

Teachers' training for the use of digital tools of the formative assessment in the implementation of the concept of the New Ukrainian School

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Abstract. The article deals with teachers' training to the use of digital tools of formative assessment. The authors analyze a number of legal documents in the field of education, which emphasize the introduction of formative assessment in the practice of assessment of primary and basic school pupils. Formative assessment is defined as the assessment to identify learning needs and traces each student's progress, it is carried out on a constant basis and aims to support, stimulate, motivate to learn. The important features of this type of evaluation are criterion, interactivity, consistency. The components of formative assessment are peer assessment, self-assessment, observation, development of logic goals and criteria for their achievement, feedback. The programme of advanced training for teachers of different profiles, deputy heads of educational work on the topic "Theory and Practice of Application of Formative Assessment at a Primary School" was presented. The experience of such programme in advanced training courses at Municipal Higher Educational Establishment "Kherson Academy of Continuing Education of Kherson Regional Council" is presented. The authors describe a pedagogical experiment conducted on the basis of Municipal Higher Educational Establishment "Kherson Academy of Continuing Education of Kherson Regional Council" on the use of digital tools during formative assessment. The experiment covered 162 primary school teachers who were trained under that program. During the practical classes, teachers worked with such digital tools as MentiMeter, Plickers, Kahoot, Poll Everywhere. The results of the survey showed the relevance of the course and the need for its implementation in postgraduate pedagogical education for teachers who will teach at the New Ukrainian School.

Keywords: formative assessment, self-assessment, peer assessment, criterion, advanced training, digital tools

1. Introduction

Educational reform, which began in Ukraine in 2016, is based on the concept of the New Ukrainian School [18], the main principles of which are child-centeredness, pedagogy of part-

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nership, a new content of education is based on competencies, the formation of common values and more. In the component formula of the new school, the leading place is given to teachers of the new formation, who are at the forefront of social and educational transformations, successful, motivated, competent, who are agents of modern change.

The concept of the New Ukrainian School has led to significant transformations of the usual system of assessment for most teachers. The Concept states: “Approaches to the assessment of learning outcomes will be changed. Assessments will be used to analyze individual progress and plan the individual pace of learning, rather than ranking students. Assessments will be considered as a recommendation to action, not a verdict” [16]. According to paragraph 2 of Article 17 of the Law of Ukraine “On Complete General Secondary Education” the main types of assessment of student learning outcomes are formative, current, final (thematic, semester, annual) assessment, state final certification, external independent assessment [50].

All the subtleties and nuances of secondary education reform during 2017-2020 are felt by primary school teachers. Soon, 2022-2023 school year, it will be able to test teachers who teach in primary school. And in the 2021-2022 academic year – teachers who teach in 5th grades of general secondary education – participants in the innovative educational project of the All-Ukrainian level on “Development and implementation of educational and methodological support for secondary education in the implementation of the State standard of basic secondary education”.

Although everyone has their own assessment experience, there are many aspects that need to be rethought, to abandon stereotypes and prejudices about the appropriateness of a new type of assessment, the teacher’s willingness to use formative assessment, to devote time to mastering and a daily use. At the same time, there are many tools, including online services, which are aimed at optimizing the use of formative assessment, increasing its effectiveness. That it is the reason of our paying attention to this problem in our article.

Although everyone has his/her own assessment experience, there are many aspects that need to be reconsidered and addressed, namely:

- teacher’s willingness / unwillingness to use this type of assessment, allocating time for its mastering and daily use);
- a small number of opportunities (online courses, advanced training on the basis of post-graduate education institutes, educational literature) on qualitative advanced training on the topic of formative assessment;
- a large number of digital tools to optimize the use of formative assessment, increase its effectiveness, but at the same time ignorance of the pedagogical community, lack of material-and-technical resources for their use in the classroom / distance learning.

At the same time there are many tools, including online services aimed at optimizing the use of formative assessment, increasing its efficiency. This is what we will pay attention to in our article.

The *purpose of the article* is to characterize the key aspects of preparing primary school teachers for the use of digital tools of formative assessment in the context of the implementation of the concept of the New Ukrainian School.

We propose to present the main material of our article according to the following plan.

