lesson I plan for a non-NUS grade 8 [appears] to be almost identical to that for grade 6 [under NUS]. I mean that I use the same methods.

(Respondent 2 of the second round, a teacher of history)

#### Curricula

**Integrated courses** were designed to reduce students' load and help them acquire a more systematic and full picture of the world. However, a quantitative survey showed that such teachers are still a minority – even including those who work with individual subjects and implement integrations:

Teaching individual subjects	70%
Teaching integrated courses	<b>7</b> %
Teaching both individual subjects and integrated courses	23%

We believe this evidences that **not all teachers wish to change** their usual work patterns as they are either overloaded or financially unmotivated (answers to other questions within this section also indirectly support the statement). Moreover, even given the wish to switch to integrated courses, they may feel insecure about the new material, and insufficient methodological tools or knowledge for teaching them, and therefore be afraid to get engaged in such educational activities. A recommended solution here is advanced training institutions to improve operations in this area.



The outcomes of the in-depth interviews partially support such assumptions. Almost all respondents of the second round teach individual subjects. The factors in favor of choosing individual subjects as opposed to integrated courses (except for external ones, when the administration of the educational institution resolved to teach individual subjects) are the following:

- lack of teachers qualified to teach integrated courses;
- lack of a high-quality curriculum for integrated courses;
- reluctance to create information overload for students;
- more complicated perception of information presented as an integrated course.



It is quite difficult to find any decent integrated course in mathematics for grades 5-6.

> (Respondent 13 of the second round, a teacher of mathematics)

At that, the respondents also noted factors proving general reluctance to the idea of integrated course introduction. In particular, one respondent believed that the knowledge children acquired during integrated courses was shallow. There has also been the opinion that it is irrelevant to combine individual subjects into integrated courses as the former have different contexts and therefore should be taught separately.

The question about the education content was also aimed at learning whether the respondents noticed **changes in the model curricula** compared to the ones based on the old State Standard.

The absolute majority (70%) of subject teachers noticed changes in the curriculum compared to the one before the NUS. At that, about a quarter of respondents (26%), on the contrary, believe that the program related to the NUS introduction has rather not changed or has not changed at all. We assume that such an answer may also be caused by the fact that the content of specific model curricula sometimes "copies" the old ones in many ways, therefore, this issue requires additional study.

During the second round of in-depth interviews, we discussed changes in the curriculum with respondents affecting their general attitude toward the NUS reform. Teachers with positive attitudes to the reform noted that, apart from the academic freedom increase and more active interaction with students, there was a growth in students' initiative, mostly because the new curriculum is more interesting for them.



The thing I really like about NUS is that they feel free, they feel free in class and are no longer afraid to ask, to inquire, and they are also not afraid to express their opinion. You see, I just can compare. The non-NUS classes, the children there are more like - "well, the teacher hasn't mentioned that, it's ok, then I just don't need to know it."

> (Respondent 8 of the second round, a teacher of history)





Another advantage is that my child also studies at NUS, in grade 6, and I observe NUS both as a mother and as a teacher. And I am satisfied that the curricula have been fully updated. They have become more modern, relevant, and most importantly, interesting for children.

> (Respondent 10 of the second round, a teacher of Ukrainian language and literature)

During the second round of interviews, the reform was also criticized. It did not always mean the respondent's generally negative attitude toward the reform, however, there were such cases. Some respondents negatively commented on the modern content of the curricula used at NUS. They mentioned the insufficient complexity and the small number of tasks for memory development, which adversely affected the students' knowledge (presumably, these comments were related to specific textbooks, and not model curricula determining tasks only in general).

77% of teachers working with integrated courses believe that the related curricula differ from the programs of subjects that have been combined; of them, 30% believe that the changes introduced are significant. On the contrary, 15% of respondents believe that there is no difference between the integrated course curricula and earlier programs of individual subjects. Integrated course curricula require relevant additional study, as well as programs of individual subjects. Namely, the writing team included a comparison of all available model curricula for grades 5-6 with curricula developed based on the old State Standard of Basic Secondary Education in Annex 2 hereto.

Within this study framework, we analyzed all model curricula on Ukrainian language and literature for grades 5–6 (and for 7–9) (excluding integrated courses).



We compared textbooks for grade 6, submitted to the IECM competition, with the curricula they were based on to find the most popular ones among teachers. Having analyzed the choices made by male and female teachers by region, we identified the most popular textbooks and authors' teams. The total ordered quantity of textbooks based on a certain curriculum indirectly indicates its popularity.

It should be noted that the selection procedure remains irritating: when choosing, teachers can review textbooks only partially. It is obviously risky for both authors and publishers to provide the full version. There is hardly any favorable solution to this situation. Perhaps it would be worthwhile to ask authors to talk about the same, predetermined thematic sections in the textbooks during the presentation so that teachers could visually compare different approaches to certain topics and issues.

Moreover, the fact that well-known authors with a long market history are chosen more often, although less well-known authors or teams may offer better content, remains a problematic issue.

Ukrainian language textbooks, grade 6	Number of copies
Avramenko O. M., Tyshchenko Z. R.	110,225
Holub N. B., Horoshkina O. M.	43,768
Zabolotnyy O. V., Zabolotnyy V. V.	258,323
Litvinova I. M.	12,010

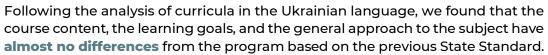


Ukrainian language textbooks, grade 6	Number of copies
Onatiy A. V., Tkachuk T. P.	35,095
Semenog O. M., Kalynych O. V., Diatlenko T. I., Beliasnyk M.D., Volnytska V. V.	13,596

Ukrainian literature textbooks, grade 6	Number of copies
Avramenko O. M.	181,573
Arkhypova V. P., Sichkar S. I., Shylo S. B.	67,700
Zabolotnyy V. V., Zabolotnyy O. V., Sloniovska O. V., Yarmulska I. V.	57,983
Kalynych O. V., Diachok S. O., edited by Kovbasenko Yu. I.	76,894
Kovalenko L. T., Bernadska N. I.	11,280
Chumarna M. I., Pastushenko N. M.	5,862
Yatsenko T. O., Pakharenko V. I., Slyzhuk O. A.	49,019
Borzenko O. I., Stoliy I. L.	8,255

Positions with most teachers' votes (by the ordered number of copies) are highlighted in bold. Both Oleksandr Avramenko and Oleksandr Zabolotnyy are well-known in the market of educational literature on the Ukrainian language and literature for secondary schools. Yuriy Kovbasenko is a scientific editor of a textbook on Ukrainian literature, who earlier has compiled many textbooks on foreign literature. We may even assume that teachers choose the model curriculum "retroactively": firstly, they choose a textbook by a familiar author, and then review a program it is based on, and not the other way around. Perhaps, an additional factor here influencing the teachers' choice could be public comments by independent experts on each textbook reviewed.

More details are available in a relevant <u>publication</u> on the New Ukrainian School website.





Mostly, the speech component was changed, mainly because new topical topics were added. It means that the language curriculum has even increased compared to the previous one:

- the language component has not changed a lot (in this part, new curricula contain almost no differences);
- the speech component has been enhanced and updated (in the curriculum by Holub and Horoshkina).



The approach to teaching the Ukrainian language is still mostly "academic": the main focus is on giving children the most comprehensive theoretical knowledge about various linguistic phenomena resulting in a lack of time for proper implementation of the speech component, which should become the "added value" of teaching the Ukrainian language in the senior classes of NUS. This problem can be partially solved by integrating regular tasks to develop communication skills into the lesson focused on the language component. However, this approach once again "bumps into" the lack of time and the requirements of final attestations and admission tests. If during the External Independent Evaluation, applicants receive the most points for theoretical knowledge but not for communication skills and creativity, then, it is more logical for teachers to focus their educational efforts on the system requirements. In our opinion, the only way out of this "vicious circle" is changing the curricula as the final attestation requirements are based on them.



More details about the educational program content are available in a relevant <u>publication</u> on the New Ukrainian School website.

Nowadays, there are three curricula on Ukrainian literature for grades 5-6. The curriculum by Arkhypova, Sichkar, and Shylo is the most popular. It offers a lot of optional texts, but basically, it is still extremely similar to the old one. Preliminary

estimates show them coinciding by about 70-75%. Still, almost all curricula offer the same approach, based on genres and chronology: students start learning literature with folklore, then texts on historical topics are added to build "bridges" between folklore and author's literature, which is relatively interesting to schoolchildren (unless the main characters there are children).

The "compromise-based" recommendation to read large texts in their shortened version is still a serious problem as it has created the illusion that the volume of material has decreased, although there has been no **reduction** either in terms of texts to be studied or in terms of theoretical literary material. For example, according to the old curriculum, there were 31 compulsory texts of various genres to be studied in grade 5, while in the new ones, this number is 28, 38, and 44, respectively.

Texts to be studied in grade 5 (by genre)					
Old curriculum	Yatsenko T.O. et al.	Chumarna M.I., Pastushenko N.M.	Arkhypova V.P., Sichkar S.I., Shylo S.B.		
Legends: 5 Folk story: 1 Folk tales: 3 Literary tales in prose: 2 Literary tale in verse: 1 Versed drama tale: 1 Fairy-tale novel: 1 Novels: 3 Short stories: 5 Riddles Proverbs and sayings Excerpts from chronicles: 3 Verses: 9	Legend: 1 Folk story: 1 Folk tale: 1 Literary tales: 3 Short stories: 8 Novels: 2 (both abridged) Riddles Proverbs and sayings Excerpt from chronicles: 1 Verses: 11 This curriculum seems to be the most concise in terms of mandatory text material.	Myths: 2 Legend: 1 Folk tales: 2 Literary tales: 2 Fairy-tale novels: 2 (in both cases – excerpts) Short stories of various subgenres: 4 Fable: 1 Folk parables: 3 Folk true story: 1 Folk story: 1 Author's parable: 1 Folk games: 3 Christmas carols: 2 Shchedrivka songs: 1 Vesnianky songs	Only texts marked as mandatory are included. Legends: 5 Folk stories: 3 Folk tales: 6 Literary tales: 2 Literary tale in verse: 1 Versed drama tale: 1 Fairy-tale novel: 1 (excerpt) Novel: 1 (abridged) Short stories: 4 Riddles Proverbs and sayings Excerpts from the chronicle: 4 Popular scientific texts (biographies): 2–3		



Texts to be studied in grade 5 (by genre)				
Old curriculum	Yatsenko T.O. et al.	Chumarna M.I., Pastushenko N.M.	Arkhypova V.P., Sichkar S.I., Shylo S.B.	
Total 31	Total 28	Riddles Proverbs and sayings Novels: 2 (both in fragments) Verses: 10 Total 38	Verses: 14  It seems as if there are fewer large texts than in the old curriculum, but they are compensated by a significant amount of smaller ones.  Total 44	

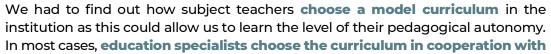
The popularity of the curriculum by Arkhypova somehow proves that teachers are not ready to accept crucial changes. However, it should be noted that the curriculum for grades 7-9 by the same team is still not available. If it is never compiled, those who study under it will face a problem of what to do next. What are we going to do with all the textbooks when this curriculum is no longer the chosen one due to it lacking continuity?

Moreover, the new curricula are overloaded with theory:

	Old curriculum	Yatsenko T.O. et al.	Chumarna M.I., Pastushenko N.M.	Arkhypova V.P., Sichkar S.I., Shylo S.B.
Total terms to be studied in grades 5-6	70	86	56	71

The academic year for grades 5-6 consists of 34 academic weeks, that is, 68 in two years. Thus, according to most curricula, children will have to study a new literary concept every week, or perhaps even more often.

More details about the problems of studying Ukrainian literature in grades 5-9 are available in the <u>publication</u> on the New Ukrainian School website.





colleagues who teach the same subject or integrated course (59%). 32% of respondents independently choose the curriculum for themselves. The administration of educational institutions chose a model curriculum in 8% of cases, and representatives of the education authorities did it even more rarely - in 1% of cases. It means that in most cases, education specialists are independent when choosing the model curriculum to work with but still prefer a joint decision. No more than 9% of alleged coercion to work under a certain curriculum was found.



During the in-depth interviews, the respondents named the following criteria influencing their choice of model curricula:

- integration of various subjects and areas;
- patriotic component;
- many interesting tasks for children;
- awareness of age characteristics of children (curricula must be accessible and clear).

Respondents' comments on model curricula and textbooks:

- complexity of tasks and theoretical material;
- overload:
- inconsistent material presentation.



They changed the NUS program on geography. [...] The geographical coordinates were not included, but the length in degrees and the meridian arc were - and we had to determine all this. But the children did not know this yet. From my experience - whether it is shallow or extensive - children will not be able to learn all that in one lesson.

> (Respondent 3 of the first round, a teacher of geography and natural sciences)

The pedagogical autonomy principle also provides for the possibility of developing a tailored curriculum. However, during the survey we learned that the absolute majority of teachers (76%) prefer model ones. About a quarter of the respondents (24%) had the experience of developing tailored curricula.

Expectedly, specialists of the higher and first-level professional grades developed tailored curricula more often (22% and 28% of respondents had such experience, respectively), among specialists (no professional grade) and those of the second-level professional grade, only 14% and 17% developed tailored curricula, respectively. Presumably, the specialists of the first-level and higher professional grades had the knowledge and experience to make them feel confident when developing the curricula.

The questionnaire did not specify the curriculum development stage - writing "from scratch," the extensive, partial, or provision-based adaptation of existing model ones. Given this, the answer to the question about teachers' motivation to develop tailored curriculum is of particular interest:

- availability of free time (50%),
- pay supplements (35%),
- necessary knowledge (29%).

14% of respondents do not plan to design tailored curricula even if given additional incentives or motivations.



We assume that the teachers' fatigue and exhaustion have reached the point where they require ready-made solutions as they do not have the resources to implement a creative approach to teaching and pedagogical autonomy constantly. We see that the majority cannot be motivated even by a hypothetical salary increase. The way teachers assess their mental condition confirms our assumption of exhaustion: since the beginning of the war in 2022, 78% of respondents felt an increase in anxiety, fear, sadness, or anger affecting their performance and creativity (more information about the mental condition of educating specialists is presented in the related section).

In-depth interviews prove the general data obtained during the quantitative survey. A minority of respondents had experience in developing tailored curricula based on model ones. Respondents designed tailored curricula to meet the following needs:

- to bring the standard curriculum in line with the specific features of the region (in particular, according to the teacher of art from the west of the country);
- to balance the curriculum by adding theory;
- to simplify the curriculum to meet weaker students' abilities (it should be adjusted even within one parallel as students of grades 5-6 may have different levels of knowledge after primary school).

The model curricula have no ready-made course scheduling included, so its development is also the teachers' responsibility. Given this, during a quantitative survey, we decided to learn the exact ways education specialists design or get course scheduling.

About 75% of respondents develop course scheduling on their own, while 25% have never designed it. Teachers of lower professional grades rarely develop course scheduling compared to their colleagues of higher grades (in our opinion, the same correlation between experience and confidence is observed in the case of curriculum development).

Teachers who do not develop course scheduling resort to the following alternative methods:

- download course scheduling from various online resources (62%);
- use materials provided by publishers (47%);
- get course scheduling from their colleagues free of charge (24%);
- buy materials from their colleagues (3%).

We deem this is another area for the state or program developers to support teachers: reference course scheduling for all subjects added to model curricula or methodological kits (textbook, workbook, and teacher's guide) would facilitate the work of education specialists to a great extent.

Questions about the necessity of teaching and methodological kits and their content were added to the second round of in-depth interviews. Some respondents mentioned the following as components of teaching and methodological kits they would like to have to facilitate their work:

- workbooks for students with thematic relation to the textbook;
- workbook for tests;
- a teacher's guide with thematic relation to the textbook;
- course scheduling;



methodological support.

One respondent of the second round emphasized the necessity for teaching and methodological kits to be adaptable to online lessons.



For the teacher, I would like to pay attention to adapted course scheduling. It takes quite a lot of time to get this amount of work done. If some people have already developed this and it is adaptable to our needs, it would be great.

> (Respondent 1 of the second round, a teacher of foreign literature)



Indeed, according to the order of the Ministry of Health No. 2205 dated 25.09.2020 (Section "Requirements for the organization of work with technical teaching aids," Cl. 10, added under the order of the Ministry of Health No. 1371 dated 01.08.2022), "given martial law, an emergency of a different nature, the continuous duration of lessons in synchronous distance learning should not exceed the following for students of:

- grades 1-2 2 lessons, 30 minutes each, or 3 20 minutes each;
- grades 3-4 2 lessons, 45 minutes each, or 3 30 minutes each, or 4 20 minutes each;
- grades 5-6 2 lessons, 45 minutes each, or 3 35 minutes each, or 4 25 minutes
- grades 7–9 2 lessons, 45 minutes each, or 3 40 minutes each, or 4 30 minutes each, or 5 – 25 minutes each;
- grades 10-11 3 lessons, 45 minutes each, or 4 35 minutes each, or 5 30 minutes each, or 6 – 25 minutes each;

The remaining lessons should be conducted in an asynchronous format. Given the situation, the updated course scheduling is a serious challenge for teachers who constantly work in a remote mode and need support.

As to methodological kits, they are least requested by English language teachers who use textbooks by foreign authors.

Still, it should be noted that the respondents expressed concerns about the potential misuse and dishonesty of schoolchildren when completing tasks in printed workbooks, in particular, during distance education. The cost of the kit components also caused concern, as respondents believe it will fall on parents and may provoke a negative attitude towards teachers, apart from other things.





I live in a village where not all parents have sufficient financial means now, especially given the war. If I insist the parents will say: 'oh, the teacher is always trying to collect money from us.' Therefore, I did not use these workbooks. My son is in grade 6 at the New Ukrainian School, and I see that these workbooks are helpful.

(Respondent 8 of the second round, a teacher of history)



Well, that's great, and there are a lot of such kits. And we, teachers, use them. But for all students to have them, they have to purchase them themselves. And here we face a problem as such a workbook for one subject can cost more than 100 hryvnias. It is a bit expensive if children have many subjects, and every teacher demands such a workbook.

> (Respondent 1 of the second round, a teacher of foreign literature)

Interesting fact: during the interviews, respondents did not assume that such kits could be financed by the state, which, in our opinion, evidences a certain level of distrust in central and local education authorities. Perhaps, this attitude was intensified by the lack of textbooks for grades 5, untimely distribution of educational literature, or textbook misdelivery (not as ordered) to schools, etc. More detailed information is available in the next section.

#### **Textbooks**

Textbooks are developed based on model curricula, but the specifics of the material presentation and the task selection depend on the author team of a given edition. As there are often many comments from parents and teachers about textbooks in the public space, we decided to find out which aspects of the available educational literature, according to teaching staff, require revision the most.

The majority of comments were about:

Interconnection of educational material with real requests and students' lives	31%	
Tasks for students	31%	
Content of theoretical material	23%	
The consistency of theoretical material presentation	21%	
Presentation style	17%	
Links to electronic resources	17%	
Textbook illustrations	12.5%	

18% of respondents believe that the textbooks they use should not be revised.



Still, the "distribution of claims" by teachers of mathematics, Ukrainian language and literature, and foreign languages is uneven. In particular, foreign language teachers most often complained about the consistency of material presentation in textbooks: 32% compared to the average of 20%.

The following aspects were commented on most (popular answers (in percentage) are marked in bold):

	Mathematics	Ukrainian	Ukrainian literature	Foreign language
interconnection of material with real requests and students' lives	33.0	31.4	32.7	29.3
Tasks for students	27.7	33.1	36.7	30.3
Content of theoretical material	21.4	30.6	28.6	19.2
The consistency of theoretical material presentation	17.0	24.8	17.3	32.3
Presentation style	10.7	14.9	9.2	18.2
Links to electronic resources	18.8	17.4	20.4	17.2
Illustrations	17.0	5.0	6.1	15.2
The textbooks require no revision	21.4	19.0	20.4	17.2

We can observe the dissatisfaction with textbooks fluctuating within a small range, which evidences that all four subjects have more or less the same problems. It should be noted that when filling out the questionnaire, the respondents did not specify the textbooks (authors' teams; for grades 5 or 6), so the issue should be perceived in general - as a driver for a more detailed review of the educational literature.

It should also be noted that teachers who work in a distance or mixed format request for tasks (+7%) and links to electronic resources in textbooks (+9%) to be improved. Teachers working inperson were mostly dissatisfied with the consistency of theoretical material presentation in textbooks (+8.5%). This difference may be caused by focus on different types of activities during in-person and distance education.

The main textbook disadvantages specified by respondents during the first round of in-depth interviews are as follows:

- the tasks in the textbook are too difficult compared to the student's level;
- disbalance between the material amount and the lesson duration;
- too much emphasis on the game format which negatively affects the theoretical material learning;
- invalid QR-code links;



- increased dependence on gadgets as too many tasks require an internet connection;
- the English language textbook lacks a dictionary and a grammar guide.

We have already commented on the remarks about the game format - the "increasing dependence on gadgets" complaint seems to be more about the unwillingness of teachers to change their usual practices, rather than about the actual characteristics of educational literature.

The respondents identified the following as the advantages of the new textbooks:

- integration of different directions, establishment of interdisciplinary relations;
- introduction of practical cases presenting everyday life to explain the material;
- use of multimedia material and interactivity of tasks;
- preparation for External Independent Evaluation/State Final Attestation/National Multi-Subject Test.

Most educational specialists of the second round, unlike the respondents of the first one, positively assessed textbooks based on the new State Standard compared to the older ones. The teachers mentioned the following positive changes (items coinciding with the opinion of the respondents of the first round are in italics):

- textbook compliance with the new curriculum;
- availability of new and interesting material for students;
- interactivity: QR codes, which students can activate to complete tasks or view additional multimedia material;
- more qualitative illustrations;
- tasks intended to master practical skills;
- interdisciplinary relationships.



Advantage: the textbook under the new State Standard is already compiled in a way that allows us to use it in class. We don't have to invent, search, or add anything. This saves our time, and beyond that, the textbooks help us with the State standard implementation.

(Respondent 2 of the second round, a teacher of history)



Practical tasks. The child understands that the information in the textbook applies to everyday life, it is not about anything foreign, unknown, or unfamiliar.

> (Respondent 10 of the second round, a teacher of Ukrainian language and literature)

However, not all respondents noticed the difference between textbooks based on the new and old Standards. For example, English language teachers, who could choose textbooks even before the NUS introduction and preferred foreign authors, continued using this educational literature.



Most likely, parents have to buy such textbooks, so there is a question about the fate of literature by Ukrainian authors ordered at state or sponsors' expense. We believe that the issue of educational literature used to learn foreign languages at schools, English in particular, requires a detailed additional study.

While some respondents would like to have new textbooks, but their circumstances make this impossible, other teachers may deliberately refuse the new textbooks in favor of the ones based on the old curriculum. For example, during the second round of interviews, one of the respondents, a teacher of Ukrainian language, said that despite the new textbooks available, she uses the old ones which ensure a better learning process in her opinion. The respondent also complained that the textbooks based on the new State Standard contain insufficient tasks on certain topics and are not focused on preparation for the External Independent Evaluation/National Multi-Subject Test (as opposed to the respondents of the first round, who praised the textbooks for the tests included).



I will tell you even more, confidentially, that we, teachers, use both new NUS-based and old textbooks in our work. We take exercises [from old textbooks] and give them out to the children during the lessons so that they can complete certain tasks intended to improve students' literacy, not decrease it. If we use only the said textbook [based on the new State standard], then, in our experience, the literacy level will simply fall to zero.

> (Respondent 4 of the second round, a teacher of Ukrainian language)



We would appreciate it if the textbooks contained more exercises intended for literacy development to get children used to tests. For example, there are almost no test tasks in the textbooks. While grade 6 can be prepared for the External Independent Evaluation and completing test tasks.

> (Respondent 4 of the second round, a teacher of Ukrainian language)

#### We assume that

- the short cycle to prepare a textbook based on the model curriculum drastically affected the content quality (there is not enough time to prepare a high-quality book given the term between the model curricula approval and the textbook competition);
- the conclusions of textbooks and programs examination, even when properly conducted, were not taken into account by the developers and authors in full;
- teachers are still highly dependent on textbooks: they lack time, energy, and knowledge to teach "not in line with the textbook," and given the current situation, this is another reason to increase attention to educational content quality.

Re-examination of all textbooks (and, therefore, model curricula as the books' content is based on them) in all subjects for grades 5-6 is a time-consuming task requiring a large team of professionals to be involved. But it still should be conducted, at least to some extent. To illustrate this need, we focused on the language and literature area, namely, several textbooks on Ukrainian literature.



For the analysis, we chose textbooks on Ukrainian literature for grade 5, based on the curriculum designed by the authors' team of Arkhypova, Sichkar, and Shylo. We've already mentioned that the said model curriculum is the most popular. We analyzed the following textbooks: "Ukrainian Literature" for grade 5 by the curriculum authors' team (Valentyna Arkhypova, Svitlana Sichkar, Svitlana Shylo); one book by Viktor Zabolotnyy's team (Oleksandr Zabolotnyy, Olha Sloniovska, Ivanna Yarmulska), and another book by Oleksandr Avramenko.

The gender imbalance is already observed in the content, namely, in the selection of authors of literary works. In the main textbook part, the ratio of male and female authors is as follows:

Arkhypova: 14–1;

Avramenko: 14–2;

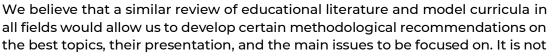
Zabolotnyy: 14–1.

The question arises: will this ratio **pass an anti-discrimination examination**? Moreover, people with disabilities are not presented in texts selected for grade 5 – there are only illustrations available (a girl in a wheelchair having fun in a water park, a textbook by Zabolotnyy) or some insets with information about achievements (about Maksym Krypak, a Paralympic swimming champion, in a textbook by Arkhypova). As to ethnic and racial diversity, the issue of good neighborliness is also problematic: for example, in the tale "How Sirko Defeated the Tatars," the Tatars are antagonists. None of these three textbooks contain comments that, despite the past conflicts between Ukrainians and Tatars, nowadays, we seek mutual understanding and fight our enemy together.

The decision to include large parts of texts as QR codes (for example, in a textbook by Avramenko) also seems quite doubtful. Abridged texts (in particular, the novel "Ali's Unusual Adventures in the Land of Nedoladia") are sometimes shortened to an extent making it impossible to learn the plot events from the material available in the textbook. In general, as we have already noted, abridged texts are a methodological compromise-based solution to be revised taking into account the ultimate goal of studying literature.

There are also positive approaches in the analyzed textbooks: interactive elements, interdisciplinary relationships, modern tasks, and illustrations (for example, a task to write a fairy tale fanfic). The textbook by Arkhypova consistently introduces cross-cutting content (environmental safety, civic responsibility, health and safety, financial literacy, and entrepreneurship). If we develop and scale these solutions, and also rethink some content of the model curriculum used for the textbook compilation, we will get closer to implementing the NUS reform principles.

More information about the textbooks on Ukrainian literature – in <u>the publication</u> about the related model curricula on the NUS website.



necessary – actually impossible even – to change all curricula and re-publish all educational literature at once. But it is possible to work out certain corrective solutions based on the available material.

Apart from comments on the textbook content, the respondents of the in-depth interviews repeatedly mentioned the **lack of printed textbooks** – both in general and in required quantity (or the wrong textbooks, based on another model curriculum, were delivered to the school – which appears to be the only reason to change the program).





We do have problems with textbooks. This is a very difficult situation. Grade 5 has its textbooks, and grade 5 - doesn't. The point is that we work under the Zabolotnyy curriculum, and they published textbooks based on Holub-Horoshkina program, which is totally different.

> (Respondent 15 of the first round, a teacher of Ukrainian language and literature)

According to the respondents of in-depth interviews, the situation with textbooks for grade 5 remains difficult. Some respondents of the second round could not evaluate the textbooks based on the new State Standard as their schools had not received them yet.



We have some problems with grade 5 as we still haven't received any textbooks, unfortunately. This is the second year in a row we have no grade 5 textbooks based on the new curriculum. So I have to use the old textbook, and I don't really like it.

(Respondent 8 of the second round, a teacher of history)

It should be recalled that to ensure the reform implementation, the textbooks for grades 5 had to be ready by September 2021 - to be tested in pilot classes. Since the textbooks are based on certain model curricula, the latter should be made available in advance. Most model curricula for grades 5-6 were approved at the beginning of July 2021, which obviously made it impossible to compile textbooks by September 1.



Clause 8 of the Procedure for the competitive selection of textbooks (except for electronic ones) and manuals for students of general secondary education and teaching staff, approved by order of the Ministry of Education and Science of Ukraine No. 1001 dated September 21, 2021, and registered with the Ministry of Justice of Ukraine under No. 1483/37105 on November 11, 2021, sets that individuals

and legal entities, owners of exclusive property rights to the textbook/manual, can participate in the Competition. Publishing houses submit textbooks/manuals bearing a stamp of the Ministry to the competition, that is, before the selection procedure, the textbook must be sent to the examination (scientific and methodological, psychological and pedagogical, and antidiscrimination). Therefore, the observed textbook printing schedule delay was not caused alone by Russia invading. The procedure of compiling, examining, printing, and approving textbooks requires much more time than is available.

Given the fact that the programs for grades 7-9 have already been approved, this experience can be taken into account in the next cycle – and textbook development for grades 8-9 should be started as early as possible.

It should be recalled that according to the "Action Plan for 2017-2029 on the Introduction of the State Policy Concept Implementation related to the 'New Ukrainian School' Reform of General Secondary Education," preparation and publication of textbooks for grades 7 was planned for Q3 2020. Moreover, the desk study revealed that the preparation and publication of textbooks for grades 4, 8, and 9 were not included in the said "Plan."



The Law of Ukraine "On the State Budget of Ukraine for 2022" No. 1928-IX dated 02.12.2021, set the subvention 2211230 "Subsidy from the state to local budgets to ensure high-quality, modern, and affordable 'New Ukrainian School' General Secondary Education" in the amount of UAH 1 571 334 900, of which 1 021 334 900 are development expenditures, and UAH 55 000 000 are consumption expenditures.



Under this subvention, funds were allocated for advanced training of teaching staff and teaching aids acquisition. Moreover, UAH 1 328 950 300 was allocated to publish textbooks and manuals, in particular, for grades 5 of the New Ukrainian School. Following the budget sequestration following the Russian Federation's invasion of Ukraine and the introduction of martial law, these expenditures were reduced in full.

In 2022, funds from the state budget were allocated only to textbooks for students with special educational needs. Resolution of the Cabinet of Ministers of Ukraine No. 459-r dated June 7, 2022 "On the redistribution of certain state budget expenditures allocated for the Ministry of Education and Science of Ukraine in 2022 and intended for the financial support of the Unified State Electronic Database on Education software update and publishing textbooks for persons w special educational needs who study in general secondary education institutions" allowed the government to re-distribute expenditures under the program 2201260 "National measures in the field of education" and reduce consumption expenditures by UAH 41 259 900 that were then reallocated to development expenditures, of which UAH 33 259 900 was allocated to publish study materials for persons with special educational needs.

