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# К ВОПРОСУ О ФОРМИРОВАНИИ ФУНКЦИОНАЛЬНОЙ ГРАМОТНОСТИ У ШКОЛЬНИКОВ

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В данной статье рассматривается необходимость действенных систем обучения, а также ценность функциональной грамотности в обучении студентов для решения проблем, связанных с вызовами в реальном мире. На основании экспериментальных данных определяется степень сформированности у старшеклассников функциональной грамотности. Эта информация может быть использована для улучшения методологической и научной поддержки развития функциональной грамотности у детей 15 лет.

**Ключевые слова:** функциональная грамотность; школьники; учителя; обучение; грамотность; способности; глобальные компетенции.

# ON THE QUESTION OF THE FORMATION OF FUNCTIONAL LITERACY IN SCHOOLCHILDREN

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This article examines the need for effective learning systems, as well as the value of functional literacy in teaching students to solve problems related to challenges in the real world. Based on experimental data, the degree of formation of functional literacy in high school students is determined. This information can be used to improve methodological and scientific support for the development of functional literacy in children aged 15 years.

***Keywords:*** functional literacy; schoolchildren; teachers; training; literacy; ability; global competencies.

High–quality education is the foundation for forming a modern, competitive society, which is the basis of a progressive state in international political and economic ties. In this regard, the country's government focuses on internal and external educational systems in search of effective learning systems [1].

The fourth meeting of the National Council of Public Trust was held on

October 22, 2020. At this meeting, President Kassym-Jomart Tokayev paid particular attention to the content of school education. The results of an authoritative international study show that our students' reading literacy skills need to be sufficiently developed. Therefore, the introduction of a reading culture and the development of reading literacy should become a priority in the secondary education system in the country, and the child's interest in learning and knowledge of the environment should be formed through books within the school [2].

According to the OECD (Organization for Economic Cooperation and Development), basic skills and competencies, as well as the development of student's personal qualities, are critical areas of education in the twenty-first century. Of course, the basic skills include reading, writing, mathematics, natural science, financial literacy, and ICT literacy. These skills will help students fully function and solve everyday tasks in life [3].

In addition to these skills, there are other elements of functional literacy. For example, creative thinking, the ability to analyze and communicate, and the ability to work in a group are all very important for students. Such competencies will make it much easier for the student to cope with complex and peculiar tasks. It should be noted that personal qualities such as leadership, initiative, curiosity, perseverance, etc., also play a unique role in adapting to an environment with constant challenges.

Forming functional literacy in schoolchildren leads to developing positive personal qualities and attitudes in the learning process. "The emphasis on personal achievements, students are aimed at finding conditions and means of developing the internal position of the individual at all stages of ontogenesis" [4].

Kazakhstan has been participating in PISA and other international studies since 2009 to identify the educational achievements of students aged 15. Another PISA study was conducted in Kazakhstan from April to May 2022 to identify schoolchildren's functional literacy. This study compares schoolchildren's skills and abilities in reading, mathematics, and natural science. During the entire period of participation in this study, Kazakhstani schoolchildren fail to pass the threshold level of literacy. Therefore, we decided to conduct a study at the local level to find out what this is related to.

As many people know, the revolution in science and technology has brought adjustments to the formation of functional literacy and its very concept. Thanks to many scientific studies, we are learning new and fresh formulations that most fully describe the functional literacy of a modern person. This change is happening in connection with the development of technology, digitalization, and living conditions in megacities. All these new human needs have begun to change the concept of literacy. Thus, literacy is no longer a monolithic concept but a concept with many aspects. For example, it began to be used along with various types of literacy, such as Internet literacy, media literacy, computer

literacy, and technology literacy [5].

Moreover, literacy has entered a person's lifestyle and will cover his entire existence along with developing types of literacy such as informational, cultural, and universal. This term has changed and developed, having gone through many stages following a certain period of development of society and its needs. In order to see the difference, similarities, or connections with the term literacy, it is necessary to focus on the definition of functional literacy.