1. The purpose of formative assessment, its components.
2. Introduction of the programme of advanced training for teachers of various profiles of the primary school, deputy heads “Theory and practice of application of formative estimation in the primary school”.
3. Pedagogical experiment on the use of digital tools during formative assessment.

2. Related work

Formative assessment is becoming increasingly popular, which is not a tribute to fashion or blind imitation of foreign ideas, but a requirement of the time. More and more European education systems (Finland, the Netherlands, Great Britain, Germany, Denmark, etc.) use formative assessment, combining it with the final and current.

The development of theoretical foundations of formative assessment and implementation of results in practice has been going on in Western pedagogy for more than 20 years. The most famous are the works of Black and Wiliam [7], Chappuis [12].

Since the 2000s, the concept of “formative assessment” has become widely recognized, and therefore in Europe they began to approve official documents and recommendations for its implementation. And since then, the assessment systems of different countries, the education system of which has been focused not only on the control of knowledge, but primarily on improving the quality of the learning process, recognize formative assessment as an effective tool.

According to Lokshyna [22] there is a minimization of the role of such dominant for centuries functions as control and selection in the direction of accentuating those that contribute to the development of the student, the disclosure of his potential, form the ability to learn.

The term “formative assessment” was first proposed by Cronbach [15] in 1963 as the idea of using assessment to review and improve curricula, i.e. it is necessary to take into account student’s assessment as a basis for adaptation and modification of curricula. Bloom, Hastings and Madaus [8] understands formative assessment as a learning approach that involves the use of data to improve both teaching and learning.

Sadler [40] notes that assessment in higher education has two basic function, facilitating learning, and creating formal records of achievement for student transcripts. E-learning technologies are revolutionizing assessment, but properly deploying them requires insight into their assumptions, strengths, and limitations

Among scientists and pedagogues-innovators of the Soviet period, Amonashvili [2], Bodalev and Volkov [10], Lysenkovva et al. [23], Shatalov [43], Sukhomlinskii [46] differed from the traditional assessment. Amonashvili [3] came closest to the tendencies of formative assessment, gradually passing it on to the class, to each student for self-control and self-assessment.

Currently, the issues of formative assessment are presented in the works of Balyk et al. [5], Bibik, Zhorova and Marusynets [6], Martynchuk et al. [26], Morze and Strutynska [32].

Today, in the context of global digitalization of society, digital tools are important for the implementation of formative assessment.

The use of digital tools in the educational process was considered by Burov, Bykov and Lytvynova [11], Glazunova et al. [17], Kuzminska et al. [19], Lytvynova et al. [24], Makhachashvili

et al. [25], Mintii et al. [27], Morze, Kuzminska and Protsenko [28], Morze et al. [29], Morze and Kucherovska [30], Morze and Strutynska [31], Oleksiuk and Spirin [33], Oleksiuk et al. [34], Osadcha et al. [35], Osadchyi et al. [36], Semerikov, Mintii and Mintii [41], Semerikov et al. [42], Spirin et al. [44, 45], Tarasenko, Amelina and Semerikov [47], Vakaliuk et al. [49], Zaika et al. [52].

Among researchers who have considered the issues of informatization of education and the use of digital services in formative assessment, we should mention Awedh et al. [4] (use of socrative and smartphones to support collaborative learning), Bloxham and Campbell [9] (using interactive sheets to evaluate feedback), Cheung and Hew [13] (methods and methodology of using mobile devices in secondary and higher educational establishments), Cosi et al. [14] (formative assessment at the university using digital technology tools).

3. The purpose of formative assessment, its components

As Lokshyna [22] noted, formative assessment is understood as an interactive assessment of student progress, which allows teachers to determine the needs of students, adapting the learning process to them. According to the guidelines for assessing the learning outcomes of students in grades 1-4 of secondary schools (2021) the purpose of formative assessment is to trace the personal development of students and the course of their learning experience as a basis for competence and construction of individual educational trajectory [1].

The important components of such assessment are peer assessment, self-assessment, observation, development of clear goals and criteria for their achievement, feedback.