In 2022-2023, the Ministry of Education and Science of Ukraine appealed to international organizations to attract financial aid to provide students and teaching staff of general secondary education institutions with textbooks and manuals.

No.	Subject	Number of textbooks	The number of fifth- graders at the beginning of 2022/2023, according to the State Statistics Service	The number of fourth- graders at the beginning of 2022/2023, according to the State Statistics Service	
1	Mathematics (UNICEF)	472,440			
2	Geography (UNICEF)	491,911			
3	Ukrainian language (Council of Europe)	505,032	430,777	414,962	
4	Natural Sciences (Government of Finland)	361,357	- ,	,	
5	Polish language (Polish Institute)	11,897	_		





According to the State Statistics Service of Ukraine, at the beginning of the 2022/2023 academic year, there were **430,777 students** in grades 5 in Ukraine, and **414,962** – in grades 4 (currently, grade 5).

	А	В	С	D	Е	F	G	Н
1	36. Distribution of students of general secondary education institutions at the begining of the 2022/23 academic year by classes and regions							
2								(persons)
3					Inclu	ıding		
4								
5								
6		Total 1	1	2	3	4	5	6
7			grade	grade	grade	grade	grade	grade
8								
9								
10	Ukraine	4 003 177	322 320	385 613	401 279	414 962	430 777	402 581

Let's compare the number of printed textbooks on mathematics and the Ukrainian language mentioned above. We can assume that all fifth-graders in the territories controlled by Ukraine should have received these textbooks, although as late as the second semester. Thus, educational literature should have been returned to libraries and passed on to the next generation of fifth-graders. However, parents and teachers are still complaining (in private conversations, comments on social networks, letters to the email address specified on the NUS website, etc.) that they lack textbooks. This issue should be audited.

Perhaps the situation was partly caused by the fact noted in response that IECM provided to an information request: "Donors independently chose textbooks to finance their publishing and delivery given their political views and allocated funds amount." We assume that not all schools received the textbooks they had chosen within the competition (even the ones the state was ready to finance before a full-scale war).

According to the IECM response, negotiations with donors on publishing the textbooks "Computer Science," grade 5, "Arts," "Ukrainian Language," "Ukrainian Literature," and "Foreign Literature," grade 6, IGSE, are currently held.

The state budget of Ukraine for 2023 provided for publishing 116 textbook titles for grade 6 of general secondary education institutions with a circulation of 4,769,768 copies, which is 66% of the need. Namely, the following were published:

- 62 textbook titles for Ukrainian-medium educational institutions with a total circulation of 4,720,891 copies;
- 54 titles of original and translated textbooks in the languages of national minorities with a total circulation of 48,877 copies.

All published textbooks were delivered to the distribution centers of oblast administrations before the academic year started.

Under the Law of Ukraine "On Amendments to the State Budget for 2023" UAH 552.8 million was additionally allocated. By the end of the year, 109 textbook titles for grades 5 and 6 of general secondary education institutions in 4,188,831 copies will be published and delivered to the regional distribution centers," the IECM letter of November 23, 2023, reads.

Namely, these include:

grade 5 – 89 titles with a total circulation of 2,774,040 copies;



grade 6 – 20 titles with a total circulation of 1,414,791 copies;

Of course, the tough economic situation makes it almost impossible to plan expenditures on textbooks to be used nationally in one and a half to two years. However, by the beginning of 2024/2025, seventh graders should have access to textbooks in all subjects, at least in .pdf format. Currently, the textbook competition for grade 7 has already been announced, it will last by the end of March 2024.



#### **NUS evaluation system**

The problem of the new evaluation system understanding and use by teachers of grades 5-6 should be reviewed independently.

Following the survey, 92% of teachers (regardless of their age and professional grade) understood the NUS evaluation system. Of them, 50% showed a comprehensive understanding of the evaluation system, and 42% – a likely understanding. 8% of respondents have difficulties understanding the NUS evaluation system (it is worth paying attention: in the west of the country, this indicator reaches 14%, with 4% on average in the other regions).

The most problematic is formative assessment:

Subject	Of those having problems understanding how to evaluate	Share in the total sample of respondents
Formative assessment	56%	5%
Level-based assessment	35%	3%
Final assessment	25%	2%

The fact that formative assessment is the most unclear part of the NUS evaluation system proves our initial hypothesis. In general, the situation with NUS evaluation is rather contradictory.

Respondents who have completed advanced training courses and believe that they have acquired enough knowledge to implement the NUS reform.	86%
Defined "Evaluation of educational achievements methods" as skills mastered during the courses	44.9%
Defined "Evaluation of NUS students' educational achievements in academic subjects/integrated courses" as a skill to be mastered in the courses	42.1%
Defined "Evaluation of NUS students' educational achievements in academic subjects/integrated courses" as the most relevant skill to be mastered in the courses	28.1%



Therefore, the evaluation of students' educational achievements is both a "mastered skill" and a "development area," which remains relevant for more than 40% of education specialists. Although the majority testify that they understand the NUS evaluation system, not everyone uses formative assessment systematically.

592 respondents with affirmative answers to the question about the system understanding noted the following frequency of formative assessment use:

Frequency	Number of people	%
Almost every lesson	200	33.8
About half of all lessons	238	40.2
In some lessons, however, I often resort to other forms of assessment	135	22.8
Do not use	19	3.2

The frequency of formative assessment use did not relate to the respondent ages. It is popular among Kyiv teachers: half of respondents from the capital city claimed they use formative assessment in almost every lesson with grades 5-6.

If the majority knows how to use formative assessment, its seldom use may be caused by such reasons as lack of time or system understanding by parents (such options were included in the survey). We also assume that teachers deem formative assessment as a purely formal practice - including mandatory written statements of the child's achievements in all cross-cutting skills, subjects, and key competencies.

There is also dissatisfaction with level-based assessment – it was expressed by a female respondent, a teacher of the English language, in the first round of in-depth interviews. In her opinion, it is not always possible to determine the point equivalent for each level. Moreover, the level-based assessment reduces the knowledge grading between students of the same level, which they may deem unfair.



You know, first of all, I am not satisfied with the assessment as such. It has no clear strategy on how to evaluate a child. For example, it proposes to assess a level without any instructions on how to assess the knowledge or what to tell the children. Thus, there are one, two, and three points in the elementary level, and in the high - 10, 11, and 12. And it is not quite clear when a child reaches a high level: is it 10 or 12? I believe that any evaluation should be point-based and comprehensive.

> (Respondent 14 of the first round, a teacher of English language)

The respondents of the second round of in-depth interviews provided more details about the issues related to level-based assessment.

Non-systematic use of formative assessment and the above-mentioned attitude to level-based one confirm the initial assumption made by the study team: teachers probably do not fully realize that comprehensive feedback on the student's achievements is more important than a point-based assessment. There is also some doubt whether teachers fully understand the very concept of feedback. In particular, teachers' answers to the question about their ways to



provide feedback were distributed as follows in the questionnaire (several options could be chosen):

- personal communication with the student (67%);
- text communication via messengers, email, or educational platform (44%);
- notes in a student diary or workbook (36%);
- personal communication with the student and their parents (35.5%);
- communication with the student involving other students (26%);
- personal communication with the student's parents (20%).

It looked as if most respondents chose a "socially acceptable answer": given their total overload, there is hardly any time to systematically give personal verbal feedback to children - or to call parents in 20% of the cases. However, this is possible if you understand "feedback" as a oneword remark. It is recommended to conduct a similar survey involving students in the future to compare the results.

Responses from the first round of in-depth interviews prompted us to go deeper into the topic of evaluation and feedback during the second round of interviews. The assumptions mentioned above were confirmed to a certain extent. In particular, respondents mostly understood "feedback" as feedback given by students about the lesson quality, their self-assessment of the clarity of the material covered, or the educational requests. Some respondents, although having a similar understanding of "feedback," focused not on the student's feelings and views, but on learning outcomes expressed as test or semester scores. Such forms of feedback as notes in an electronic/paper student diary, communication with students both personally and involving third parties, and communication with parents on the phone, were also mentioned.



I try to use feedback in almost every lesson I have. For example, assessment and self-assessment, impression of the lesson. We assess with them [students]: "I learned the material well," "I learned the material perfectly," "I wish I worked better," and "I would like to explore this topic in more detail." That is the feedback format.

(Respondent 2 of the second round, a teacher of history)



Feedback is when students provide information about their understanding of the material. So that a teacher realizes the level of their understanding of educational material and whether they should focus on certain issues more or less.

(Respondent 13 of the second round, a teacher of mathematics)

There has been some kind of misunderstanding: feedback from students is highly important, but within the evaluation framework, it is the teacher who provides feedback. We believe that this concept should be analyzed in more detail in advanced training courses and specialized methodological instructions.





As for the **NUS evaluation system in general**, the self-assessment of the respondents of the second round showed that the majority have no difficulties with it. The few **difficulties identified by the respondents** included a lack of developed assessment criteria and clarifications from the Ministry of Education and Science on keeping an observation diary of students' achievements. Distance teaching added certain inconveniences to the evaluation process.



Perhaps because we still do not have relevant assessment criteria developed. We were used to being given ready-made assessment criteria. Nowadays, we have none. We are forced to develop them. We were not taught to do this and teachers generally should not do it themselves, there are resource teachers for this, which probably has caused difficulties when developing assessment criteria.

(Respondent 10 of the second round, a teacher of Ukrainian language and literature)



It is difficult to write feedback for every student. When we work only remotely, we are given these mandatory indexes, and characteristics of learning results, and we must assess a student using each characteristic. Which is not quite possible when working remotely.

(Respondent 2 of the second round, a teacher of history)

Although most respondents are well aware of the NUS evaluation system, there were also complaints about its specific aspects. In particular, some did not like the **evaluation anonymity** introduced at NUS, where teachers have no right to publicly disclose assessment points. According to one respondent, anonymity reduces motivation as there is no **student competition** available. Other respondents claimed that the point-based assessment criteria should be **stricter**. One respondent even stated that level-based assessment is an opportunity to bypass the prohibition to publicly announce students' scores:



I can't say that Petia got 2, and Vania got 12. But at the end of the lesson, I can say that the group worked well today – and they all get high scores. This group, unfortunately, is awarded a sufficient or intermediate level. They will receive a specific point when they come to me and I put it in their student diaries and a class book. We can kind of hide points received in front of the audience using references to levels.

(Respondent 1 of the second round, a teacher of foreign literature)



We agree that the competitive spirit can improve the students' results (in particular, as evidenced by the <u>PISA</u> data), but competition cannot and should not be the only – or the main – motivation to study.

The observation diary of students' achievements (which some respondents called generally incomprehensible) was often mentioned as one of the ineffective elements of the current evaluation system as teachers have no time to fill it out.





For example, there is an assessment diary. During the lesson, well, you were conducting a lesson and monitoring, and then, at the end of the lesson, you sit down and put in it how each student behaved, for example. Well, it's just, as they say, gross. During the lesson, I have to conduct it, and monitor, and ensure that the children performed tasks and learned, and even write something on the blackboard. And then I have a 10-minute break. I have to go from class to class, adjust the equipment. And finally, sit down, and fill in - for each student, 20 people - who have mastered skills, and who have not.

> (Respondent 9 of the second round, a teacher of English language)

However, some female respondents were positive about evaluating students based on a set of components. One teacher even admitted that she was scared at first, but when got used to it, the system appeared to be clear and quite suitable for her.



I really like all the things we emphasize – and now we have a group of results when evaluating. That is, a child is assessed not by some number but by a variety of different components. At first, with grade 5, it scared me as I had no idea how to cope with it. Currently, when I work with a pilot grade 7 and grade 6 of NUS, I really like it. I have no problems with evaluation.

> (Respondent 10 of the second round, a teacher of Ukrainian language and literature)

Formative assessment also became one of the main topics for the second round of in-depth interviews. Its participants understood formative assessment as verbal communication with a student about the evaluation of their achievements during the lesson or the usage of visual markers - stickers, notes, etc. The respondents emphasized that this type of evaluation requires reasoning and focus on the positive aspects of the student's educational achievements.

Only one respondent was able to describe different methods of formative assessment in detail. She saw it as centered on a student's self-assessment.



We have different forms of formative assessment. For example, I design a ladder of success, five stars, and a scale of understanding, to know their understanding and progress. Next, I have a self-assessment questionnaire to be used at the end of the lesson. Thus, we can easily understand, especially when reflecting, whether they understood the topic. Every child chooses a brick. Next, I give the following algorithm for the child to evaluate the lesson and each stage: work in groups, individual work, how the other children evaluate them.

> (Respondent 15 of the second round, a teacher of mathematics)

The teachers' experience of using formative assessment was somehow limited as it was deemed an intermediate stage before the transition to point-based assessment. Several teachers from different regions of Ukraine informed that in their educational institutions, formative assessment is used only in the first quarter of grade 5 so that children can adapt after primary school.



Then, according to the decision taken by the institution's administration, they move to pointbased assessment. And teachers do not use formative assessment any longer.



I no longer have to apply formative assessment. I can express my point of view, and I can present it to the lead teacher at some meetings, but I don't know how to use it and then record it in some document.

> (Respondent 14 of the second round, a teacher of mathematics)

Respondents expressed different opinions on the students' attitude to formative assessment:

- children are positive about formative assessment;
- children do not take it seriously and prefer the point-based one.



The children take this [formative assessment] calmly, there are no problems with it. Everyone was worried about how they would cope without points, without those numbers. Well, everything went fine.

> (Respondent 5 of the second round, a teacher of English language)



I should admit, they don't care. They don't really respond to it [formative assessment]. Let's put it this way, 30 percent benefit from it, not more. Some students, who didn't prepare, didn't like it as the parents were busy at work, or they didn't want to spend time with the child, they were not interested in it at all.

> (Respondent 12 of the second round, a teacher of English language)

The respondents were unanimous about the parents' attitude to formative assessment. According to some respondents, parents negatively view it and demand point-based assessment. This situation may indicate that some parents are still guided by their educational experience and are not aware of the NUS reform essence - or do not share its philosophy. Additional clarifications on how to work with parents would improve the level of novelty acceptance.

Respondents mentioned the advantages of formative assessment:

- less psychological pressure on students;
- opportunity to follow the educational competencies development;
- higher motivation to study;
- establishing better communication with students;
- this assessment teaches children to critically evaluate their knowledge.





I believe that a formative assessment is useful when the child knows how to self-analyze, self-assess, and of course, listens to the teacher and classmates. Then there will be mutual understanding and cooperation, partnership.

> (Respondent 15 of the second round, a teacher of mathematics)

Respondents also mentioned the disadvantages of a formative assessment, in their opinion:

- takes too much time compared to other types;
- it is almost impossible to use it efficiently in classes with a large number of students;
- does not promote students' discipline (the respondent sees formative assessment exclusively as encouragement and praise, no criticism included).



You have [...] problems with formative assessment when you have a large class. We have more than 30 students, sometimes 34, or even 36. Therefore, it is physically difficult to assess everyone. It can be selective. The difficulty is that everyone wants to be heard, but you don't have that much time.

> (Respondent 11 of the second round, a teacher of Ukrainian language and literature, foreign literature)

Respondents were positive about point-based assessment. During the interviews, they often mentioned a change in students' perception of point-based assessment: students of the NUS program take its results more calmly. Respondents perceived it both positively (focus on acquiring knowledge, not on points) and negatively (children's indifference to the educational process). Some respondents interpreted a calm attitude to points as unawareness of their importance as there was no such assessment in primary school.



You know, even with 7 points - they come and say: Mom, hooray, I got 7 today. I mean, they've broken free from those limits set by the previous system.

> (Respondent 6 of the second round, a teacher of Ukrainian language and literature)



Sometimes a child brings me a student diary to get 3 points. I'm shocked. I think to myself: why do you want me to put 3 points into your diary? Who would have brought a diary to get 3 points? And they somehow see it like - well, 3 points, ok, then. And 7 points is also ok, something like that.

> (Respondent 9 of the second round, a teacher of English language)

Level-based assessment, which one respondent of the first round of in-depth interviews criticized, was considered by the respondents in the second round a sequel to the five-point system and an intermediate stage between formative and point-based assessment.



During the interviews, they also mentioned the disadvantages of a level-based assessment more often than its advantages. In particular, the following:

- tricky process of the level determination if a child's knowledge is at the intersection of levels;
- low accuracy caused by over-inclusive intervals between levels;
- sufficient and intermediate levels "overlapping";
- insufficient motivation compared to point-based assessment;
- parents' casual attitude to level-based assessment;
- level-based assessment making it difficult to move to point-based.



In my opinion, this assessment is not illustrative of your level. A sufficient level covers three points: 7, 8, and 9. You have no idea whether you have 9 or 7. Thus, you have to explain that a child is at a sufficient level but should still improve knowledge to get closer to the high level.

> (Respondent 6 of the second round, a teacher of Ukrainian language and literature)



For intermediate and sufficient levels, this assessment should be more systematized. Why do the intermediate and sufficient levels overlap? They are basically the same. There could be just three clear levels: low, intermediate, and high.

> (Respondent 4 of the second round, a teacher of Ukrainian language)

In our opinion, the answers during the second round of interviews prove that teachers are not fully aware of the importance of teachers' feedback to students and see formative assessment as an "intermediate stage," while still preferring point-based assessment. This attitude can be fueled by the actual importance of scores for children: during final and entrance tests, results are "converted" into a certain number of points. Teachers may believe that their task is to prepare students to pass the tests successfully, hence the commitment to the pointbased system and the request to include tests "under External Independent Evaluation format" in the textbooks.

The concept of comparing a student's past and current achievements also seems to be underestimated: the respondents are more aware of the idea of competition between children, which should theoretically motivate them to improve their results. We believe that the evaluation system should get further clarifications and methodological explanations - both from the advanced training institutions and the central education authorities.

#### Online learning

As presented in the part dedicated to advanced training, when designing the questionnaire, we assumed that the topic of online education remains challenging in the following aspects:

teachers need methodological support and ready-made quality content to ensure a proper level of distance learning;



- distance learning adds to teachers' fatigue;
- technical support for distance learning (gadgets, broadband internet) should be improved.

The respondents' answers confirmed these assumptions to a large extent.

In particular, the situation with equipment provision is as follows:

- almost half of the teachers (45%) conduct online classes using a laptop provided by the school:
- another common situation is when teachers use their personal laptops (36%). Young teachers aged 18 to 39, unlike other age groups, more often use their personal laptops for distance learning than those provided by the school. Namely, this may be caused by the fact that a greater proportion of young education specialists own quality devices and prefer them - even if the school is ready to provide a laptop;
- some education specialists conduct classes using phones (6.7%) and tablets (2.9%), that is, equipment that is less convenient and less suitable for online classes;
- 2.5% of teachers conduct lessons using home desktop computers, and 4.9% school desktop computers. It should be noted that desktop computers are much more dependent on external power than laptops, therefore the lesson is more likely to be interrupted during a blackout.

Compared to other macro-regions, more teachers from the West of Ukraine conduct online lessons using their phones (12.2%). However, given the security situation, distance learning in the region is less common.

The situation with methodological materials adapted for online learning is as follows:

- most respondents use learning support materials adapted for the distance format (52%);
- such digital tools as Padlet, Miro, etc. are also quite popular (34.5%);
- almost a quarter of respondents use educational programs adapted for online learning (25%);
- only 15% of respondents use special methods for online teaching.

Respondents over 50 were less likely to use digital tools for online learning than their younger colleagues: 29.5% compared to an average of 38%.

Respondents who reviewed work practices related to online learning in advanced training courses, more often used educational programs adapted for online (+12%), special methods of online teaching (+15%), and digital tools for online learning (+17.5%). This allows us to conclude that online learning should be given as many hours in advanced training courses as possible because, despite the desire of the educational process participants to return to in-person classes," distance learning has become an integral part of education as a whole - and of secondary education in particular.



In-depth interviews confirm a shortage of equipment and learning support materials. Respondents noted the following **problems:** 

- lack of equipment to be used by both teachers and children or its unsatisfactory condition;
- poor connection quality, which makes students turn off their cameras during lessons, prevents them from doing interactive tasks, and therefore decreases the motivation of both children and teachers;
- difficulty in using the Chromebooks provided by the school (teachers have to use their equipment even when given a Chromebook);
- lack of additional materials for distance lessons, which makes teachers spend even more time on preparation to keep students active in their lessons.



To be honest, it's more like a nightmare. Because preparing for a standard lesson takes a lot of time, and preparing for a remote lesson takes even more, indeed much more time than a face-to-face lesson. First, you select tasks, then you have to assemble everything, videos, presentations, images, and tasks - put everything together. For the children to like the lesson, it needs to be prepared, with the teacher not just logging on to Zoom and talking at them.

> (Respondent 12 of the first round, a teacher of Ukrainian language and literature)

The respondents of the second round of interviews also noted the need for online methodological support to get prompt responses to their requests.



It would be appreciated if there were some specific mentors to turn to at any time, some kind of support. Methodological support, especially when teachers are just beginners. Because there are a lot of such questions. You start asking your colleagues, try to read out any information, or search for it. It's nice they offer seminars, but when you undertake activities, you may need certain answers right here and right now.

> (Respondent 7 of the second round, a teacher of mathematics)

As we have already noted above, this function could be undertaken by CPDTS, the Centers for Professional Development of Teaching Staff.

The respondents requested high-quality equipment, websites with additional materials for remote lessons, and parental support as to the discipline and motivation of students. They believe this could facilitate online lessons conduct, and make them both interesting and meaningful.

Teachers need lots of ready-made solutions for online teaching, including the following:

- programs adapted for remote format;
- ready-made tasks, high-quality digital content;



a more detailed review of the online learning methods and techniques presented in advanced training courses.

Support in this area will give teachers the time they can use to provide said feedback, improve their knowledge in a specific subject, master modern approaches to teaching under NUS – and ultimately, restore their emotional and cognitive resources.

## Suggestions to address problematic issues

#### **NUS evaluation system**

- 1. We should pay increased attention to various types of evaluation, in particular, formative assessment, in methodological recommendations when undertaking courses and advanced training.
- 2. Teachers note they do not have enough time to conduct formative assessments, therefore, it is worth providing recommendations on an "express format," for example.
- 3. The "feedback" concept should be reviewed in detail in advanced training courses, in communication in field-specific media, in methodological instructions, etc.
- 4. Developing a more detailed table with the ratio of level-based and point-based scores could simplify the transition to the "level-based" system in grades 5-6, facilitate the process of explaining scores to parents, and providing feedback to students.

#### Work practice

Work practice can be updated by the following:

- recommend IPPE/ACE to develop field-specific advanced training courses dedicated to integrated subjects;
- higher education institutions in the pedagogical field should focus more on subjects designed to master the content and methods of teaching integrated courses;
- initiate public discussions on the need to reform higher pedagogical education in general: in particular, higher education institutions in the pedagogical field should be more focused on the NUS reform, thereby also developing methodological recommendations, as well as being involved in training and retraining of education specialists for the implementation of the new State standard of basic secondary education;
- additionally, study foreign experience (for example, certain "reference" textbooks on integrated courses), identify approaches to be used in Ukrainian educational realities.



#### Online learning

The online learning process can be optimized by the following:

- create a large database of ready-made materials for teachers to use when compiling lessons, thus adapting curricula to online format with minimal effort;
- create more high-quality courses in general computer literacy and specific tools for efficient online work (by NGOs, IPPE/ACE, and other providers of relevant services);
- recommend that higher education institutions in the pedagogical field teach students to evaluate the quality of educational content and create their materials. Such training can involve all stakeholders, particularly NGOs, authors of textbooks, and so on.

#### Curricula and textbooks

The literature and language subject, the curricula of which we have analyzed within our study, is only one example proving that approaches to educational content development should be revised.

- 1. Current programs must be reviewed for compliance with the State Standard followed by the adoption of further decisions on their validity until being approved indefinitely, that is, they will be applied and used for textbook compilation unless officially canceled;
- 2. A valuable resource for teachers can be alternative programs focused on practical goals (for example, in the literature and language subject - compliance with the principles of reading competence under PISA) or recommendations on ways on more effectively using existing content (modifying programs, using textbook material, etc.).
- 3. The process of improvement and re-approval of programs should be started as soon as possible, better yet even as you read this, so that by 2027, when new textbooks for grade 5 are to be printed, updated programs and educational literature will already be available.

The study showed that teachers require ready-made solutions providing them with materials at a minimum sufficient level, but this approach does not hinder creative solutions, should a teacher have the time, the will, and the desire. To support teachers who wish to develop tailored programs but do not have the necessary knowledge, it is worth:

- recommending IPPE/ACE to introduce individual courses on curriculum development;
- recommending that higher education institutions in the pedagogical field introduce relevant topics into their curricula.

improving the quality of learning support materials, it is worth:

Start developing textbooks to be republished in the next cycle and encourage compilation of high-quality methodological kits (textbook, workbook for students, and teacher's guide) – solutions that work out of the box.



- change the competition procedure (in particular, the part related to the presentation of the educational materials to teachers) and the terms for textbook development (to be extended);
- to re-examine textbooks that are the most complained about in the public space, and to develop methodological guidelines on the proper use of the existing published textbooks following the examination results;
- change the general textbook **examination** procedure:
  - prolong the examination period;
  - increase experts' responsibility for results;
  - ensure anonymity of author teams;
  - assess under clearly defined criteria rather than express the subjective expert opinion as a justification for conclusions;
- Change the system of textbook development: currently, publishers influence this process, so for the textbook to be ordered, it often complies not in line with the NUS philosophy but with the request of education specialists wishing to "work as we used to";
- give more time to choose textbooks, as well as motivate discussion of textbooks by an expert environment to facilitate the selection process for teachers;
- review operations of the institution responsible for the textbook examinations (IECM) and decentralize the functions of textbook examination and procurement;
- on the same note, consider the likely cost of a published workbook (to be reprinted every year) to completely replace a student's textbook, and the full cost of a methodical kit, which could include ongoing comprehensive teacher's support by the publisher (for example, advanced training courses).



## Teachers' mental condition

## **Key findings**

As we have already noted, **78**% of the surveyed teachers noticed an **increase in anxiety, fear, sadness, or anger**, compared to the period before Russia's invasion in 2022. These four emotions are often present in those who have endured war.

These teachers were 24% more likely to feel the need to **improve their skills in providing psychological support** to themselves and their students, and 9% more often turned to psychological support within their educational institutions to work with students than their colleagues observing no such changes. This difference can arise since teachers observing an increase in anxiety, fear, sadness, or anger, generally turn to related specialists more often.

The result **did not depend** on the respondents' age, macro-region, type of settlement, or professional grade.

Respondents observed behavior that could harm teaching and interaction with students (for example, vulnerability to criticism is more likely to cause conflicts when students correct teachers during lessons).

Irritability	40%
Low motivation to work	31%
Short attention span, trouble focusing	28%
Susceptibility to criticism	23%
Difficulty with remembering new information	18%
Difficulty with recalling old information	13%



Moreover, it should be noted that **young teachers** (aged 18 to 39) reported **low motivation** more often than their older colleagues: 39% compared to 24% among teachers over 50. This may be part of the complex "occupational aging" problem.

It seemed natural that teachers working in a distance or mixed format were more likely to report low attention focus (+10%) than their colleagues who worked in-person.

**69.5**% of respondents have a request for advanced training related to providing **psychological** support to themselves or students:

- 43% of them wish to learn more about providing psychological support to themselves and students;
- 16.5% to improve their knowledge in providing psychological support to students;
- 10% need to improve their skills in providing psychological support to themselves;
- 30.5% of the surveyed teachers do not wish to improve their skills in providing psychological support to themselves or their students.

Most respondents (84%) get the **necessary** psychological support in their educational institutions to work with students.

Teachers working in rural and township schools, as well as in the eastern macro-region, reported a lack of psychological support to work with students most:

Are not getting the necessary psychological support in schools			
22% of respondents			
other settlements 12% of respondents			
Request to ensure a sufficient number of school psychologists			
regions 52% of respondents			
er macro-regions 21% of respondents			

It should be noted that 56% of teachers who admitted insufficient psychological support to work with students, do not believe **they need it**.

Lack of psychological support was caused by the following factors:

- for 19% of respondents no school psychologist available,
- for another 19% a school psychologist was not qualified enough to solve their problems.



Ideas on improving the psychological support provision to the educational process participants were distributed as follows:

There should be a clear algorithm developed for teachers to deal with difficult cases.	43%
Teachers should take additional training on how to help themselves and their students.	27%
There should be a sufficient number of psychologists depending on the number of students and teachers in the school.	26%
An interschool psychological service should be established.	19.5%
Psychologists should take additional training on how to deal with crises or trauma.	18%

We assume that the first option's popularity also proves the need for out-of-the-box solutions and ready-made instructions for crisis management.

The teachers surveyed in the **in-depth interviews** used the following strategies to support their students in a vulnerable emotional or mental condition:

- addressing a school psychologist;
- personal communication to support and reassure the child;
- creating a positive environment in the classroom, in particular, by laughter;
- promoting ideas of mutual support and empathy among students;
- participation in socially useful activities together with students;
- motivation using famous people as an example;
- hugs;
- the "inhale-exhale" exercise learned in advanced training courses.



## Suggestions to address problematic issues

Exhausted and "burned-out" teachers are unlikely to implement the reform efficiently, therefore, they need relevant support. For that, the following is required:

- improve work with practical psychologists during advanced training;
- at least partially satisfy the need for school psychologists in rural areas and eastern Ukraine – via online consultations with volunteers or the like;
- ensure additional advanced training courses in the relevant field for school psychologists;
- in cooperation with practical psychologists, develop the maximum number of algorithms to respond to various crises, in particular for dealing with parents, so that teachers could use recommendations as a basis for making decisions and taking actions:
- introduce monitoring of teachers' and children's mental conditions and make management decisions based on it.

Lower motivation to work among young teachers may be evidence of the general crisis of youth involvement in the industry.



# BEGOL COMPETENCE

### **Educational losses**

## Key findings

The need to identify approximate educational losses for children who have moved on to basic secondary school is justified by several reasons:

- they had to study part of their primary school program in a distance format (for 1.5 2.5 years);
- due to the war, many fifth-graders have been studying online which was characterized by a significant loss of study time due to blackouts and air raid alerts.

Given the difference in teachers' training, "NUS children" start secondary school with different levels of knowledge, thus, it is important to find out how the subject teachers assess their educational losses and the measures they use to overcome them.

According to the survey, over the past six months (that is, the end of the previous academic year and the beginning of the current one, 2023/2024) educational losses were measured:

- several times 41% of respondents;
- once 26% of respondents;
- none 33% of respondents;

It should be noted that the respondents working in a distance or mixed format measured educational losses 8% more than their colleagues working in person.

