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## **Formation of cross-cutting skills in primary school pupils within extracurricular educational institutions**

**Abstract.** Transversal skills are considered a key component in the development of the younger generation, which is confirmed by the provisions of international documents and national educational reforms in Ukraine. The need to form transversal skills in Ukrainian primary school pupils has become particularly relevant in the context of Ukraine's integration into the European educational space. The aim of the study was to determine the criteria for assessing transversal skills of primary school pupils on the example of the Municipal Institution – Centre for Out-of-School Work of the Putyvl City Council and Konotop Lyceum No. 7 named after Hryhorii Hulyanytskyi of the Konotop City Council of Sumy Region, and to analyse the results of monitoring the formation. The study applied a comprehensive methodological approach combining analysis of scientific sources, empirical study of the formation of transversal skills in primary school pupils and expert assessment of the level of these skills in pupils by teachers. Based on the analysis of scientific literature, the essence of the concept of “transversal skills” in the context of developing key competences of primary school pupils was clarified, and the importance of out-of-school education for forming these skills and the ability of primary school pupils to apply knowledge in practical situations was substantiated. On the basis of the results of the expert evaluation method conducted among primary school teachers and educators, the following five main criteria for assessing transversal skills of primary education pupils were determined: creativity, social and emotional development, communicative competence, critical thinking and application of knowledge in real-life situations. Examples of pedagogical practices that contribute to the formation of these skills were presented, as well as the conditions under which these practices are most effective for the development of primary school pupils were outlined. The study emphasised the importance of out-of-school education as a space for developing the competent personality of the primary school pupil. The practical significance of the study lies in the possibility of using the results by teachers of out-of-school educational institutions and primary school teachers for the further development of transversal skills of primary school pupils in out-of-school educational institutions

**Keywords:** creativity; critical thinking; out-of-school education; social and emotional development; digital literacy

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## INTRODUCTION

In the 21<sup>st</sup> century, the reorientation of Ukrainian education towards European standards requires systemic reforms aimed at updating the content, technologies, and approaches to learning. At the same time, the process of modernisation is taking place under conditions of challenges specific to Ukraine: the spread of distance learning, frequent power outages and security threats associated with the full-scale invasion of Russia into Ukraine, which has continued since 2022. Such circumstances affect the work of teachers and pupils and increase the need for flexible, change-resilient educational solutions. As tools and technologies rapidly become obsolete, these technologies and instruments must be regularly updated, and effective methods sought that ensure the modernity of the educational environment, especially in primary school. Innovations in education are aimed at solving current problems by means of new, simple and effective approaches that improve the quality of learning.

The relevance of the outlined issues is also confirmed by the results of contemporary scientific research focusing on the development of transversal skills in primary school age, in particular in the works of N. Hrona *et al.* (2022) and O. Bilous (2025). In the works, the authors emphasised that the formation of such skills contributes not only to academic achievements but also to the development of the personality of the primary education pupil as an active participant in the sociocultural environment. Another group of Ukrainian scholars, in particular N. Yevtushenko *et al.* (2023), studied the impact of artificial intelligence on the development of pupils' "soft" skills. The researchers noted that artificial intelligence assistants improved the educational process, as these assistants provided teachers with information necessary for close and empathetic work with pupils, which in turn made it possible to develop such skills in pupils. The study stressed that the use of artificial intelligence technologies allows the teacher to maintain contact with pupils and helps to control important decisions, which develops decision-making skills and is important for risk management.

At the same time, modern academic discourse highlights the need to go beyond the assessment of pupils' cognitive abilities alone. Thus, S. Joksimovic *et al.* (2020) emphasised that an effective educational process must take into account social and emotional, communicative and metacognitive aspects of learning alongside academic outcomes. This approach is consistent with the concept of transversal skills, which are formed as a complex of cognitive, social and personal characteristics of the pupil.

In addition, academic studies separately stress the need to take into account the specific social and security conditions under which the Ukrainian education system currently operates. For example, I. Kostikova & T. Viediernikova (2023) emphasised the need to develop transversal skills of pupils in Ukrainian schools under conditions of full-scale war and martial law (frequent blackouts, the need often to go down to shelters, the need to be

psychologically prepared for learning in different conditions). Under these conditions, pedagogical approaches capable of ensuring pupils' adaptability, emotional resilience and engagement acquire particular importance, including play-based activities, integrated learning and artistic practices. Practising teachers emphasised that it is the practical focus of education that ensures its real-life value.