Thus, in our understanding, formative assessment is the assessment to identify learning needs and track the progress of each student, it is carried out on a regular basis and aims to support, stimulate, motivate to learn. Important features of this type of assessment are criterion (development together with students of criteria for assessment of various works, especially creative direction (illustrations to the work, collage, abstract, multimedia presentation, infographics, etc.)); interactivity, because formative assessment involves constant interaction between students for peer assessment, parents (taking into account parental observations of the child), teachers; consistency, because the formative assessment should be addressed frequently, not once a semester, as in the final.

The process of such an assessment can already teach a lot. It is about assessment for learning, assessment as learning. For example, to assess oneself fairly, one's abilities, to determine one's level in mastering a certain topic, to assess others, to formulate clear goals and ways to achieve them, to develop criteria for assessment a certain work. Formative assessment develops the ability to cooperate, analytical and critical thinking, the ability to learn throughout life, responsibility in learning and more.

Taking into account the fact that most teachers do not have the knowledge and skills of formative assessment, do not know and can not perform such assessment by digital services, the problem of developing and implementing an appropriate training program for teachers of educational institutions has sharply appeared.

4. Introduction of the program of advanced training for teachers of various profiles of elementary school, deputy heads “Theory and practice of application of formative assessment in elementary school”

The program of professional development of teachers, namely: subject teachers who teach in primary school, and deputy heads of educational work on “Theory and practice of formative assessment in primary school” is developed in accordance with modern state educational policy [16, 20, 21, 50] and on the basis of the Standard educational program organization and training of teachers by postgraduate teachers (Order of the Ministry of Education and Science of Ukraine from 15.01.2018 No. 36) taking into account the requirements of the Resolution of the Cabinet of Ministers of Ukraine of August 21, 2019 No. 800 “On some issues of training of teachers and research and teaching staff” and other normative documents of the Ministry of Education and Science of Ukraine in the field of education.

This program is author’s and it is developed in accordance with the needs of students of advanced training courses of the Municipal Higher Educational Establishment “Kherson Academy of Continuing Education of Kherson Regional Council”.

During the development of the program a practice-oriented approach was used. The analysis of digital resources took place with an emphasis on their use in both full-time and distance learning.

The *target audience* is teachers who teach various subjects in primary school and deputy heads of educational work of educational institutions.

The *purpose of the program* is to develop the competencies of subject teachers, deputy heads of educational work institutions of general secondary education, necessary for effective work in terms of reforming the education sector.

Program tasks:

- acquaintance with the main provisions of the theory of formative evaluation, the views of leading world scientists on traditional and formative evaluation;
- understanding the purpose and benefits of using this type of assessment in primary school, the principles of its application;
- improvement of skills to carry out self-assessment, mutual assessment, observation in lessons, to formulate clear goals of the lesson in a language understandable to students, to develop criteria for their achievement, to provide feedback;
- mastering by teachers of the basic techniques of formative assessment;
- improving the ability to integrate formative assessment techniques into the lesson content;
- promoting the personal and professional development of teachers, revising and changing established beliefs about the principles and system of assessment of educational achievements of students.

Areas of professional development: development of professional competencies (knowledge of the subject, professional methods, technologies).

Profiles of competencies of pedagogical workers:

- General:
 - Ability to act responsibly and consciously on the basis of respect for human and civil rights and freedoms; exercise their rights and responsibilities; be aware of the values of civil society and the need for its sustainable development (civic competence).
 - Ability to interpersonal interaction, teamwork, communication with representatives of other professional groups of different levels (social competence).
 - Ability to show respect and appreciate the Ukrainian national culture, diversity and multiculturalism in society; ability to express national cultural identity, creative self-expression (cultural competence).
 - Ability to make effective decisions in professional activities and a responsible attitude to responsibilities, motivating people to achieve a common goal (leadership competence).
 - Ability to generate new ideas, identify and solve problems, initiative and entrepreneurship (entrepreneurial competence).
- Professional:
 - Subject-methodological competence (ability to model the content of learning in accordance with the mandatory learning outcomes of students; the ability to assess and monitor the learning outcomes of students on the basis of the competence approach).
 - Information and digital competence (ability to use digital technologies in the educational process).
 - Prognostic competence (ability to predict the results of the educational process).
 - Assessment and analytical competence (ability to evaluate student learning outcomes, ability to analyze student learning outcomes, ability to provide self-assessment and peer assessment of student learning outcomes).
 - Competence of pedagogical partnership (ability to subject-subject (equal and personality-oriented) interaction with students in the educational process).

