Lytvynov Andrii, PhD (Pedagogy), Associated Professor, Heard of Theory and Methods of Primary Education Chair, Oleksandr Dovzhenko Hlukhiv National Pedagogical University, Hlukhiv, Ukraine, ORCID ID: https://orcid.org/0000-0002-7914-9857

DIDACTIC POTENTIAL OF DIGITAL PLATFORMS IN THE DEVELOPMENT OF COGNITIVE INTEREST OF PRIMARY SCHOOL PUPILS

Abstract

The article studies the didactic potential of digital platforms in the development of cognitive interest of primary school pupils. It is substantiated that the activation of cognitive interest is determined not by the very fact of using digital technologies, but by the nature of educational activities organized through digital platforms.

Psychological and pedagogical approaches to the interpretation of cognitive interest as an integrative characteristic of the educational activity of junior schoolchildren are analyzed. Its structural components are revealed and the pedagogical mechanisms through which digital platforms affect the development of students' cognitive activity are characterized, in particular, emotional involvement, visualization of educational material, organization of cognitive search, provision of prompt feedback, individualization of learning and support of educational interaction.

A systematization of digital platforms according to their didactic purpose, built on the basis of dominant pedagogical functions, is proposed. Groups of digital resources designed for the creation and visualization of educational content, the organization of interactive educational activities, formative assessment, communication and cooperation, as well as the development of creative and

research activities of younger students have been allocated. It is substantiated that the proposed approach provides a pedagogically balanced selection of digital platforms in accordance with the goals of individual stages of the lesson and contributes to their holistic integration into the educational process of primary school.

The practical possibilities of using digital platforms at different stages of the modern lesson are determined and it is proved that their effectiveness depends on the subordination to the logic of the organization of educational activities, and not the technical characteristics of individual digital resources. It is concluded that the didactic potential of digital platforms is realized under the condition of their methodically justified use, aimed at the development of cognitive interest, intensification of educational activities and the formation of key competencies of younger students.

Keywords: cognitive interest, junior schoolchildren, digital platforms, didactic potential, educational activities, digital educational environment, digital technologies.

Problem statement. The formation of a stable cognitive interest of primary school pupils is one of the key tasks of modern primary education, since it provides internal motivation for learning, contributes to the development of independence, initiative and readiness of students for active acquisition of knowledge. The preservation and development of younger pupils' natural curiosity largely depend on largely depends on the extent to which the educational environment encourages them to active cognitive activity, research search and independent solution of educational tasks.

At the same time, the digital transformation of education opens up new opportunities for organizing such an educational environment. Modern digital platforms and tools provide interactive interaction of students with educational

material, expand the possibilities of its visualization, create conditions for prompt feedback, individualization of learning and organization of joint activities. Thanks to this, they can act not only as technical means of supporting the educational process, but also as an effective pedagogical tool for the development of cognitive interest, educational activity and positive motivation of younger students.

Despite the active introduction of digital technologies in the practice of primary education, their use is often fragmented and is associated mainly with individual electronic services or digital resources. In scientific research, the main attention is paid to the description of the functionality of digital platforms or the analysis of certain aspects of the digitalization of the educational process. At the same time, the issues of pedagogical justification for the use of digital platforms as a means of activating the cognitive interest of younger students, as well as their systematization in accordance with the didactic functions they perform in the educational process, remain insufficiently disclosed.

The need to solve these issues necessitates a comprehensive analysis of the pedagogical potential of modern digital platforms and tools, determining their role in the formation of cognitive interest of primary school students and substantiating approaches to their pedagogically appropriate use in accordance with the goals and content of education.

Analysis of recent research and publications. The problem of the formation of cognitive interest, the development of educational motivation and cognitive activity of students occupies an important place in the national pedagogical science. The theoretical foundations of this problem are revealed in the works of N. Bibik, I. Kozlovska, N. Lysenko, L. Maryanenko, V. Bohuslavska, M. Zabrotsky and other scientists. In their research, they substantiate the role of cognitive interest as one of the leading factors of successful learning, emphasize the need to create an educational environment that stimulates independence, research activity and positive motivation of younger students.