Teachers of **foreign languages** least measured educational losses: 56% compared to the average of 75%.



**The educational loss reasons** – based on the experience of teachers who participated in in-depth interviews – are as follows:

- missed study hours due to air raid alerts or military operations;
- children studying abroad, which has an adverse effect due to the difference in curricula;
- distance learning, firstly caused by the pandemic, and then by the war;
- lack of motivation to study specific subjects;
- a game-based learning format that does not provide a sufficient theoretical base;
- unsatisfactory children's behavior.



A 20 minute **online lesson** – you get the picture. By the time we greet one another, discuss expected results, set the mood, think about things we will learn, the sirens start wailing. And the whole perfectly planned lesson, even compiled under all the NUS requirements, as they say, crashes against the bitter reality.

(Respondent 8 of the first round, a teacher of Ukrainian language and literature)



There are gaps from the children studying remotely for too long. It is obvious that children who are used to just sitting in front of their computer, have problems with writing, they are not used to doing tasks and writing everything down.

(Respondent 2 of the first round, a teacher of Ukrainian language and literature)

#### Teachers measured educational losses:

By the observational method	59%
Using self-developed tests	45%
Using tests from other internet resources	33%
Using tests from manuals	29%
Using tests available on the All-Ukrainian Online School platform	26%
Using tests developed by colleagues	8%

Teachers **over 40** were 11% more likely to use the outcomes of self-developed tests to measure educational losses than their younger colleagues.

The fact that teachers **over 50** preferred tests available on the All-Ukrainian Online School platform was quite unexpected for the study team.

Teachers working in person more often (+12%) measured educational losses by observing their students – this seemingly obvious method once again proved that in-person learning made the teacher's job easier.



Teachers use the **following approaches** to overcome educational losses:

In-person consultations	36%
Students independently study additional materials, and the teacher then checks the result	33%
Online consultations	32%
Additional in-person lessons	27%
Additional online lessons	14%
Students independently study additional materials, and the teacher does not check the result	8%
No measures taken	11%

The teachers surveyed during in-depth interviews described their experience of dealing with educational losses.

- 1. To overcome educational losses, several respondents often use the re-teaching of the learned material, namely, by its integration into the new one.
- 2. Given that, teachers are aware that the excessive use of this strategy can cause students to overload and have a general negative effect.
- 3. To re-teach the learned material, the respondents invented tasks to make students interested in the subject.
- 4. Moreover, the surveyed teachers established cooperation with parents and additionally worked with individual students who needed it the most.
- 5. The respondents, who are currently teaching remotely, have high expectations about the renewal of in-person learning (they believe this format will help to make up for educational losses).



How to make up for it, the knowledge? It is very difficult. The only remedy is additional lessons. But when to have them? After all, overload is not allowed, there is a limit load. In the lessons, we try to introduce reviews along with the new material and go back. Sometimes we have to go back to the multiplication table, and this is not a rare case

> (Respondent 10 of the first round, a teacher of mathematics)



## Suggestions to address problematic issues

Educational losses among Ukrainian students are evidenced, in particular, by the monitoring of the education quality in grades 6 and 8 in mathematics and the Ukrainian language, which was conducted by the State Service of Education Quality at the end of the 2022/2023 academic year. Therefore, activities aimed at identifying and overcoming educational losses should continue. Still, the overloading of both children and teachers, their demotivation by frequent



interruptions of the educational process by air strikes and sirens, and fatigue from online lessons of irrelevant quality, mostly caused by technical issues, stand in the way of effective catch-up of missed material.

Nowadays, MESU and UNICEF developed <u>recommendations</u> on organizing activities to make up for educational losses, <u>manual</u> "Overcoming educational losses in Ukrainian language and literature in grades 5-11" (International Renaissance Foundation, Club NUS), ready-made diagnostic tests available on the All-Ukrainian Online School portal – these resources should be shared and promoted to help teachers overcome educational losses.







# Begoe Competence

# Reform communication and obstacles to its implementation

### **Key findings**

The study team assumed that, despite the long-term implementation of NUS in primary school, secondary school teachers do not understand the reform philosophy and essence in full, as well as its difference from the previous education system. A quantitative survey partly confirmed this hypothesis:

- 95% of the respondents were informed about the NUS reform content and its difference from the old teaching system;
- however, 40% of them have shallow knowledge: they would not be able to explain
  the NUS reform content and its difference from the old teaching system to others if
  asked;
- 5% of respondents believe they are insufficiently informed about the NUS reform content and its difference from the old teaching system.

Most **respondents from the eastern regions** show a sufficient understanding of the reform to tell others about it -66.7% (of 98.9% of those who believe they are informed). The indicators are slightly lower for the central macro-region: 63.2% (of 93.7%). There are no teachers in the south who believe they are insufficiently informed about the reform content but only 55.3% can explain it to others.



A fairly high rate of teachers who believe they are insufficiently informed about the NUS reform is observed among **specialists of the first-level professional grade**: 10% compared to 4% (the average rate for the other grades). Moreover, there are 7% more teachers who would not be able to explain the NUS reform content to others among specialists of a first-level professional grade. Currently, it is difficult to explain the reasons for said peculiarities.

Thus, quite a large part of the respondents would not be able to explain the NUS reform essence. (It should be remembered that the NUS Concept implementation in basic secondary education is still an acute issue within advanced training for 34.5% of respondents).

The question arises: where do the respondents get information about the reform progress? As is presented in the table below – in advanced training courses, on the MESU website, and from the IGSE administrations.

On the Ministry of Education and Science of Ukraine website	73%
In advanced training courses	57%
From the education institution administrations	57%
On the "New Ukrainian School" website	36%
From colleagues	27%
From IPPE/ACE employees	18%
From field-specific media	10%
On the NUS-Hub website	9%

During **in-depth interviews of the second round**, we tried to find out how exactly education specialists understand the NUS reform essence.

The respondents believe that its essence is as follows::

- education alignment with the requirements and needs of modern Ukrainian society;
- practical skills acquisition by students;
- improving education quality;
- child-centered attitude and their comprehensive development.



We construct, so to say, raise, form, and teach an educated Ukrainian. According to our document, the school should help them become personalities, patriots, and innovators. So that a person leaving the school walls meets modern time challenges.

(Respondent 2 of the second round, a teacher of history)

One teacher noted that the NUS reform, among other things, was also intended to improve the **prestige of the teaching profession**, however, in her opinion, it failed. Some respondents complained about **the lack of teachers**, especially young ones, which hinders the local reform implementation.







According to the data of the educational indicators <u>dashboard</u>, the average age of a teacher in Ukraine is 46, and according to the <u>"Monitoring study on NUS reform implementation by teaching staff"</u> (SSI Institute of Educational Analytics, 2022), as of the 2021/2022 academic year, the share of teachers under 30 has decreased to 11.7% of the total number of secondary school staff. By contrast, it was 15.5% in the 2017/2018 academic year. One can thereby assume that the government's measures aimed at improving the occupation's prestige are insufficient indeed.

The respondents see the following as the **main obstacles to the NUS reform implementation** (7 options out of 14 proposed could be marked):

- exhaustion due to war 53.5%;
- outdated pay system 51%;
- reduction of school hours due to war 41%;
- insufficient equipment and material support 37.6%;
- lack of quality learning support materials 35.6%;
- low teachers' motivation 27%;
- lack of qualitative methodological support 24.4%.

# People most affected by the study hours reduction in the context of the reform implementation (percentage of responses among survey participants) Southern regions 68% Central regions 55% Eastern regions 34% Western regions 18%

Some changes related to the pay system (in particular, bonuses planned for 2024) were initiated to further motivate teachers. However, it is quite obvious that educational authorities cannot "remove" the war, which is the main obstacle to the reform implementation, from the teachers' reality. On the other hand, other issues can be solved, for example:

- support teachers by giving them days off;
- decrease the load by providing methodological support and high-quality learning support materials;
- control that the NUS subvention reallocated for 2023/2024 is used to procure appropriate material resources.

Such factors as an unclear assessment system based on the new Basic Education Standard (10%), low quality of the advanced training system (8%), wasted time during reform preparation under the previous MESU leadership (7%), lack of understanding of how to teach the program online (5%), and lack of relevant support from educational authorities (3%) almost did not affect the NUS implementation by teachers. For 8% of the respondents, an insufficient information campaign explaining the NUS peculiar features is an obstacle – however, it seems that the rest a bit underestimated the importance of this factor given their answers about awareness of the reform essence.



As for the in-depth interviews, the respondents noted that the biggest obstacle to NUS implementation was the **lack of equipment and material support**. Almost all respondents in the first round mentioned unsatisfactory equipment and material support, moreover, their stories were **quite detailed**, which may indicate the topic's importance. According to one respondent, the lack of equipment and material base in a secondary school has a particularly negative effect on children who are used to a more relevant material provision in junior grades:



However, I think that, you know, there should be provision intended for these children. Because, you know what happened? **When in primary school, they had everything**. And then they came to a secondary school, where we have almost nothing, except for a laptop, which could be brought by a teacher, and a TV.

(Respondent 8 of the first round, a teacher of Ukrainian language and literature)

According to the respondents of the in-depth interviews, grades 5-6 of NUS **lack** the following materials, furniture, and equipment:

- published textbooks,
- handouts,
- contour maps,
- equipment for practical lessons,
- printers,
- color chalk,
- multimedia boards,
- individual and mobile desks.

In general, the respondents linked poor equipment and material support with a low level of learning the educational material. To compensate for the lack of equipment and to be able to teach under the NUS Concept, the respondents **spent their own money and used their own equipment**.



All my technical support dates back to the Soviet times. The structure of molecules and atoms – I borrowed these models from the chemistry lab. And they are marked "Ministry of the Ukrainian Soviet Republic."

(Respondent 3 of the first round, a teacher of geography and natural sciences)

Respondents of the second wave of in-depth interviews had the same complaints. Even though the respondents understood the problems of NUS reform implementation in grades 5-6 caused by the war, they often called **poor equipment and material support** the main drawback (in particular, a lack of textbooks), which does not allow for the comprehensive reform realization.





The same is true to supplies. The primary level was provided with everything, while we have no books, and our equipment and material support is at a very low level as there are no funds. And still we are asked to implement the reform.

> (Respondent 1 of the second round, a teacher of foreign literature)



We have no equipment: no computers, no projectors. We implement it on our initiative by printing out some cards for the children and drawing on the board. And it is implemented just in line with the teacher's abilities.

> (Respondent 6 of the second round, a teacher of Ukrainian language and literature)

Respondents believe that insufficient equipment and material support is caused by poor financing, unwillingness or inability of central and local authorities to organize it, as well as corruption.



Under the documents, we have NUS. In reality, I do not know of any school that actually works under NUS, it is impossible. Take me, for example: they give me some plastic alphabet with magnets. And just for you to understand, it cost 50 hryvnia back then. When recorded on the school books, it already costs 400 hryvnia. High markups. They spent a lot of money on it with little result. I don't believe in NUS.

> (Respondent 12 of the second round, a teacher of English language)

It is indicative that the respondents from primary and secondary schools have different attitudes to the reform and its implementation. The opinion that the reform was well implemented in the primary grades is quite often: the respondents praise it, while the same reform in grades 5-6 is criticized. The respondents explained the difference by worse equipment and material support, weaker teachers' readiness, and lack of payments for the reform implementation, which are allocated for primary school teachers.



Teachers did not have timely training. Unfortunately, this is true even in my school, where many teachers still kind of work under the New Ukrainian School curricula but apply the old methods and techniques, just as they are used to.

> (Respondent 10 of the second round, a teacher of Ukrainian language and literature)



There are many factors here but I would like to focus on teachers' payment. Primary school teachers implementing the NUS reform, [...] receive 20% as a bonus to their salary. There is a related resolution of the Cabinet of Ministers, and it is being followed.



Teachers of grades 5-6 are not included in the said resolution, so the same funds are not allocated and not paid to them.

(Respondent 1 of the second round, a teacher of foreign literature)

The general attitude towards the NUS reform was influenced by its implementation assessment by respondents in the second round of interviews. In particular, education specialists claimed that the reform did not include any clear mechanisms to achieve its goal, as it merely copied the Western experience while ignoring the Ukrainian context.



The point is whether this reform will help us achieve our goals. After all, the tools are not clear and many things characteristic of Ukraine are not considered.

(Respondent 13 of the second round, a teacher of mathematics)

Respondents are also anxious about the lack of consistency and continuity in the reform implementation caused by constant changes in the government, which may adversely affect the level of students' knowledge.

However, when joining the process under the new State Standard, some respondents also noticed positive changes, namely:

- the number of practical tasks assigned to children has increased;
- teachers interact with students more often;
- teachers of integrated programs observed the students' load to decrease;
- teachers acquired more academic freedom (in particular, the ability to choose and amend programs in line with student needs independently);
- teachers actively use different methods in the educational process;
- the NUS evaluation system allows them to evaluate the students' knowledge and skills more accurately;
- the idea of the teacher's influence on a student's life has changed: from people with a monopoly on knowledge and passing it on to children, teachers have become guides helping a child to acquire knowledge independently, that is, facilitators and moderators of the educational process.



Their workload decreased as the integrated course in grade 6 is much easier to study than individual subjects.

(Respondent 2 of the second round, a teacher of history)



I use a lot of methods involving independent work with grades 5-6 of the New Ukrainian School. Recently, we had a very interesting topic – Egypt's environment. Within the topic, I offered children to create a model of, for example, a peasant's activities, or a device used by the ancient Egyptians



with any available materials, like, say, modeling clay. Those methods, the "Press" and the "Microphone" methods, allow children to express themselves.

(Respondent 8 of the second round, a teacher of history)



The result is the same, but you can observe, for example, that this child's audio perception is ok, but they cannot express themselves in written or verbal form. Or reading skills are poor though speaking is normal. I mean, the NUS system allows the student to learn knowledge more accurately.

(Respondent 9 of the second round, a teacher of English language)

Still, not all respondents in the second round of interviews share the opinions presented above. In particular, even if noticing the changes in their own experience when teaching under the new State Standard, teachers could note that the same of their colleagues did not change following the NUS introduction. Respondents who reported a lack of changes in approaches or methods believed that everything depended solely on the teacher and that individual teachers could sabotage the teaching process under the NUS standards.



It all depends on the teacher. If earlier some teachers and innovators introduced game forms and work practice in their lessons, [then] the same adhered to that nowadays. And those who didn't work like that before, won't be doing it now either. Currently, the principal cannot just attend a teacher's lesson. We have the academic freedom of the teacher. What are they doing? Whatever they wish to.

(Respondent 1 of the second round, a teacher of foreign literature)

The aforementioned claim that the representative of the administration cannot freely attend lessons requires additional clarifications – as well as improvement of supervision over NUS.

Respondents often believe that authorities – both local and central – are the main **element in the reform improvement**. First of all, they are expected to allocate more funding to ensure equipment and material support and textbook availability.



It is obvious that if local authorities are interested in our youth becoming intelligent citizens, the former should themselves undertake their part of the responsibility. However, in my opinion, the main responsible entity is the Ministry of Education.

(Respondent 13 of the second round, a teacher of mathematics)

Moreover, the MESU is expected to introduce changes to certain regulations to **reduce the bureaucratic burden on teachers**.

Not all respondents relied solely on authorities when implementing the reform. They also claimed the necessity for the **interaction of all stakeholders** – the authorities, administrations of educational institutions, teachers, parents, and students. Respondents wished the authorities



listened more to local education specialists and considered their opinions when implementing the reform.



Firstly, [the reform] improvement is possible if you communicate with local teachers. Currently, if there are people filing suggestions, they are some "big names" who have been working in schools a long time ago, and who are in corridors of power now. If they come to the school someday and learn the real needs and the way to satisfy these, and also ask ordinary teachers, then, I think, this process can get better.

(Respondent 10 of the second round, a teacher of Ukrainian language and literature)

Respondents in the in-depth interviews of the first round also named the following obstacles hindering the reform implementation:

- too large class sizes: teachers could not pay enough attention to students or perform practical exercises under the curriculum (the same was also expressed by respondents in the second round);
- lack of motivation in both children and teachers;
- sabotage by some teachers who stick to old programs due to their unwillingness to change.

The reluctance to change can be caused by the fear of not knowing something and being wrong – we believe it is a general problem of an outdated perception of mistakes as something to be ashamed of, rather than as a natural driver to improvement.



We are experiencing a critical time shortage, a heavy workload. Large classes, if they are NUS classes. I wish they were comprised of 22 students, for example, well, let's say, 20-22 in an ideal scenario, or even 25, but not 32.

(Respondent 7 of the second round, a teacher of mathematics)

#### Suggestions to address problematic issues

- 1. Provide for additional explanations of the reform essence in the media popular among teachers (such data are available in the survey in particular, the page of the Ministry of Education and Science and the website of the New Ukrainian School).
- 2. Revive the idea of creating public (and teachers, in particular) awareness of the essence of the NUS reform, its purpose, and philosophy; presenting actual results may prove useful here.
- **3.** Create a system for collecting and processing feedback on the reform progress from teachers: reviews would help to find out primary needs requiring centralized support.



The following measures can be used to overcome obstacles to the reform implementation:

- reallocate the NUS subvention (done);
- assign bonuses to subject teachers who implement NUS in basic secondary school (similar to primary school practice);
- revise the pay system (the process has been initiated at least there is a corresponding political will and plans in the 2024 budget).
- training sessions on searching for grant opportunities, writing grant applications, and so on for representatives of school administrations;
- improve methodological support for the reform (development of detailed instructions and free learning support materials, in particular for online lessons).



To improve the teachers' mental condition, major management decisions are required, specifically, teachers' days off on public holidays, canceled during martial law, must be returned, also it is recommended not to assign (and not to offer) advanced training courses during summer vacations, etc. Currently, the teachers' working hours are not regulated in any way, which results in overwork

– which is another marker that the teachers' pay system needs immediate changes.

In the context of the occupation prestige and its "aging," momentous decisions at the state level should be considered. This may include:

- a campaign to create a positive public opinion about the key role of the teacher in the community;
- reforming the pedagogical education (train future teachers for the real challenges of school work: the gap between the knowledge acquired at university versus practice, the lack of support in the educational institution later frustrates young teachers);
- wider introduction and financing of mentoring activities in schools, introducing pedagogical internships. Despite the existing regulatory framework, the actual implementation did not take place due to the war;
- a significant increase in salaries and a detailed definition of duties to improve the educational process quality;
- introducing a new pay system for teachers aimed at their support both in the conditions of the NUS reform and in the difficult conditions of martial law and postwar reconstruction (in particular, through benefits, which could become an additional factor in making the job attractive and partially compensate for the salary, which is insufficient from the point of view of education specialists). In general, payments and the regulation of the teacher's workload should become the subject of a separate comprehensive study.



### Regional peculiar features

competence

	West	Central	South	East
Learned to use techniques of social and emotional support in advanced training courses		10% on average		25%
Noticed changes in their teaching practices following the NUS introduction	60.5%		76% on average	
Noticed changes in the NUS curricula compared to the old ones	63%		76% on a verage	
Design tailored curricula	25% on average with 14.5% in Kyiv		33%	25%
Have no desire to develop tailored curricula under any circumstances	6.4%	15.8%	4.0%	33.3%
Do not understand the NUS evaluation system	14%		4% on average	
Conduct online lessons using laptops provided by the school	25%		53% on average	
Conduct lessons using phones	12.2%	4.4%	5.1%	1.1%
Apply learning "by request"	7.8%	13.2%	19.2%	8.0%
Frequently observe		On average		
problems with attention focusing,		6.4%		40%
irritability,		6.4%		56%
low motivation for work		6.4%		21%
Evaluated educational losses	57%	64%	78%	89%



	West	Central	South	East
Take no measures to overcome educational losses	18.5%	4.2%	9.2%	13.6%
Have most complaints about the lack of equipment and material support	32%	55%	19%	24%
Have most complaints about the lack of qualitative learning support materials	37.6%	46.7%	20.5%	15.9%
Have higher rates of exhaustion because of the war	40%	62.6%	75.6%	42%



## Cases of self-reliance

For various reasons, at the end of the 2021/2022 and 2022/2023 academic years, there was no state financial support for the NUS reform, which still had to be implemented in grade 5 nationally.

In fact, in the 2022/2023 academic year, the reform was implemented due to teachers' enthusiasm. "Smart Osvita" NGO collected examples of individual educational institutions coping with the situation while lacking funding, methodological support, and management solutions.

There were three data sources:

- ATC responses to requests (almost 165 letters from RMA and ATC were analyzed);
- interactive form on the "New Ukrainian School" online page (11 responses);
- references to similar cases in earlier interviews with education specialists taken for various articles on the "New Ukrainian School" online page.

Vinnytsia, Zhytomyr, Rivne, and Chernihiv OVAs sent a request to amalgamated territorial communities, which allowed us to learn some extra "local" information.

Some of these cases can be adopted and scaled up, while others emphasize "problem areas" of the reform implementation to be considered.

Below is a list of crucial problems that teachers, administrations, and parents, whose children started NUS in basic secondary school, had to solve on their own.



Problem Local solution

> 1. Fundraising (via grant applications) and allocations from the community budget.

For example, participation in grant projects allowed the Potiv educational complex of the I-II levels in the Poltava region to install a multimedia board and new computers (the DECIDE project - STEM Supplies).

This approach can be scaled up by holding free courses on writing grant applications for teachers and representatives of the administration.

1. Lack of subvention to procure equipment, furniture, and so on for classrooms.

2. Redistribution of the available school equipment to fifthgraders.

For example, in the Pomichna Lyceum No. 1 named after the Hero of Ukraine Yevhen Berezniak (Kirovohrad Oblast), grades 5 <u>received</u> a TV and a video projector of the available. In the grammar school under Ivan Franko National University (Lviv), they "borrow equipment from other classrooms" to ensure a proper educational process in the NUS basic secondary school.

2. Blackouts and consequent inability to continue the lesson.

Teachers of the Kyiv Gymnasium of Oriental Languages No. 1, pre-<u>post</u> materials for the lesson on the Google Classroom platform: step-by-step task explanations, UOS video lessons, YouTube explanations of the topic, presentations, supporting materials, and so on.

Such an approach obviously requires even more thorough and longer lesson preparation, but the promotion of the UOS content or, for example, audio lessons "Learn with Your Ears" by "Smart Osvita" NGO and supplementing the said materials so that they are in line with the curriculum to a maximum extent, may help with solving the problem.

#### 3. Lack of published textbooks.

Parents and teachers note that fifth-graders have difficulties using a gadget with several open tabs, one of which may be a textbook. It is definitely impossible to scan QR codes in the PDF version if you open a textbook on the phone. Moreover, during inperson lessons, children's gadgets may run low.

Teachers print out parts of textbooks and individual pages, and send screenshots of only the necessary exercises and tasks in electronic form; parents can print out the whole set of PDF versions provided by the publishers.

In the Shabo institution of general secondary education of I-III level (Bilhorod-Dnistrovsky district of Odesa Oblast), it was noted that aid was provided by local authorities and in cooperation with the local publishing facility.

In the school of I-III levels No. 294, Desnianskyy district of Kyiv, a teacher of mathematics who worked in the pilot NUS grade 6, bought a photocopying machine to ensure a sufficient number of handouts for her children.

At that, both teachers and parents claim that it is expensive to print out textbooks. Not everyone shows an understanding of the need, especially given the level of inflation and teachers' salaries. This could be solved by introducing a reimbursement mechanism, but ways to calculate the expenses remain an open problem.



**Problem** Local solution

- 4. The need for extended the reform on part of the MESU.
- Local communication.

For example, there is a tradition in the schools of the Desnianskyy district of Kyiv to have a meeting of communication between communication about kindergartens, schools, and parents every spring: teachers tell parents about the peculiar features of NUS.

Apart from that, more experienced primary school staff explain the reform essence to subject teachers within schools.

5. The problem with formative assessment tools and methodological recommendations as to their application.

Schools independently <u>develop</u> tools for formative assessment (different activities, exercises, tasks); vary approaches: introduce level-based assessment from grades 3-4 so that children get used to it step-by-step.

Teachers and parents note the following problems:

This experience in various subjects should be studied in more detail to determine a list of effective methods to help teachers in developing their techniques. Another option is to share the experience of formative assessment with other educational institutions.

level-based assessment is not quite in line with the point-based one (in fact, their matching is set in the

recommendations,

Annex 2. but it is not reflected in the level names);

- formative assessment, in particular, its written part, takes a lot of time:
- additional communication with parents to explain points are not the ultimate goal of learning.



6. Lack of training courses and activities for subject teachers in schools implementing NUS as a "pilot" project.

Exchange of experience (mutual attendance, meetings), independent search for information, and establishing communities.

A three-day NUS hackathon was held for secondary and senior school teachers (2021) at Vvedenska Gymnasium No. 107, Podilsky district of Kyiv:

- the first hackathon day was dedicated to theory, where primary school teachers shared their experiences with their colleagues from secondary and senior school;
- on the second day, the teachers became "students," while their colleagues from the elementary school conducted integrated lessons in:
  - Ukrainian language and literature;
  - mathematics;
  - "I explore the world";



**Problem Local solution** 

- o computer science.
- This allowed the participants to review in practice tools recommended to be used during lessons;
- during the third hackathon day, secondary and senior school teachers worked on practical tasks prepared by primary school teachers and then designed a presentation about these activities.

This experience can be recommended to other schools, however, the participants of these events note: after all, primary and secondary schools are different stages of education requiring other approaches. There is not enough understanding of ways to implement NUS approaches for specific subjects in secondary school.



Read more about all the cases on the "New Ukrainian School" website at hashtag.



# Sold Competence

# Legal regulation of reform implementation

The main content, forms, and tools for the NUS reform implementation are set in the document "Conceptual Principles of the New Ukrainian School," adopted by the decision of the council of the Ministry of Education and Science of Ukraine dated October 27, 2016. This is a substantial reference to initiate a public discussion on the need to reform general secondary education, as well as



activities on reform planning and actual implementation in the Verkhovna Rada of Ukraine, the Government, and the Ministry of Education and Science.

The "Conceptual Principles" involved the adoption of two key regulations – the Laws of Ukraine "On Education" (adopted in 2017) and "On General Secondary Education" (adopted in 2020 titled "On Complete General Secondary Education") – intended to replace the then current laws thus setting a new system of relations in the field of education in general and secondary education in particular. The Conceptual Principles also included three stages of the reform implementation: 2016–2018, 2019–2022, and 2023–2029.

The systemic regulation adopted to determine the NUS reform content and course was the <u>Action Plan for 2017–2029 for the implementation of the Concept of State Policy Implementation within the "New Ukrainian School" Reform of General Secondary Education.</u> The timeline of specific steps for the reform implementation is set therein. The plan was developed by the Ministry of Education and Science of Ukraine and approved by the order of the Cabinet of Ministers of Ukraine No. 903 dated December 13, 2017.



The plan was developed and approved three months after the new Law of Ukraine "On Education" entered into force. Its Final and Transitional Provisions contained the necessary changes to be implemented to the Law of Ukraine "On General Secondary Education" in force at that time to implement the educational reform. The plan introduced the reform timeline proposed by the "Conceptual Principles" and defined the terms and the parties responsible for its implementation.



The reform can be conditionally divided into several large clusters.

- 1. Content of education: new State standards of primary education, basic secondary education, field-specific secondary education, standard educational programs, and curricula under new state standards.
- 2. Methodological support of the new content of education: new textbooks, in particular, their e-versions, and other learning support materials.
- 3. Professional development and upward mobility of teaching staff (salary): a new system of training and professional development for teaching staff, training for curricula compilers, authors of textbooks and manuals, new standards of higher education for the pedagogical industry, professional standards, a new attestation procedure, a mechanism for upward mobility of teachers, voluntary certification, and amended funding system for advanced training of teaching staff.
- 4. Network of general secondary education institutions: field-specific secondary education institutions, development of hub schools network.
- 5. Effective management: autonomy of educational institutions, competitive appointment and training of heads, reduction of bureaucratic burden on educational institutions, improving the institutional capacity of education authorities, the system of educational statistics and analytics, and public supervision.
- Ensuring the qualitative general secondary education: diversity of forms, monitoring studies, guidance counseling for education seekers, and independent system of educational achievements evaluation for school leavers (grades 9-11 (12)).
- 7. A barrier-free inclusive educational environment.



Long before the 2022 invasion, there were certain internal factors, in particular, the change of the Government and extraordinary elections to the Verkhovna Rada, which had a substantial effect on the content of the basic field-specific regulation, Law of Ukraine "On Complete General Secondary Education" (hereinafter referred to as the Law). On the last days of its mandate, on May 30, 2019, the Verkhovna Rada of Ukraine of the 8th convocation adopted the law in the first reading.



Between the first and second reading, the future law was refined by the Verkhovna Rada Committee on Education, Science and Innovation involving the new political leadership of the Ministry of Education and Science of Ukraine. On January 16, 2020, the bill was adopted in the second reading as a whole by the People's Deputies of Ukraine, elected to the Verkhovna Rada of Ukraine of the 9th convocation.



Detailed information on the materials and the law adoption process is available on the website of the Verkhovna Rada of Ukraine at the link.

It was not surprising that certain material factors (in particular, the difficulty of reforming the network of educational institutions in territorial communities given decentralization, pandemic, and war) influenced the law.



It entered into force on March 18, 2020, and then various amendments related to its content and scope were introduced.

Most amendments were about establishing a network of general secondary education institutions. Namely:

- reorganizing special needs institutions of general secondary education;
- postponing the reorganization of sanatorium schools (sanatorium boarding schools) until July 1, 2025 (the "Action Plan" prescribed the inventory of the boarding schools network followed by their reforming to be held in 2019-2020);
- bringing the founding documents of institutions in line with the law by September 1, 2027;
- introducing annual public discussion to liquidate or reorganize general secondary education institutions in rural areas;
- new requirements for lyceums;
- establishing state institution "School of Superheroes";
- property issues of liquidated state and municipal general secondary education institutions or if their activities have been ceased.

Moreover, school leavers (grade 11) were exempted from the State Final Attestation several times, and the following law provisions were suspended for the period of martial law: the minimum academic year duration (175 days), the maximum number of students in one grade (except for full-time and part-time forms of general secondary education), and the mandatory competition to extend the principal's employment agreement.



It should be noted that Article 22, paragraph three, part two of the law was recently declared unconstitutional following the Decision of the Constitutional Court No. 1-r/2023 dated February 7, 2023. This fragment prescribed "teaching staff of state and municipal general secondary education institutions, who have reached retirement age and are paid an old-age pension, to work under employment agreements entered into for a period of one to three years." This provision precluded from concluding open-ended employment agreements with the said category of teaching staff.

Therefore, no significant amendments to cancel other conditional "clusters of the NUS reform" have been introduced so far. Thus, the key issues related to the content of education, educational programs, textbooks, other methodological support, professional development of teaching staff, and their upward mobility (salary) remain acute despite the armed aggression of the Russian Federation.