The problem of forming transversal skills in primary school age is the focus of attention not only of Ukrainian but also of foreign scholars. Studies by contemporary foreign researchers confirm that the development of critical thinking begins in primary school age, especially under conditions of problem-based learning. Scholars from Hong Kong C.I. Chau *et al.* (2019) considered gamification as a means of developing flexible skills of primary school pupils and studied its impact on pupils' psychological development. A. Han *et al.* (2021) demonstrated the importance of teamwork for the development of soft skills in primary school pupils. American researchers K.L. Kaspar & S.L. Massey (2023) identified a link between the introduction of social and emotional learning and the development of pupils' transversal skills. The researchers identified potential problems and developed general recommendations for school leaders to take into account the specific features of implementing social and emotional learning in primary schools, in which the researchers set out a step-by-step plan of action that can be used as guidance for developing skills of constructive management of one's own emotions.

The formation of transversal skills is impossible without the development of social and emotional intelligence. In this context, the social and emotional component of the development of the primary school pupil's personality acquires particular importance. Academic studies by W. Birhan *et al.* (2021) and M. Alzahrani *et al.* (2019) confirmed the need to develop social and emotional competence for pupils' behaviour, which in turn influenced the educational achievements of primary school pupils. CASEL's SEL Framework (2020) programme proved that the development of social and emotional skills in school and out-of-school learning improves academic outcomes and has a positive effect on the further development of the personality. The "Philosophy for Children" method (Lipman, 1976), as well as newer OECD (2021) recommendations, underline the importance of developing critical thinking as one of the key skills of the twenty-first century. According to the World Economic Forum (2024) report, creativity is one of the five key skills needed in the future world of work. Out-of-school institutions, with the focus on developing individual abilities, play a leading role in forming this competence. In addition, practising teachers stressed the need for a well-founded assessment of the skills under study, as well as for the development of innovative methods for forming and developing transversal skills.

However, despite the considerable number of works devoted to defining the essence and list of transversal

skills, modern scientific and regulatory literature lacks clear and validated criteria for the assessment in primary school pupils. Existing classifications describe the content of skills but do not provide tools for measuring the level of the formation. This complicates the monitoring and comparison of educational outcomes in different learning conditions, particularly in out-of-school activities. In this regard, there is a need to develop criteria that will make it possible objectively to assess the level of formation of transversal skills and to ensure a thorough empirical study of this process. Taking this into account, the aim of this work was to determine criteria for assessing transversal skills of primary school pupils and to analyse the formation of these skills in primary school pupils on the example of the Municipal Institution – Centre for Out-of-School Work of the Putyvl City Council and Konotop Lyceum No. 7 named after Hryhorii Hulianytskyi of the Konotop City Council of Sumy Region on the basis of the developed criteria. To achieve this aim, the following intermediate tasks were implemented step by step: 1) to determine the criteria and levels for assessing transversal skills of primary school pupils; 2) to clarify the current state of development of soft skills of primary school pupils; 3) to analyse the results of the study conducted.

## MATERIALS AND METHODS

At the first stage of the study, materials were prepared and the pedagogical experiment was organised. During this period, scientific literature on the research problem was analysed, the programme of the pedagogical experiment was developed, and diagnostic tools were selected and designed (questionnaires, tests, surveys, result-recording sheets). Criteria and indicators for assessing the level of formation of transversal skills of primary school pupils were also defined. The experimental programme was developed and based on an interdisciplinary approach as one of the key trends in modern education, which presupposes consideration of educational phenomena in an integral interrelationship rather than in isolation.

The empirical stage of the study directly envisaged the implementation of the developed programme in the educational process, with subsequent analysis of the results obtained. This stage was implemented in two interrelated substages – classroom and extracurricular – which made it possible comprehensively to assess the formation of transversal skills of primary school pupils in different educational contexts. The empirical study was conducted at the Municipal Institution – Centre for Out-of-School Work of the Putyvl City Council and Konotop Lyceum No. 7 named after Hryhorii Hulianytskyi of the Konotop City Council of Sumy Region. It covered 84 primary school pupils aged 6 to 11 of both cycles of primary school: the adaptation-and-play cycle (56 pupils) and the subject-based cycle (28 pupils). Pedagogical observation was applied as a transversal method throughout the entire empirical stage, which made it possible to trace the dynamics of the manifestation of pupils' communicative, cognitive, creative and

organisational skills in the course of various types of educational and extracurricular activities.