Programme learning outcomes:

- master the basic provisions of the theory of formative evaluation;
- understand the differences between traditional and formative assessments;
- understand the purpose and benefits of using this type of assessment in primary school;
- know and follow the principles of application of formative assessment;
- to improve the ability to carry out self-assessment, peer assessment, observation in lessons, to formulate clear goals of the lesson in a language understandable to students, to develop criteria for their achievement, to provide feedback;
- master the basic visual, written, oral, motor techniques of formative assessment;
- to improve the ability to integrate formative assessment techniques into the content of the lesson;
- to change the established beliefs about the principles and system of assessment of educational achievements of students;

- use formative assessment when teaching subjects in primary school.

The program is designed for 30 hours, which are arranged in modules.

Figure 1 shows the scheme of the program “Theory and practice of application of formative assessment in primary school”.

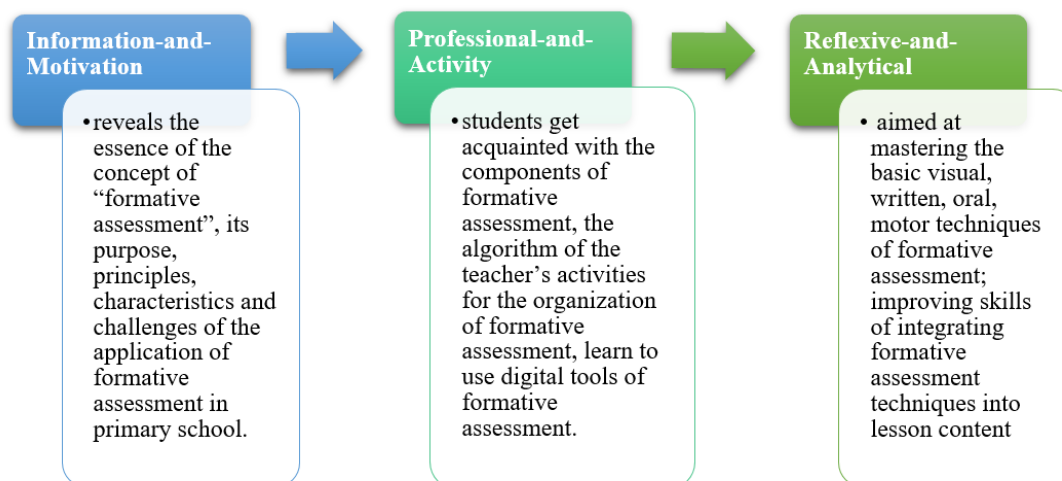


Figure 1: Scheme of the programme “Theory and practice of application of formative assessment in a primary school”.

We will reveal the content of the modules in more detail.

1. *Information and motivation module.* Within its limits the essence of the concept of “formative assessment”, its purpose, principles are revealed, the advantages and challenges of application of formative assessment in the basic school are characterized.
2. *Professional activity module.* During its implementation, students get acquainted with the components of formative assessment, namely: self-assessment, peer review, observation, formulation of clear lesson objectives in a language understood by students, development of evaluation criteria for different types of student work, providing feedback. Students also have the opportunity to work out the algorithm of the teacher’s activity on the organization of formative assessment, learn to use digital tools of formative assessment: Kahoot, Plikers, instant survey services Mentimeter and others. During the analysis of digital platforms, a practice-oriented approach was used in terms of both full-time and distance learning. Particular attention was paid to the analysis of tools for assessing pupils’ achievements, which are presented on each site. The scheme of acquaintance with each service was as follows: general characteristics of the platform, registration conditions, educational opportunities of the platform, application during distance and full-time training, tools for assessing learning outcomes offered by the platform.
3. *Reflexive-analytical module* is aimed at mastering the basic visual, written, oral, motor techniques of formative assessment; improving the skills of integrating formative assessment techniques into the lesson content. During the training, teachers rethink the

established beliefs about the principles and system of assessment of educational achievements of students. It is planned to test the content of classes and receive feedback from students on the quality of education.

Number of hours for studying disciplines for full-time / distance learning – 30 hours, of which 5 hours – lectures, 25 hours – practical training.