The new basic law for a large system needed – and still needs – implementation: some of its provisions remain unrealized. This is evidenced by the results of the analysis of the

Plan to prepare drafts of legal regulations necessary to ensure the implementation of the Law of Ukraine "On Complete General Secondary Education," approved by the order of the Ministry of Education and Science of Ukraine No. 811 dated June 16, 2020. This plan includes a detailed list of documents of the Government and the MESU to be either revised or replaced with new ones.



Legal regulations that have not yet been adopted or properly reviewed (important amendments have been introduced), but are important for the NUS reform, are listed below. They are grouped in the table by the already mentioned "clusters" of the reform.



Content of education					
Legal provision	Objective	Outcome			
To Article 44, part three (on state standards approval)	To develop and duly submit draft resolutions of the Cabinet of Ministers of Ukraine on the standards of basic and field-specific secondary education approval to the Government.	The standard of field-specific secondary secondary education was publicly discussed.			
Methodologica	al support for the new educational conter	nt			
Legal provision	Objective	Outcome			
To Article 52, paragraph two, part one (on specific online information resource where complete textbooks and other educational materials, fully or partially published at the expense of the state budget, are freely accessible)	Review the Regulation on the National Digital Educational Platform, approved by Order of the Ministry of Education and Science of Ukraine No. 523 dated May 22, 2018, and ensure that changes are introduced to it if necessary.	The provision has not been reviewed, the platform is not accessible. Textbooks are posted on the IECM website.			
Professional developn	nent and upward mobility of teaching sta	ff (salary)			
Legal provision	Objective	Outcome			
To Article 22, paragraph two, part one (on determining the list of teaching staff)	Review the List of teaching and academic staff, approved by the Resolution of the Cabinet of Ministers of Ukraine No. 963 dated June 14, 2000, and if necessary, develop and duly submit to the Government a draft resolution of the Cabinet of Ministers of Ukraine on amendments to it.	The new List has not been approved since 2020, and some amendments (supplements) have been introduced.			
To Article 24, paragraph two, part four (on setting tariff rates for teaching staff of state and municipal educational institutions)	Review the resolution of the Cabinet of Ministers of Ukraine No. 1298 dated August 30, 2002, and if necessary, develop and duly submit a draft resolution of the Cabinet of Ministers of Ukraine on amendments introduction;	The resolution was not revised in full, and some amendments (supplements) were not introduced.			



Legal provision	Objective	Outcome
To Article 48, part two (on determining the list of pedagogical grades and ranks).	Review the List of professional grades and pedagogical ranks, approved by the Resolution of the Cabinet of Ministers of Ukraine No. 1109 dated December 23, 2015, and if necessary, develop and duly submit to the Government a draft resolution of the Cabinet of Ministers of Ukraine on amendments to it.	The said List remains unchanged.
To Article 58, part two (on approval of the formula to calculate the financial ratio of budgetary support per student)	Develop and duly submit to the Government a draft resolution of the Cabinet of Ministers of Ukraine.	The said formula has not been developed or approved.
To Article 24, paragraph two, part six (on approving the Procedure to calculate salary of teaching staff in state and municipal educational institutions)	Review the Procedure for calculating the salary of teaching staff, approved by the order of the Ministry of Education of Ukraine No. 102 dated April 15, 1993, and promote the adoption of the related order of the MESU.	The Procedure has not been revised and remains valid and unchanged. A new Procedure for calculating the salary has not been developed or approved.
To Article 60, part one (on general staff standards for general secondary education institutions)	Review the Standard staffing standards of institutions of general secondary education, approved by the Order of the Ministry of Education and Science of Ukraine No. 1205 dated December 6, 2010, and if necessary, introduce amendments to it.	The standards have not been revised, since 2020, two minor changes have been introduced.



Effective management					
Legal provision	Objective	Outcome			
To Article 18, part four (on approval of the Procedure for the development, issuance, and accounting of documents on education)	Review the Orders of the Ministry of Education and Science of Ukraine No. 811 dated December 10, 2003, and No. 939 dated December 15, 2004, and ensure the adoption of the related order of MESU on approval of Procedures for the development, issuance, and accounting of documents on basic secondary education and full general secondary education.	The related orders have not been revised and remain valid and unchanged.			

Ensuring qualitative general secondary education					
Legal provision	Objective	Outcome			
To Article 12, part six (on approving the Procedure for dividing classes into groups when studying individual subjects (integrated courses) in state and municipal educational institutions)	Review the Procedure for dividing classes into groups when studying individual subjects in general educational institutions, approved by the Order of the Ministry of Education and Science of Ukraine No. 128 dated February 20, 2002, and if necessary, introduce amendments to it.	The Procedure remains valid and unchanged.			
To Article 12 paragraph two	Deview the Procedure for the creation	The Precedure			

To Article 12, paragraph two, part nine (on approving the Procedure for the creation and organizing activities of extended day groups in state and municipal institutions of general secondary education)

Review the <u>Procedure for the creation</u> of extended day groups in state and municipal institutions of general secondary education, approved by the Order of the Ministry of Education and Science of Ukraine No. 677 dated June 25, 2018, and if necessary, introduce amendments to it.

The Procedure has not been revised, it remains valid and unchanged.



To Article 17, paragraphs four and five, part five (on the content, form, and procedure of the State Final Attestation for students of general secondary education institutions, as well as the Procedure of attestation for students of scientific Review the <u>Procedure for conducting</u> <u>State Final Attestation</u>, approved by the Order of the Ministry of Education and Science of Ukraine No. 1369 dated December 7, 2018, and introduce amendments to it. If necessary, develop and duly submit for state registration an individual order of

The Procedure was not revised in full, and some amendments (supplements) were not introduced. No individual order of



Legal provision	Objective	Outcome
lyceums in subjects determined by the related standard of field- specific education)	MESU on the attestation of students of scientific lyceums.	MESU on the attestation of students of scientific lyceums was not developed.
To Article 17, part eight (on approving the system and general criteria for evaluation of educational achievements of students)	Review the Criteria for evaluation of educational achievements of students (pupils) in the system of general secondary education, approved by the Order of the Ministry of Education, Science, Youth, and Sports of Ukraine No. 329 dated April 13, 2011, and ensure the adoption of the related order of MESU.	The assessment criteria remain valid and unchanged. No new system and general criteria for the evaluation of the educational achievements of students were approved.
To Article 54, paragraph fourteen, part two (on approving the Procedure for encouraging and honoring students, teachers, and other employees of the education system with departmental incentive awards)	Review the Regulations on Departmental Incentive Awards of the Ministry of Education and Science of Ukraine, approved by the Order of the Ministry of Education and Science of Ukraine No. 1047 dated July 30, 2013, and introduce amendments to it.	The Regulations remain valid and unchanged.
To Article 54, paragraph nineteen, part two (on approving the Procedure for providing professional support and assistance to teaching staff (supervision))	Develop and duly submit for state registration the related order of MESU.	The supervision procedure was not developed or approved.
A barrier-f	ree inclusive educational environment	
To Article 12, paragraph four, part one (on approving the Procedure on establishment and activities of special needs classes)	Review the Regulation on special needs classes for teaching children with special educational needs in general educational institutions, approved by the order of the Ministry of Education and Science of Ukraine No. 1224 dated December 9, 2010, and ensure the adoption of the related order of MESU.	The Regulation remains valid and unchanged.



Legal regulations are obviously not the only things required for the proper reform implementation, still, they are a rather important component that "mirrors" state policy. The New Ukrainian School calendar includes a detailed presentation of this and other important components overlooked in the legal regulations.

If the situation with the new content of general secondary education and its methodological support is difficult but controlled, the issue of teaching staff salaries remains unresolved.



Approved State standards of primary and basic secondary education, Standard educational programs, their piloting, and subsequent large-scale implementation in educational institutions are a single option. The lack of a state standard of field-specific secondary education currently does not pose a crucial problem for education in general, which is in the process of overcoming the pandemic consequences and is conducted in wartime. Training under programs for twelve-year field-specific complete secondary education will start on September 1, 2027 (subparagraph 3, paragraph 3 of Chapter XII "Final and <u> Transitional Provisions" of the Law of Ukraine "On Education"</u>), and its piloting – in September 2025, most likely. The related project has already been developed, and its <u>public discussion</u> has been completed, so it will be duly approved finally. "Freezing" the National Educational Electronic Platform for an indefinite period became an impetus to create alternative repositories of textbooks and other methodological support.

The legal regulation of the situation with the social status of teaching staff and their pay system is also "frozen," though at the level of documents, which were developed and approved from 1993 to 2002. For 30 years, there have been almost no changes in answers to questions on what positions are deemed teaching, how the salary is calculated, or what the scope and duration of a teacher's work is.



MESU has announced a global reform of the teachers' pay system, which will obviously require a solution, in particular, via legislative regulation of the following issues at least:

- duration of the teachers' working day and their pedagogical workload;
- 2. implementation of an external impartial assessment of teachers' performance (including by scaling the certification tool);
- 3. removing the teaching staff salary from the "tariff scale";
- 4. role of certification, professional grades, and pedagogical ranks of teaching staff when calculating salaries;



- 5. capability of educational institutions to independently pay for advanced training for their teaching staff;
- **6.** definition of the relevant "money follows the child" mechanism or the formula to calculate the financial ratio of budgetary support per child.

Another problematic "cluster" is ensuring qualitative general secondary education. Despite the current system of ensuring qualitative education and educational activities, the following crucial problems remain unsolved:

- introducing supervision for teachers;
- dividing classes into groups when studying individual subjects (integrated courses);
- system and criteria to evaluate students' educational achievement under NUS.

Given these problems, the issue of special needs classes, establishment and functioning of extended day groups, work content and scope of education specialists in these groups in a general secondary education institution, as well as the legally set though the unrealized authority of MESU to reward (encourage) students of general secondary education institutions with departmental awards, obviously, take a back seat. The same applies to the expected implementation of an electronic document database on general secondary education, which should reduce the bureaucratic workflow in educational institutions.





### MAIN CONCLUSIONS

### Sociological study conclusions

- The factors hindering the NUS implementation are exhaustion due to the war, an outdated pay system, a reduction in teaching time, insufficient equipment and material support, and a lack of ready-made learning support materials.
- Compared with the statistics prior to the 2022 invasion, 78% of the teachers reported an increase in anxiety, fear, sadness, or anger.
- It is necessary to pay attention to the qualifications (their availability) of psychologists in rural schools as 22% of respondents there do not get the necessary support.
- Online teaching requires special attention: ready-made adapted materials, adding specific content to advanced training courses, and in some cases electronics are required.
- The main comment of teachers on advanced training more practical material, exchange of experiences, cases, examples, etc.
- Formative assessment remains the most problematic aspect of the NUS evaluation system, which requires increased attention (34% of teachers use it every lesson).
- Most of those who refuse to use it explain that such an assessment takes too much time.



- Most teachers (76%) do not create tailored programs but use model ones, and half (!) of the respondents could not even be motivated to develop curricula by additional payments or bonuses, but by the availability of free time - teachers are overloaded with preparing for lessons and other duties.
- Most teachers (70%) are working with individual subjects and not integrated courses.
- Such textbook features as compliance of the educational material with real requests and children's lives, tasks, content, and consistency of theoretical material presentation drastically need improvement.
- Programs and textbooks should be simplified and expanded as per student age characteristics.
- 40% of the respondents could not explain the difference between NUS and the old teaching system;

### Recommendations following an office study outcomes

- Improve statistics collection in particular, regarding the number of teachers implementing NUS every year, as this number will continue to grow.
- Revise the Standard Advanced Training Program in terms of the practical hours, in particular in the aspect of hours distribution
- Recommend IPPE to regularly collect requests from teachers and involve as many coaches as possible, especially those recommended by communities
- Review the programs for the basic secondary school in terms of workload and content, and create "subject-specific" recommendations to harmonize them with the NUS philosophy.
- Writing, examination, publishing, and approval of textbooks require much more time than is actually available. Given the fact that the programs for grades 7-9 have already been approved, this experience can be taken into account - and textbook development for grades 8-9 should be started as early as possible.
- Re-examine the textbooks, at least in terms of anti-discrimination content.
- Consider the possibility of scaling up positive cases of self-reliance (exchange of methodological findings, in particular, related to evaluation; holding training sessions on writing grant applications).
- Make changes to the Action Plan for 2017-2029 on the Concept of State Policy Implementation within the "New Ukrainian School" Reform of General Secondary Education, namely to add the task of publishing textbooks for grades 4, 8, and 9.
- Review or adopt legal regulations under the "Action Plan."





### ANNEXES

### Annex 1 NUS financing – 2022

The reform funding situation is presented in the table below: in 2024, after a break, funding should finally be at a level comparable to that at the start of the full-scale war in 2022. However, hryvnia devaluation during this period should also be considered (for comparison, USD and EUR to UAH exchange rates are presented as of 2021 to November 2023).

The lack of additional payments to teachers of basic secondary schools is also demotivating; the second most popular reason hindering the reform implementation is the irrelevant pay system, according to 51% of the respondents. This percentage can also include respondents who claimed that reform implementation is hindered by "low motivation" (27.4%) as financial incentives are an important part of any external motivation to act. Presumably, the tension in this matter will be relieved by the pay raise planned for 2024.

37.6% of the sociological survey respondents named financial support as one of the main problems hindering NUS implementation. Lack of funding to procure equipment and materials in 2022 slowed down the reform implementation in grades 5, where the lessons were conducted in-person or in a mixed format.



	2021	2	.022		2023		2024	
		Before sequestration	After sequestration					
Budget for education (general fund of MESU)	UAH 139.3 billion	UAH 153.7 billion	UAH 131.0 billion		UAH 122.1 billion		UAH 148.8 billion	
			– Resolution of	Namely: Resolution of the dated September 19, 2023 "C	<u>On providing education</u>	<u>onal subvention from</u>	UAH  1.5 billion z(equipment, materials, teacher training, pilot grade 8)	
NUS subvention	UAH 1.42 billion	UAH 1.577 billion	the Cabinet of Ministers of Ukraine No. 245 dated March 10, 2022 "On the allocation of funds to the reserve fund of the state budget"	UAH 256 409 300  Procurement of teaching aids for classrooms of municipal general secondary education institutions providing educational services under the State Standard of Basic Secondary Education in the first (adaptive) cycle of basic secondary education via in-person or a mix of inperson and distance	UAH 113 200 000 Procurement of teaching aids, multimedia equipment, computer equipment, and furniture for pilot classes.	UAH 43 724 200 Purchase of educational and methodological literature, particularly their electronic and audio versions for students and teaching staff of pilot classes.	grade of	
USD exchange rate (according to the data of the Ministry of Finance for 30.12.2021- 2022, as of 29.11.2023, forecast for 2024)	UAH 27.208	UAH	36.5686	formats. UAH 37.7 (avera	age sale) UAH 36.3644	4 (NBU)	UAH 41.4 (according to the September forecast of the Minister of Finance)	
EUR exchange rate (the same)	UAH 30.776	UAF	ł 38.951	UAH 41.1 (avera	age sale) UAH 39.8172	! (NBU)	Ministry of Finance made no forecast. According to the forecast_of "Informator" experts, the exchange rate will be 43-44 UAH/euro.	
Annual inflation index	110.0%	12	6.0%				· · ·	



This problem has been partially solved locally by allocating funds from the community budget and redistributing the remainder of the educational subvention, sponsorship (from Ukrainian and international donors), and fundraising. In response to the request sent by the New Ukrainian School to the regional military administrations, we received the following examples as listed below.

No.	Oblast	Settlement	Case description
1	Vinnytsia Oblast	Olgopil, Haisyn district	In 2022 and 2023, at the expense of <b>charitable aid from the community agricultural producers</b> , school furniture was purchased for students of two grades 5, Olgopil Lyceum. The total cost was UAH 85,698.49, which was recorded and accounted as supplies in kind.
2	Vinnytsia Oblast	Sytkivtsi, Raihorod village council	The <b>grant</b> allowed the procurement of an acoustic speaker (UAH 3,760) and an interactive whiteboard (UAH 26,085).
3	Vinnytsia Oblast	Severynivka township, Zhmeryn district	An electronic educational tool "Didactic multimedia content" (3 pcs.) was purchased (UAH 79,900) with local budget funds.
4	Zhytomyr Oblast	Zhytomyr	Funds (UAH 4,338,000) to procure sets of interactive panels with additional equipment (73 sets) were allocated from the local budget (budget of the Zhytomyr Territorial Community) by the decision of the Zhytomyr City Council No. 797 dated 29.06.2023.
5	Zhytomyr Oblast	Berdychiv	In 2022, desks and chairs for two classes of Berdychiv City Lyceum No. 15 were procured at the expense of the city budget (UAH 99,980). In 2023, funds of the city budget (UAH 279,560) were used to procure tables, desks, chairs, and bookcases for the gymnasium No. 1 named after T. H. Shevchenko of Berdychiv; TV and laminating machine for gymnasium No. 17 of Berdychiv; tablet for Berdychiv Lyceum No. 15; 15 multifunctional devices (printer-scanner-copier) for city schools.
6	Zhytomyr Oblast	Horodok, Zhytomyr district	In 2022 and 2023, funds from the local budget (UAH 164,000) were used to procure the following interactive equipment (short-focus projector with mount and cable – 2 pcs., SMART interactive board – 2 pcs.) to create an educational environment in the grades 5-6 of IGSE; laboratory furniture (UAH 43,000); teaching aids (UAH 29,430). Village territorial community allocated additional UAH 136,650 for teaching aids and furniture.
7	Zhytomyr Oblast	village Potiivka, Zhytomyr district	In 2023, the remainder of the educational subvention as of January 1, 2023, was used to procure furniture worth UAH 99,066.00 and equipment worth UAH 52,524.00 for the IGSE in Potiiv TC, namely: student desks, chairs, wall cabinets, inkjet printers (2 pcs.), interactive whiteboard, and the student's creativity class.
8	Zhytomyr Oblast	village Kharytonivka, Zhytomyr district	Local budget funds (UAH 45,038) were used to procure furniture, equipment, and learning support materials.
9	Zhytomyr Oblast	village Stanyshivka, Zhytomyr district	In 2023, the village council <b>allocated UAH 396,745.20</b> from the local budget for the NUS implementation in the basic school and related procurement of furniture (single-seated tables of various types – 26+18+20 pcs., double-seated desks – 34 pcs., student chairs of various types – 26+68+56 pcs., cabinet for documents – 1 pc., wall cabinet – 1 pc., boards of various types – 5 pcs.) and equipment (TV – 5 pcs.).



No.	Oblast	Settlement	Case description
10	Zhytomyr Oblast	Novoguivynske township, Zhytomyr district	The village council allocated the local budget to procure eight sets of electronic educational tools – Didactic multimedia content "KM MEDIA ED Profi" (a multimedia web resource with an access code) for eight NUS grades 5 in five community IGSEs (UAH 39,950 per unit, UAH 319,600 in total).
11	Rivne Oblast	village Horodok, Rivne district	In 2023, the village council <b>allocated budget funds</b> (UAH 192,200) to procure 13 laptops for the NUS implementation in the basic school.
12	Rivne Oblast	village Polytsi (Polytsi village council), Varash district	In 2022, <b>the local budget</b> allocated UAH 34,200 to procure chairs and desks for the Romeiky Lyceum, in 2023, another UAH 83,390 was allocated for the same procurement.
13	Rivne Oblast	Radyvyliv city council	In 2023, <b>sponsor funds</b> were allocated to create an educational environment in IGSE grades 5-6: UAH 55,200 was allocated to purchase computer equipment, and UAH 51,000 – furniture for two institutions, for the Druzhba Lyceum – computer equipment (55 Kivi Smart TV for grade 5 (UAH 19,700), LG TV for grade 6 (UAH 18,500); for Nemyriv Lyceum – computer equipment (SAMSUNG TV for grade 5 (17,000 UAH), and furniture (for grade 6: 12 student desks (17,400 UAH), 24 student chairs (18,600 UAH), wall cabinet for accessories, 1 pc. (UAH 15,000).
14	Chernihiv Oblast	Desna village	In 2022, the <b>community funds</b> were allocated to restore windows and repair the Desna Lyceum, which was damaged by explosions on May 17 and June 25, 2022.  In 2022, didactic multimedia content "KM MEDIA ED Profi," an electronic educational tool, was procured (UAH 99,990.00).
15	Chernihiv Oblast	Losynivka township, Nizhyn district	At the beginning of the 2022/2023 academic year, local budget funds (UAH 49,992) were allocated to procure furniture (24 sets: student table + chair) for two NUS grades 5 in Losynivka IGSE, Losynivka TC; UNICEF charity funds (UAH 73,000) were used to procure multimedia equipment (2 projectors). At the beginning of the 2023/2024 academic year, the local budget funds were allocated to procure furniture (23 sets: student table + chair; 2 teacher's desks; a blackboard) – UAH 65,930; multimedia equipment (2 projectors) – UAH 73,000.
16	Chernihiv Oblast	Demydivka township	In 2022 and 2023, the local budget funds were allocated to procure furniture (sets of teacher furniture, sets of student furniture (desk + chair), wall cabinets) to create an educational environment in grades 5-6 of the secondary school – UAH 219,010, computer equipment (laptops, Chromebooks, multifunctional office devices, inkjet printers) – UAH 75,041, and teaching kits and equipment – UAH 80,321.
17	Sumy Oblast		UNICEF sponsor funds (UAH 22,650) were used to procure Micro:bit (a pocket-sized microcomputer designed for the educational industry) – 1 pc., STEM laboratory – 3 pcs.



The examples presented evidence that quite a few communities have successfully won grants or attracted sponsorship. On one hand, additional training for teachers and representatives of the administration on finding grant opportunities, writing applications, and so on could promote activities in this area, while on the other hand, negotiations with foreign donors who are ready to sponsor reconstruction, renewal, and improvement of educational environments in basic secondary schools.

The cases reported by three communities (Zhytomyr, Vinnytsia, and Chernihiv oblasts) should be presented individually: they procured sets of didactic multimedia content for grades 5 at the expense of the local budget. We believe that the need to procure additional multimedia content is in line with the results of our survey. It should be recalled that the answers to the question "At your advanced training courses, did you review methods of working online with NUS grades 5-6?" were as follows: 44.3% of the respondents answered that such methods were reviewed in detail, 40.4% – were reviewed casually, and 11.5% and 3.8%, respectively, noted that the methods of working with NUS grades 5-6 were not reviewed at all or they did not remember such an experience. It means that more than half of the respondents did not receive a thorough knowledge of online learning in NUS grades 5-6 at courses/webinars, and so on. At that, 35.6% of respondents named the lack of high-quality educational materials as one of the reasons hindering the reform implementation. it should be noted that 47.1% of respondents work in a mixed format, therefore, they need knowledge and materials for online learning. Digital content development at the state level (for example, within the scope of UOS activities) could help resolve this issue.

The general situation with material support is presented in response to the information request sent by the New Ukrainian School to the Institute of Education Content Modernization. The institute reported that as of January 1, 2023, according to the data of the departments of education and science of the regional and Kyiv city state/military administrations, there were 11,581 IGSEs in Ukraine providing educational services to fifth-graders in various formats (in person, distance, mixed, family).

The number of grades 5 that were formed and received educational services increased by 8,212 units compared to the forecast before the beginning of the academic year (which was about 82% of the expected number): as of July 1, 2022 – 11,423 classes; as of January 1, 2023 – 19,635 classes. As of January 1, 2023, these 19,635 grades 5 were provided with modern equipment and teaching aids in the total amount of 858,870 pieces/sets/kits (below the difference between pieces, sets, and kits is explained), namely:

- computer equipment 28,899 pcs.;
- multimedia equipment 8,318 pcs./sets;
- digital equipment 2,809 pieces, excluding the number of electronic educational resources;
- appliances 23,660 pcs./sets;
- furniture 647,234 pcs.;
- teaching aids and other educational equipment 147,950 pieces/sets/kits, excluding electronic and audio versions of textbooks/manuals (vs the related 307,002 pieces/sets/kits).



According to IECM, the cost of certain equipment (computer and digital equipment, appliances, school furniture) was reimbursed by local budgets, sponsor funds, public society foundations, and so on - the relevant examples were presented above.

As of July 1, 2023, according to the data of the departments of education and science of the regional and Kyiv city state/military administrations, there were 11,575 institutions of general secondary education in Ukraine providing educational services to sixth-graders in various formats (in person, distance, mixed, family). Luhansk Oblast reported 80 institutions that are controlled by the Ukrainian authorities and work remotely, though having no access to facilities and resources.

"The number of grades 6, which is planned for the beginning of the 2023-2024 academic year, is 19,704," the Institute's answer reads.

As of July 1, 2023, the said grades were provided with modern equipment and teaching aids in the total amount of 870,822 pieces/sets/kits, in particular:

- computer equipment 24,476 pieces;
- multimedia equipment 8,862 pcs./sets;
- digital equipment 2,403 pieces;
- appliances 25,155 pcs./sets;
- furniture 679,653 pieces;
- teaching aids and other educational equipment 130,273 pieces/sets/kits.

Such summaries do not present the security situation in general, thus, we will try to explain this with the example below. We found an interesting case of the problem with facilities and resources communication with MESU last year. MESU response given to Inna Sovsun's deputy's appeal No. 223d9/15-2022/148807 dated September 6, 2022, which she provided to the study team, read: "According to regional and Kyiv city state/military administrations, before the 2022/2023 academic year, MESU in cooperation with the State Scientific Institution IECM monitored equipment and material support of general secondary education institutions (as of July 1, 2022).

The study was conducted given martial law in Ukraine. Study areas included a review of the situation with IGSE classrooms being equipped, which were intended for fifth-graders of the New Ukrainian School in the 2022/2023 academic year."

The response letter outlines the main quantitative findings of this study but also raises certain questions.

#### Statement

#### Question/comment

According to monitoring, 12,543 institutions of general secondary education had to provide educational services to grades 5, of which 11,423 institutions (91% of the total number of schools) were ready to organize the educational process in various formats. At the beginning of the 2022/2023 academic year, these institutions planned to have 21,632 grades 5.

According to current information from the regions, the specified 21,632 grades 5 in 11,423 What does the wording "in various formats" include? Is it just in-person, online, and mixed learning - or also extramural and external study modes? Different formats obviously require different types (and amounts) of equipment, as well as furniture. By the way, the number of classes is significantly higher than that calculated as of January 1, 2023. It is unclear whether this wording is about the equipment and teaching aids procured specifically for grades 5 under requirements for the NUS educational space or about the equipment that is available in the



Statement	Question/comment
institutions of general secondary education were provided with modern equipment and teaching aids in the total amount of <b>963,620</b> pieces/sets/kits, in particular:	school and will be distributed between several grades (5-9 or 5–11).
Computer equipment – 25,604 pieces;	25,604/21,632 classes = 1.18 computers per class
Multimedia equipment – 23,907 pieces/sets;	A piece and a set of multimedia equipment are obviously different things and should not be combined into one item.  23,907/21,632 classes = 1.1 pieces (sets?) of equipment per class
Digital equipment – 3,324 pieces;	This category includes specific appliances for natural science classrooms. For grade 5, it can theoretically be necessary to have integrated courses such as "I discover world," "Environment," and so on, as well as STEM and robotics lessons, if they are in a school curriculum.  3,324/21,632 classes = 0.15 pieces per class
Appliances – 22,546 pieces/sets;	Most likely, it means non-digital devices for classrooms to study the already-mentioned subjects.  22,546/21,632 classes = 1.04 pieces (or sets)
Furniture – 577,779 pieces;	577,779/21,632 classes = 26.7 pieces per class.  According to Article 12 of the Law of Ukraine "On Complete General Secondary Education," in secondary and senior schools, the minimum class capacity is 5, and the maximum 30 (this provision is suspended during martial law). It should be noted that, according to the data of the State Statistics Service of Ukraine, at the beginning of the 2022/2023 academic year, there were 430,777 students in grades 5 in Ukraine, therefore, the average class capacity was 430,777/21,632 = 19.9 students. We do not know which furniture pieces are included (double or single-seated desks? Are wall cabinets, poufs, teachers' tables, and so on taken into account?), so the numbers given in the answer do not reveal the complete picture.
Teaching aids and other educational equipment – 310,460 pieces/sets/kits:  • paper teaching aids – 65,322 pieces/sets;  • electronic versions of paper teaching aids – 3,458 pieces;  • musical instruments – 47,544 pieces/sets;  • instruments (except musical) – 49,307 pieces/sets;  • devices/equipment/facilities/appliances – 14,045 pieces/sets;  • models/miniatures/molds – 56,371 pieces/sets;  • natural objects/slide mounts – 4,060 pieces/sets/kits;  • athletic equipment, inventory – 70,353 pieces/sets/kits.	The difference between the appliances listed above in the amount of 22,546 pieces/sets, and the appliances in the amount of 12,045 pieces/sets is not clear.



These large numbers sound as if grades 5 are fully or almost fully equipped with all the necessary items for learning, including whatever is required under the new State standard of basic secondary education. However, if we take, for example, the <u>Standard List of Teaching Aids and Equipment for Classrooms</u> and STEM Laboratories, we see a detailed list on 69 pages. MESU's response provided in 2022 had no information on whether this list was referred to when accumulating data on equipment and learning support materials. It can be assumed that such shallow communication as presented above is one of the factors slowing down the reform implementation. Posting "optimistic data" will not solve the problem.



## Annex 2

# Have the writing teams of curricula under the old State Standard and model programs for grades 5-6 of NUS changed?

No.	Subject	Writing team (old program)	Writing team (NUS model program)	
1	Ukrainian	First writing team (2012): Shelekhova H.T., Pentyliuk M.Ya., Novosiolova V.I., Hnatkovych T.D., Taranik-Tkachuk K.V., Korzhova N.B.  The program load reduction was performed by (2015): Shelekhova H.T., Holub N.B., Novosiolova V.I., Sydorenko V.V., Tarasenko O.O., Usatenko H.O., Operchuk O.P., Melnyk M.M., Tkachova H.V., Hlazova O.P., Panasenko N.M.  The program was updated by: Hlazova O.P., Romanenko Yu.O., Holub N.B., Kondesiuk T.V., Kotusenko O.Yu., Melnychenko O.M., Mykhaylovska N.A., Panchenkov A.S., Pcheliana L.V.	I. II.	Holub N.B., Horoshkina O.M. Zabolotnyy O.V., Zabolotnyy V.V., Lavrynchuk V.P., Plivachuk K.V., Popova T.D.
2	Ukrainian literature	First writing team: Movchan R.V., Taranik-Tkachuk K.V., Bondar M.P., Ivasiuk O.M., Kocherha S.A., Kavun L.I., Nezhyvyy O.I., Mykhailova N.V. The working group that reduced the program load (under Order No. 100 of the Ministry of Education and Science of Ukraine dated 06 February 2015 and Order No. 617 of the Ministry of Education and Science of Ukraine dated 03 June 2016): Shunkaruk N.I., Movchan R.V., Kovalenko L.T., Logvinenko N.M., Iliasevych N.V., Mykhailova N.V., Usatenko H.O., Panasenko N.M. The working group that updated the program (under Orders of the Ministry	I. II. III.	Yatsenko T.O., Pakharenko V.I., Slyzhuk O.A., Tryhub I.A., Kachak T.B., Kyzylova V.V., Ovdiychuk L.M., Dyachok S.O., Makarenko V.M. Arkhypova V.P., Sichkar S.I., Shylo S.B. Chumarna M.I., Pastushenko N.M.