Within the classroom substage, specially designed tasks and exercises were carried out, aimed at diagnosing communicative skills, the ability to work in a team, critical thinking, creativity, emotional intelligence and self-organisation. The level of communicative skills was determined using the exercises "Continue the Story" and "Describe the Picture". Group projects were used to test teamwork skills. To assess critical thinking, the exercises "What Will Happen If...?" and "Justify Your Answer" were conducted. Creativity was checked using the exercises "Create Your Own Fairy Tale" and "Finish the Story"; emotional intelligence was tested through the description of emotional pictures and the exercise "How Does the Character Feel?"; the tasks "Plan of the Day" and self-assessment helped determine pupils' skills of self-organisation and responsibility.

Within the extracurricular substage, the development of pupils' transversal skills took place in a blended learning format and covered children's participation in the activities of out-of-school educational institutions and various forms of extracurricular activity. Pupils were involved in clubs, including introductory technical modelling, *vytynanka* (paper cutting), dancing, woodworking, nature study, as well as in the activities of sports sections, volunteering campaigns and group creative projects. In the course of the work, virtual excursions were held, pupils were involved in creating simple presentations and using educational platforms. In out-of-school educational institutions, the interdisciplinary approach was implemented through the integration of knowledge from natural sciences, technical, humanities, and arts fields. In particular, during classes in robotics clubs, elements of physics, computer science, mathematics, design, and engineering were combined, which contributed to forming pupils' ability to solve problems in a complex way, to work with different sources of information, to analyse it and to establish cross-curricular connections. In parallel, data were collected from primary school teachers, who assessed the level of pupils' transversal skills on a scale from 1 to 11, where the lower boundary (1) meant the lowest level and the higher (11) the highest. The sample included 8 educators, among whom there were 3 primary school teachers and 5 club leaders working with primary school pupils. All participants had more than 10 years of teaching experience, which was the basis for the involvement as experts.

The final stage of the study involved the analysis of primary school pupils' work and the summarising of the results of teachers' questionnaires. For the purpose of primary evaluation of the sample, methods of descriptive statistics were applied; for the analysis of the results of questionnaires and observations, methods of qualitative analysis were used. In the course of mathematical calculations, methods of data processing and analysis via Excel were applied. To ensure a holistic view of the process of development of primary school pupils, a comprehensive approach was used, which envisaged pedagogical

substantiation of criteria on the basis of modern scientific literature, generalisation of practical experience and determination of levels of formation of transversal skills. The study was conducted in a confidential mode in compliance with ethical norms within extracurricular activities held at the above-mentioned schools and out-of-school educational institutions (World Medical Association, 2024).

## RESULTS AND DISCUSSION

The current Ukrainian document emphasises the need to prepare learners for real-life situations. Therefore, the competence-based approach to learning was defined as one of the leading ideas of the reform by the Ministry of Education and Science of Ukraine (2016), since it is aimed at forming in pupils not only basic competences but also transversal skills necessary for successful socialisation and adaptation of primary school pupils to the rapidly changing conditions of the modern world. According to the Law of Ukraine No. 38-39 (2017), such skills include: (1) the ability to read with understanding and to express one's own opinion in oral and written form; (2) the ability to think critically and systematically and to justify one's own position logically; (3) the ability to act creatively; (4) the ability to show initiative; (5) the ability to manage emotions constructively; (6) the ability to assess risks; (7) the ability to make decisions; (8) the ability to solve problems; (9) the ability to cooperate with other people. These skills form the list of basic competences defined in the current State Standard of Primary Education (Resolution of the Cabinet of Ministers of Ukraine No. 87, 2018), in which attention is focused on the formation of transversal skills in accordance with the recommendations of international educational organisations, in particular OECD (2021).