Due to the arrival of the visual-digital world, the concept of "functional literacy" requires expansion and rethinking. As in the case of the term "literacy," it is difficult to define it clearly. At a fundamental level, functional literacy can be understood as the next level in general. That is, how a person in personal, economic, social, and cultural endeavors can use literary and mathematical information. An equally important point in functional literacy is studying basic information and skills directly related to the natural sciences after applying them in everyday life. In other words, the functional literacy level includes technical and functional skills. Moreover, it is considered an additional auxiliary training for a person to develop further social, civil, and economic roles [6].

As a result of their research in action, which was done in several stages and cycles, the authors came to the conclusion that students could improve their ability to follow simple instructions through practice and getting used to them [7]. As can be seen from this conclusion, functional literacy is a continuous process.

For the first time, this concept was mentioned at the World Congress of Ministers of Education in Tehran in 1965, which meant "a set of reading and writing skills for use in everyday life and solving everyday problems" [8].

Furthermore, in 1978 UNESCO introduced some additions to this concept: "functionally literate is considered only one who can take part in all activities in which literacy is necessary for the effective functioning of his group and which also allow him to continue to use reading, writing, and counting for his development and the further development of the community (social environment)." Twelve years later, the International Year of Literacy is being held under the leadership of UNESCO, and the UN declared the years from 2002-2012 as the Decade of Literacy. After such a large–scale event, the concept of functional literacy acquires a broad meaning as "fully and effectively functioning as members of the community, parents, citizens and workers" [9].

Also, in UNESCO resources, functional literacy is defined by De Castel as follows: "If a person can take part in significant events: in professional, social, political, and cultural fields for the society in which he/she lives with the help of his/her literacy skills, it is possible to define this person as functionally literate" [10]. In literature, many definitions of literacy and functional literacy are similar. Thus, Luke, referring to the Dictionary of the American Heritage College (AHC), notes that the concept of "functional" is referred to as "capacity

building" and "literacy" as "reading and writing skills" [11]. Hatch argues that when these two terms are combined, the following definition is created: "The ability to read and write at a level sufficient to conduct their daily business" [12]. Its definition is quite simple and specific.

Thus, the classical positions of functional literacy are considered in the conditions of digitalization of education, which significantly changes their content – the set of basic special modern knowledge and skills changes [13].

According to K. Robinson, a conceptual shift in education should occur in three directions [14]:

1. From education to free cognition (education ~ learning);
2. From consumption to participation (consumption ~ participation);
3. From institutions to networks (institutions ~ networks);

On this basis, possible directions for improving general education to ensure the country's innovative development are considered. Thus, the international standard "Skills of the 21st century" (universal skills, key competencies, soft skills) highlights basic skills, competencies, and personal qualities that need to be developed in the education system [15].

These directions can be considered the development of cognitive, value, and activity spheres of personality. The conceptual framework of educational outcomes developed for the international project "Education 2030" implemented by the OECD is oriented according to the same principles [16].

Functional literacy is considered in two ways in P.R. Atutov's concept. The first is related to providing students with the necessary and sufficient knowledge, skills, and abilities to enable them to engage in future activities and have a sufficient basis for effective practical work over a long period. The second aspect is related to the formation of motives for the continuous improvement of one's knowledge, skills, and personality qualities, which allow one to always be in business form and constantly and sensitively respond to the systematically changing information and technological environment" [17].

Suppose traditional education is focused on memorizing someone else's knowledge and is based on the accumulation and transfer of information. In that case, the trend of modern education is, to a greater extent, the development of the methodological apparatus of working with information and its transformation into individual knowledge (concepts), which as the basis of specific competencies, are not only improved but also expanded. The experience of applying personal knowledge (concept) is acquired at each turn of the individual's educational trajectory life-long learning [18]. This trend contributes to rethinking educational content and expanding the function of tasks. When solving standard tasks, students are required to know a particular algorithm, and these tasks aim to work out the skills to solve a specific class of problems. Students' activity in solving this type of task is of a reproductive nature [19].

The solution of creative tasks is based on applying various methods of cognition and constructing new ways of justification. It also requires students to integrate knowledge from various educational fields. In this regard, the teacher faces the problem of independently compiling educational and cognitive tasks of various types. To solve this problem, the teacher will need a method of constructing educational and cognitive tasks using a set of formulations in the form of "unfinished sentences" (according to the criterion of the taxonomy of cognitive goals according to Bloom) [20].