No.	Subject	Writing team (old program)	Writing team (NUS model program)		
		of Education and Science of Ukraine No. 52 dated 13 January 2017 and No. 201 dated 10 February 2017): Molochko S.R., Mykhailova N.V., Kotusenko O.Yu., Fasolia A.M., Drozdovskyy D.I., Ratushniak O.M., Pivtorak V.R., Bilous A.V., Stus T.B.			
3	World Literature	There is no information about the writing team for the program updated in 2022 (Order of the Ministry of Education and Science of Ukraine No. 698 dated 3 August 2022).	<ul> <li>I. Voloshchuk Ye.V.</li> <li>II. Nikolenko O.M., Isaieva O.O., Klymenko Zh.V., Matsevko- Bekerska L.V., Yuldasheva L.P., Rudnitska N.P., Turianytsa V.G., Tikhonenko S.O., Vitko M.I., Dzhangobekova T.A.</li> <li>III. Bohdanets-Biloskalenko N.I., Sniegiriova V.V., Fidkevych O. L.</li> </ul>		
4	Integrated literature course (Ukrainian and world)		<ul><li>I. Yatsenko T O., Tryhub I.A.</li><li>II. Chumarna M.I., Pastushenko N.M.</li></ul>		
5	Integrated language and literature course (Ukrainian language, Ukrainian and world literature)		Staragina I.P., Novosiolova V.I., Tereshchenko V.M., Romanenko Yu.O., Blazhko M.B., Tkach P.B., Panchenkov A.O., Volosheniuk O.V		
6	Foreign language	There is no information about the writing team of the program, approved by Order of the Ministry of Education and Science of Ukraine No. 804 dated 07 June 2017.	<ul> <li>I. Zymomria I.M., Moysiuk V.A., Trifan M.S., Ungurian I.K., Yakovchuk M.V.</li> <li>II. Redko V.G., Shalenko O.P., Sotnykova S.I., Kovalenko O.Ya., Koropetska I.B., Yacob O.M., Samoiliukevych I.V., Dobra O.M., Kior T.M.</li> </ul>		
7	Second foreign language		Redko V.G., Shalenko O.P., Sotnykova S.I., Kovalenko O.Ya., Koropetska I.B., Yacob O.M., Samoiliukevych I.V., Dobra O.M., Kior T.M., Matskovych M.R., Hlyniuk L.M., Braun Ye.L.		
8	Discovering nature (integrated course)		<ul> <li>I. Bida D.D., Hilberg T.G., Kolisnyk Ya.I., Korshevniuk T.V.</li> <li>II. Shalamov R.V., Kaliberda M.S., Hryhorovych O.V., Fitsailo S.S.</li> <li>III. Bobkova O.S.</li> </ul>		
9	Natural sciences (integrated course)		Bilyk Z.I., Zasiekina T.M., Lashevska H.A., Yatsenko V.S.		
10	Environment		Hryhorovych O.V.		



No.	Subject	Writing team (old program)	Writing team (NUS model program)
11	Biology (under the old program it was studied from grade 6)	There is no writing team specified in the program.	Under the new program, it is studied from grade 7.
12	Geography (from grade 6 under both programs)	The working group that prepared the 2012 program: Oliynyk Ya.B., Hladkovskyy R.V., Datsenko L.M., ZabuHa N.I., Kudyrko V.I., Kukhar L.O., Munich N.V., Uvarova H.Ye. In 2015, the program was amended by the following working group: Oliynyk Ya.B., Vitenko I. M., Havriliuk V.H., Gilberg T.H., Datsenko L.M., Dovhan H.D., N. I. Zabuga N.I., Kobernik S.H., Kovalenko R.R., Kudyrko V.I., Mahaletska T.D., Munich N.V., Nazarenko T.H., Nadtoka O.F., Pryimak O.M., Ryhlyk T.I., Sliusar O.I., Sovenko V.V., Stadnyk O.H., Uvarova H.Ye. The working group that updated the program on geography for students of grades 6–9 (2017): Vitenko I.M., Bulava L.M., Hladkovskyy R.V., Gilberg T.H., Bobrovskyy M.V., Karpiuk H.I., Kudyrko V.I., Umanska T.V., Sliusar O.I., Sokol T.K., Fastov I.V., Kozachuk O.O., Ilnytskyy I.M. The working group that updated the program on geography for students of grades 6–9 (2022): Dovhan A.I., Hladkovskyy R.V., Savchuk I.H., Sovenko V.V.	I. Kobernik S.H., Kovalenko R.R., Gilberg T.H., Datsenko L.M.  II. Zapototskyy S.P., Karpiuk H.I., Hladkovskyy R.V., Dovhan A.I., Sovenko V.V., Datsenko L.M., Nazarenko T.H., Gilberg T.H., Savchuk I.H., Nikytchuk A.V., Yatsenko V.S., Dovhan H.D., Groma V.D., Horovyy O.V.
13	Mathematics	The program was compiled by (2012): Burda M.I., Maliiovanyy Yu.I., Nielin Ye.P., Nomirovskyy D.A., Pankov A.V., Tarasenkova N.A., Chemerys M.V., Yakir M.S. The program load was reduced by (2015): Burda M.I., Pankov A.V., Yakir M.S., Nomirovskyy D.A. The program was updated by (2017): Burda M.I., Kudrenko B.V., Bilyanina O.Ya., Azarenkova A.I., Bukovska O.I., Kindyukh T.S., Lysenko O.Ye., Mylianyk A.V., Panova N.V., Pankov A.V.	<ol> <li>Bedenko M.V., Klochko I.Ya., Kordysh T.H., Tadeiev V.O.</li> <li>Burda M.I., Vasylieva D.V.</li> <li>Vasylyshyn M.S., Milyanyk A.I., Pratsyovytyy M.V., Prostakova Yu.S., Shkolnyy O.V.</li> <li>Ister O.S.</li> <li>Merzliak A.H., Nomirovskyy D.A., Pykhtar M.P., Rubliov B.V., Semenov V.V., Yakir M.S.</li> <li>Radchenko S S., Zaitseva K.S.</li> <li>Skvortsova S.O., Tarasenkova N.A.</li> </ol>
14	Healthcare, Safety, and Welfare (integrated course)		<ol> <li>Vasylenko S.V., Koval Y.Yu., Kolotiy L.P.</li> <li>Hushchyna N.I., Vasylashko I.P.</li> <li>Vorontsova T.V., Ponomarenko V.S., Lavrentieva I.V., Khomych O.L.</li> <li>Khytra Z.M., Romanenko O.A.</li> <li>Shyian O., Voloshchenko O., Hryniova M., Diakiv V., Kozak O.,</li> </ol>



No.	Subject	Writing team (old program)	Writing team (NUS model program)		
			Ovcharuk O., Sedochenko A., Soroka I., Strashko S.		
15	Fundamentals of Health Science	There is no information about the writing team of the old <u>program</u> for grades 6-9, re-approved by Order No. 698 dated 03.08.2022.			
16	Ethics		<ul> <li>I. Ashortia Ye.D., Bakka T.V., Zheliba O.V., Kozina L.Ye., Meleshchenko TV., Shchupak I.Ya.</li> <li>II. Pometun O.I., Remekh T.O., Kryshmarel V.Yu.</li> </ul>		
17	Learn to live together		Vorontsova T.V., Ponomarenko V.S., Lavrentieva I.V., Khomych O.L.		
18	Culture of good- neighborly relations		Arajioni M.A., Kozorog O.H., Lebid N.I., Potapova V.I., Ungurian I.K.		
19	Spirituality and morality for a person and a society		Zhukovskyy V.M., Sidanich I.L., Hryschuk D.H., Hubenia I.I., Lachman N.M.		
20	Ukraine and the world. Introduction to		I. Kaftan M.V., Kozoroh O.H., Kostiuk I.A., Mudryy M.M., Selivanenko V.V.		
	history and civic education (integrated		II. Vlasova N.S., Zheliba O.V., Kronhauz V.O., Sekyrynskyy D.O., Shchupak I.Ya.		
	course)		III. Arkusha O.H., Diakiv V.H., Mudryy M.M., Pastushenko R.Ya., Khlypavka L.M.		
			IV. Danylenko V.M., Hisem O.V., Martyniuk O.O., Okhredko O.Ye., Tarasiuk T.D.		
21	Introduction to the history of Ukraine and civic		I. Burlaka O.V., Vlasova N.S., Zheliba O.V., Maiorskyy V.V.,		
	education (grade		Piskariova I.O., Shchupak I.Ya.  II. Zheliba O.V., Mokrohuz O.P.		
	5)		III Hisem O.V. Martyniuk O.O.		
			Meleshchenko T.V., Shchupak I.Ya.		
22	Discovering history and		I. Vasylkiv I.D., Dymiy I.S., Sheremeta R.V.		
	society (grades 5- 6, integrated course)		II. Pometun O.I., Remekh T.O., Maliienko Yu.B. Moroz P.V.		



No.	Subject	Writing team (old program)	Writing team (NUS model program)		
			III. Hisem O.V., Martyniuk O.O., Hisem O.O., Ohredko O.Ye.		
23	History of Ukraine. World history (grade 6)	In 2012, programs on history were compiled by: Pometun O., Atamas O., Vlasov V., Havryliuk Zh., Yevtushenko R., Komarov Yu., Kostiuk I., Ladychenko T., Maliienko Yu., Stavniuk V., Tkachenko V., Tymchenko A.  In 2017, programs on history were updated by: Mudryy M., Baikienich H., Bakhanov K., Burlaka O., Hyrych I., Gromovy V., Hupan N., Yevtushenko R., Kendzor P., Ksiondzyk T., Maidanyk O., Mitrofanenko Yu., Osmolovskyy S., Pastushenko R., Rukkas A., Skalskyy V., Khlypavka L., Cherevko O., Shchupak I.  In 2018, educational programs on the history of Ukraine were revised by: Patryliak I., Mudryy M., Baikienich H., Bakhanov K., Burlaka O., Vlasov V., Havryliuk Zh., Haliehova O., Hyrych I., Golovko V., Hrynevych V., Huk O., Yevtushenko R., Ksiondzyk T., Kulchytskyy S., Lapchynska N., Maidanyk O., Maliienko Yu., Mysan V., Marochko V., Ostrovskyy V., Pastushenko R., Rukkas A., Serhiychuk V., Khlypavka L.  In 2022, programs on the history were amended and supplemented by (under the order of the Ministry of Education and Science of Ukraine No. 521 dated June 3, 2022):  Hrynevych L., Aristov V., Baikienych H., Bakhanov K., Gavryliuk Zh., Hyrych I., Hrynevych V., Yevtushenko R., Zheliba O., Zakharchuk I., Maliienko Y., Meleshchenko T., Mokrohuz O., Mudryy M., Ostrovskyy V., Pavlov V., Pastushenko R., Polianskyy P., Potylchak O., Sokyrko O., Starchenko N., Khlypavka	I.	Piskariova I.O., Burlaka O.V., Maiorskyy V.V., Meleshchenko T.V., Shchupak I.Ya. Hisem O., Martyniuk O., Sorochynska N., Hisem O., Vasylenko Ya.	
24	Computer science	L., Shchupak I.  The curriculum (studied from grade 2) in 2015–2016, was prepared by a working group: Zhaldak M.I., Goroshko Yu.V., Korshunova O.V., Kudrenko B.V., Morze N.V., Moturnak Ye.V., Nanaieva T.V., Protsenko H.O., Ryvkind Y.Ya., Shakotko V.V., Zavadskuy I.O., Lapinsky V.V., Pankov A.V.		Zavadskyy I.O., Korshunova O.V., Lapinskyy V.V. Morze N.V., Barna O.V. Pasichnyk O.V., Chernikova L.A.	
		The working group on the program update (2017): Zavadskyy I.O., Pasichnyk O.V., Sarazhynska N.A., Bohatyriov O.O., Bondarenko S.M., Bulyhina L.V., Gromko H.Yu., Korotka O.B., Kudrenko B.V., Lapinskyy V.V., Paliushok L.V., Fedor L.M.			



No.	Subject	Writing team (old program)	Writing team (NUS model program)	
25	Dramatic art and theater	There is no information about the writing team of the program for grades 5–9, which is studied from grade 5 along with computer science.	<ul> <li>I. Radchenko S.S., Borovtsova Ye.V.</li> <li>II. Ryvkind Y.Ya., Lysenko T.I., Chernikova L.A., Shakotko V.V.</li> <li>III. Kozak L.Z., Vorozhbyt A.V.</li> <li>Starahina I.P., Chuzhynova I.Yu., Ivasiuk O.M.</li> </ul>	
26	Arts (integrated course)	The program was compiled by (2012): Masol L., Kovalenko O., Sotska H., Kuzmenko H., Marchuk Zh., Konstantynova O., Pankiv L., Hrynchuk I., Novikova N., Ovinnikova N. Working group on the program update: Haidamaka O., Liemesheva N., Abramian T., Huseva O., Koval O., Skyba M., Shlieienkova T.	Lobova O.V., Nazar L.Y.,	
27	Musical arts		Fring E., Antal D., Heider L., Kish Yu., Korneichuk L., Ferents Ye.	
28	Graphic arts		There is no model program available.	
29	Physical education	The program was re-approved by the Order of the Ministry of Education and Science of Ukraine No. 698 dated 03 August 2022. Different writing teams were responsible for each variable component (different types of games).	Pedan O.S., Kolomoiets H.A., Boliak A.A., Rebryna A.A., Derevianko V.V., Stetsenko V.H., Ostapenko O.I., Lakiza O.M., Kosyk V.M., and others.	
		The following working group compiled the program on PT for grades 6–9 of general secondary education institutions in 2012: Krutsevych T.Yu., Halenko L.A., Derevianko V.V., Diatlenko S.M., Ilchenko A.I., Kravchenko N.S., Turchyk L.Kh. Cheshevko S.M. The working group that updated the program (under the Order of the Ministry of Education and Science of Ukraine No. 521 dated 03 June 2022): Boliak A., Hladkovskyy R., Hloba M., Derevianko V., Dykyy O., Kolomoiets H., Rebryna A.		
30	Technologies		<ul> <li>Kilderov D.E., Machacha T.S., Yurzhenko V.V., Lupiak D.M.</li> <li>Tereshchuk A.I., Abramova O.V., Haschak V.M., Pavych N.M.</li> </ul>	
			<ul><li>III. Tutashynskyy V.I.</li><li>IV. Khodzytska I.Yu., Horobets O.V., Medvid O.Yu., Pasichna T.S., Prykhodko Yu.M.</li></ul>	



No.	Subject	Writing team (old program)	Writing team (NUS model program)
31	Labor and Professional Training	The initial working group: Sydorenko V.K., Borynets N.I., Borovyk D.V., Haschak V.M., Danylina E.M., Diatlenko S.M., Leshchuk R.M., Losyna N.B., Machacha T.S., Pavych N.M., Tereshchuk A.I., Khodzytska I.Yu., Yurzhenko V.V.  The working group that reduced the program load (under Order of the Ministry of Education and Science of Ukraine No. 100 dated 06.02.2015): Borynets N.I., Borovyk D.V., Diatlenko S M., Losyna N.B., Medvid O.Yu., Melnyk O.V., Pavych N.M., Parkhomenko O.M., Popova T.S., Prykhodko Yu.M., Tereshchuk A.I., Tutashynskyy V.I., Khodzytska I.Yu., Paliy Yu.V.  The working group that updated the program (under order of the Ministry of Education and Science of Ukraine No. 52 dated 13.01.2017 and order No. 201 dated 10.02.2017): Tereshchuk A.I., Burdun V.V., Diatlenko S.M., Pavych N.M., Gaschak V. M., Medvid O.Yu., Paliy Yu.V., Kovalchuk O.S., Krimer V.V., Leshchuk R.M., Paliychuk M.D., Khodzytska I.Yu.	
32	Robotics		Sokol I.M., Chentsov O.M.
33	STEM (interdisciplinary integrated course)		Buturlina O.V., Artemieva O.Ye.



## Technical remarks

- 1. The NUS curriculum provides for teaching the "Arts" integrated course or individual subjects "Musical art" or "Graphic Art," but there is no model program on the latter on the websites of MESU and IECM available.
- 2. The decision to hide writing teams in some updated programs based on the old State Standard (foreign literature, foreign language, biology, fundamentals of health science) is strange.
- 3. Unlike model programs, old ones contained detailed data about their compilers. The percentage of scientific professionals and teachers, who developed the program on a certain subject, and their practical experience could be examined. There is no such information in the new model programs, though the said could have become an additional choice factor for teachers.
- 4. Many authors from teams working on programs for natural sciences, mathematics, informatics, history, labor and professional training, and physical education then joined the development of NUS model programs. It is difficult to draw conclusions based on this fact alone, but it may indicate a lack of specialists or the reluctance of other specialists to join the program development (what can motivate them?). In the future, new and old programs should be compared in more detail regarding their content and methodology: we assume that the specialists used their previous work, so we recommend checking whether the old approaches are included in the new programs "automatically."



## Annex 3

# Key findings and recommendations: summary

Key findings	Problematic issues / Assumptions	Possible solutions
--------------	-------------------------------------	--------------------

#### Demographic characteristics of the sample of teachers

Out of 600 respondents:

- 30% are aged 40-49;
- 27% 50-59;
- 20% 30-39:
- 14% over 60;
- 9% 18–29.

These data generally coincide with the educational indicators presented on the dashboard (the average age of a teacher in Ukraine is 46.1).

The share of women in the selection was 91.5%, men - 7%. Other respondents did not state their gender. The limited number of men in the sample may prove that the profession is not attractive to them.

According to the "Monitoring study on NUS reform implementation by teaching staff" (SSI Institute of Educational Analytics, 2022), as of the 2021/2022 academic year, the share of teachers under 30 has decreased to 11.7% of the total number of secondary school staff. By contrast, it was 15.5% in the 2017/2018 academic year. One can thereby assume that the government's measures aimed at improving the occupation's prestige are insufficient.

Addressing the "occupational aging" problem requires momentous decisions at the level of the state. The situation can be improved by:

- a campaign to create a positive public opinion about the key role of the teacher in the community;
- reforming the pedagogical education system (practical training of future teachers for the real challenges of school work: the gap between the knowledge acquired at university versus practice, the lack of support in the educational institution later frustrates young teachers);
- wider introduction and financing of mentoring activities in schools, introducing pedagogical internships. Despite the existing regulatory framework, the actual implementation did not take place due to
- a significant increase in salaries and a detailed definition of a teacher's job duties in order to improve the educational process
- introducing a new pay system for teachers aimed at their support both in the conditions of the NUS reform and in the difficult wartime conditions and post-war reconstruction - in particular, through benefits. Such benefits could become an additional factor in making the job attractive and partially compensate for the salary, which is insufficient from the point of view of education specialists.



#### Advanced training

There was a general advanced training related to NUS for most teachers working in grades 5-6 (96% of respondents completed it)

The top 3 organizations providing advanced training related to the new State Standard implementation in basic secondary schools:

- Institutes of Postgraduate Pedagogical Education or Academies of Continuing Education – 85%;
- Civil society organizations (for example, Osvitoria PU, School for Democracy program, etc.) –22%;
- Institute of Education Content Modernization –18%.

Teachers are ready to recommend these courses to their colleagues.

Despite the lack of targeted funding from the state, 22% of teachers underwent courses offered by NGOs, which can be considered a successful case.

According to the respondents, the main factors determining course selection are as follows:

- course practical focus59%.
- availability of necessary content modules – 42%,
- previous experience of attending courses offered by the particular organizer – 19%.

According to the teachers, other factors are of less importance:

86% of teachers believe that the knowledge acquired during advanced training is sufficient. Still, the answers to other questions indicate that the knowledge acquired by teachers is insufficient and non-systematic. For example, survey respondents were asked to choose from 13 skills, methods, and competencies they were mastering at the advanced training or they were learning to use. Still, none of the proposed options were chosen by more than half of the respondents - even though any number of options could be marked. The problem of the nonsystematic and shallow nature of the acquired knowledge is particularly clear in the example of evaluation methods: on one hand, 45% chose evaluation of their students' educational achievements as the best mastered one. while on the other hand, it was named among the top topics to be studied in advanced training:

- modern approaches to teaching under NUS – 55%,
- digital technologies for teaching activities – 45%,
- <u>evaluation of students'</u>
   <u>educational</u>
   <u>achievements –</u> 42%.

The teachers deem the said three topics (as well as the NUS concept implementation in basic secondary school) to be the most relevant for advanced training, therefore, they are not mastered. Despite the alleged "sufficient knowledge," these topics

- involve practical coaches, namely, subject teachers from pilot schools, when conducting advanced training based on IPPF:
- Review the approximate allocation of hours in the Standard Advanced Training Program for Teachers related to the new State Standard of Basic Secondary Education Implementation and add topics more relevant for education specialists; a similar program for the IGSE principals also requires revision.
- Suggest the institutions involved in advanced training reduce the volume of the course material, make it more detailed, and issue a manual with these materials also in digital form.

Collecting data from IPPEs from different regions allowed us to draw up a comprehensive list of categories of people engaged as coaches there (subject to funding availability). In our opinion, recommending this list as a reference would cover most of the teachers' needs – both in methodological and practical knowledge of the subject, development of critical thinking, civic consciousness, etc.:

- teachers of pilot schools;
- teachers of regional schools, known for introducing advanced teaching methods (candidates must be submitted by ATCs);
- developers of model programs;
- authors of textbooks;
- employees of CPDTS and inclusive resource centers;
- representatives of civil society organizations;
- teachers of higher education institutions, namely the pedagogical field (this option is mutually beneficial given that their representatives will be able to introduce new approaches to future teachers' training at the place of primary employment based on their experience).
- Regulate the advanced training market.
   One relevant tool can be a state platform consolidating all advanced training services providers with the option of collecting feedback from participants, quality control mechanisms, and integrity of the advanced training process for teachers;
- After regulating the advanced training market, launch the "money follows the teacher" mechanism, beyond just on paper, so that this already fair market becomes available to teachers.



## **Key findings**

## Problematic issues / Assumptions

#### Possible solutions

- colleagues' feedback about the course – 13%.
- feedback on the internet – 6%.
- attitude of the principle – 5%,
- course cost 4%.

We've observed a strong demand for practical training, for the capability to immediately use the acquired knowledge at work.
Teachers most often named the following skills/competencies as mastered:

- methods for evaluation of educational achievements – 45%,
- key competencies development – 39%,
- organizing group work in the classroom –37%.

At least 6% of teachers admitted that they paid to get a certificate without any training, however, this number may be as high as 16% because another 10% chose the "Not sure" option when answering a question about the purchase of certificates.

require additional attention.

According to in-depth interviews, teachers lacked:

- practical cases;
- ready-made tools to teach specific subjects;
- time to study the material;
- manuals with course materials;
- training in modern approaches to teaching under NUS;
- training in digital technologies, specific features of online activities:
- information about the specific features of NUS evaluation.

The fact that most education specialists underwent targeted advanced training to work with grades 5-6 of NUS offered by IPPE/ACE may be evidence not of the popularity or high level of quality of services provided by these institutions, but rather a systemic problem with the funds' allocation on advanced training Despite the implementation of the "money follows the teacher" mechanism, it rarely applies in practice. More details are available in relevant publications on the NUS website.

- promote partnerships between civil society organizations and IPPE/ACE in the field of advanced training related to NUS introduction in secondary schools. IPPE and ACE can adopt and implement the experience of online courses offered by civil society organizations to improve their solutions.
- apply the successful practice of mass advanced training for teachers working in NUS primary school, namely:
  - ocompleting an online course presenting subject teachers with the philosophy of NUS and the differences between the old and new educational systems; delivering teaching methods in specific educational fields under the new state standard of basic secondary education; introducing modern teaching methods and tools:
  - work with trained coaches locally to consolidate theoretical and practical skills

Wherever applicable given the security situation, renew an in-person or mixed format in advanced training, in particular by NUS coaches working with teachers.

Supervision at NUS also should be improved: external tests of teachers' knowledge gained in advanced training courses, support provision to address problems and questions. The said task can be undertaken by CPDTS, Centers for Professional Development of Teaching Staff. MESU should motivate communities to establish a CPD or enter into service agreements with CPDs of other communities.



We can assume that teachers have not mastered formative assessment to an acceptable level. The indepth interviews include answers proving that teachers see formative assessment as a purely formal activity – a

- Pay increased attention to various types of evaluation, in particular, formative assessment, in methodological recommendations when undertaking courses and advanced training.
- teachers note they do not have enough time to conduct formative assessments, therefore, it is worth providing recommendations on an "express format," for example.



## Key findings Problematic issues / Possible solutions Assumptions

mandatory written document describing their student's achievements in all subjects including key competencies and crosscutting skills. It will be important to analyze (within a separate study) the professional standards and curricula of higher education institutions in the pedagogical field, to find out whether their programs contain the philosophy of the "New Ukrainian School" reform, specific aspects of its implementation, namely, assessment (formative, level-based, etc.), as well as to examine the readiness of graduates of Pedagogical Higher Educational Institutions to work in NUS. Use the results to recommend such higher education institutions the following: add program modules directly dedicated to NUS, among other things, evaluation issues.

The assumption that teachers do not understand the "feedback" concept is related to the formative assessment: 67% stated that they usually provide it through personal interaction with a student, which is quite doubtful given the real amount of time available for such communication, especially in an online format. The results of the second round of in-depth interviews proved that teachers see "feedback" as more of students reviewing the education material while having scant ideas about their feedback.

Pay more attention to the "feedback" concept in advanced training, in communication via field-specific media, in methodological explanations, etc.

#### Content of education

Most teachers (about 70%) are still working with individual subjects and not integrated courses.

This may show a reluctance to change the usual work patterns, particularly due to overload and insufficient financial motivation. Moreover, even given the wish to switch to integrated courses, teachers may feel insecure about the new material, and insufficient methodological tools or subject knowledge for teaching them and therefore be afraid to get engaged in such educational activities.

- Recommend IPPE/ACE to develop fieldspecific advanced training courses dedicated to integrated subjects.
- Improve cooperation with higher education institutions in the pedagogical field on expanding the list of subjects aimed at mastering the content and methods of teaching integrated courses.
- Initiate public discussions on the need to reform higher pedagogical education in general: in particular, higher education institutions in the pedagogical field should be more focused on the NUS reform, thereby also developing recommendations, as well as being involved in training and retraining of education specialists for the implementation of the new State standard of basic secondary education.



Karatia dia a	Problematic issues /	Dansible selections
Key findings	Assumptions	Possible solutions

- Additionally, study foreign experience (for example, "reference" textbooks on integrated courses), and identify solutions to be used in Ukrainian educational
- Recommend that higher education institutions in the pedagogical field teach students to evaluate the quality of educational content and create their materials. Such training can involve all stakeholders, particularly NGOs, authors of textbooks, and so on.

Analyzing model programs in Ukrainian language allowed us to identify that the course content, the learning goals, and the general approach to the subject have almost no differences from the program based on the previous State Standard. The approach remains "academic" and "theoretical" in general, while the "linguistic" component of the program prevails over the "speech competence."

Of the three model programs in Ukrainian literature available for grades 5-6, teachers most often choose the one that is almost 70% similar to the "old program."

The "compromise-based" recommendation to read large texts in their shortened version is still a serious problem, as it has created the illusion that the volume of material has decreased, although there has been no reduction, either in terms of texts to be studied or in terms of theoretical literary material. For example, according to the old curriculum, there were 31 compulsory texts of various genres to be studied in grade 5, while in the new ones, this number is 28, 38, and 44,

We assume that "commitment" to old approaches to learning and specific texts in the case of the Ukrainian language and literature is caused by several factors, namely:

- lack of understanding of how and why to teach "in a new way";
- fear of making a mistake, of not knowing something (it is safer to teach the "old" way);
- lack of time to master new material in a quality manner;
- inability to master new material due to its inaccessibility (some texts included in the programs are not available, even in bookstores - more information is available in this document).



This literature and language subject is only one example proving that approaches to educational content development should be

- Current programs must be reviewed for compliance with the State Standard followed by the adoption of further decisions on their validity until being approved indefinitely, that is, they will be applied and used for textbook compilation unless officially canceled.
- A valuable resource for teachers can be alternative programs focused on practical goals (for example, in the literature and language subject – compliance with the principles of reading competence under PISA) or recommendations on ways on more effectively using existing content (modifying programs, using textbook material, etc.).
- The process of improvement and reapproval of programs should be started as soon as possible, better yet even as you read this, so that by 2027, when new textbooks for grade 5 are to be printed, updated programs and educational literature will already be available.



respectively. If we take, for example, Yatsenko's program in Ukrainian literature for grades 7-9, interdisciplinary relationships here are broken as it suggests studying literature of the 20th and 21st centuries chronologically in express mode, while the Ukrainian history and world history programs do not yet include these periods.

Even salary bonuses do not motivate teachers to design curricula in contrast to the availability of free time (50% of teachers could be motivated to make a tailored curriculum for a subject by free time, and only 35% by bonuses).

As with advanced training, we assume that the teachers' fatique and exhaustion have reached the point where they require ready-made (outof-the-box) solutions, as they do not have the resources to implement a creative approach to teaching and pedagogical autonomy constantly. Moreover, teachers may lack knowledge on how to develop a program "from scratch" or adapt a model to the needs of one of their students.

On one hand, teachers need ready-made solutions providing them with materials at a minimum sufficient level. On the other hand, this approach does not hinder creative solutions, should a teacher have the time, the will, and the desire. To support teachers who wish to develop tailored programs but do not have the necessary knowledge, it is worth:

- recommending IPPE/ACE to introduce individual courses on curriculum development;
- recommending that higher education institutions in the pedagogical field introduce relevant topics into their curricula.