A significant addition to the main content of the modules is the variable component, which provides consultations (4 hours offline) for the needs of students on topical issues.

If necessary, there are variations of themes in the amount of 20% of the total. The thematic plan and expected results from the course are presented in table 1.

Table 1

Content and expected results of studying the course “Theory and practice of application of formative assessment in primary school”.

Module	Contents of the training module. Main topics	Number of hours	Expected results
Module 1. Information and motivation	Introductory lesson (acquaintance, introductory instruction). The essence and purpose of formative assessment	6	A student has mastered the basic provisions of the theory of formative assessment; understands the differences between traditional and formative assessments; understands the purpose and benefits of using this type of assessment in primary school; knows and adheres to the principles of application of formative assessment
Module 2. Professional activity	The main components of formative assessment. Self-assessment. Affiliate evaluation. Observation. Portfolio – an innovative technology for assessing student achievement. Effective feedback. Algorithm of teacher’s activity on the organization of formative assessment. Digital tools of formative assessment	16	A student has improved the ability to carry out self-assessment, mutual evaluation, observation in lessons, to formulate clear goals of the lesson in a language understandable to students, to develop criteria for their achievement, to provide feedback; mastered the basic visual, written, oral, motor techniques of formative assessment
Module 3. Reflexive-analytical	Integration of formative assessment techniques into lesson content. Feedback. Testing	8	A student has improved the ability to integrate formative assessment techniques into the content of the lesson; changed the established beliefs about the principles and system of assessment of educational achievements of students

The programme provides for training sessions in various forms of cooperation – lectures, practical classes, trainings. In the process of training work the following methods are used: interactive (in pairs, groups and cooperative forms) – project, problem, game, activity; developmental

diagnostics – self- assessment scales, questionnaires, observations, testing, etc.

5. Pedagogical experiment on the use of digital tools during formative assessment

Since the beginning of the implementation of the course, 162 teachers of Kherson region of different categories and directions have been covered during their advanced training within the framework of 30-hour courses according to the above program. Among them 56 (35%) teachers of language and literature, 31 (19%) – mathematics, 26 (16%) – natural sciences, 18 (11%) – civil and historical sciences, 11 (7%) – arts. , 9 (5%) – technology industry, 6 (4%) – social and health care industry, 5 (3%) – information technology.

Graphically, the distribution of teachers by field is presented in figure 2.

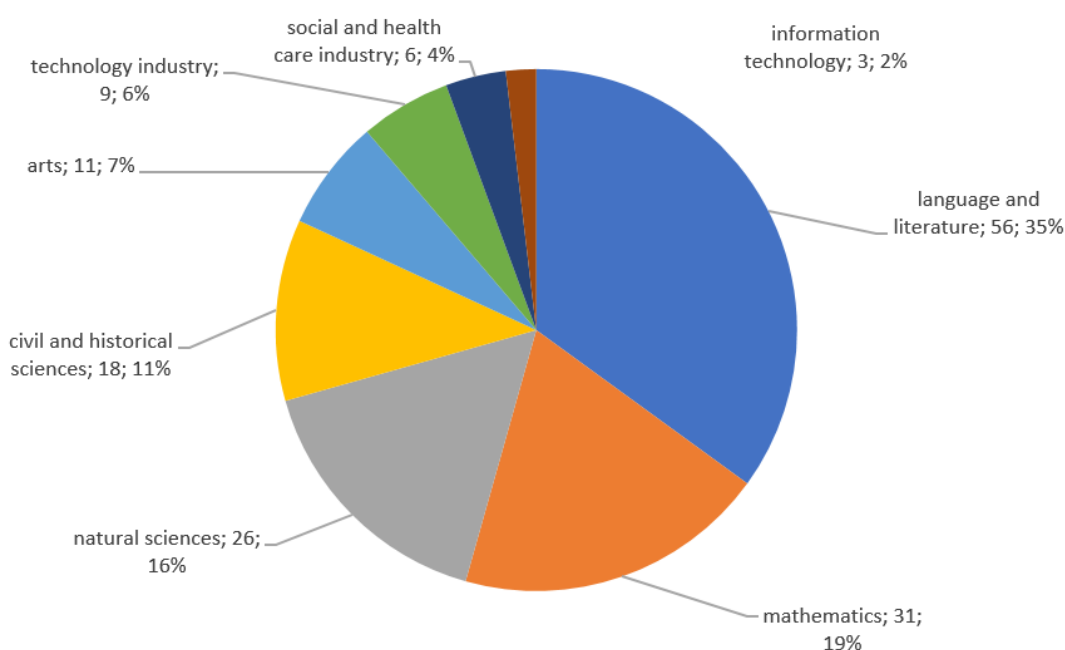


Figure 2: Representative sample of teachers who have passed the course “Theory and practice of application of formative assessment in primary school”.