On the basis of scientific literature and the method of expert evaluation, criteria were established for assessing transversal skills of primary education pupils, which took into account not only the results of educational activity of

primary school pupils but also the out-of-school experience while attending clubs, implementing projects and interacting with peers and adults. These criteria ensured a holistic understanding of the levels of competence formation and created conditions for the individual educational trajectory of each pupil. However, during 2020-2025 the list of transversal skills underwent certain changes, and the most relevant skills were defined as follows: (1) analytical thinking and innovation, (2) active learning and learning strategies, complex problem-solving, critical thinking and analysis, creativity, originality and initiative, leadership and social influence, use of technology, monitoring and control, technology design and programming, resilience, stress tolerance and flexibility, logical reasoning, problem-solving and ideation (Resolution of the Cabinet of Ministers of Ukraine No. 87, 2018). The foundation of these skills is laid in primary school, and the purposeful formation requires a scientifically grounded system of criteria and indicators of assessment. The assessment of transversal skills should be based on a comprehensive approach, taking into account not only the results of educational activities but also the out-of-school experience of primary school pupils, which is formed in the process of interaction with peers and adults, for example, during project activities and attendance of clubs of various types.

The European competence framework LifeComp (Sala *et al.*, 2020) aimed at the formation and development of nine skills organised into three domains: personal, social and cognitive, which distributes ten "soft skills" into the following groups: cognitive, interpersonal and intrapersonal. In the Ukrainian educational space (Linnik *et al.*, 2022), slightly different transversal skills were defined; however, these skills can also be distributed among the three main domains described in the aforementioned works. Based on the results of the theoretical analysis in this study, a classification of transversal skills of primary school pupils by domains was carried out, which is presented in Table 1.

**Table 1.** Distribution of transversal skills of primary school pupils by domains

Domains	Transversal skills
Personal	Ability to act creatively
	Ability to manage emotions constructively
Social	Ability to cooperate with other people
	Ability to show initiative
Cognitive	Ability to read with understanding
	Ability to express one's own opinion in oral and written form
	Ability to think critically and systematically
	Ability to justify one's own position logically
	Ability to assess risks
	Ability to make decisions
	Ability to solve problems

**Source:** developed by the authors on the basis of studies by O.O. Linnik *et al.* (2022)

The analysis of the data presented in Table 1 shows an uneven distribution of transversal skills across the domains. The predominance of skills in the cognitive domain indicates that modern primary education is

oriented towards the development of cognitive and learning skills. At the same time, the relatively lower representation of the social and personal domains proves the need for the purposeful development, particularly in



the context of out-of-school activities, where broader opportunities are created for the formation of social, emotional and creative skills. On the basis of the analysis of

scientific literature, a classification of transversal skills of primary school pupils by domains was carried out, which is presented in Table 2.

**Table 2.** Distribution of transversal skills of primary school pupils by criteria

Transversal skills	Criterion
Ability to act creatively	Creativity
Ability to manage emotions constructively	Social and emotional development
Ability to show initiative	
Ability to cooperate with other people	Communicative competence
Ability to express one's own opinion in oral and written form	
Ability to read with understanding	Critical thinking
Ability to think critically and systematically	
Ability to justify one's own position logically	
Ability to assess risks	Application of knowledge in real-life situations
Ability to make decisions	
Ability to solve problems	

**Source:** developed by the authors

The data presented in Table 2 indicate an uneven distribution of transversal skills according to the defined criteria. The largest number of indicators falls under the criteria of critical thinking and application of knowledge in real-life situations, which points to the complex nature and leading role in the formation of competences of primary school pupils. At the same time, the criterion of creativity is represented by only one indicator, which may indicate its narrower focus within this study. The obtained results also show that the manifestation of transversal skills depends on the educational environment: in out-of-school activities pupils more often demonstrate initiative, cooperation, and the application of knowledge in practical situations, whereas in school learning the skills related to reading, analysis of information and argumentation prevail. Additional data regarding the level of formation of the specified skills were obtained during the analysis of essays, presentations, projects, and the performance of creative and competence-based tasks.