Teachers **have** comments on the textbook content (it should be noted that the textbooks are developed based on model programs). The survey results revealed teachers' opinions about textbooks in mathematics, Ukrainian language, Ukrainian literature, and foreign languages. Comments are mostly related to the following

interconnection of educational material with real requests and children's lives (the indicators are similar for the four subjects listed above: from 29.3% in English to 33% in mathematics);

#### We assume that:

- the short cycle of textbook development based on the model program had a drastic effect on the educational content quality;
- the scientific conclusions of textbooks and examinations of the programs, even when properly presented, have not been taken into account by the developers and authors in full;
- teachers are highly dependent on textbooks: they lack time, energy, and knowledge to not teach "by the book," and given the current situation, this is

- Start developing textbooks to be republished in the next cycle and encourage compilation of high-quality methodological kits (textbook, workbook for students, and teacher's guide) solutions that work out of the box.
- Change the competition procedure (in particular, the part related to the presentation of the educational materials to teachers) and the terms for textbook development (to be extended).
- To re-examine textbooks, which are the most complained about in the public space, and to develop methodological guidelines on the proper use of the existing published textbooks following the examination results.
- Change the general textbook **examination** procedure: extend examination terms; increase responsibility for scores; ensure the anonymity of writing teams; assess with clearly defined criteria rather than express the subjective expert opinion as a justification for conclusions.



## **Key findings**

## Problematic issues / Assumptions

#### Possible solutions

- tasks for schoolchildren (36.7% of the respondents mostly commented on textbooks for Ukrainian literature: less in mathematics -27.7%: Ukrainian language – 33.1%, and foreign languages -30.3%):
- theoretical material content(in particular, its complexity for children of a certain age – here the least comments were made by teachers of foreign language and mathematics (19.2% and 21.4%, respectively), higher dissatisfaction was observed among teachers of Ukrainian language and literature (30.6% and 28.6%);
- consistency of theoretical material presentation (the largest number of comments – from teachers of foreign languages (32.2%), mathematics and Ukrainian literature -17% and 17.3%, respectively, and Ukrainian language -24.8%);

dissatisfaction with links to electronic resources ranges from 17.2% to 20.4%, the presentation style is the most unsatisfactory for teachers of foreign (18.2%) and Ukrainian (14.9%) languages, and illustrative material - for teachers of foreign language (15.2%) and mathematics (17%); Moreover, during indepth interviews, teachers mentioned drawbacks of textbooks such as the discrepancy between material to be

another reason to increase attention to educational content quality.

- Change the system of textbook development: currently, publishers influence this process, so for the textbook to be ordered, it often complies not in line with the NUS philosophy but with the request of education specialists wishing to "work as we used to."
- Give more time to choose textbooks, as well as motivate discussion of textbooks by an expert environment to facilitate the selection process for teachers.
- Review operations of the institution responsible for the textbook examinations (IECM) and decentralize the functions of textbook examination and procurement.
- On the same note, consider the likely cost of a published workbook (to be reprinted every year) to completely replace a student's textbook, and the full cost of a methodical kit, which could include ongoing comprehensive teacher's support by the publisher (for example, advanced training courses).



#### covered and lesson duration.

No comments on textbooks were expressed by:

- 21.4% of teachers of mathematics,
- 19% Ukrainian language,
- 20.4% Ukrainian literature,
- 17.2% foreign language

Analyzing several textbooks in Ukrainian literature for grade 5 (based on the most popular program by Arkhypova) and all model programs on this subject for grades 5-9 has revealed that certain content does not correspond to the target audience's age (texts with detailed descriptions of death, cruelty, etc.), contains uncommented discriminatory statements (in terms of gender or people with disabilities), and "depressive" narratives in the context of patriotic upbringing. Large arrays of texts in books are available by QR codes, and most stories are shortened, which directly contradicts the global goal defined in programs in literature: to learn to understand a literary work in its stylistic harmony.

#### As to the specific features of teaching online

- 44.3% of respondents noted that this issue was considered in detail in advanced training courses;
- 40.4% was considered, but briefly;

The way teachers assess their mental condition proves that since the 2022 invasion, 78% of the respondents have felt an increase in anxiety, fear, sadness, or anger. It is not surprising that such a condition affects cognitive abilities, namely, the ability to create educational content. Teachers require ready-

- Create a large database of ready-made materials for teachers to use when compiling lessons, thus adapting curricula to online format with minimal effort.
- Create more high-quality courses in general computer literacy and specific tools for efficient online work (by NGOs, IPPE/ACE, and other providers of relevant services).



## **Key findings**

## Problematic issues / **Assumptions**

#### Possible solutions

the rest, that is a total of 15.3% - issue was either not considered at all, or they cannot recall such an experience.

At that, answers to the question about the materials teachers use when working online were distributed as follows:

- curricula adapted for online - 25.2%;
- special methods of online teaching -15.2%;
- learning support materials for online teaching - 51.9%;
- digital tools (Padlet, Miro, etc.) - 34.5%;
- none of the above/teaching faceto-face - 23%

According to in-depth interviews, preparation for lessons in grades 5-6, online lessons in particular, takes a lot of time and adds to the exhaustion.

made solutions, especially for online lessons in NUS classes, in particular:

- programs adapted for remote format:
- a more detailed review of the online learning methods and techniques presented in advanced training courses;
- ready-made learning support materials (presentations, tasks, etc.).

#### Teachers' mental condition

It's not surprising that teachers' mental condition worsened after a horrific war broke out. In particular, apart from the above data on increased anxiety, fear, sadness, or anger, teachers also reported:

- irritability 40%,
- low motivation for work - 31%,
- problems with attention focusing -28%,
- susceptibility to criticism - 23%.

Almost 70% of teachers requested advanced training related to psychological support for themselves and/or their children.

The greatest demand for school psychologists is observed in the eastern regions (52% of respondents as compared to 21% in other macroregions).

22% of respondents in villages and towns do not receive sufficient support from school psychologists, as compared to 12% in cities.

The most popular answer to the question about ways to improve psychological support services is the following: "It is necessary to develop

- Improve work with practical psychologists during advanced training.
- At least partially satisfy the need for school psychologists in rural areas and the east via online consultations with volunteers or the like.
- Ensure additional advanced training courses in the relevant field for school psychologists.
- In cooperation with practical psychologists, develop the maximum number of algorithms to respond to various crises, in particular for dealing with parents, so that teachers could use recommendations as a basis for making decisions and taking actions.
- Introduce monitoring of teachers' and children's mental conditions and make management decisions based on it.



#### Problematic issues / **Key findings Assumptions**

#### Possible solutions

a clear algorithm for teachers to deal with difficult cases." We assume that this also proves the need for solutions that work out of the box, and ready-made instructions for crisis management.

#### Reform communication

40% of teachers cannot tell the differences between NUS and previous approaches to secondary education. Some of the respondents' answers in the in-depth interviews indicate that they confuse even basic concepts (for example, "textbook content" and "curriculum"). It should be recalled that 86% of teachers believe that the knowledge acquired during advanced training is sufficient. Still, they identify many "development areas" (especially in topics that have already been determined as mastered, such as evaluation of educational achievements).

We assume that the training of subject teachers, despite its general character in 2023, is still lacking the appropriate quality level. However, teachers rarely directly admit that they lack knowledge from being too tired and exhausted to attend additional training during off-work time. Data presented in the section "Teachers' mental condition" support this assumption.

- Provide for additional explanations of the reform essence in the media popular among teachers (such data are available in the survey - in particular, the page of the Ministry of Education and Science and the website of the New Ukrainian School).
- Revive the idea of creating public (and teachers, in particular) awareness of the essence of the NUS reform, its purpose, and philosophy; presenting actual results may prove useful here.
- Create a system for collecting and processing feedback on the reform progress from teachers: reviews would help to find out primary needs requiring centralized support.

#### Obstacles to the reform implementation

According to the teachers, the main obstacle to the NUS implementation is exhaustion due to the war (53.5% of respondents).

Other reasons include:

- outdated pay system (51%),
- reduction of school hours due to air alerts and blackouts (41.1%);
- insufficient equipment and material support for the reform (37.6%),
- lack of quality learning support materials (35.6%),

The factors that can be influenced by the MESU and other decisionmaking institutions are highlighted in bold in the left column. Of course, it is impossible to "remove war" from the educational process, however, the pay system updating has already begun; the NUS subvention has been reallocated, covering the need for material and equipment support. The latter seems to be of particular importance, given that during the indepth interviews, teachers often talked about the fact that the "NUS

- Reallocate the NUS subvention (done).
- Assign bonuses to subject teachers who implement NUS in basic secondary school (similar to primary school practice).
- Revise the pay system (the process has been initiated - there is at least a corresponding political will and plans for the 2024 budget).
- Teach representatives of school administrations to search for grant opportunities, write applications, etc.
- To improve the teachers' mental condition, major management decisions are required. Specifically, teachers' days off on public holidays, which were canceled during martial law. must be returned. Also, it is recommended not to assign (and not to offer) advanced training courses during summer vacations, etc. Currently, the teachers' working hours are not regulated



## **Key findings**

## Problematic issues / **Assumptions**

#### Possible solutions

- low motivation to implement NUS (27.4%),
- lack of qualitative methodical support for the reform (24.4%).

children," who in primary school were provided with equipment, means, materials for learning, etc., are demotivated by the lack of the same in grades 5-6. Many teachers have to buy equipment or print materials at their own expense, which not only becomes an additional burden on their family budgets but also contributes to rapid burnout.

in any way, which results in overwork which is another marker that the teachers' pay system needs immediate changes.



Improve methodological support for the reform (development of detailed instructions and free learning support materials, in particular for online lessons).

#### Reform legal framework

Successful continuation of the reform implementation requires certain legislative changes.

- 1. Unblock the National Educational Electronic Platform and review the Regulation on the National Digital Educational Platform, approved by Order of the Ministry of Education and Science of Ukraine No. 523 dated May 22, 2018, and ensure that changes are introduced to it if necessary.
- 2. Review the List of teaching and academic staff, approved by the Resolution of the Cabinet of Ministers of Ukraine No. 963 dated June 14, 2000, and if necessary, develop and duly submit to the Government a draft resolution of the Cabinet of Ministers of Ukraine on amendments to it or approve a new List.
- 3. Change the pay system of teaching staff, for which, in particular:
  - a) review the resolution of the Cabinet of Ministers of Ukraine No. 1298 dated August 30, 2002, and if necessary, develop and duly submit a draft resolution of the Cabinet of Ministers of Ukraine on the new pay system introduction;
  - b) review the List of professional grades and pedagogical ranks, approved by the Resolution of the Cabinet of Ministers of Ukraine No. 1109 dated December 23, 2015, and if necessary, develop and duly submit to the Government a draft resolution of the Cabinet of Ministers of Ukraine on amendments to it;
  - c) approve the new <u>Procedure for calculating the salary of teaching staff</u> in state and municipal educational institutions and to recognize as invalid the Instruction on the procedure for calculating the salary of educational staff, approved by Order of the Ministry of Education of Ukraine No. 102 dated April 15, 1993.
- 4. Develop and duly submit a draft resolution of the Cabinet of Ministers of Ukraine on the approval of the formula to determine the financial standard of budgetary provision for one child.
- 5. Review the Standard staffing standards of institutions of general secondary education, approved by the Order of the Ministry of Education and Science of Ukraine No. 1205 dated December 6, 2010, and if necessary, introduce amendments to it.
- 6. Review the Orders of the Ministry of Education and Science of Ukraine No. 811 dated December 10, 2003, and No. 939 dated December 15, 2004, and ensure the adoption of the related order of MESU on approval of new Procedures for the development, issuance, and accounting of documents on basic secondary education and full general secondary
- 7. Review the Procedure for dividing classes into groups when studying individual subjects in general educational institutions, approved by the Order of the Ministry of Education and Science of Ukraine No. 128 dated February 20, 2002, and if necessary, introduce amendments to it.



- 8. Review the <u>Procedure for the creation of extended day groups in state</u> and municipal institutions of general secondary education, approved by the Order of the Ministry of Education and Science of Ukraine No. 677 dated June 25, 2018, and if necessary, introduce amendments to it.
- 9. Review the Procedure for conducting State Final Attestation, approved by the Order of the Ministry of Education and Science of Ukraine No. 1369 dated December 7, 2018, and introduce amendments to it. If necessary, develop and duly submit for state registration an individual order of MESU on the attestation of students of scientific lyceums.
- 10. Review the Criteria for evaluation of educational achievements of students (pupils) in the system of general secondary education, approved by the Order of the Ministry of Education, Science, Youth, and Sports of Ukraine No. 329 dated April 13, 2011, and ensure the adoption of the related order of MESU.
- 11. Review the Regulations on Departmental Incentive Awards of the Ministry of Education and Science of Ukraine, approved by the Order of the Ministry of Education and Science of Ukraine No. 1047 dated July 30, 2013, and introduce amendments to it.
- 12. Approve the Procedure for providing professional support and assistance to teaching staff (supervision) - develop and duly submit the related order of MESU for review.
- 13. Review the Regulation on special needs classes for teaching children with special educational needs in general educational institutions, approved by the order of the Ministry of Education and Science of Ukraine No. 1224 dated December 9, 2010, and ensure the adoption of the related order of MESU.



## Annex 4

# Survey results in tables

Did you undergo targeted advanced training to work with grades 5-6 of NUS? (n=600) 1.

	Frequency	%
Yes	577	96.2
No	23	3.8

Distribution by macro-region where the educational institution of respondent's 1.1. employment is located (in %)

	West	Central	South	East
Yes	100.0	94.3	96.2	92.0
No	0.0	5.7	3.8	8.0

1.2. Distribution by residential type where the educational institution of respondent's employment is located (in %)

	Village and township	Oblast center	Kyiv	Other city
Yes	98.8	97.6	90.6	89.3
No	1.2	2.4	9.4	10.7



#### 2. Did you acquire enough knowledge to work with grades 5-6 and to implement the NUS reform in advanced training courses? (n=576; among respondents who underwent targeted advanced training to work with grades 5-6 of NUS)

	Frequency	%
Yes	224	38.9
Somewhat yes	273	47.4
Somewhat no	42	7.3
No	7	1.2
Not sure	30	5.2

#### 2.1. Distribution by age (in %)

	18–39	40–49	50+
Yes	40.9	37.6	38.4
Somewhat yes	47.6	47.1	47.5
Somewhat no	6.1	8.8	7.0
No	1.2	1.2	1.2
Not sure	4.3	5.3	5.8

## 2.2. Distribution by professional grade (in %)

	Specialist	Specialist of a second-level professional grade	Specialist of a first-level professional grade	Specialist of higher professional grade
Yes	32.5	39.7	34.5	41.6
Somewhat yes	56.6	50.0	45.7	45.4
Somewhat no	6.0	8.6	8.6	7.0
No	0.0	0.0	3.4	1.0
Not sure	4.8	1.7	7.8	5.1



3. Who organized the advanced training courses to work with grades 5-6 of NUS, which you underwent? (n=575; among respondents who underwent targeted advanced training to work with grades 5-6 of NUS; respondents could mark any number of answers)

	Frequency	%
Institute of Education Content Modernization	104	18.1
Institutes of Postgraduate Pedagogical Education or Academies of Continuing Education	489	85.0
Ukrainian Institute of Education Development	31	5.4
National Academy of Educational Sciences of Ukraine	9	1.6
Civil society organizations (for example, Osvitoria PU, School for Democracy program, etc.)	125	21.7
Private individuals or organizations (IE, LLC, etc.)	32	5.6
International partner organizations (for example, the Learning Together project)	38	6.6

Which of the following advanced training courses to work with grades 5-6 of NUS 4. would you recommend to colleagues? (n=572; among respondents who underwent targeted advanced training to work with grades 5-6 of NUS; respondents could mark any number of answers)

	Frequency	%
Courses by Institute of Education Content Modernization	134	23.4
Courses by Institutes of Postgraduate Pedagogical Education or Academies of Continuing Education	465	81.3
Courses by Ukrainian Institute of Education Development	51	8.9
Courses by National Academy of Educational Sciences of Ukraine	24	4.2
Courses by civil society organizations (for example, Osvitoria PU, School for Democracy program, etc.)	129	22.6
Courses by individuals or organizations (IE, LLC, etc.)	26	4.5
Courses by international partner organizations (for example, Learning Together project)	77	13.5



## Distribution by three advanced training courses to work with grades 5-6 of NUS that are the most popular among the respondents (in %)

	Institute of Education Content Modernization	Institutes of Postgraduate Pedagogical Education or Academies of Continuing Education	Civil society organizations (for example, Osvitoria PU, School for Democracy program, etc.)
Courses by Institute of Education Content Modernization	81.7	20.5	30.4
Courses by Institutes of Postgraduate Pedagogical Education or Academies of Continuing Education	67.3	90.5	72.0
Courses by civil society organizations (for example, Osvitoria PU, School for Democracy program, etc.)	26.0	21.5	79.2

5. In your opinion, which of the following topics - within the scope of advanced training courses to work with grades 5-6 of NUS – are the most relevant in the context of NUS? (n=577; among respondents who underwent targeted advanced training to work with grades 5-6 of NUS; respondents could mark up to three answers)

	Frequency	%
Implementing the NUS concept in basic secondary education	199	34.5
State standard of basic secondary education	88	15.3
Standard educational program	68	11.8
Standard curriculum	33	5.7
The educational program of the institution	47	8.1
Modern approaches to teaching under NUS	374	64.8
Psychological and pedagogical prerequisites to organize the NUS educational process	143	24.8
Peculiar features of inclusive education implementation	97	16.8
Digital technologies for teaching activities	201	34.8
Peculiar features of teaching subjects/integrated courses within the relevant educational field	142	24.6
Evaluation of students' educational achievements in NUS academic subjects/integrated courses	162	28.1
Psychological aid to the educational process participants during wartime	99	17.2
None of the above	5	0.9



#### 5.1. Distribution by residential type where the educational institution of respondent's employment is located (in %)

	Village and township	Oblast center	Kyiv	Other city
Implementing the NUS concept in basic secondary education	31.4	39.9	17.2	44.0
State standard of basic secondary education	16.7	14.3	8.6	18.7
Standard educational program	12.6	15.3	6.9	4.0
Standard curriculum	5.4	7.9	5.2	1.3
The educational program of the institution	8.8	10.3	3.4	4.0
Modern approaches to teaching under NUS	67.4	60.6	72.4	61.3
Psychological and pedagogical prerequisites to organize the NUS educational process	21.3	28.1	22.4	28.0
Peculiar features of inclusive education implementation	14.6	18.2	22.4	14.7
Digital technologies for teaching activities	35.1	35.0	48.3	22.7
Peculiar features of teaching subjects/integrated courses within the relevant educational field	23.4	22.2	34.5	28.0
Evaluation of students' educational achievements in NUS academic subjects/integrated courses	27.2	22.2	31.0	44.0
Psychological aid to the educational process participants during wartime	14.6	15.3	32.8	18.7

#### 6. Did you review methods of working online in the advanced training courses to work with grades 5-6 of NUS? (n=574; among respondents who underwent targeted advanced training to work with grades 5-6 of NUS)

	Frequency	%
Reviewed in detail	254	44.3
Reviewed casually	232	40.4
Did not review	66	11.5
Do not remember / Not sure	22	3.8



#### 6.1. Distribution by macro-region where the educational institution of respondent's employment is located (in %)

	West	Central	South	East
Reviewed in detail	38.0	42.3	54.7	55.6
Reviewed casually	45.4	36.6	40.0	38.3
Did not review	12.7	15.5	4.0	4.9
Do not remember / Not sure	3.9	5.6	1.3	1.2

## Distribution by residential type where the educational institution of respondent's employment is located (in %)

	Village and township	Oblast center	Kyiv	Other city
Reviewed in detail	45.4	43.3	35.7	49.3
Reviewed casually	36.6	42.4	48.2	41.3
Did not review	13.4	11.8	10.7	5.3
Do not remember / Not sure	4.6	2.5	5.4	4.0

## 6.3. Distribution by teaching format (in %)

	Distant or mixed format	In person
Reviewed in detail	48.6	39.8
Reviewed casually	41.7	39.8
Did not review	6.2	16.3
Do not remember / Not sure	3.6	4.1

7. Which of the following did you master in advanced training courses to work with grades 5-6 of NUS? (n=574; among respondents who underwent targeted advanced training to work with grades 5-6 of NUS; respondents could mark any number of answers)

	Frequency	%
Activity approach	163	28.4
Organizing group work in the classroom	212	36.9
Methods for evaluation of educational achievements	258	44.9
Diagnosing educational losses and gaps	73	12.7



	Frequency	%
Making up for educational losses and gaps	74	12.9
Curricula development	132	23.0
Learning support materials development	137	23.9
New knowledge of the subject I teach	109	19.0
Organizing individual work in the classroom	114	19.9
Creating a comfortable environment for students	165	28.7
Techniques of social and emotional support	70	12.2
Key competencies development	224	39.0
Developing cross-cutting skills common to various educational fields	109	19.0
None of the above	8	1.4

#### Distribution by macro-region where the educational institution of respondent's 7.1. employment is located (in %)

	West	Central	South	East
Activity approach	34.1	22.0	37.8	22.2
Organizing group work in the classroom	33.2	42.5	33.8	34.6
Methods for evaluation of educational achievements	41.0	49.5	43.2	44.4
Diagnosing educational losses and gaps	11.7	10.3	13.5	21.0
Making up for educational losses and gaps	6.8	15.4	23.0	12.3
Curricula development	28.8	18.7	25.7	17.3
Learning support materials development	30.7	20.6	14.9	23.5
New knowledge of the subject I teach	23.4	17.3	17.6	13.6
Organizing individual work in the classroom	20.5	19.2	31.1	9.9
Creating a comfortable environment for students	19.0	35.0	39.2	27.2
Techniques of social and emotional support	7.8	13.1	8.1	24.7
Key competencies development	20.5	48.1	52.7	49.4
Developing cross-cutting skills common to various educational fields	4.4	24.8	29.7	30.9



## 7.2. Distribution by residential type where the educational institution of respondent's employment is located (in %)

	Village and township	Oblast center	Kyiv	Other city
Activity approach	30.8	29.6	21.1	24.0
Organizing group work in the classroom	38.0	36.0	47.4	28.0
Methods for evaluation of educational achievements	44.7	43.3	50.9	45.3
Diagnosing educational losses and gaps	8.4	16.7	7.0	20.0
Making up for educational losses and gaps	11.0	17.7	5.3	12.0
Curricula development	18.6	29.6	14.0	26.7
Learning support materials development	20.3	30.5	21.1	20.0
New knowledge of the subject I teach	23.6	17.7	17.5	9.3
Organizing individual work in the classroom	19.4	21.7	24.6	13.3
Creating a comfortable environment for students	25.3	29.6	33.3	34.7
Techniques of social and emotional support	8.9	15.3	7.0	17.3
Key competencies development	36.7	32.5	59.6	49.3
Developing cross-cutting skills common to various educational fields	10.1	20.2	29.8	36.0

## 7.3. Distribution by three advanced training courses to work with grades 5-6 of NUS that are the most popular among the respondents (in %)

	Institute of Education Content Modernization	Institutes of Postgraduate Pedagogical Education or Academies of Continuing Education	Civil society organizations (for example, Osvitoria PU, School for Democracy program, etc.)
Activity approach	27.9	27.4	33.1
Organizing group work in the classroom	41.3	37.4	41.1
Methods for evaluation of educational achievements	52.9	45.1	50.8
Diagnosing educational losses and gaps	15.4	11.9	14.5
Making up for educational losses and gaps	22.1	10.5	18.5
Curricula development	15.4	22.6	21.0
Learning support materials development	19.2	24.3	23.4



	Institute of Education Content Modernization	Institutes of Postgraduate Pedagogical Education or Academies of Continuing Education	Civil society organizations (for example, Osvitoria PU, School for Democracy program, etc.)
New knowledge of the subject I teach	24.0	18.7	16.9
Organizing individual work in the classroom	17.3	20.2	21.8
Creating a comfortable environment for students	26.0	27.4	33.1
Techniques of social and emotional support	12.5	12.1	8.9
Key competencies development	44.2	39.9	46.0
Developing cross-cutting skills common to various educational fields	22.1	19.8	35.5

8. Which of the following statements describes your situation at best? (n=575; among respondents who underwent targeted advanced training to work with grades 5-6 of NUS; respondents could mark any number of answers)

	Frequency	%
I paid for advanced training courses to work with grades 5-6 of NUS	95	16.5
I paid for an advanced training certificate to work with grades 5-6 of NUS	44	7.7
I paid to travel to advanced training courses to work with grades 5-6	9	1.6
I paid for accommodation while taking advanced training courses to work with grades 5-6 of NUS	7	1.2
I did not pay for anything when taking the advanced training courses to work with grades 5-6 of NUS, it all was paid for by the state	431	75.0
I did not pay for anything when taking the advanced training courses to work with grades 5-6 of NUS, it all was paid for by donor organizations	30	5.2
None of the above	17	3.0

#### 8.1. Distribution by macro-region where the educational institution of respondent's employment is located (in %)

	West	Central	South	East
I paid for advanced training courses to work with grades 5-6 of NUS	31.7	9.3	13.3	0.0
I paid for an advanced training certificate to work with grades 5-6 of NUS	5.9	11.7	9.3	0.0
I paid to travel to advanced training courses to work with grades 5-6	0.5	2.3	2.7	1.2
I paid for accommodation while taking advanced training courses to work with grades 5-6 of NUS	1.0	1.4	2.7	0.0



	West	Central	South	East
I did not pay for anything when taking the advanced training courses to work with grades 5-6 of NUS, it all was paid for by the state	63.4	76.6	77.3	97.5
I did not pay for anything when taking the advanced training courses to work with grades 5-6 of NUS, it all was paid for by donor organizations	2.9	7.0	12.0	0.0
None of the above	1.5	4.7	4.0	1.2

## 8.2. Distribution by residential type where the educational institution of respondent's employment is located (in %)

	Village and township	Oblast center	Kyiv	Other city
I paid for advanced training courses to work with grades 5-6 of NUS	20.6	17.2	8.8	8.0
I paid for an advanced training certificate to work with grades 5-6 of NUS	9.2	3.4	17.5	6.7
I paid to travel to advanced training courses to work with grades 5-6	1.7	1.0	1.8	2.7
I paid for accommodation while taking advanced training courses to work with grades 5-6 of NUS	0.4	1.5	1.8	2.7
I did not pay for anything when taking the advanced training courses to work with grades 5-6 of NUS, it all was paid for by the state	64.7	82.3	78.9	84.0
I did not pay for anything when taking the advanced training courses to work with grades 5-6 of NUS, it all was paid for by donor organizations	4.6	4.9	7.0	6.7
None of the above	5.0	1.0	0.0	4.0



#### 9. What was the key choice factor for you to undertake a specific advanced training course to work with grades 5-6 of NUS? (n=573; among respondents who underwent targeted advanced training to work with grades 5-6 of NUS; respondents could mark any number of answers)

	Frequency	%
The course's practical focus	338	59.0
Availability of the content module relevant to my subject/integrated course	243	42.4
Previous experience of taking courses designed by this organizer	109	19.0
Feedback from colleagues	73	12.7
Reviews on the internet	32	5.6
Cost of courses	24	4.2
Attitude of the principal	30	5.2
Attitude of management or department of education	49	8.6
This course was the only option available	34	5.9

## 9.1. Distribution by age (in %)

	18–39	40–49	50+
The course's practical focus	59.8	54.4	61.7
Availability of the content module relevant to my subject/integrated course	42.7	41.4	42.9
Previous experience of taking courses designed by this organizer	14.6	17.8	22.9
Feedback from colleagues	17.7	9.5	11.7
Reviews on the internet	7.9	4.1	5.0
Cost of courses	3.7	4.1	4.6
Attitude of the principal	5.5	4.7	5.4
Attitude of management or department of education	7.9	9.5	7.9
This course was the only option available	5.5	8.3	4.6



## 9.2. Distribution by macro-region where the educational institution of respondent's employment is located (in %)

	West	Central	South	East
The course's practical focus	52.2	68.4	61.3	49.4
Availability of the content module relevant to my subject/integrated	36.1	39.2	56.0	54.3
course				
Previous experience of taking courses designed by this organizer	17.1	18.9	17.3	25.9
Feedback from colleagues	14.6	9.9	16.0	12.3
Reviews on the internet	10.7	3.8	2.7	0.0
Cost of courses	7.3	3.3	2.7	0.0
Attitude of the principal	4.9	7.1	5.3	1.2
Attitude of management or department of education	5.4	11.8	4.0	11.1
This course was the only option available	4.9	10.4	2.7	0.0

## 9.3. Distribution by residential type where the educational institution of respondent's employment is located (in %)

Village and township	Oblast center	Kyiv	Other city
57.8	62.9	66.7	45.3
36.7	44.1	45.6	54.7
19.4	15.3	29.8	18.7
15.6	13.4	7.0	6.7
6.3	7.9	1.8	0.0
4.6	5.0	1.8	2.7
4.2	7.9	1.8	4.0
7.6	8.4	5.3	13.3
6.3	5.9	8.8	2.7
	19.4 15.6 6.3 4.6 4.2 7.6	township         Oblast center           57.8         62.9           36.7         44.1           19.4         15.3           15.6         13.4           6.3         7.9           4.6         5.0           4.2         7.9           7.6         8.4	township         Oblast center         Kylv           57.8         62.9         66.7           36.7         44.1         45.6           19.4         15.3         29.8           15.6         13.4         7.0           6.3         7.9         1.8           4.6         5.0         1.8           4.2         7.9         1.8           7.6         8.4         5.3



## 9.4. Distribution by professional grade (in %)

	Specialist	Specialist of a second-level professional grade	Specialist of a first-level professional grade	Specialist of higher professional grade
The course's practical focus	57.8	72.4	48.7	60.4
Availability of the content module relevant to my subject/integrated course	41.0	41.4	38.3	44.4
Previous experience of taking courses designed by this organizer	19.3	13.8	20.0	19.8
Feedback from colleagues	21.7	15.5	16.5	8.6
Reviews on the internet	4.8	10.3	12.2	2.6
Cost of courses	6.0	1.7	2.6	4.8
Attitude of the principal	6.0	0.0	3.5	6.7
Attitude of management or department of education	8.4	3.4	6.1	10.2
This course was the only option available	3.6	1.7	8.7	6.4

10. There are many reasons for teachers to buy advanced training certificates without actually taking these courses. Sometimes it is the only option. For example, the course provider demanded payment in the absence of any real training, or it was not possible to undertake advanced training due to family reasons. Have you ever had to pay for an advanced training certificate without actually taking the course? (n=571; among respondents who underwent targeted advanced training to work with grades 5-6 of NUS)

	Frequency	%
It happened to me	34	6.0
It never happened to me	480	84.1
Not sure	57	10.0



#### 11. If you did NOT take advanced training courses to work with grades 5-6 of NUS, why? (n=23; among respondents who did NOT undergo targeted advanced training to work with grades 5-6 of NUS; respondents could mark any number of answers)

	Frequency	%
I was not aware of these courses when they were held	3	13.0
I did not have free time to take courses	2	8.7
I believed the security situation was unfavorable	0	0.0
The school administration did not include me in the advanced training plan to take these courses	0	0.0
I did not have the facilities to complete the courses (internet access, computer, etc.)	2	8.7
I could not cover the costs related to taking these courses	0	0.0
I did not work with the grade 5 of NUS last year	18	78.3
There was no need for this as I had already had all the necessary information	0	0.0
Other	2	8.7