The ability to solve life problems in various fields of activity based on applied knowledge in a changing world characterizes functional literacy in the context of educational outcomes and the level of education. The latter includes "knowledge of rules, norms, and instructions, application of rules in known situations, justification and application of known rules in new situations, the use of universal methods of activity to solve functional problems in educational situations, solving functional problems related to the implementation of individual social functions" [21].

The most relevant in recent years have been analytical tasks in which all the information required for solving is initially embedded in conditions (for example, in natural science subjects). Tasks of this type have their strengths, but they need to entirely the stage of collecting actual data, without which real cognitive activity is impossible. All educational information is received or thought out by the task compiler and handed over to the student in a ready-made form. In tasks for the formation and evaluation of functional literacy, the search and acquisition of new information is an essential requirement [22].

As we can see, the performance of any task involves solving a set of tasks that work out various aspects of functional literacy. Since the tasks within a complex task involve working with information, they can be classified according to the form of working with information. [23].

Looking at all these integrative components of the current functional literacy, it is not difficult to imagine how difficult our life is becoming, in the sense of how much a modern person should know and be able to do.

*The purpose of the study:* is to identify whether school-age children are functionally literate enough to meet the global demands of the country's future.

We conducted an ascertaining experiment to study the functional literacy of children of secondary school age. The basis of our research was the General Education City School No. 16, named after A. Sharipov. 176 schoolchildren aged 15 participated in this experiment.

To identify the level of functional literacy of secondary school age, we used the survey methodology - questionnaires and interviews.

Based on theoretical research and previous pedagogical experience of researchers in the field of functional literacy, interrelated criteria and indicators

of functional literacy were identified: cognitive (the idea of reading literacy), activity-based component (the ability to apply accumulated knowledge to solve everyday tasks), emotional and value component (the ability to follow social norms and rules).

Thus, the identified parameters corresponding to the criteria mentioned earlier made it possible to reveal the levels of functional literacy (high, medium, low) among students.

Students at a high level explained the importance of functional literacy: "rapid adaptation to the external environment," "the ability to apply knowledge and experience in practice," "can work for results," "can think critically," etc. This category of students showed a steady interest in cases that were based on facts (an actual life situation is simulated) where the student applies his accumulated knowledge and skills to solve a particular case; in the plot of games; in the actions of various heroes/heroines; they took the initiative, tried to explain to their peers how to fully function in a given situation related to global competencies (*task Gender Equality and stereotypes, etc.*)*;* they were able to finish the task they started [24].

The participants of the mid-level survey, having some concepts of functional literacy, can only sometimes explain their meaning. They need to pay more attention to the need to be not just literate but functionally literate. Knowing about the competitive world, they have simple ideas about the content of adult labor activity. Nevertheless, students perform the activities assigned to them qualitatively and show perseverance and enterprise in obtaining a practical result from an activity.

The low level is characterized by the inability of students to explain elementary concepts of functional literacy, do not use elements of functional literacy in active life; do not know how to apply instructions to any things; do not know how to apply reading or writing in a social context; students are poorly motivated to work together with peers; the result is not essential for them to, but a quick completion is a necessary process; can wait for others to finish the job they started.

To achieve the study's goal, we surveyed schoolchildren aged 15, in the number of 176 people. In the process of conducting the survey, it was possible to find out how functionally literate schoolchildren aged 15 are, have ideas about literacy, ways of using them in life situations, and personal characteristics of a functionally literate person.

The work was carried out individually, and as the answers to the questions were successful, we determined the level of development of functional literacy. The survey aimed to identify the competence of applying skills and knowledge when: writing an email with a request to change something (e.g., a product); using the instructions for using household appliances; writing an application

with a request; fill out a form.

The questionnaire content included three blocks of questions, through which we identified the features of functional literacy of schoolchildren aged 15.