At the beginning of the course, an entrance survey was conducted using the developed Google form.

The questionnaire of the introductory survey consisted of 10 questions, conditionally divided into three blocks:

1. The general block.
2. The level of knowledge of formative assessment and mechanisms of its implementation.
3. The level of mastery of ICT tools and acquaintance with digital tools of formative assessment.

The general block of questions allowed to reveal the age of listeners, experience of pedagogical activity, branch of teaching, etc.

The second block includes questions:

1. Have you ever heard of formative assessment before? (Yes / No)
2. Have you read about formative assessment? (Yes / No)
3. Have you been trained in formative assessment? (Yes / No)
4. Do you use formative assessment at lessons, in extracurricular activities? (1 – very rarely, 5 – constantly)

Can you teach, advise others, share experiences, how to use formative assessment? (Yes / No) The third block of questions on the level of ICT proficiency contained questions:

1. Level of mastery of digital technologies (1 – initial, 2 – low, 3 – medium, 4 – sufficient, 5 – high).
2. What digital formative assessment tools do you know?

The results of the survey of respondents – participants of the course on the first three questions showed that the largest number of students taught subjects of language and literature. Most of them are of the age of 31-40 and have the experience of work about 10-20 years. These data are presented in more details in figure 3.

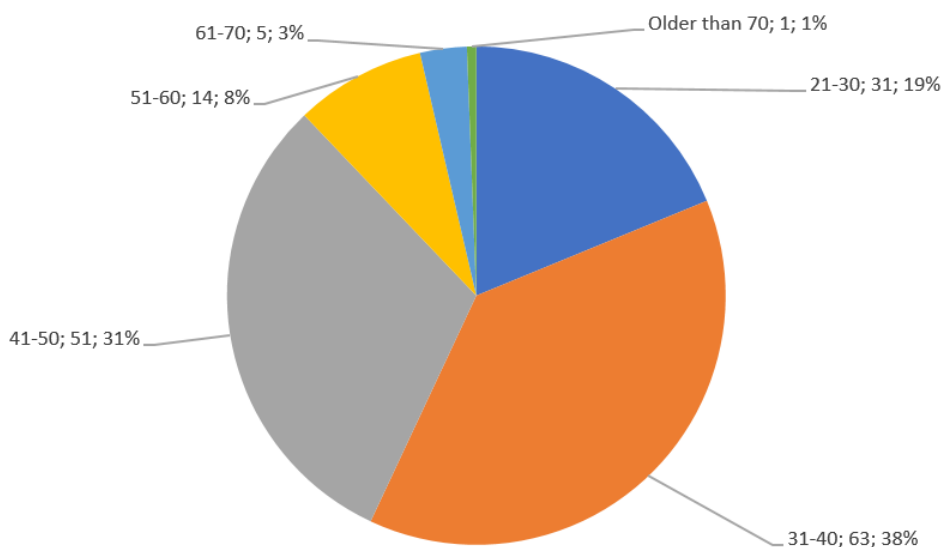


Figure 3: Distribution of students of the course “Theory and practice of application of formative assessment in primary school” by age.

The results of the survey on some issues of the second block of questions are presented in figure 4.