To substantiate the content of the defined criteria and the use in further analysis, it is advisable briefly to characterise each criterion from the standpoint of modern pedagogical approaches. The creativity of primary school pupils is manifested in the ability to generate new ideas and combine non-standard solutions. In the out-of-school environment, creativity is developed during club activities: drawing, robotics, music and so on. Levels of formation were determined by such indicators as the number and variety of ideas, the pupil's ability to improve ideas and readiness to experiment. As creativity presupposes the ability to find new solutions, to generate original ideas and to implement these ideas in practice, during the pedagogical experiment in art clubs, drama studios and music ensembles, primary school pupils obtained the opportunity to reveal the potential and learn to think in a non-standard way. Creativity is closely related to other transversal skills: critical thinking, cooperation and digital literacy. For example, the creation

of multimedia projects requires not only technical knowledge but also a creative approach.

The criterion of pupils' social and emotional development covers the ability of primary school pupils to be aware of the emotions, to empathise with others and to overcome conflict situations. Such skills directly influence academic success and adaptation in society. In out-of-school activities (for example, when participating in children's camps, role-playing games and volunteering initiatives) pupils learn compassion and emotional regulation. The indicators were the pupils' ability to identify the feelings, to react adequately to the emotions of others and to resolve conflicts in a non-violent way. Primary school pupils are at the stage of active formation of the emotional sphere, and it is precisely out-of-school education that creates a favourable environment for the development of such qualities as empathy, the ability to self-regulate and the ability to work in a team. During out-of-school activities, primary school pupils took part in collective games, projects and creative performances, which contributed to the formation of emotional resilience and the ability to resolve conflicts. This, in turn, ensured the development of critical thinking, as primary school pupils learn to evaluate situations not only from the standpoint but also taking into account the opinions of others.

Communicative competence is manifested in pupils' ability to listen to the interlocutor, to express the thoughts and to participate in dialogue and group work. Effective communication in primary school lays the foundations of social competence. This work correlates with studies by Italian scholars P. Zanchi & L. Zampini (2021), who revealed the particularities of developing pupils' skills of literary analysis of a text, which the authors regard as one of the key skills for the formation of the skills under study. The scholars analysed the oral narratives of primary school pupils using a narrative competence task, which made it possible to identify its gradual growth both at the

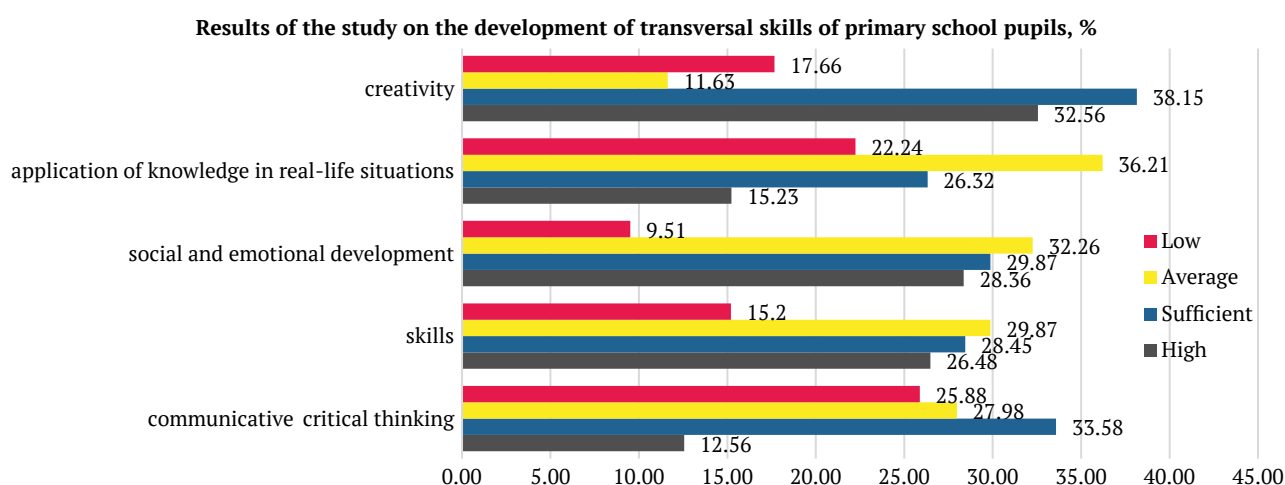
macrostructural and microstructural levels. In addition to the increase in chronological age, cognitive abilities (general non-verbal intelligence and sequential thinking) and linguistic skills (mean length of utterance and lexical diversity) played a significant role in explaining the variability of the macrostructure of the narrative of primary school pupils. Primary school pupils with higher cognitive and linguistic abilities produced more content-rich narrative stories, characterised by a greater amount of information, better structure and a wider use of mental vocabulary. In the context of out-of-school educational institutions in Ukraine, the particularities of developing primary school pupils' skills of communication while attending drama clubs and children's press centres were studied, during which pupils gained experience of public speaking. The indicators were pupils' use of different speech strategies, the ability to ask questions and to maintain a dialogue. In addition, this criterion envisaged checking the ability to work in a team, to share responsibilities and to achieve a common goal. The study by A. Han *et al.* (2021) confirmed that cooperative learning increases pupils' motivation and academic outcomes. The indicators were the pupils' willingness to help others, the ability to negotiate and to take responsibility.