A separate area of modern research is related to the digitalization of education and the use of digital technologies in the educational process. These issues are covered in the works of N. Aristova, O. Nozdrova, M. Onopriychuk, L. Poryadchenko, A. Popesko, M. Savchyn, A. Silveistra, V. Stanchyk, I. Trubenko, O. Uspenska, A. Melnyk and other researchers. The authors consider the possibilities of electronic educational resources, interactive platforms and digital services to increase the effectiveness of learning, individualize the educational process, develop digital competence and organize active interaction of students with educational material.

The analysis of scientific publications shows that the issue of the use of digital technologies in education has been studied quite extensively. At the same time, most of the works are devoted to individual digital services or general aspects of the digitalization of education. On the other hand, the possibilities of modern digital platforms as a means of activating the cognitive interest of primary school students remain insufficiently covered. Methodological approaches to the selection and use of digital tools, taking into account the age characteristics of younger students, also need to be further generalized.

The article is aimed at theoretical substantiation of pedagogical possibilities of using digital platforms and tools to activate the cognitive interest of primary school students.

Presentation of the main material of the study. It is advisable to evaluate the effectiveness of using digital platforms in primary school not only by their technical capabilities or variety of functions. Much more important is how much they are able to influence the internal mechanisms of students' educational activities, support their cognitive activity and create conditions for the conscious assimilation of knowledge. In this context, the central place is occupied by cognitive interest, which determines the nature of the interaction of younger students with the educational material and significantly affects the effectiveness of learning [1; 10; 9; 6].

In psychological and pedagogical research, cognitive interest is considered as a complex personal formation formed at the intersection of intellectual need, positive emotional attitude to learning, internal motivation and active activity of the student [1; 7]. It cannot be reduced only to interest in a particular topic or an unusual form of conducting a lesson. Unlike situational curiosity, which quickly arises and just as quickly fades away, cognitive interest has a more stable character. It encourages the student not only to perceive new information, but also to ask questions, look for explanations, test their own assumptions, establish cause-and-effect relationships and apply the acquired knowledge in new learning situations [1; 10; 8; 6].

For primary school age, this is of particular importance. It is during this period that the child's attitude to learning is formed, the foundations of educational independence are laid, and the first strategies for solving educational problems are developed [7; 9]. The natural curiosity of children creates favorable conditions for the development of cognitive interest, but by itself it does not guarantee its stability. If educational activity is based mainly on the reproduction of ready-made information, interest gradually weakens. Instead, learning, which involves searching, researching, choosing ways of acting and being able to see the result of one's own efforts, supports intrinsic motivation and turns cognition into a personally meaningful process [1; 7; 8].

Cognitive interest is not an isolated characteristic of the personality. It is closely related to educational motivation, cognitive activity, independence and reflection, gradually determining the student's readiness for continuous learning [1; 10; 6]. That is why in modern primary education, its development is considered not as a concomitant result of learning, but as one of the leading pedagogical goals [7; 8]. This approach also changes the requirements for the selection of teaching tools: they should not only ensure the transfer of knowledge, but also support the child's inner need to learn new things.

Cognitive interest is not a homogeneous psychological and pedagogical phenomenon. Its development is ensured by the interaction of several components, each of which performs its own function in the organization of educational activities [1; 10; 6]. That is why it is advisable to assess the effectiveness of pedagogical tools not only by the final results of learning, but also by what components of cognitive interest they affect. This approach allows you to move from the intuitive use of digital resources to their conscious selection in accordance with specific educational tasks.

The emotional component determines the child's attitude to the learning process [10; 9; 6]. A feeling of interest, positive experiences from the successful completion of a task, a desire to continue working or discover new things create a psychological basis for further cognitive activity [1; 8]. Younger students are especially sensitive to novelty, clarity and changes in activities, so the emotional perception of educational material directly affects the level of their involvement in the lesson [9]. This explains why the use of digital platforms with multimedia elements, interactive models or gamification elements often provides not only an increase in interest in a particular task, but also forms a positive attitude towards educational activities in general.