The results of the survey (figure 4) showed that most teachers had heard and read about formative assessment, but almost no one had taken specialized courses to master it. But taking

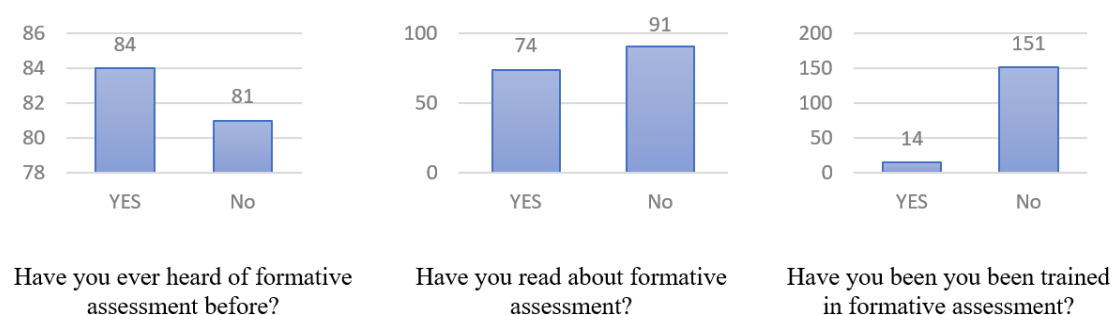


Figure 4: Results of a survey of students on familiarization with formative assessment.

into account the urgency of this issue in the context of the reform of the New Ukrainian School, some teachers even came up with pre-written questions that they wanted to be answered. Besides, it was especially important not just to listen to the course, but to understand the methodology of both formative assessment in general and the use of digital tools in conducting this type of assessment. All this noted the importance of implementing this course once again.

Thus, the survey data on the second block of questions testified to the relevance of the course and the need for its implementation in the context of postgraduate pedagogical education for teachers who will teach at the New Ukrainian School.

Regarding the third block of questions, it should be noted that the vast majority of teachers (57.6%) noted a sufficient level of digital literacy. Also note that most students could not name the tools of formative assessment. Among these services, there were Google Forms, NaUrok, Vseosvita, Kahoot.

The answers obtained showed the need to classify services for teachers and a clear differentiation of those ones that will allow to introduce formative assessment to students.

8 hours are allocated for acquaintance of teachers with digital tools of formative assessment within the course.

During this time, students were introduced to the features of modeling a lesson using digital tools, pedagogical analysis of the lesson, technical support of the lesson for formative assessment in face-to-face, remote and mixed formats, the most relevant and popular services for formative assessment in lessons, their advantages and disadvantages.

The list of resources that were offered to teachers as tools for formative assessment:

- Socrative;
- Quizlet;
- Quizziz;
- Plickers;
- GoFormative;
- EdPuzzle;
- LearningApps;
- Google Form;

- Kahoot;
- Triventy;
- Classtime etc.

During the practical classes (6 hours) teachers studied more actual tools as MentiMeter, Plickers, Kahoot, Poll Everywhere. The choice of tools could vary depending on the level of digital literacy of the audience and the above services.

MentiMeter is an online tool for creating interactive presentations that helps turn any lesson or training into a dialogue with the audience. With this tool one can conduct polls, voting and quiz in real time. Voting is conducted in real time, which allows to receive instant feedback from the audience. Within the free tariff you can create an unlimited number of presentations of quizzes / surveys; attract an unlimited number of participants; export documents to PDF; 2 slides with interactive elements; 5 with a quiz; slides with text and pictures (creating presentations) can be added in unlimited quantities.

These functions are enough to make full use of the resource for various purposes.

During the course, teachers participate in various types of surveys using this service and compose their own surveys for formative assessment.

The online service Plickers (<https://www.plickers.com>) is absolutely free. However, its use requires a teacher to have a workstation (laptop, computer) and a screen to demonstrate the survey, as well as a mobile device on iPad, iPhone or Android platforms [48].

Plickers included in the evaluation kit are paper cards. Before use, the teacher establishes a correspondence between the cards and the students in the system. The teacher installs the Plickers mobile application on the phone or tablet. During the face-to-face interview, he scans students' answers using the camera of his mobile device. Working on the method of recognizing QR-codes on student cards, this application instantly evaluates the answers of the whole class and displays general statistics in percentage. Using the additional function "Live View" allows you to display questions on the screen and show the class the results of the survey, the correct answer to the test task. This online service works in conjunction with a computer / laptop and a projector / interactive whiteboard connected to them to broadcast the tasks and results of the class survey. The Plickers service allows the teacher to flexibly manage the learning process, implementing continuous monitoring of students' educational outcomes. You can use the service both at the end of the lesson and at the beginning of the previous lesson to understand what was learned and what needs to be repeated [51].