Critical thinking in primary school pupils is manifested in the ability to analyse information, establish cause-and-effect relationships, ask questions, justify the position and distinguish facts from judgements when performing educational and practical tasks. In the course of the study, the formation of this skill in out-of-school educational institutions took place while solving problem tasks, participating in research projects and performing creative and experimental tasks. In particular, in science clubs and during environmental projects, primary education pupils learned to pose questions and test hypotheses. In out-of-school conditions, pupils had more freedom to experiment and therefore tried different approaches without fear of receiving a low mark. The indicators of formation were pupils' ability to explain the opinion, to propose arguments and to

consider other opinions as an alternative. At a high level, pupils independently analyse situations and draw conclusions; at an average level, the pupils use the teacher's help; at a low level, the pupils only reproduce information.

The last criterion applied to the assessment of transversal skills of primary school pupils – application of knowledge in real-life situations – is an integral characteristic that determines the ability of primary school pupils to transfer school knowledge into everyday experience. One of the indicators of this criterion in the present study was the ability to cooperate effectively. In out-of-school institutions, pupils worked in groups on creative, scientific and sports tasks. This contributed to the development of such qualities of primary school pupils as mutual assistance, leadership, responsibility, and tolerance. Cooperation taught pupils to take into account the interests of others, to negotiate, to distribute roles and to achieve results together. A special role here was played by collective creative activities, which have now acquired new relevance in the light of the competence-based approach. In accordance with OECD (2021), cooperation is one of the key competences that is directly correlated with academic success and pupils' readiness for the future professional activity. Examples included keeping a "nature observation diary", solving everyday tasks (for example, calculating purchases in a shop) and participating in school fairs. The indicators of formation were the ability of primary school pupils to apply knowledge in new circumstances, to explain the practical significance of tasks and to propose the ways of solving problems.

Each pupil was assessed by primary school teachers according to the level of mastery of each criterion on four levels: high (10-11), sufficient (7-9), average (4-6) and low (1-3). In this way, data were obtained on the levels of mastery of the defined criteria of all pupils who took part in the pedagogical experiment. The results of the study of the levels of development of transversal skills of primary education pupils are presented in the histogram (Fig. 1).



**Figure 1.** Results of the study of the levels of development of transversal skills of primary school pupils

Source: developed by the authors on the basis of the study

According to the results of the study, it can be noted that creativity is best developed in primary school pupils (32.56% of pupils possess this skill at a high level and 38.15% of respondents have a sufficient level of creativity), whereas the least developed is the ability to apply knowledge in real-life situations (the number of pupils who possess this skill at a high level is only 15.23%, while as many as 36.21% of respondents have a sufficient and 22.24% a low level). The levels of mastery of communication skills and social and emotional development in primary school pupils are approximately the same (a high level is characteristic of 26.48% and 28.36% of pupils respectively, and sufficient and average levels range from 28.36% to 32.26%). The results of the experiment prove that the critical thinking of primary education pupils is poorly developed, since only 12.56% of pupils possess a high level of critical thinking, and 25.88% of respondents have a low level of critical thinking. In this context, particular attention is required for pupils' ability to make well-founded decisions and to evaluate the consequences of the actions. W. Bruine de Bruin *et al.* (2020) proved that decision-making competence is not reduced solely to the level of intelligence but is formed as a complex of skills that includes critical analysis of information, risk assessment and the application of knowledge in real-life situations. This confirms the expediency of distinguishing the criterion "application of knowledge in real-life situations" as one of the key ones in the structure of transversal skills of primary school pupils.