The cognitive component reflects the student's desire to understand the educational material, establish relationships between phenomena, find answers to problematic questions and independently acquire new knowledge [1; 10; 6]. Its development is associated with the performance of such activities that require analysis, comparison, generalization, suggestion and verification of one's own conclusions [10; 7]. Thus, digital tools perform a developmental function only when they encourage students not to mechanically choose the correct answer, but to intellectual search, research and comprehension of educational material.

No less important is the motivational and volitional component, which ensures the readiness of schoolchildren to make efforts to achieve the educational

goal [1; 7; 6]. It manifests itself in the desire to complete the work started, overcome difficulties, improve one's own result and maintain interest even while performing complex tasks [9; 8]. In this context, digital platforms can act as an effective means of supporting learning motivation through prompt feedback, the ability to gradually complicate tasks, track individual progress, and create a situation of success for each student.

The activity component integrates all the previous ones, since it is in practical activity that the real level of formation of cognitive interest is manifested [10; 7; 6]. If the student seeks to experiment, offers his own ways of solving problems, creates new products or uses the acquired knowledge in other learning situations, this indicates a transition from situational interest to a stable cognitive need [1; 8]. With this in mind, the greatest pedagogical value is those digital tools that provide not only the implementation of ready-made exercises, but also the creation of their own projects, models, interactive stories, or other results of creative activity.

This approach allows us to consider the structure of cognitive interest not only as a theoretical characteristic of the individual, but as a practical guideline for the choice of digital learning tools. Each component requires different pedagogical support mechanisms, and therefore different functionalities of digital platforms. It is this pattern that should determine the logic of their use in primary school and serves as the basis for further systematization of digital tools according to their didactic purpose.

In modern primary school, digital platforms are increasingly used not only as an additional source of educational information, but as a full-fledged tool for organizing the educational process [2; 3]. Their pedagogical value is determined not by the number of available functions or technological novelty, but by the ability to change the nature of educational interaction between teacher, student and educational content. That is why the assessment of the effectiveness of digital resources

requires, first of all, the analysis of the pedagogical opportunities that they open up for the development of cognitive activity of primary school pupils [7].

The traditional model of teaching is mainly focused on the transfer of ready-made knowledge from teacher to student. With this approach, the student mostly acts as a performer of the proposed tasks, and his cognitive activity is often limited to the reproduction of already known information [1; 7]. Digital platforms make it possible to change this logic. They create conditions under which the student becomes a direct participant in the educational process: independently researches the material, performs interactive tasks, tests his own hypotheses, analyzes the results of activities and corrects further actions. In this case, the digital resource is not a substitute for the teacher, but a means of organizing active cognitive activity.

A feature of digital platforms is the ability to combine different ways of presenting educational information. Text materials can be supplemented with animations, video fragments, interactive diagrams, virtual models or educational simulations. The combination of several channels of perception contributes to a better understanding of the educational material, facilitates the establishment of relationships between concepts and makes the learning process more accessible to children of primary school age. At the same time, it is not the multimedia itself that is crucial, but its pedagogically expedient use in accordance with the set educational goal [7; 9; 2].

No less important is the ability to ensure constant interaction of the student with the educational material. Unlike printed didactic tools, digital platforms involve active actions: choosing answer options, moving objects, performing interactive exercises, modeling situations, creating your own digital products. This format of training supports concentration, stimulates research behavior and promotes the transition from passive perception of information to its active processing [1; 10; 6].

At the same time, the effectiveness of digital platforms is not automatically determined by the very fact of their use. One and the same resource can either support the cognitive activity of students, or turn into only a modern form of presenting traditional reproductive tasks. It depends on how well the teacher integrates digital tools into the structure of the lesson, selects the content of educational tasks and organizes the interaction of students with the digital environment [7]. Therefore, the decisive factor is not the technology itself, but the method of its pedagogical use.

That is why it is advisable to consider digital platforms not as a universal means of increasing motivation, but as a tool for the implementation of specific pedagogical functions. Their impact on cognitive interest depends on what mechanisms of educational activity they activate, what types of interaction they support and what opportunities they provide students for independent cognition [1; 10; 7; 6; 4]. This approach creates the basis for the analysis of individual pedagogical mechanisms through which digital resources affect the development of cognitive interest of younger students.