The peculiarity of the functional literacy of secondary school-age children is manifested in a certain inconsistency associated with vague ideas about the functional activities of schoolchildren and their inability to apply their accumulated knowledge and skills in everyday operations (reading information from the receipt, various room plans, terrain, structures, site maps, appeals, entrance tickets, make purchases online on the site, make an online order, find official information on websites, read and understand the evacuation plan at school, etc.).

As a result of the conducted research aimed at determining the level of functional literacy, we have identified the level of development of the cognitive component of functional literacy through questionnaires with schoolchildren.

*Table 1*

**The results of the formation of the cognitive component of functional literacy**

| component | levels | | |
|---|---|---|---|
| cognitive | low<br>54 (34%) | average<br>98 (67%) | high<br>20 (12%) |

According to the data obtained, schoolchildren aged 15 have a sufficient understanding of the applications of acquired skills and knowledge in life. Analyzing the results of a questionnaire aimed at assessing the formation of the cognitive component of functional literacy (about the applications of knowledge and skills in real-life cases) in schoolchildren aged 15, it turned out that this category (34%) not only had no idea what "functional literacy" is but also did not have a sufficient understanding of the applications they did not encounter it in everyday life or did not participate in events in which this skill would be required. In other words, their parents play a significant role in their lives. Despite this, this category of students showed cognitive interest concerning the functional component of the life of society.

The survey showed that most schoolchildren (67%) understand connecting their acquired knowledge with reality. For example, to the question, "Do you know how to buy a ticket from Almaty to Astana on your own?", "Do you read words/ sentences written in small fonts in notifications and announcements?", "How often do you order food delivery online?", "Do you know how to change an air/railway ticket at the checkout or via a website?" received the following answers, "Yes, an online ticket purchase is much easier, but you need to be careful when you link the card to the website," "Before making purchases of any product, you need to set the limit on the card correctly," "I sometimes ignore

the words in small print ads, I consider unnecessary," "We often order delivery via Glovo or Wolt, it saves time and is inexpensive," "Some tickets need to be changed at the ticket office, it is sometimes inconvenient in terms of time and money spent on the road," etc. Students give answers, referring to their experiences and cases. To the question, "How can I apply the acquired knowledge and skills to solve everyday tasks?" teenagers expressed the opinion, "To help grandparents replenish the balance on the phone," "When booking rooms," "Outside of school." 34% of respondents associate using their knowledge and skills when they reach adulthood.

To the next question, "Do you consider yourself a functionally literate person?", schoolchildren answered "yes, I do" -80%, "rather yes than no" - 15%, "it is too early to think so, I still have to study - 5%. Most schoolchildren consider themselves functionally literate, although some children still doubt and finally cannot attribute themselves to functionally literate people. The smallest percentage in the survey cannot correctly formulate their understanding of functional literacy and believe they are not yet educated enough to be considered functionally literate.

Based on the answers of schoolchildren, most respondents can relate to a functionally literate person who knows how to solve any life task (purchase, understand the schedule, receive notification, make an announcement, etc.). Some respondents (15%) were able to answer "yes," but with some doubt, that is, they are still not sure. To the question "Why is it necessary to be functionally literate?" the respondents answered as follows: "to be educated," "to get out of any situation correctly," "to solve various everyday problems," "to be in demand," "to get a well-paid job," and "to be competitive."

Analyzing the answers of schoolchildren, we can conclude that 12% of 15-year-olds understand well enough the need to be functionally literate, and they are.

A 12% high level of formation of the cognitive component was revealed. The students could not only give the exact meaning of functional literacy but also showed that they had enough knowledge and skills to be functionally literate. The survey revealed the following: the formation of functional literacy of schoolchildren: low - 34%, average - (67%), and high - (12%)

Their answers were due to the fact that they have good ideas about the functional life of society, the essence of functional activity, and its content.

When identifying the emotional component of the formation of functional literacy, special attention was paid to the manifestation of a value attitude to culture, society, and family.