These results emphasise the importance of developing not only basic skills but also the skills necessary for adaptation to the modern digital environment. Taking this into account, the study by G. Mustafa *et al.* (2025) pointed to the importance of early formation of digital literacy, which is important for preparing pupils for the conditions of digital transformation of education. The study identified factors that contributed to the effective implementation of the school digitalisation project: 1) provision of training for the development of the necessary skills, 2) a culture of support and exchange, 3) prior knowledge about tablets, 4) openness to learning, 5) perception of autonomy and competence to work in the new environment. The study was conducted taking into account change management and the satisfaction of psychological needs within the framework of the digital transformation of learning. However, in the study by M. Chicote-Beato *et al.* (2024), it was noted that measures to prevent cyberbullying are necessary from the first contact with technologies. In particular, emotional competence, self-regulation skills, school climate and online safety are factors that have a positive effect on preventing cyberbullying in primary school. Accordingly, in the present study, digital technologies were used, which made it possible to diversify teaching methods and to engage pupils in active cognitive activity. The use of digital tools was carried out in compliance with the rules of safe behaviour in the digital environment.

The use of online resources, virtual laboratories and interactive platforms expands opportunities for creativity

and critical analysis of information. In the course of the study, primary school pupils, working with digital tools (for example, creating multimedia presentations), learned to search for and select information, to analyse its reliability and to use it in new conditions. This process contributes to the formation of the ability to learn throughout life and to the development of media literacy. The UNESCO (2017) study stresses that digital technologies must be integrated into all educational environments, including out-of-school institutions, for the development of key and transversal competences.

Transversal skills also include the formation of civic position, legal culture and responsible attitudes towards society (Sala *et al.*, 2020). In out-of-school education, this aspect was implemented through participation in volunteering projects, environmental and educational activities and pupils' self-government. Primary school pupils who were involved in such practices began to realise the importance of personal contribution to the life of the community and responsibility for the actions; the pupils developed skills of critical assessment of social phenomena. The Concept of Civic Education in Ukraine and the Recommendations of the Council of Europe on Education for Democratic Citizenship and Human Rights define civic competence as one of the main transversal competences.

The study carried out shows that the formation of transversal skills requires interaction between schools and out-of-school educational institutions. Out-of-school educators supplement this process with professional support and specially organised forms of activity. Effective partnership is manifested in joint planning of the child's educational trajectories, in parents' support for the initiatives that the child implements in clubs, as well as in involving parents in the educational process as co-organisers of projects. Work on the formation of transversal skills proves that cooperation between school, family, and community significantly increases the effectiveness of forming pupils' key and transversal competences.

It is important to note that many scholars, including M. Alzahrani *et al.* (2019), O. Linnik *et al.* (2022) and K.L. Kaspar & S.L. Massey (2023), have proved that the formation of transversal skills is an important and valuable means of developing the personality of the primary school pupil. Therefore, the study demonstrated new findings regarding the formation of transversal skills of primary school pupils. The problem under study has become particularly important after the beginning of the coronavirus pandemic in 2019 and the full-scale invasion of Russia into the territory of Ukraine in 2022.

The works of M. Alzahrani *et al.* (2019) and K.L. Kaspar & S.L. Massey (2023) showed that one of the key transversal skills is the social and emotional development of primary education pupils, which, in turn, affects pupils' learning outcomes and the behaviour in society. The study conducted confirms these results and proves that this skill is important; however, in the conditions of distance learning it is quite difficult to develop it, especially in primary school

pupils, since the social and emotional development of primary school pupils presupposes communication with peers and the manifestation of empathy during communication. The obtained results are consistent with the conclusions of Ukrainian scholars O. Linnik *et al.* (2022), who studied 11 transversal skills of primary school pupils. At the same time, in the present study five main soft skills of primary school pupils were distinguished on the basis of expert evaluation by teachers, and the level of the formation was analysed. In addition, it is necessary to take into account the conditions of distance and blended learning in Ukraine, which do not always make it possible to assess the independence of pupils' thoughts and statements and the performance of all tasks. The subjective factor of the teachers who took part in the research process should also be considered.