It is advisable to assess the pedagogical potential of digital platforms not through the list of their functionality, but because of the changes that they provide in the educational activities of younger students. The same digital tools can demonstrate different effectiveness depending on what pedagogical mechanisms they activate, how organized the interaction of students with educational material is organized and how this interaction corresponds to the age characteristics of children. In this regard, the analysis of not the digital technologies themselves, but the methods of their pedagogical application is of key importance [7; 9].

One of these mechanisms is emotional involvement. Younger students are much more actively involved in educational activities if the educational material evokes positive emotions, supports curiosity and creates a situation of discovery [1; 9; 6]. Digital platforms have ample opportunities to implement this mechanism

due to the combination of visual images, animation, soundtrack, interactive elements and game techniques. However, by themselves, these means do not guarantee the development of cognitive interest. If they are used only for external "enlivenment" of the lesson, their impact quickly disappears [8]. Emotional involvement becomes pedagogically valuable when it stimulates further intellectual activity, and does not replace it [6].

An equally important mechanism is the creation of a situation of cognitive search. Unlike the traditional presentation of ready-made information, digital platforms make it possible to organize learning situations in which the student independently analyzes facts, establishes patterns, makes assumptions and checks them in the process of completing tasks [10; 7]. It is this activity that ensures the transition from passive assimilation of knowledge to its active construction [1; 6; 5]. Accordingly, a digital resource performs not an informational, but a cognitive-organizational function.

Operational feedback plays a special role in maintaining cognitive interest. Younger students need quick confirmation of the correctness of their own actions, as this helps them to correct mistakes in a timely manner, realize their own progress and maintain confidence in their own capabilities [9]. Unlike traditional forms of control, digital platforms provide an almost instantaneous response to the student's performance. At the same time, the pedagogical value of such feedback lies not only in reporting the correct or incorrect answer, but also in creating conditions for analyzing the mistakes made and choosing ways to overcome them [7].

An important factor in the development of cognitive interest is also the individualization of learning. Younger students differ in the pace of work, level of training, learning experience and cognitive needs [7; 9]. Digital platforms allow you to vary the complexity of tasks, choose different ways of presenting educational material, return to previous stages of learning, or, conversely, offer additional tasks for students with a higher level of training. Under such conditions, ed-

ucational activity becomes more personally significant, and interest is maintained not due to external stimulation, but through the opportunity to work at your own pace and feel success from the achieved result [1; 7; 9; 2].

Another mechanism is the organization of educational interaction. Modern digital environments have long ceased to be a space for individual work. They provide the opportunity to implement joint projects, discuss results, mutual evaluation, and collective problem solving. This format contributes to the development of not only cognitive interest, but also communication skills, critical thinking, the ability to argue one's own position and take into account the opinion of other participants in the educational process. For younger students, this is of particular importance, because educational activities at this age gradually acquire a social character [7; 9].

Therefore, the effectiveness of digital platforms is determined not by individual technical characteristics, but by a set of pedagogical mechanisms that they provide. It is through emotional involvement, organization of cognitive search, timely feedback, individualization and educational interaction that digital tools create conditions for the development of sustainable cognitive interest [1; 10; 6; 4]. At the same time, different digital platforms implement these mechanisms to an unequal extent, which necessitates their systematization not by technical features, but by didactic purpose and dominant pedagogical functions.

An analysis of modern scientific publications shows that digital platforms are most often classified according to technical characteristics, functionality or scope of use. In scientific and methodological works, you can find a division into services for creating educational content, distance learning platforms, formative assessment tools, communication tools or collaborative environments. This approach is appropriate for describing digital resources, but it only partially reflects their pedagogical potential, since it focuses mainly on the technical features of digital products.

For a primary school teacher, another question is more important: what didactic function does this or that digital tool perform in the learning process. The same resource can be used to explain new material, organize research activities, formative assessment, reflection or joint work of students. At the same time, different digital platforms often implement the same pedagogical function, despite differences in the interface, toolkit, or ways of interacting with the user. That is why their comparison only in terms of functionality does not give the teacher sufficient guidelines for a pedagogically grounded choice.