#### 12. Below is a list of topics that can potentially be considered in advanced training courses related to work with grades 5-6 of NUS What would you like to learn? (n=598; respondents could mark up to ten answers)

	Frequency	%
Implementing the NUS concept in basic secondary education	191	31.9
State standard of basic secondary education	89	14.9
Standard educational program	97	16.2
Standard curriculum	76	12.7
Educational program of the institution	65	10.9
Activity approach	198	33.1
Organizing group and individual work in the classroom	209	34.9
Evaluation of students' educational achievements in NUS academic subjects/integrated courses	252	42.1
Diagnosing educational losses and gaps	142	23.7
Making up for educational losses and gaps	174	29.1
Peculiar features of teaching subjects/integrated courses within the relevant educational field	192	32.1
Modern approaches to teaching under NUS	331	55.4



	Frequency	%
Digital technologies for teaching activities	268	44.8
Promote development of cross-cutting skills common to various educational fields	78	13.0
Capability to create a motivating educational environment	150	25.1
Psychological aid to the educational process participants during wartime	147	24.6
Psychological and pedagogical prerequisites to organize the NUS educational process	121	20.2
Peculiar features of inclusive education implementation	171	28.6
Curricula development	84	14.0
Learning support materials development	133	22.2
Unexploded ordnance safety	30	5.0
First aid skills	98	16.4
None of the above	4	0.7

# 12.1. Distribution by residential type where the educational institution of respondent's employment is located (in %)

	Village and township	Oblast center	Kyiv	Other city
Implementing the NUS concept in basic secondary education	34.4	35.6	17.5	26.2
State standard of basic secondary education	18.7	18.3	3.2	4.8
Standard educational program	17.8	18.8	4.8	14.3
Standard curriculum	15.8	12.5	12.7	4.8
Educational program of the institution	8.7	15.4	4.8	9.5
Activity approach	32.4	32.7	34.9	35.7
Organizing group and individual work in the classroom	36.5	35.6	34.9	29.8
Evaluation of students' educational achievements in NUS academic subjects/integrated courses	44.8	37.0	50.8	40.5
Diagnosing educational losses and gaps	22.4	22.1	22.2	33.3
Making up for educational losses and gaps	24.9	28.4	28.6	42.9
Peculiar features of teaching subjects/integrated courses within the relevant educational field	31.5	35.6	34.9	23.8
Modern approaches to teaching under NUS	56.4	57.7	52.4	48.8
Digital technologies for teaching activities	44.0	46.2	57.1	35.7



	Village and township	Oblast center	Kyiv	Other city
Promote development of cross-cutting skills common to various educational fields	12.9	16.8	11.1	6.0
Capability to create a motivating educational environment	23.2	22.6	25.4	36.9
Psychological aid to the educational process participants during wartime	24.1	25.0	22.2	26.2
Psychological and pedagogical prerequisites to organize the NUS educational process	21.2	17.8	23.8	21.4
Peculiar features of inclusive education implementation	24.1	26.9	52.4	28.6
Curricula development	14.9	12.0	22.2	10.7
Learning support materials development	21.6	22.1	33.3	16.7
Unexploded ordnance safety	4.6	5.8	3.2	6.0
First aid skills	17.8	14.4	28.6	7.1
None of the above	0.8	0.0	0.0	1.2

#### Assess the extent to which you changed teaching methods and techniques after the NUS introduction. (n=598)

	Frequency	%
Changed significantly	75	12.5
Somewhat changed	337	56.4
Rather little changed	111	18.6
Did not change at all	9	1.5
Not sure	33	5.5
I cannot assess as I have not taught in the NUS classes before	33	5.5

## 13.1. Distribution by age (in %)

	18–39	40-49	50+
Changed significantly	9.9	14.3	13.1
Somewhat changed	55.6	53.8	58.8
Rather little changed	16.4	20.3	18.8
Did not change at all	3.5	0.5	0.8
Not sure	5.3	6.0	5.3
I cannot assess as I have not taught in the NUS classes before	9.4	4.9	3.3

## 13.2. Distribution by macro-region where the educational institution of respondent's employment is located (in %)



	West	Central	South	East
Changed significantly	10.7	9.3	12.8	25.0
Somewhat changed	49.8	59.9	66.7	53.4
Rather little changed	24.4	15.9	15.4	14.8
Did not change at all	2.9	0.9	1.3	0.0
Not sure	6.8	5.7	1.3	5.7
I cannot assess as I have not taught in the NUS classes before	5.4	8.4	2.6	1.1

## 13.3. Distribution by residential type where the educational institution of respondent's employment is located (in %)

	Village and township	Oblast center	Kyiv	Other city
Changed significantly	9.1	17.8	4.8	15.5
Somewhat changed	53.5	55.3	69.8	57.1
Rather little changed	21.6	16.8	11.1	19.0
Did not change at all	2.5	1.4	0.0	0.0
Not sure	7.1	4.8	4.8	3.6
I cannot assess as I have not taught in the NUS classes before	6.2	3.8	9.5	4.8

## 13.4. Distribution by professional grade (in %)

	Specialist	Specialist of a second-level professional grade	Specialist of a first-level professional grade	Specialist of higher professional grade
Changed significantly	11.1	8.3	11.1	14.4
Somewhat changed	55.6	55.0	48.7	59.6
Rather little changed	14.4	23.3	21.4	18.0
Did not change at all	3.3	0.0	2.6	0.9
Not sure	5.6	8.3	9.4	3.7
I cannot assess as I have not taught in the NUS classes before	10.0	5.0	6.8	3.4



#### 13.5. Distribution by teaching format (in %)

	Distant or mixed format	In person
Changed significantly	13.4	11.6
Somewhat changed	53.4	58.9
Rather little changed	22.9	14.6
Did not change at all	1.4	1.7
Not sure	5.5	5.6
I cannot assess as I have not taught in the NUS classes before	3.4	7.6

#### 14. Which of the following statements describes your situation at best? (n=592)

	Frequency	%
I teach individual subjects	417	70.4
I teach integrated courses	40	6.8
I teach both individual subjects and integrated courses	135	22.8

#### If you teach individual subjects, how much has the program changed compared to the 15. previous one? (n=556; among respondents teaching individual subjects)

	Frequency	%
Changed significantly	85	15.3
Rather changed	303	54.5
Rather little changed	140	25.2
Did not change at all	6	1.1
I cannot tell as I did not teach under the program preceding NUS	22	4.0

## 15.1. Distribution by macro-region where the educational institution of respondent's employment is located (in %)

	West	Central	South	East
Changed	62.9	68.7	79.2	79.3
Did not change	34.4	24.7	20.8	17.1
I cannot tell as I did not teach under the program preceding NUS	2.7	6.6	0.0	3.7



#### 15.2. Distribution by residential type where the educational institution of respondent's employment is located (in %)

	Village and township	Oblast center	Kyiv	Other city
Changed	63.4	74.2	58.6	84.6
Did not change	32.1	23.2	31.0	14.1
I cannot tell as I did not teach under the program preceding NUS	4.5	2.6	10.3	1.3

#### 15.3. Distribution by professional grade (in %)

	Specialist	Specialist of a second-level professional grade	Specialist of a first-level professional grade	Specialist of higher professional grade
Changed	61.0	72.8	74.5	70.8
Did not change	25.6	23.6	25.4	27.2
I cannot tell as I did not teach under the program preceding NUS	13.4	3.6	0.0	2.0

#### If you teach integrated courses, to what extent is the related program different from 16. the programs of individual courses making it up? (n=176; among respondents teaching integrated courses)

	Frequency	%
Changed significantly	53	30.1
Rather changed	82	46.6
Rather little changed	24	13.6
Did not change at all	2	1.1
I cannot tell as I did not teach under the program preceding NUS	15	8.5

#### 17. Who usually chooses model programs for subjects/integrated courses in the educational institution of your current employment? (n=588)

	Frequency	%
Each teacher independently	191	31.8
Teachers working with the same subject/integrated course choose one program collectively	352	58.7
The administration of the educational institution	47	7.8
Representatives of the educational authorities	9	1.5
Other	1	0.2



#### 18. Have you had experience in developing tailored curricula based on model ones? (n=591)

	Frequency	%
Yes	141	23.9
No	450	76.1

#### 18.1. Distribution by macro-region where the educational institution of respondent's employment is located (in %)

	West	Central	South	East
Yes	23.9	20.2	33.3	25.0
No	76.1	79.8	66.7	75.0

#### 18.2. Distribution by residential type where the educational institution of respondent's employment is located (in %)

	Village and township	Oblast center	Kyiv	Other city
Yes	21.8	28.0	14.5	25.6
No	78.2	72.0	85.5	74.4

#### 18.3. Distribution by professional grade (in %)

	Specialist	Specialist of a second-level professional grade	Specialist of a first-level professional grade	Specialist of higher professional grade
Yes	14.4	16.9	21.6	28.3
No	85.6	83.1	78.4	71.7

#### What could prompt you to develop a tailored curriculum based on model one? (n=443; 19. among respondents who did NOT have experience in developing tailored curricula based on model ones; respondents could mark any number of answers)

	Frequency	%
Pay supplements	154	34.8
Satisfactory mental and emotional condition	50	11.3
Availability of free time	220	49.7



	Frequency	%
Availability of necessary knowledge	127	28.7
Other	7	1.6
I have no desire to develop tailored curricula under any circumstances	61	13.8

#### 19.1. Distribution by age (in %)

	18–39	40–49	50+
Pay supplements	38.3	39.3	28.6
Satisfactory mental and emotional condition	14.8	5.0	13.7
Availability of free time	50.0	55.0	45.1
Availability of necessary knowledge	31.3	30.7	25.1
I have no desire to develop tailored curricula under any circumstances	10.2	9.3	20.0

#### 19.2. Distribution by macro-region where the educational institution of respondent's employment is located (in %)

	West	Central	South	East
Pay supplements	42.3	35.1	16.0	30.3
Satisfactory mental and emotional condition	10.9	12.3	12.0	9.1
Availability of free time	50.0	52.0	60.0	34.8
Availability of necessary knowledge	26.3	31.0	44.0	16.7
I have no desire to develop tailored curricula under any circumstances	6.4	15.8	4.0	33.3

#### 19.3. Distribution by residential type where the educational institution of respondent's employment is located (in %)

	Village and township	Oblast center	Kyiv	Other city
Pay supplements	36.6	39.7	24.0	25.4
Satisfactory mental and emotional condition	9.8	13.7	6.0	14.3
Availability of free time	45.9	56.2	50.0	46.0
Availability of necessary knowledge	31.7	23.3	44.0	20.6
I have no desire to develop tailored curricula under any circumstances	15.8	4.8	16.0	27.0



#### 19.4. Distribution by professional grade (in %)

	Specialist	Specialist of a second-level professional grade	Specialist of a first-level professional grade	Specialist of higher professional grade
Pay supplements	40.0	47.9	28.3	33.2
Satisfactory mental and emotional condition	10.7	6.3	10.9	12.8
Availability of free time	44.0	41.7	46.7	54.9
Availability of necessary knowledge	30.7	27.1	42.4	22.6
I have no desire to develop tailored curricula under any circumstances	17.3	8.3	15.2	12.8

#### Do you develop course scheduling for yourself? (n=593) 20.

	Frequency	%
Yes	447	75.4
No	146	24.6

#### 20.1. Distribution by age (in %)

	18–39	40-49	50+
Yes	77.5	77.1	72.7
No	22.5	22.9	27.3

#### 20.2. Distribution by macro-region where the educational institution of respondent's employment is located (in %)

	West	Central	South	East
Yes	81.0	71.7	80.5	67.0
No	19.0	28.3	19.5	33.0

#### 20.3. Distribution by residential type where the educational institution of respondent's employment is located (in %)

	Village and township	Oblast center	Kyiv	Other city
Yes	72.7	79.7	68.3	77.1
No	27.3	20.3	31.7	22.9



#### 20.4. Distribution by professional grade (in %)

	Specialist	Specialist of a second-level professional grade	Specialist of a first-level professional grade	Specialist of higher professional grade
Yes	70.0	71.2	73.3	78.7
No	30.0	28.8	26.7	21.3

#### 20.5. Distribution by teaching format (in %)

	Distant or mixed format	In person
Yes	77.2	73.9
No	22.8	26.1

21. If you do not develop course scheduling for yourself, where do you get them? (n=146; among respondents who did NOT develop their course scheduling; respondents could mark any number of answers)

	Frequency	%
I use materials provided by the publisher	69	47.3
I use materials provided by colleagues for free	35	24.0
I buy materials from colleagues	4	2.7
I use materials downloaded from various online resources	91	62.3

In your opinion, what components of textbooks for grades 5-6 you use should be 22. revised? (n=592; respondents could mark any number of answers)

	Frequency	%
Content of theoretical material	135	22.8
The consistency of theoretical material presentation	126	21.3
Presentation style	103	17.4
Tasks for students	181	30.6
Illustrations	74	12.5
Links to electronic resources	101	17.1
interconnection of material with real requests and students' lives	184	31.1
Other	8	1.4
The textbooks require no revision	109	18.4



## 22.1. Distribution by teaching format (in %)

	Distant or mixed format	In person
Content of theoretical material	21.3	24.6
The consistency of theoretical material presentation	17.1	25.6
Presentation style	15.0	19.6
Tasks for students	34.1	26.9
Illustrations	13.9	11.3
Links to electronic resources	21.6	12.6
interconnection of material with real requests and students' lives	33.1	29.2
The textbooks require no revision	18.1	18.9

## 22.2. Distribution by subjects in grades 5–6 (in %)

	Mathematics	Ukrainian	Ukrainian literature	Foreign language
Content of theoretical material	21.4	30.6	28.6	19.2
The consistency of theoretical material presentation	17.0	24.8	17.3	32.3
Presentation style	10.7	14.9	9.2	18.2
Tasks for students	27.7	33.1	36.7	30.3
Illustrations	17.0	5.0	6.1	15.2
Links to electronic resources	18.8	17.4	20.4	17.2
interconnection of material with real requests and students' lives	33.0	31.4	32.7	29.3
The textbooks require no revision	21.4	19.0	20.4	17.2

#### Do you understand the NUS evaluation system? (n=596) 23.

	Frequency	%
Yes	299	50.2
Somewhat yes	248	41.6
Somewhat no	34	5.7
No	15	2.5



#### 23.1. Distribution by age (in %)

	18–39	40–49	50+
Yes	90.6	91.8	92.7
No	9.5	8.2	7.3

#### 23.2. Distribution by macro-region where the educational institution of respondent's employment is located (in %)

	West	Central	South	East
Yes	85.9	92.9	94.9	100.0
No	14.2	7.1	5.2	0.0

#### 23.3. Distribution by residential type where the educational institution of respondent's employment is located (in %)

	Village and township	Oblast center	Kyiv	Other city
Yes	87.4	94.2	90.7	98.8
No	12.5	5.8	9.4	1.2

#### 23.4. Distribution by professional grade (in %)

	Specialist	Specialist of a second-level professional grade	Specialist of a first-level professional grade	Specialist of higher professional grade
Yes	91.1	91.5	90.6	92.4
No	8.9	8.5	9.4	7.7

#### 23.5. Distribution by teaching format (in %)

	Distant or mixed format	In person
Yes	95.2	88.4
No	4.8	11.6



#### 24. What do you not understand about the NUS evaluation system? (n=48; among respondents who do NOT understand the NUS evaluation system; respondents could mark any number of answers)

	Frequency	%
Principles of level-based assessment	17	35.4
Principles of formative assessment	27	56.3
Principles of final assessment	12	25.0
Other	2	4.2

#### 25. How often do you use formative assessment in your work with fifth-graders studying at NUS? (n=592)

	Frequency	%
Almost every lesson	200	33.8
About half of all lessons	238	40.2
In some lessons, however, I often resort to other forms of assessment	135	22.8
Do not use	19	3.2

#### 25.1. Distribution by age (in %)

	18–39	40-49	50+
Almost every lesson	30.4	36.9	33.9
About half of all lessons	42.9	38.5	39.6
In some lessons, however, I often resort to other forms of assessment	22.0	22.3	23.7
Do not use	4.8	2.2	2.9

#### 25.2. Distribution by residential type where the educational institution of respondent's employment is located (in %)

	Village and township	Oblast center	Kyiv	Other city
Almost every lesson	33.6	31.7	50.0	26.3
About half of all lessons	37.8	45.4	29.7	42.5
In some lessons, however, I often resort to other forms of assessment	25.7	20.0	14.1	28.8
Do not use	2.9	2.9	6.3	2.5



#### 25.3. Distribution by professional grade (in %)

	Specialist	Specialist of a second-level professional grade	Specialist of a first-level professional grade	Specialist of higher professional grade
Almost every lesson	31.5	41.4	26.1	35.9
About half of all lessons	40.4	37.9	47.8	38.3
In some lessons, however, I often resort to other forms of assessment	23.6	19.0	22.6	22.7
Do not use	4.5	1.7	3.5	3.1

#### Why don't you use formative assessment in your work with fifth-graders studying at 26. NUS? (n=19; among respondents who do NOT use formative assessment in their work with fifth-graders; respondents could mark any number of answers)

	Frequency	%
I don't know how to do it	5	26.3
It takes a lot of time	9	47.4
In my opinion, formative assessment is not useful	7	36.8
Students do not like formative assessment	1	5.3
Students' parents do not approve of formative assessment	3	15.8
My colleagues do not support formative assessment	2	10.5
The administration of the educational institution does not support formative assessment	0	0.0

#### 27. What feedback methods do you most often use at your work with students? (n=598; respondents could mark any number of answers)

	Frequency	%
Private communication with the student	403	67.4
Communication with the student involving others	156	26.1
Private communication with the student's parents	120	20.1
Communication with a student and their parents	212	35.5
Notes in a student diary or workbook	214	35.8
Text communication via messengers/email/educational platform	263	44.0
Other	5	0.8



#### 27.1. Distribution by age (in %)

	18–39	40-49	50+
Private communication with the student	71.2	64.3	67.1
Communication with the student involving others	24.7	26.4	26.8
Private communication with the student's parents	20.0	20.9	19.5
Communication with a student and their parents	38.2	39.0	30.9
Notes in a student diary or workbook	42.4	31.9	34.1
Text communication via messengers/email/educational platform	45.3	43.4	43.5

#### 27.2. Distribution by teaching format (in %)

	Distant or mixed format	In person
Private communication with the student	48.6	39.8
Communication with the student involving others	41.7	39.8
Private communication with the student's parents	6.2	16.3
Communication with a student and their parents	3.6	4.1
Notes in a student diary or workbook	3.6	4.1
Text communication via messengers/email/educational platform	3.6	4.1

#### 28. Which of the following statements best describes your experience with online classes? (n=596; respondents could mark only one answer)

	Frequency	%
I conduct lessons using my personal laptop	216	36.2
I conduct lessons using laptop provided by a school	266	44.6
I conduct lessons using my personal phone	40	6.7
I conduct lessons using my personal tablet	17	2.9
I conduct lessons using a desktop computer at home	15	2.5
I conduct lessons using a desktop computer at school	29	4.9
None of the listed above is applicable to my situation	13	2.2



#### 28.1. Distribution by age (in %)

	18–39	40–49	50+
I conduct lessons using my personal laptop	43.5	31.9	34.4
I conduct lessons using laptop provided by a school	38.8	48.9	45.5
I conduct lessons using my personal phone	4.7	7.1	7.8
I conduct lessons using my personal tablet	2.9	2.7	2.9
I conduct lessons using a desktop computer at home	1.2	3.8	2.5
I conduct lessons using a desktop computer at school	5.9	4.4	4.5
None of the listed above is applicable to my situation	2.9	1.1	2.5

## 28.2. Distribution by macro-region where the educational institution of respondent's employment is located (in %)

	West	Central	South	East
I conduct lessons using my personal laptop	43.4	32.9	43.6	21.6
I conduct lessons using laptop provided by a school	25.4	57.8	48.7	52.3
I conduct lessons using my personal phone	12.2	4.4	5.1	1.1
I conduct lessons using my personal tablet	6.8	0.4	2.6	0.0
I conduct lessons using a desktop computer at home	3.4	1.8	0.0	4.5
I conduct lessons using a desktop computer at school	6.3	1.3	0.0	14.8
None of the listed above is applicable to my situation	2.4	1.3	0.0	5.7

#### 28.3. Distribution by residential type where the educational institution of respondent's employment is located (in %)

	Village and township	Oblast center	Kyiv	Other city
I conduct lessons using my personal laptop	35.0	41.1	31.3	31.3
I conduct lessons using laptop provided by a school	45.0	35.7	57.8	55.4
I conduct lessons using my personal phone	3.3	11.1	4.7	7.2
I conduct lessons using my personal tablet	3.3	4.3	0.0	0.0
I conduct lessons using a desktop computer at home	3.8	1.0	1.6	3.6
I conduct lessons using a desktop computer at school	5.4	5.8	3.1	2.4
None of the listed above is applicable to my situation	4.2	1.0	1.6	0.0



#### 29. Which of the following do you currently use when organizing online learning with grades 5-6 of NUS (n=592; respondents could mark any number of answers)

	Frequency	%
Curricula adapted for online	149	25.2
Special methods of online teaching	90	15.2
Learning support materials for online teaching	307	51.9
Digital tools (Padlet, Miro, etc.) for online learning	204	34.5
None of the above/teaching face-to-face	136	23.0

#### 29.1. Distribution by age (in %)

	18-39	40-49	50+
Curricula adapted for online	29.6	25.3	22.0
Special methods of online teaching	14.2	14.8	16.2
Learning support materials for online teaching	49.7	50.5	54.4
Digital tools (Padlet, Miro, etc.) for online learning	40.2	35.7	29.5
None of the above/teaching face-to-face	23.7	19.2	25.3

#### 29.2. Distribution by macro-region where the educational institution of respondent's employment is located (in %)

	West	Central	South	East
Curricula adapted for online	15.1	28.4	37.7	29.5
Special methods of online teaching	12.7	11.7	20.8	25.0
Learning support materials for online teaching	43.9	60.4	44.2	55.7
Digital tools (Padlet, Miro, etc.) for online learning	26.8	38.7	46.8	30.7
None of the above/teaching face-to-face	36.1	18.5	7.8	17.0



#### 29.3. Distribution by residential type where the educational institution of respondent's employment is located (in %)

	Village and township	Oblast center	Kyiv	Other city
Curricula adapted for online	23.4	24.8	25.8	31.3
Special methods of online teaching	10.9	15.5	16.1	26.5
Learning support materials for online teaching	51.9	44.7	62.9	60.2
Digital tools (Padlet, Miro, etc.) for online learning	34.3	32.5	41.9	34.9
None of the above/teaching face-to-face	22.2	30.6	14.5	13.3

#### 29.4. Distribution by professional grade (in %)

	Specialist	Specialist of a second-level professional grade	Specialist of a first-level professional grade	Specialist of higher professional grade
Curricula adapted for online	26.7	37.3	26.7	22.0
Special methods of online teaching	17.8	13.6	14.7	15.2
Learning support materials for online teaching	52.2	52.5	50.9	52.0
Digital tools (Padlet, Miro, etc.) for online learning	41.1	35.6	29.3	34.1
None of the above/teaching face- to-face	23.3	15.3	25.9	23.2

#### 29.5. Distribution by option whether respondents considered methods of online teaching in advanced training courses to work with grades 5-6 of NUS (in %)

	Reviewed in detail	Reviewed casually	Did not review
Curricula adapted for online	26.3	25.8	14.1
Special methods of online teaching	21.1	13.1	6.3
Learning support materials for online teaching	51.8	49.8	48.4
Digital tools (Padlet, Miro, etc.) for online learning	39.4	34.1	21.9
None of the above/teaching face-to-face	19.1	23.6	42.2



#### 30. Which of the following do you currently use on lessons with grades 5-6 of NUS (n=591; respondents could mark any number of answers)

	Frequency	%
Subject integration	229	38.7
Development of individual student learning curves	150	25.4
Project learning	288	48.7
Design of a student portfolio	81	13.7
Problem-solving learning	310	52.5
Learning "by request"	67	11.3
None of the above	24	4.1

#### 30.1. Distribution by age (in %)

	18–39	40-49	50+
Subject integration	40.4	38.5	37.9
Development of individual student learning curves	25.9	24.7	25.5
Project learning	47.6	44.5	52.7
Design of a student portfolio	13.9	12.6	14.4
Problem-solving learning	45.8	53.8	56.0
Learning "by request"	13.9	12.6	8.6
None of the above	3.6	4.9	3.7

## 30.2. Distribution by macro-region where the educational institution of respondent's employment is located (in %)

	West	Central	South	East
Subject integration	38.0	43.2	46.2	22.7
Development of individual student learning curves	30.7	25.0	12.8	25.0
Project learning	46.8	55.0	38.5	46.6
Design of a student portfolio	19.0	8.6	10.3	17.0
Problem-solving learning	46.8	58.2	55.1	48.9
Learning "by request"	7.8	13.2	19.2	8.0
None of the above	2.9	2.7	3.8	10.2



#### 30.3. Distribution by residential type where the educational institution of respondent's employment is located (in %)

	Village and township	Oblast center	Kyiv	Other city
Subject integration	32.4	49.0	45.2	27.7
Development of individual student learning curves	24.4	28.6	21.0	24.1
Project learning	42.9	55.3	50.0	48.2
Design of a student portfolio	14.3	15.0	14.5	8.4
Problem-solving learning	55.0	45.6	66.1	51.8
Learning "by request"	11.3	10.2	19.4	8.4
None of the above	5.0	1.9	0.0	9.6

#### 30.4. Distribution by professional grade (in %)

	Specialist	Specialist of a second- level professional grade	Specialist of a first-level professional grade	Specialist of higher professional grade
Subject integration	37.1	31.0	33.9	42.2
Development of individual student learning curves	20.2	20.7	33.0	24.6
Project learning	49.4	44.8	47.8	49.8
Design of a student portfolio	13.5	19.0	13.9	12.6
Problem-solving learning	52.8	44.8	40.0	58.2
Learning "by request"	13.5	12.1	12.2	10.5
None of the above	5.6	3.4	7.0	2.8

## 30.5. Distribution by subjects in grades 5–6 (in %)

	Mathematics	Ukrainian	Ukrainian literature	Foreign language
Subject integration	28.6	44.6	39.4	29.6
Development of individual student learning curves	29.5	30.6	27.3	23.5
Project learning	38.4	46.3	49.5	56.1
Design of a student portfolio	12.5	18.2	18.2	17.3
Problem-solving learning	51.8	63.6	66.7	40.8
Learning "by request"	10.7	7.4	12.1	15.3
None of the above	8.0	0.8	0.0	6.1



#### 30.6. Distribution by three advanced training courses to work with grades 5-6 of NUS that are the most popular among the respondents (in %)

	Institute of Education Content Modernization	Institutes of Postgraduate Pedagogical Education or Academies of Continuing Education	Civil society organizations (for example, Osvitoria PU, School for Democracy program, etc.)
Subject integration	41.3	41.0	52.8
Development of individual student learning curves	33.7	26.6	20.8
Project learning	61.5	50.1	58.4
Design of a student portfolio	16.3	13.9	12.8
Problem-solving learning	53.8	53.6	64.8
Learning "by request"	15.4	9.1	13.6
None of the above	2.9	4.2	0.8

#### Do you share the responsibilities related to shaping students' cross-cutting skills and 31. competencies with your colleagues? (n=584)

	Frequency	%
Yes, this is centralized	162	27.7
Yes, on the initiative of individual teachers	155	26.5
No	267	45.7

#### 31.1. Distribution by macro-region where the educational institution of respondent's employment is located (in %)

	West	Central	South	East
Yes, this is centralized	20.0	27.6	42.3	33.3
Yes, on the initiative of individual teachers	20.0	33.6	28.2	23.0
No	60.0	38.8	29.5	43.7



#### 32. Have you noticed an increase in anxiety, fear, sadness, or anger compared to the period before the war? (n=597)

	Frequency	%
Yes	206	34.5
Somewhat yes	260	43.6
Somewhat no	72	12.1
No	59	9.9

#### 32.1. Distribution by age (in %)

	18–39	40–49	50+
Yes	79.5	79.9	75.8
No	20.5	20.1	24.3

#### 32.2. Distribution by macro-region where the educational institution of respondent's employment is located (in %)

	West	Central	South	East
Yes	76.1	78.0	77.9	82.9
No	23.9	22.0	22.1	17.0

#### 32.3. Distribution by residential type where the educational institution of respondent's employment is located (in %)

	Village and township	Oblast center	Kyiv	Other city
Yes	79.7	72.6	76.2	89.2
No	20.4	27.4	23.8	10.8

#### 32.4. Distribution by professional grade (in %)

	Specialist	Specialist of a second-level professional grade	Specialist of a first-level professional grade	Specialist of higher professional grade
Yes	78.9	78.0	79.5	77.7
No	21.1	22.1	20.5	22.4



#### 33. Which of the following do you notice in yourself? (n=565; respondents could mark any number of answers)

	Frequency	%
Short attention span, trouble focusing	156	27.6
Irritability	222	39.3
Difficulties with remembering new information	103	18.2
Difficulties with recollecting old information	72	12.7
Low motivation to work	173	30.6
Susceptibility to criticism by third-parties	131	23.2

## 33.1. Distribution by age (in %)

	18–39	40–49	50+
Short attention span, trouble focusing	27.1	29.6	26.5
Irritability	39.2	39.1	39.6
Difficulties with remembering new information	16.3	17.8	20.0
Difficulties with recollecting old information	12.0	14.8	11.7
Low motivation to work	38.6	31.4	24.3
Susceptibility to criticism by third-parties	19.9	23.1	25.7

## 33.2. Distribution by macro-region where the educational institution of respondent's employment is located (in %)

	West	Central	South	East
Short attention span, trouble focusing	20.0	28.5	32.9	40.0
Irritability	32.7	42.5	30.1	56.3
Difficulties with remembering new information	15.6	24.6	16.4	10.0
Difficulties with recollecting old information	12.7	14.5	16.4	5.0
Low motivation to work	32.2	30.4	37.0	21.3
Susceptibility to criticism by third-parties	22.0	25.6	21.9	21.3



#### 33.3. Distribution by residential type where the educational institution of respondent's employment is located (in %)

	Village and township	Oblast center	Kyiv	Other city
Short attention span, trouble focusing	27.4	24.8	24.1	39.2
Irritability	37.8	38.1	32.8	52.7
Difficulties with remembering new information	17.4	15.8	25.9	20.3
Difficulties with recollecting old information	11.7	14.4	13.8	10.8
Low motivation to work	33.5	28.7	29.3	27.0
Susceptibility to criticism by third- parties	20.0	25.2	37.9	16.2