Note that during the mastering of the course, teachers not only participated in the prepared survey, but also presented their own compositions and tested them in the classroom.

Another tool that is offered for learning by teachers is Poll Everywhere.

Poll Everywhere (<https://www.polleverywhere.com/>) is a survey tool that has long been known to users. The service is constantly developing. This is not only a great tool for interviewing students, analyzing their opinions, voting, but also testing knowledge, i.e. testing. Students can answer tasks from their laptops, tablets and phones. Moreover, the service can be used both independently on the site and as an application in PowerPoint, Google Slides and others. The survey can be organized both anonymously and with the names of students [39].

The Kahoot service (<https://www.kahoot.com/>) is the most popular among teachers. Kahoot allows teachers to create tests and quizzes that include a wide range of multimedia elements

such as video, images and text.

Every test you create is available to students from any mobile device. Teachers have the opportunity to set the time of tasks. Students receive additional points for early response.

It is worth noting that the course is quite flexible. Depending on the level of digital awareness of teachers, they may be offered a slightly modified list of digital services. For example, the service LearningApps, EdPuzzle, Quizlet, Socrative, etc. can be additionally studied [? ? ?]. The experience of using immersive technologies for formative assessment is also interesting [37, 38].

The surveys created during the classes were noted in the table of progress of the course.

At the end of the training, teachers were given an initial diagnosis of the knowledge, skills, abilities and competencies acquired during the training.

To track the results of the introduction of digital tools of formative assessment after the course, three months later teachers were offered a questionnaire on the application of acquired knowledge, skills and abilities in the educational process and the difficulties that arose in their path. Number of respondents – 142. Among them 51 (36%) teachers of language and literature, 28 (20%) – mathematics, 25 (17%) – natural sciences, 18 (12%) – civics and history, 8% – art, 5 (4%) – technology, 4 (3%) – social and health care, 3 (2%) – information.

Answering the question “Do you use formative assessment in lessons and extracurricular activities” the majority (84 teachers, 59%) informed that they actively use digital tools of formative assessment, 42 teachers (30%) – occasionally carry out formative assessment using digital means, 17 students (11%) noted that formative assessment is used, but do not have the technical capability of its digital implementation.

Regarding the study of the course, teachers noted that “now I understand what formative assessment is and how to implement it”, “I am no longer afraid of formative assessment”, “the use of digital formative assessment in lessons always makes lessons lively and interesting”, “now very I often use Kahoot “and others.

The results of the survey contributed to the modernization of the course in the direction of equipping teachers with clearer methodological tools for the use of digital tools of formative assessment in the classroom. In particular, during the diagnostic-analytical module, teachers showed not only their progress in the table of achievements and passed tests, but also compiled a lesson outline using digital tools of formative assessment.

6. Conclusions and prospects

Analysis of the current state and scientific publications on formative assessment allowed to understand the essence of formative assessment, the peculiarities of its application in the educational process. Currently, the introduction of formative assessment is one of the promising areas of reforming the general secondary education system. Formative assessment is an assessment to identify learning needs and track each student’s progress, it is carried out on an ongoing basis and aims to support, stimulate, motivate to learn. Important features of this type of assessment are criterionality, interactivity, consistency, and the constituent elements: self-assessment, mutual evaluation, observation, feedback, development of clear criteria, formulation of clear, understandable goals for students.

One of the effective means of using formative assessment at lessons is digital tools. Developed for teachers of different profiles of primary school, deputy principals 30-hour course “Theory and practice of formative assessment in primary school” will develop teachers’ competence in the use of formative assessment in lessons and in the use of digital technologies in its implementation. The introduction of the course for teachers of different fields and categories proved its relevance and effectiveness. It was mastered by 165 teachers of Kherson and Kherson region. If at the beginning of the course the result was seen in the table of achievements and final testing, the approbation of the course was aimed at the need to supplement the reporting documents with lesson outlines using digital tools of formative assessment in order to form a clearer vision of theoretical tools.

The results of the study should be further used in postgraduate pedagogical education, as well as in the development of similar courses for teachers.

We believe that the prospects for further research in this direction may be the development of guidelines for teachers on the use of digital means of formative assessment, taking into account foreign experience in the implementation of this phenomenon.

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