In our opinion, the selection of digital platforms should be carried out primarily in accordance with the didactic goal of a particular stage of the lesson. This approach avoids a situation where digital technologies are used only as a means of diversifying the educational process. Instead, each digital tool becomes an element of a holistic methodological system, in which its use is determined not by popularity or technical characteristics, but by pedagogical expediency.

With this in mind, the study proposes a systematization of digital platforms according to their dominant didactic purpose. The basis of the classification was not the software capabilities of individual services, but the pedagogical functions that they mainly implement in the process of teaching younger students. This approach makes it possible to consider digital tools as a component of teaching methods, and not only as a technical means of supporting the educational process.

The proposed systematization is based on three interrelated principles.

The first principle is didactic expediency. Each group of platforms is determined according to which learning task it helps to implement most effectively. The focus is not on the list of functions of the digital service, but on its place in the organization of the educational process.

The second principle is the dominance of the pedagogical function. Most modern platforms combine several tools, so they can be used in different learning situations. However, for systematization, it is important to determine the function

that is leading and most fully characterizes the pedagogical purpose of a particular resource.

The third principle is methodological universality. The proposed classification is not tied to individual software products. It will remain relevant even with the emergence of new digital platforms, since it is based on pedagogical functions that remain unchanged regardless of the development of digital technologies. This, in our opinion, makes such systematization more suitable for use in the professional activity of a teacher.

It should be noted that modern digital platforms are characterized by multifunctionality and can be used to solve various educational problems. This complicates their unambiguous distribution by technical characteristics or scope, since the same digital resource can be effective in explaining new material, organizing independent work, carrying out formative assessments or performing creative tasks. Under such conditions, it is more expedient to arrange them in accordance with the didactic role they play in the structure of the educational process [7].

The proposed systematization is based on the proposition that the choice of a digital tool should be determined not by its popularity or number of functions, but primarily by the educational goal of a particular stage of the lesson. This approach allows us to consider digital platforms as a component of the methodological system of education, in which each resource is used to implement a certain set of pedagogical tasks. The systematization is based on the dominant didactic function, which most fully characterizes the capabilities of a particular digital resource in the organization of educational activities of younger students.

According to the proposed approach, it is advisable to combine digital platforms into five main groups: tools for creating and visualizing educational content, tools for organizing interactive learning activities, formative assessment platforms, communication and collaboration environments, digital resources for creative and research activities of students. The proposed classification is not intended to be

exhaustive, but reflects the most common areas of pedagogical use of digital platforms in the practice of primary education.

Table 1

Systematization of digital platforms by didactic purpose

Category of digital platforms	Main didactic function	Examples of platforms	Pedagogical opportunities
Tools for creating and visualizing educational content	Explanation of new educational material, its visualization and structuring	Canva, Genially, Google Slides, Prezi	Creation of presentations, interactive diagrams, infographics, digital stories, visual models
Tools for organizing interactive learning activities	Knowledge consolidation, formation of practical skills, activation of educational activities	LearningApps, Wordwall, Educaplay	Performing interactive exercises, didactic games, classifications, matching exercises
Formative assessment platforms	Monitoring learning progress, self-assessment and feedback	Kahoot!, Quizizz, Classtime, Plickers	Online testing, quick evaluation of results, analysis of common errors, monitoring of educational progress
Communication and collaboration environments	Organization of interaction of participants in the educational process and joint activities	Google Classroom, Microsoft Teams, Padlet, Miro	Joint completion of tasks, exchange of study materials, group discussion, mutual assessment
Digital resources for creative and research activities	Development of creativity, research skills and project activities	Scratch, Book Creator, Tinkercad	Creation of digital projects, programs, models, interactive books, presentation of research results

The proposed approach demonstrates that one digital resource can be used to implement several pedagogical tasks, but when selecting it, it is advisable to take into account the leading didactic purpose. For example, formative assessment services can be used not only to control educational achievements, but also to actualize supporting knowledge, identify learning difficulties, or organize reflection. Similarly, it is advisable to use the means of creating digital content not only as a tool for demonstrating educational material, but also as an environment for the development of creativity and the formation of information and digital competence of students.