### CONCLUSIONS

The development of transversal skills in out-of-school education corresponds to international recommendations and national educational documents of Ukraine. The study conducted allows us to state that out-of-school educational institutions are a powerful environment for the formation of transversal skills in primary school pupils, since such institutions create conditions for the development of critical thinking, creativity, social and emotional intelligence, digital literacy, civic competence and the ability to cooperate. In the course of the study, on the basis of the scientific literature studied and by the method of expert evaluation, the following criteria of transversal skills of primary school pupils were defined: creativity, social and emotional development, communicative competence, critical thinking and application of knowledge in real-life situations. The obtained results show that creativity is best developed in primary school pupils, whereas critical thinking and the ability to apply knowledge in real-life situations are the least developed. The practical significance of the study lies in defining criteria for assessing transversal skills of primary school pupils, analysing the results of

monitoring the formation using a comprehensive methodological approach that combined the analysis of scientific sources, empirical study of the formation of transversal skills of primary school pupils and expert evaluation by teachers, and envisaged the use of an interdisciplinary approach, the integration of innovative technologies and a focus on partnership with the family and the community, which makes it possible to create an individual educational trajectory for each pupil and to ensure the integrity of the educational process. The research materials can be used by teachers of out-of-school educational institutions and primary school teachers for the further development of transversal skills of primary school pupils in out-of-school educational institutions. Thus, it can be concluded that out-of-school educational institutions act as an important environment for the formation of transversal skills of primary school pupils, since such institutions ensure the development of critical thinking, communicativeness, digital literacy, creativity, the ability to cooperate, social and emotional intelligence and the ability to apply knowledge in real-life situations. In this way, out-of-school education becomes a powerful factor in educating a competent personality capable of learning throughout life and of taking an active part in the development of society. The prospects for further scientific research lie in developing means of fostering transversal skills of primary education pupils, which will be useful for primary school teachers and educators who work with primary school pupils in out-of-school educational institutions of Ukraine.

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## **Формування наскрізних умінь у молодших школярів в умовах позашкільних навчальних закладів**

**Анотація.** Наскрізнi вмiння розглядаються як ключовий компонент розвитку молодого покоління, що підтверджується положеннями міжнародних документів та національних освітніх реформ України. Необхідність формування наскрізних умінь в українських школярів початкової школи набула особливої актуальності в контексті інтеграції України до європейського освітнього простору. Метою дослідження було визначення критеріїв оцінювання наскрізних умінь молодших школярів на прикладі Комунального закладу-центру позашкільної роботи Путивльської міської ради і Конотопського ліцею №7 імені Григорія Гуляницького Конотопської міської ради Сумської області та аналіз результатів моніторингу їх сформованості. У дослідженні було застосовано комплексний методологічний підхід, що поєднує аналіз наукових джерел, емпіричне вивчення сформованості наскрізних умінь у молодших школярів та експертне оцінювання рівня цих умінь у школярів педагогами. За результатами аналізу наукової літератури було уточнено сутність поняття «наскрізнi вмiння» у контексті розвитку ключових компетентностей учнів початкових класів, а також обґрунтовано значення позашкільної освіти для формування цих навичок і здатності молодших школярів застосовувати знання в практичних ситуаціях. На основі результатів методики експертного оцінювання, проведеного серед учителів та вихователів початкових класів, було визначено такі п'ять основних критеріїв оцінювання наскрізних умінь здобувачів початкової освіти: креативність, соціально-емоційний розвиток, комунікативна компетентність, критичне мислення та застосування знань у життєвих ситуаціях. Було представлено приклади педагогічних практик, які сприяють формуванню зазначених умінь, а також окреслено умови, за яких ці практики є найбільш ефективними для розвитку молодших школярів. Дослідження підкреслило значущість позашкільної освіти як простору для розвитку компетентної особистості молодшого школяра. Практична значущість дослідження полягає в можливості застосування результатів педагогами позашкільних навчальних закладів та вчителями початкових класів з метою подальшого розвитку наскрізних умінь молодших школярів в умовах позашкільних навчальних закладів

**Ключові слова:** креативність; критичне мислення; позашкільна освіта; соціально-емоційний розвиток; цифрова грамотність