#### 33.4. Distribution by professional grade (in %)

	Specialist	Specialist of a second-level professional grade	Specialist of a first-level professional grade	Specialist of higher professional grade
Short attention span, trouble focusing	30.2	26.8	24.8	28.1
Irritability	45.3	33.9	39.8	38.9
Difficulties with remembering new information	26.7	12.5	17.7	17.3
Difficulties with recollecting old information	15.1	5.4	16.8	11.4
Low motivation to work	32.6	42.9	27.4	29.4
Susceptibility to criticism by third-parties	16.3	21.4	19.5	26.8

## 33.5. Distribution by teaching format (in %)

	Distant or mixed format	In person
Short attention span, trouble focusing	33.1	23.2
Irritability	39.5	38.9
Difficulties with remembering new information	20.2	16.4
Difficulties with recollecting old information	13.3	12.4
Low motivation to work	28.5	32.6
Susceptibility to criticism by third-parties	20.9	25.2



#### 34. Do you feel the need to improve your skills in providing psychological support to yourself and your students? (n=594)

	Frequency	%
Yes, to provide psychological support to myself	60	10.1
Yes, to provide psychological support to students	98	16.5
Yes, to provide psychological support to myself and my students	255	42.9
No	181	30.5

#### 34.1. Distribution by age (in %)

	18–39	40-49	50+
Yes, to provide psychological support to myself	10.5	10.1	9.8
Yes, to provide psychological support to students	18.7	18.0	13.9
Yes, to provide psychological support to myself and my students	42.7	42.7	43.3
No	28.1	29.2	33.1

#### 34.2. Distribution by macro-region where the educational institution of respondent's employment is located (in %)

	West	Central	South	East
Yes, to provide psychological support to myself	10.7	9.3	12.8	25.0
Yes, to provide psychological support to students	49.8	59.9	66.7	53.4
Yes, to provide psychological support to myself and my students	24.4	15.9	15.4	14.8
No	2.9	0.9	1.3	0.0

#### 34.3. Distribution by residential type where the educational institution of respondent's employment is located (in %)

	Village and township	Oblast center	Kyiv	Other city
Yes, to provide psychological support to myself	12.6	10.6	7.8	2.4
Yes, to provide psychological support to students	17.6	18.8	14.1	9.8
Yes, to provide psychological support to myself and my students	36.6	39.9	59.4	57.3
No	33.2	30.8	18.8	30.5



#### 34.4. Distribution by professional grade (in %)

	Specialist	Specialist of a second-level professional grade	Specialist of a first-level professional grade	Specialist of higher professional grade
Yes, to provide psychological support to myself	14.4	10.2	12.9	7.4
Yes, to provide psychological support to students	11.1	32.2	22.4	13.2
Yes, to provide psychological support to myself and my students	44.4	37.3	36.2	45.8
No	30.0	20.3	28.4	33.5

### 34.5. Distribution by the option of whether respondents noticed an increase in anxiety, fear, sadness, or anger compared to the period before the war (in %)

	Noticed an increase in anxiety, fear, sadness, or anger	Did not noticed an increase in anxiety, fear, sadness, or anger
Yes, to provide psychological support to myself	11.6	4.7
Yes, to provide psychological support to students	15.7	18.8
Yes, to provide psychological support to myself and my students	48.2	24.2
No	24.5	52.3

#### 35. Do you receive the necessary psychological support to work with students at your educational institution? (n=590)

	Frequency	%
Yes	253	42.9
Somewhat yes	240	40.7
Somewhat no	58	9.8
No	39	6.6

#### 35.1. Distribution by macro-region where the educational institution of respondent's employment is located (in %)

	West	Central	South	East
Yes	78.6	84.6	85.8	90.8
No	21.5	15.3	14.3	9.2



#### 35.2. Distribution by residential type where the educational institution of respondent's employment is located (in %)

	Village and township	Oblast center	Kyiv	Other city
Yes	77.6	86.4	85.7	91.5
No	22.4	13.5	14.2	8.6

#### 35.3. Distribution by the option of whether respondents noticed an increase in anxiety, fear, sadness, or anger compared to the period before the war (in %)

	Noticed an increase in anxiety, fear, sadness, or anger	Did not noticed an increase in anxiety, fear, sadness, or anger
Yes	85.9	75.0
No	14.1	25.0

If you are NOT receiving the necessary psychological support to work with students at 36. your educational institution, why? (n=96; among respondents NOT receiving the necessary psychological support to work with students at their educational institutions)

	Frequency	%
There is no school psychologist	18	18.9
Insufficient qualification of a school psychologist	18	18.9
I do not need psychological support to work with students	53	55.8
Other	6	6.3

37. In your opinion, what are the best options to improve the psychological support provided to teachers and students? (n=585; respondents could choose any number of answers) (n=575; respondents could mark any number of answers)

	Frequency	%
Ensure a sufficient number of psychologists depending on the number of students and teachers in the school	150	25.6
Establish an interschool psychological service – a separate structure to provide free support and training to teachers	114	19.5
Develop a clear algorithm for teachers to deal with complex cases (bullying, trauma, etc.)	250	42.7
Ensure additional training for teachers on how to help themselves and their students.	159	27.2
Ensure additional training (professional development) for school psychologists on ways to deal with crisis or trauma	107	18.3
Other	7	1.2



#### 37.1. Distribution by macro-region where the educational institution of respondent's employment is located (in %)

	West	Central	South	East
Ensure a sufficient number of psychologists depending on the number of students and teachers in the school	22.0	19.9	22.1	51.7
Establish an interschool psychological service – a separate structure to provide free support and training to teachers	19.0	27.3	11.7	8.0
Develop a clear algorithm for teachers to deal with complex cases (bullying, trauma, etc.)	44.9	46.3	53.2	19.5
Ensure additional training for teachers on how to help themselves and their students.	20.5	36.6	24.7	21.8
Ensure additional training (professional development) for school psychologists on ways to deal with crisis or trauma	16.6	14.8	22.1	27.6

## 37.2. Distribution by residential type where the educational institution of respondent's employment is located (in %)

	Village and township	Oblast center	Kyiv	Other city
Ensure a sufficient number of psychologists depending on the number of students and teachers in the school	23.6	26.5	25.8	29.6
Establish an interschool psychological service – a separate structure to provide free support and training to teachers	21.1	20.6	22.6	9.9
Develop a clear algorithm for teachers to deal with complex cases (bullying, trauma, etc.)	40.1	46.1	48.4	37.0
Ensure additional training for teachers on how to help themselves and their students.	22.8	24.5	41.9	35.8
Ensure additional training (professional development) for school psychologists on ways to deal with crisis or trauma	17.3	18.1	12.9	25.9

#### 37.3. Distribution by teaching format (in %)

	Distant or mixed format	In person
Ensure a sufficient number of psychologists depending on the number of students and teachers in the school	25.8	25.2
Establish an interschool psychological service – a separate structure to provide free support and training to teachers	15.7	23.5
Develop a clear algorithm for teachers to deal with complex cases (bullying, trauma, etc.)	43.2	42.9
Ensure additional training for teachers on how to help themselves and their students.	26.8	27.6



Ensure additional training (professional development) for school	17.8	18.7
psychologists on ways to deal with crisis or trauma	17.0	10.7

### 37.4. Distribution by the option of whether respondents need to improve their skills in providing psychological support to themselves and their students (in %)

	Yes, to provide psychological support to themselves	Yes, to provide psychological support to students	Yes, to provide psychological support to themselves and their students	No, they feel no need.
Ensure a sufficient number of psychologists depending on the number of students and teachers in the school	23.6	26.5	25.8	29.6
Establish an interschool psychological service – a separate structure to provide free support and training to teachers	21.1	20.6	22.6	9.9
Develop a clear algorithm for teachers to deal with complex cases (bullying, trauma, etc.)	40.1	46.1	48.4	37.0
Ensure additional training for teachers on how to help themselves and their students.	22.8	24.5	41.9	35.8
Ensure additional training (professional development) for school psychologists on ways to deal with crisis or trauma	17.3	18.1	12.9	25.9

#### 38. Did you measure the educational losses of your students for the previous six months? (n=597)

	Frequency	%
Yes, I measured several times	246	41.2
Yes, I measured once	155	26.0
No. I didn't measure	196	32.8

#### 38.1. Distribution by age (in %)

	18–39	40–49	50+
Yes, I measured several times	35.1	40.0	46.3
Yes, I measured once	25.1	26.1	26.4
No. I didn't measure	39.8	33.9	27.2



#### 38.2. Distribution by macro-region where the educational institution of respondent's employment is located (in %)

	West	Central	South	East
Yes, I measured several times	27.8	42.7	50.6	60.2
Yes, I measured once	29.3	21.6	27.3	28.4
No. I didn't measure	42.9	35.7	22.1	11.4

#### 38.3. Distribution by residential type where the educational institution of respondent's employment is located (in %)

	Village and township	Oblast center	Kyiv	Other city
Yes, I measured several times	30.3	42.5	46.9	63.9
Yes, I measured once	26.6	30.4	25.0	14.5
No. I didn't measure	43.2	27.1	28.1	21.7

#### 38.4. Distribution by professional grade (in %)

	Specialist	Specialist of a second-level professional grade	Specialist of a first-level professional grade	Specialist of higher professional grade
Yes, I measured several times	42.2	36.7	30.8	45.7
Yes, I measured once	28.9	25.0	29.9	23.6
No. I didn't measure	28.9	38.3	39.3	30.7

#### 38.5. Distribution by teaching format (in %)

	Distant or mixed format	In person
Yes, I measured several times	46.9	36.0
Yes, I measured once	24.5	27.4
No. I didn't measure	28.6	36.6

#### 38.6. Distribution by subjects in grades 5–6 (in %)

	Mathematics	Ukrainian	Ukrainian literature	Foreign language
Yes, I measured several times	47.8	44.7	44.4	37.0
Yes, I measured once	29.2	28.5	29.3	19.0
No. I didn't measure	23.0	26.8	26.3	44.0



#### 39. What did you use to measure the educational losses of your students? (n=399; among respondents who measured the educational losses of students for the previous six months; respondents could mark any number of answers)

	Frequency	%
By observing students	234	58.6
Self-developed tests results	180	45.1
Results of tests taken from methodological manuals	116	29.1
Results of tests taken from the All-Ukrainian Online School platform	104	26.1
Results of tests developed by colleagues	32	8.0
Results of tests from other online resources	130	32.6

#### 39.1. Distribution by age (in %)

	18–39	40–49	50+
By observing students	63.1	48.3	62.9
Self-developed tests results	36.9	47.5	48.3
Results of tests taken from methodological manuals	27.2	33.9	27.0
Results of tests taken from the All-Ukrainian Online School platform	24.3	20.3	30.9
Results of tests developed by colleagues	8.7	5.1	9.6
Results of tests from other online resources	33.0	35.6	30.3

#### 39.2. Distribution by macro-region where the educational institution of respondent's employment is located (in %)

	West	Central	South	East
By observing students	55.6	70.8	60.7	39.0
Self-developed tests results	34.2	47.9	62.3	42.9
Results of tests taken from methodological manuals	22.2	27.1	21.3	49.4
Results of tests taken from the All-Ukrainian Online School platform	26.5	29.2	21.3	23.4
Results of tests developed by colleagues	8.5	7.6	11.5	5.2
Results of tests from other online resources	23.1	41.0	34.4	29.9



#### 39.3. Distribution by residential type where the educational institution of respondent's employment is located (in %)

	Village and township	Oblast center	Kyiv	Other city
By observing students	58.1	61.8	62.2	50.0
Self-developed tests results	37.5	47.4	51.1	51.6
Results of tests taken from methodological manuals	27.2	26.3	35.6	34.4
Results of tests taken from the All-Ukrainian Online School platform	22.1	36.8	13.3	18.8
Results of tests developed by colleagues	6.6	9.9	8.9	6.3
Results of tests from other online resources	36.8	28.9	33.3	32.8

## 39.4. Distribution by professional grade (in %)

	Specialist	Specialist of a second-level professional grade	Specialist of a first-level professional grade	Specialist of higher professional grade
By observing students	64.1	38.9	52.1	61.8
Self-developed tests results	35.9	38.9	39.4	50.7
Results of tests taken from methodological manuals	37.5	36.1	33.8	24.0
Results of tests taken from the All-Ukrainian Online School platform	23.4	22.2	29.6	26.2
Results of tests developed by colleagues	6.3	5.6	9.9	8.0
Results of tests from other online resources	45.3	25.0	26.8	32.0

#### 39.5. Distribution by teaching format (in %)

	Distant or mixed format	In person
By observing students	53.1	64.7
Self-developed tests results	44.9	45.3
Results of tests taken from methodological manuals	29.5	28.9
Results of tests taken from the All-Ukrainian Online School platform	27.1	25.3
Results of tests developed by colleagues	9.2	6.8
Results of tests from other online resources	33.8	31.1



#### 40. What measures to overcome educational losses do you use at work? (n=585; respondents could mark any number of answers)

	Frequency	%
Additional in-person lessons	158	27.0
Additional online lessons	82	14.0
Online consultations (individual or group)	186	31.8
In-person consultations (individual or group)	209	35.7
Students independently study additional materials, and I then check the result	193	33.0
Students independently study additional materials with no check on my part	46	7.9
Other	5	0.9
I do not apply measures to overcome educational losses for some reasons	66	11.3

## 40.1. Distribution by age (in %)

	18–39	40-49	50+
Additional in-person lessons	28.6	21.9	29.7
Additional online lessons	17.3	12.4	13.0
Online consultations (individual or group)	26.8	36.0	32.2
In-person consultations (individual or group)	29.8	42.1	35.1
Students independently study additional materials, and I then check the result	28.6	30.9	37.7
Students independently study additional materials with no check on my part	7.7	6.7	8.8
I do not apply measures to overcome educational losses for some reasons	13.7	11.8	9.2



#### 40.2. Distribution by macro-region where the educational institution of respondent's employment is located (in %)

	West	Central	South	East
Additional in-person lessons	28.3	32.9	21.1	14.8
Additional online lessons	6.8	13.4	28.9	19.3
Online consultations (individual or group)	15.6	31.5	65.8	40.9
In-person consultations (individual or group)	26.8	41.2	32.9	45.5
Students independently study additional materials, and I then check the result	30.7	38.9	21.1	34.1
Students independently study additional materials with no check on my part	7.3	7.4	10.5	8.0
I do not apply measures to overcome educational losses for some reasons	18.5	4.2	9.2	13.6

#### 40.3. Distribution by residential type where the educational institution of respondent's employment is located (in %)

	Village and township	Oblast center	Kyiv	Other city
Additional in-person lessons	22.6	33.7	30.6	19.5
Additional online lessons	11.5	16.6	17.7	12.2
Online consultations (individual or group)	20.9	36.6	43.5	41.5
In-person consultations (individual or group)	29.5	39.0	40.3	42.7
Students independently study additional materials, and I then check the result	32.1	27.8	45.2	39.0
Students independently study additional materials with no check on my part	10.7	5.4	3.2	9.8
I do not apply measures to overcome educational losses for some reasons	15.8	10.7	0.0	8.5



## 40.4. Distribution by professional grade (in %)

	Specialist	Specialist of a second- level professional grade	Specialist of a first-level professional grade	Specialist of higher professional grade
Additional in-person lessons	29.5	23.7	25.0	28.0
Additional online lessons	19.3	23.7	8.6	12.9
Online consultations (individual or group)	23.9	25.4	32.8	35.2
In-person consultations (individual or group)	31.8	35.6	33.6	37.7
Students independently study additional materials, and I then check the result	38.6	27.1	24.1	35.2
Students independently study additional materials with no check on my part	8.0	1.7	10.3	8.2
I do not apply measures to overcome educational losses for some reasons	8.0	11.9	19.8	9.1

## 40.5. Distribution by teaching format (in %)

	Distant or mixed format	In person
Additional in-person lessons	23.8	30.4
Additional online lessons	22.7	6.0
Online consultations (individual or group)	49.3	15.4
In-person consultations (individual or group)	35.5	36.5
Students independently study additional materials, and I then check the result	27.7	37.8
Students independently study additional materials with no check on my part	7.8	7.7
I do not apply measures to overcome educational losses for some reasons	10.3	12.0

## 41. Are you well aware of the NUS reform? (n=591)

	Frequency	%
I am well aware of the NUS reform content and its difference from the old teaching system, I also can explain this to others, if necessary	339	57.4
I am quite aware of the NUS reform content and its difference from the old teaching system, but I cannot explain this to others, if necessary	222	37.6
I am not aware of the NUS reform content and its difference from the old teaching system	30	5.1



#### 41.1. Distribution by age (in %)

	18–39	40-49	50+
I am well aware of the NUS reform content and its difference from the old teaching system, I also can explain this to others, if necessary	63.7	52.0	57.0
I am quite aware of the NUS reform content and its difference from the old teaching system, but I cannot explain this to others, if necessary	31.0	43.0	38.1
I am not aware of the NUS reform content and its difference from the old teaching system	5.4	5.0	4.9

#### 41.2. Distribution by macro-region where the educational institution of respondent's employment is located (in %)

	West	Central	South	East
I am well aware of the NUS reform content and its difference from the old teaching system, I also can explain this to others, if necessary	47.8	63.2	55.3	66.7
I am quite aware of the NUS reform content and its difference from the old teaching system, but I cannot explain this to others, if necessary	44.9	30.5	44.7	32.2
I am not aware of the NUS reform content and its difference from the old teaching system	7.3	6.3	0.0	1.1

### 41.3. Distribution by residential type where the educational institution of respondent's employment is located (in %)

	Village and township	Oblast center	Kyiv	Other city
I am well aware of the NUS reform content and its difference from the old teaching system, I also can explain this to others, if necessary	51.0	61.4	72.1	55.0
I am quite aware of the NUS reform content and its difference from the old teaching system, but I cannot explain this to others, if necessary	40.7	35.7	24.6	42.5
I am not aware of the NUS reform content and its difference from the old teaching system	8.3	2.9	3.3	2.5



#### 41.4. Distribution by professional grade (in %)

	Specialist	Specialist of a second-level professional grade	Specialist of a first-level professional grade	Specialist of higher professional grade
I am well aware of the NUS reform content and its difference from the old teaching system, I also can explain this to others, if necessary	57.8	69.0	48.3	58.0
I am quite aware of the NUS reform content and its difference from the old teaching system, but I cannot explain this to others, if necessary	38.9	25.9	41.4	38.3
I am not aware of the NUS reform content and its difference from the old teaching system	3.3	5.2	10.3	3.7

## 42. Where do you usually get information on the progress of NUS reform implementation? (n=597; respondents could mark any number of answers)

	Frequency	%
On the Ministry of Education and Science of Ukraine website	437	73.2
On the NUS website (nus.org.ua)	216	36.2
On the NUS-Hub website (nushub.org.ua)	55	9.2
From the administration of my educational institution	340	57.0
From IPPE, ACE, or CPD employees	109	18.3
From my colleagues	161	27.0
In advanced training courses	342	57.3
From field-specific media	60	10.1
Other	1	0.2
I lack sources to learn information about the NUS reform	1	0.2



#### 43. Which of the following are clearly characteristic of your students who have moved to the basic secondary school from the elementary level of NUS? (n=598; respondents could mark up to seven answers)

	Frequency	%
Self control	76	12.7
Responsibility	105	17.6
Persistence	128	21.4
Stress resistance	101	16.9
Optimism	206	34.4
Emotional capability	280	46.8
Motivation to achieve	143	23.9
Empathy	60	10.0
Trust	152	25.4
Ability to cooperate	245	41.0
Tolerance	78	13.0
Inquisitiveness	265	44.3
Creativity	199	33.3
Social skills	285	47.7
Ability to defend their views	191	31.9
Vitality	217	36.3
None of the above	10	1.7

### 44. Which of the following problems hinder the NUS implementation? (n=598; respondents could mark up to seven answers)

	Frequency	%
Outdated pay system	305	51.0
Low quality of advanced training system	46	7.7
Low teachers' motivation to implement NUS	164	27.4
Exhaustion due to war	320	53.5
Weak interconnection of model programs in different subjects to shape cross-cutting skills and competencies	74	12.4
Lack of quality learning support materials	213	35.6
Unclear evaluation system based on the new education standard	61	10.2



	Frequency	%
Lack of qualitative methodical support for the reform	146	24.4
Lack of understanding ways to teach the program online	29	4.8
Insufficient equipment and material support for the reform	225	37.6
Lack of relevant support on part of educational managers (principals, heads of educational institutions, departments, and offices)	20	3.3
Wasted time during reform preparation under the previous MESU leadership	43	7.2
Reduction of school hours (due to air raid alerts and blackouts, etc.)	246	41.1
Insufficient information campaign explaining the NUS peculiar features	49	8.2
None of the above	39	6.5

## 44.1. Distribution by macro-region where the educational institution of respondent's employment is located (in %)

	West	Central	South	East
Outdated pay system	46.8	57.7	41.0	52.3
Low quality of advanced training system	11.2	5.7	7.7	4.5
Low teachers' motivation to implement NUS	27.3	30.4	23.1	23.9
Exhaustion due to war	40.0	62.6	75.6	42.0
Weak interconnection of model programs in different subjects to shape cross-cutting skills and competencies	8.8	15.4	15.4	10.2
Lack of quality learning support materials	37.6	46.7	20.5	15.9
Unclear evaluation system based on the new education standard	11.2	9.3	12.8	8.0
Lack of qualitative methodical support for the reform	25.9	26.0	25.6	15.9
Lack of understanding ways to teach the program online	6.3	3.1	2.6	8.0
Insufficient equipment and material support for the reform	31.7	54.6	19.2	23.9
Lack of relevant support on part of educational managers (principals, heads of educational institutions, departments, and offices)	4.4	3.5	1.3	2.3
Wasted time during reform preparation under the previous MESU leadership	7.8	6.2	9.0	6.8
Reduction of school hours (due to air raid alerts and blackouts, etc.)	18.0	55.5	67.9	34.1
Insufficient information campaign explaining the NUS peculiar features	7.8	8.4	15.4	2.3
None of the above	10.2	2.2	1.3	13.6



## 44.2. Distribution by teaching format (in %)

	Distant or mixed format	In person
Outdated pay system	48.1	54.1
Low quality of advanced training system	6.9	8.6
Low teachers' motivation to implement NUS	20.6	34.0
Exhaustion due to war	55.0	52.1
Weak interconnection of model programs in different subjects to shape cross-cutting skills and competencies	15.1	9.9
Lack of quality learning support materials	32.6	38.3
Unclear evaluation system based on the new education standard	8.6	11.9
Lack of qualitative methodical support for the reform	22.3	26.4
Lack of understanding ways to teach the program online	4.5	5.3
Insufficient equipment and material support for the reform	32.6	41.9
Lack of relevant support on part of educational managers (principals, heads of educational institutions, departments, and offices)	3.1	3.6
Wasted time during reform preparation under the previous MESU leadership	6.9	7.6
Reduction of school hours (due to air raid alerts and blackouts, etc.)	45.4	37.3
Insufficient information campaign explaining the NUS peculiar features	8.6	7.9
None of the above	5.8	6.9



## Annex 5

# Guide to the first round of interviews

## Guide to conduct structured interviews of teachers of grades 5-6

STUDY TOPIC: Situation with NUS reform implementation in basic secondary school

## SECTION No. 0: TOPIC PRESENTATION, INTRODUCTION, BASIC IDEA **EXPLANATION**

- Interviewer's presentation
- Ask the preferred language for communication. DO NOT ask for any personal information (name, gender, age, educational institution).
- Explain the study topic and the importance of honest answers to the interview questions.
- Get permission for audio recording. Explain its necessity for further processing and
- Emphasize the confidentiality of the answers. State that information provided during the interview will not be shared with third parties, including school administrations or local education authorities. The quotes used will not contain any information allowing to identify a person.

#### SECTION NO. 1: ADVANCED TRAINING

This set of questions is dedicated to advanced training courses related to the NUS implementation. If you have not taken these, just say so, and we will move on to other questions.

- 1. Please, tell me about the skills you acquired in advanced training courses and use in your work.
- 2. What did you personally lack when taking the courses?
  - 2.1. Do you by chance remember any moments from the courses you deem a waste of time?



- 3. How did you choose advanced training courses? What factors were important for you?
- 4. In your opinion, how can the advanced training courses be improved?

#### SECTION No. 2: CONTENT OF EDUCATION

- 1. If you have experience in developing tailored curricula based on model ones, please, tell me a little about it. What made you do this? How did you develop it?
  - 1.1. Answer NO: Please, tell us why you decided not to develop a tailored curriculum.
- 2. Can you please name the model curricula you use at work? How did you choose them? What points were important for you?
- 3. If you changed the model curriculum to be used after grade 5, please tell us why did you do that?
- What are the problems of the model program you are currently using?
- 5. What is your general opinion about the textbooks you currently use in grades 5-6?
  - **5.1.** What is their biggest advantage?
  - 5.2. What would you like to change about them?
- 6. What challenges do you often face when preparing and conducting distance lessons?
- 7. What could help you conduct online lessons and make them both interesting and meaningful for students?

#### SECTION No. 3: STUDENTS' SOCIAL AND EMOTIONAL CONDITION

- 1. What helps you improve your emotional and mental condition?
- 2. Have you had the experience of supporting a student in a vulnerable emotional or mental condition? Can you tell me more about this case? What did you do to help? Did you succeed?

#### SECTION No. 4: STRATEGIES TO OVERCOME EDUCATIONAL LOSSES

- 1. Based on your observations, what has caused knowledge gaps in your students who are currently in grades 5-6?
  - 1.1. In your opinion, who can improve the situation? How?

#### SECTION No. 5: REFORM COMMUNICATION

1. Based on your observations, what can prevent you from using the NUS concept in your work?



## Annex 6

# Guide to the second round of interviews

## Guide to conduct structured interviews of teachers of grades 5-6

STUDY TOPIC: Situation with NUS reform implementation in basic secondary school

## SECTION No. 0: TOPIC PRESENTATION, INTRODUCTION, BASIC IDEA **EXPLANATION**

- Interviewer's presentation
- Ask the preferred language for communication. DO NOT ask for any personal information (name, gender, age, educational institution).
- Explain the study topic and the importance of honest answers to the interview questions.
- Get permission for audio recording. Explain its necessity for further processing and
- Emphasize the confidentiality of the answers. State that information provided during the interview will not be shared with third parties, including school administrations or local education authorities. The quotes used will not contain any information allowing to identify a person.

#### SECTION No. 1: CONTENT OF EDUCATION

- 1. Do you teach individual subjects or integrated courses?
  - 1.1. Answer INDIVIDUAL: Why did you decide NOT to switch to integrated courses?
  - 1.2. Answer INTEGRATED or BOTH OPTIONS: Why did you decide to start teaching integrated courses?
- Based on your experience, what is the difference between textbooks compiled under the new State Standard and earlier ones? How would you assess these changes?
- 3. If you wished to get a textbook with a teaching and methodological kit (for example, a teacher's guide, a student's workbook, etc.), what should be included in such a kit?



#### SECTION No. 2: ASSESSMENT

- 1. How would you define the "feedback" concept?
- What do you deem difficult about the NUS evaluation system? Why?
  - 2.1. Inefficient? Why?
- 3. If you use FORMATIVE ASSESSMENT, please, tell us how do you conduct it?
  - 3.1. Based on your observations, how have the children reacted to it in general? And what is their attitude to POINT-BASED ASSESSMENT?
  - 3.2. In your opinion, what are the advantages of FORMATIVE ASSESSMENT?
  - 3.3. Let's talk a bit more about FORMATIVE ASSESSMENT. Have you experienced any problems in its practical application? Please, tell us more about this.
  - 3.4. What could help you to deal with these obstacles?
- 4. If you do NOT use FORMATIVE ASSESSMENT in your lessons, what knowledge about using formative assessment do you lack to start applying it?
- 5. In your opinion, what are the advantages and disadvantages of LEVEL-BASED ASSESSMENT?

#### SECTION No. 3: REFORM COMMUNICATION

- 1. How do you understand the essence of the NUS reform?
- 2. Please, tell us, is there anything about the reform you do not understand? What is it?
- 3. Based on your observations, how does your experience of teaching under the new State Standard and the old programs in grades 5-6 differ?
  - 3.1. IF THE RESPONDENT DID NOT EXPLAIN EARLIER: Please, tell us more about changes in the content, teaching methods, and general educational process, if you have observed these.
- 4. What is your general attitude to the NUS reform? What do you like about it? And what do you dislike?
- 5. Based on your experience, how would you assess the NUS reform implementation process?
- 6. In your opinion, what does the reform implementation crucially lack?
- 7. In your opinion, how can the NUS reform be improved and who should be responsible for it?
  - 7.1. What should the authorities do to facilitate the NUS reform implementation process for teachers?
- 8. What should your salary be to ensure comfortable working conditions? Please, stick to realistic amounts.
- 9. Are you aware of the practice of employment agreements entered into in the form of a contract between teachers and heads of educational institutions? What do you think of this? Why so?
- 10. Would you agree to switch to a contractual form of employment given a salary increase? What should your salary be, given such conditions? Please, stick to realistic amounts.



- 11. If your weekly load increases and so does your salary, how many extra hours are acceptable?
- 12. What do you think about the following: your working hours will be fixed and you will have to stay at school until 3-4 p.m., but at the same time your salary will be increased?
- 13. What do you think of teachers' attestation? In your opinion, what are the disadvantages and advantages of this tool to assess teachers' knowledge?
  - 13.1. Perhaps you can suggest a different and more effective way to assess teachers' competencies.

#### SECTION No. 4: NON-STANDARD CURRICULA

- 1. If you have colleagues who use non-standard curricula (for example, "Intelligence of Ukraine" or "League of the Winged") in secondary school, in their opinion, what do they like or dislike about it? In their opinion, what are the advantages or disadvantages of teaching under these curricula?
- 2. Were you offered to work under a non-standard curriculum?
  - 2.1. IF OFFERED AND REFUSED: Why did you refuse?
- 3. Have you earlier taught in grades 5-6 under a non-standard curriculum? QUESTIONS TO THOSE WITH RELATED EXPERIENCE:
  - 3.1. Why did you decide to choose this curriculum instead of a standard one?
  - 3.2. Why did you like the curriculum? What are its advantages?
  - **3.3.** Why did you dislike in it? What are its disadvantages?
  - 3.4. What main differences did you notice when comparing your work under nonstandard and standard curricula?





_			



# nus.org.ua

International Renaissance Foundation is one of the largest charitable foundations in Ukraine, which has been helping develop an open society based on democratic values in Ukraine since 1990.

During its operations, the Foundation has supported about 20,000 projects valued at an amount of over US \$350 million.

www.irf.ua

www.fb.com/irf.ukraine

"Smart Osvita" NGO is a team of like-minded people united to improve the system of school education in Ukraine. Since Russia's invasion in 2022, we've been focusing our efforts on helping Ukrainian children, parents, and teachers to remain active participants in the educational process.





contact@smart-osvita.org www.facebook.com/smartosvita www.instagram.com/smart\_osvita\_ngo/ www.smart-osvita.org