The practical value of the proposed systematization lies in the fact that it orients the teacher to a conscious choice of digital platforms in accordance with the purpose and content of a particular stage of the lesson. This approach contributes to the pedagogically expedient integration of digital technologies into the educational process, ensures their coordination with modern didactic principles and creates prerequisites for activating the cognitive interest of younger students.

The proposed systematization of digital platforms acquires practical significance only if it is integrated into the methodology of organizing the educational process. The selection of digital resources should be carried out not according to the principle of their popularity or accessibility, but in accordance with the didactic purpose of a particular stage of the lesson. This approach ensures the pedagogically expedient use of digital technologies, contributes to the activation of students' cognitive activity and increases the effectiveness of learning [1; 7].

At the stage of motivation, it is advisable to use digital tools that can arouse cognitive interest, actualize the life experience of students and create a problem situation [1; 9; 6]. Interactive presentations, short educational videos, digital stories, virtual demonstrations or interactive surveys help to draw the attention of younger students to the educational topic and form a positive emotional attitude to further work. At the same time, the digital resource performs not an informational, but a motivational function, stimulating the inner readiness of students for cognitive activity [6].

When studying new material, it is advisable to use digital platforms as a means of visualization and research of educational content. The use of interactive models, diagrams, maps, simulations or animated objects makes it possible not only to present information in an accessible form, but also to organize active interaction of students with educational material. This contributes to the formation of a holistic view of the phenomena under study, the development of logical thinking and the establishment of cause-and-effect relationships [10; 7; 9].

At the stage of consolidation of knowledge, digital tools that provide for the active implementation of practical actions are most effective. Interactive exercises, educational games, exercises for classification, matching, modeling of educational situations provide multiple application of the acquired knowledge in various conditions. Thanks to this, students not only reproduce the educational material, but also gain experience in its practical use, which has a positive effect on the development of cognitive activity and the stability of interest in learning [1; 10; 6].

An important place in the structure of a modern lesson is occupied by formative assessment. The use of digital platforms at this stage provides prompt feedback, timely identification of learning difficulties, the possibility of self-assessment and adjustment of further educational activities. For the teacher, this creates conditions for making informed pedagogical decisions, and for students – the opportunity to realize their own progress and determine directions for further improvement [7; 9].

No less important is the use of digital platforms when organizing reflection. Interactive whiteboards, shared digital spaces, online questionnaires or electronic observation logs contribute to the comprehension of the results of the work done, the development of reflective skills and the formation of a responsible attitude to learning [7]. Analysis of their own achievements and difficulties helps younger students to realize personal progress, which has a positive effect on maintaining internal educational motivation [1; 6].

At the same time, digital platforms should not be considered as a universal means of improving the effectiveness of learning. Their effectiveness is determined primarily by the pedagogical skill of the teacher, who chooses digital tools in accordance with the purpose of the lesson, the age characteristics of students, the content of the educational material and the expected learning outcomes [7; 9]. Only under the condition of methodically justified use, digital resources become an effective means of developing cognitive interest, support the active educational

activity of younger students and contribute to the formation of key competencies [1; 7; 6].

The proposed approach allows us to consider the use of digital platforms as an integral pedagogical system, within which the components of cognitive interest, pedagogical mechanisms of their development, the didactic purpose of digital resources and the structure of a modern lesson are interconnected. Such logic provides a conscious choice of digital tools in accordance with the educational goal, increases the efficiency of the organization of the educational process and creates conditions for the formation of a stable cognitive interest of primary school students.

Conclusions. The development of cognitive interest of younger students is determined not so much by the use of modern digital platforms as by the nature of the educational activities they provide. Even the most functional digital tools do not contribute to the formation of a sustainable interest in learning if their application is limited to the demonstration of information or the mechanical performance of interactive exercises. Instead, educational activities that involve searching for different ways of solving learning tasks, cooperation, reflection and meaningful feedback create the conditions for, cooperation, reflection and receiving meaningful feedback, creates prerequisites for the transition from situational interest to stable cognitive motivation.

In this context, it is advisable to consider digital platforms not as separate technical means of learning, but as a component of an integral didactic system. Their pedagogical potential is realized only under the condition of purposeful selection in accordance with the didactic purpose of the lesson, the age characteristics of younger students and the logic of assimilation of educational material. It is the pedagogically grounded use of the possibilities of multimedia, interactivity, gamification, formative assessment, communication and creative activity that en-

sures the activation of students' cognitive activity and supports a positive attitude to learning.

The proposed systematization of digital platforms is based on their didactic purpose and reflects the most common directions of pedagogical use of digital resources in the practice of primary education. This approach allows you to move from the choice of digital services according to their technical characteristics to the conscious design of the educational process, within which each digital tool performs a certain pedagogical function. This creates conditions for the integrated use of digital platforms at different stages of the lesson and ensures their organic integration into the educational activities of younger students.

Thus, the effectiveness of the use of digital platforms in primary school is determined by their integration into a holistic didactic learning system, in which each digital tool is used in accordance with its pedagogical function and ensures the achievement of certain learning outcomes. It is this approach that allows you to maximize the potential of digital technologies for the development of cognitive interest of younger students and creates a methodological basis for their pedagogically appropriate use in the context of digital transformation of education. We see the prospects for further research in the experimental verification of the effectiveness of the proposed systematization of digital platforms, the determination of pedagogical conditions for its implementation in various educational areas of primary school and the development of methodological recommendations for the integrated use of digital resources in the educational process.

References

1. Bibik N.M. Cognitive interest as a condition of subjectivity of teaching primary school pupils. *Pedagogical discourse.* 2011. Vol. 10. P. 53-56.

2. Lytvynov A.S., Nepomnyashcha G.I. Electronic educational resources in the process of training primary school pupils. Scientific Bulletin of the Izmail

State University for the Humanities: Collection of Scientific Papers. Series: Pedagogical Sciences, 2024. Vyp. 66. 304 p. https://doi.org/10.31909/26168812.2024-(66)-20

3. Lytvynov A., Kramska S., Topolnyk Y., Chumak L., Prykhodkina N., Antoniuk L. E-Learning Technologies for Future Teachers: Introduction of Educational Innovations in Higher School Practice. BRAIN. Broad Research in Artificial Intelligence and Neuroscience. 2022. № 13. P. 403-421. https://doi.org/10.18662/brain/13.1Sup1/327

4. Lytvynov A.S., Beskorovaynyi I.V. Digital educational tools as a means of activating the cognitive interest of students in general secondary education institutions. Bulletin of Science and Education (Series "Pedagogy"). 2026. №1(53). Pp. 2266-2282. https://doi.org/10.52058/2786-6165-2026-1(43)-2266-2282

5. Lytvynov A.S., Kyrychenko D.V., Digital interactive platforms as a means of developing critical thinking of primary school students. Bulletin of Oleksandr Dovzhenko Glukhiv National Pedagogical University. Series: Pedagogical Sciences. Glukhiv, 2026. №2(61). P.212-220. https://doi.org/10.31376/2410-0897-2026-2-61-212-220

6. Renninger K. A., Hidi S. Revisiting the conceptualization, measurement, and generation of interest. Educational Psychologist, 46(3). 2011. C. 168-184.

7. Savchenko O.Y. Didactics of primary school. *Textbook for students of pedagogical faculties*, 2002. 368 p.

8. Shafar S. Cognitive interest as a necessary condition for the formation of a full-fledged personality in primary school age. *Science. Education. Youth*. Part 2, 2022. Pp. 219-221.

9. Silveistr A. M., Kolomiets K. O. Features of the development of cognitive interest of primary school pupils. *Pedagogy and Psychology: Trends and Trends in Ukraine and the World.* 2019. Part 2. P. 27-31.

10. Zheludenko A. V. Structure of cognitive interest of primary school pupils and its importance for effective learning. *The XIX International scientific and practical conference «Science, modern technologies and humanity: problems, theories and thoughts»*. 2025. P. 166-168.