*Table 2*

**The results of the formation of the emotional component of functional literacy**

| component | levels | | |
|---|---|---|---|
| emotional | low<br>35 (19%) | average<br>113 (64%) | high<br>28 (15%) |

The analysis of the formation of the emotional component of functional literacy in schoolchildren aged 15 showed that 15% had a high level. Students show interest and a positive attitude toward situational tasks (for example, a story-role case, "School graduate," a didactic case, "Types of profit," "Choosing a residential apartment," etc.) related to the application of functional literacy. Schoolchildren often showed moral qualities when solving cases like initiative, responsibility, and determination. The average level of development of functional literacy is 64%, characterized by a positive attitude toward work as a socio-moral value, the development of qualities such as diligence and accuracy, the desire and ability to take the initiative, and getting satisfaction from the results of the process. 19% of schoolchildren showed a low level of formation of the emotional component of functional literacy. A value-based attitude to work or moral qualities such as responsibility, efficiency, etc., did not characterize this category. In addition, the students incorrectly characterized the above qualities. For example, to the question, "What should a modern person be like?" 53% of respondents answered "a rich person," "have trendy gadgets," and "with a high-paying job." They associate the concept of "modern man" with acquiring things and status. And only 15% of respondents correctly characterized a modern person. Their answers: "Knows how to achieve a goal," "build healthy relationships," "knows how to think critically," and "makes decisions."

*Table 3*

**Results of the formation of the activity-based component of functional literacy**

| component | levels | | |
|---|---|---|---|
| activity-based | low<br>33 (18%) | average<br>115 (64%) | high<br>28 (15%) |

We relied on the following indicators to analyze the activity-based component of functional literacy:

- the reflection of existing knowledge about functional activity in situational, labor, and productive activities and the ability to rely on this knowledge
- the manifestation of mutual assistance
- the ability to find their place in joint activities
- the desire for cooperation, interaction, and goal achievement

To the question "What would you do if you had a large amount of money?", then the answers are "house with pool," "study abroad," "car," and "gadgets." As you can see, most respondents (64%) would spend money on large purchases. There are answers related to the further accumulation of money, but they are few, 15%.

*Table 4*

**Summary table of the formation of functional literacy components in schoolchildren aged 15**

| components | levels | | |
|---|---|---|---|
| | low | average | high |
| cognitive | 54 (34%) | 98 (67%) | 20 (12%) |
| emotional | 35 (19%) | 113 (64%) | 28 (15%) |
| activity-based | 33 (18%) | 115 (64%) | 28 (15%) |
| | 23,6% | 65% | 14% |

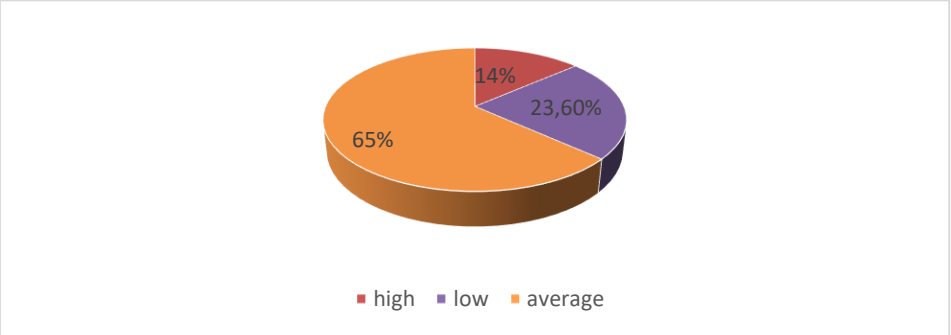


Diagram of the level of formation of functional literacy of schoolchildren aged 15

The findings show that the level of functional literacy in schoolchildren is related to the level of formation of its components.

The current situation is explained by the fact that some teenagers are already paying enough attention to becoming functionally literate. They try to solve problems of different types in everyday life. They like to feel like a responsible person who understands cases and knows how to solve them. However, due to their lack of necessary information, resources on this issue, and purposeful work with them, some teenagers need more confidence to say that they are functionally literate. The experiment stages show that schoolchildren had good ideas about using functional literacy in solving everyday tasks; medium and high levels of skills characterize them to reflect the reality of functional literacy in different activities.

The central scientific hypothesis about the mutual influence of components and levels in the formation of functional literacy in 15-year-olds has been confirmed. The correlation of cognitive, emotional, and activity-based components of functional literacy in 15-year-old students was revealed.

14% of 15-year-olds showed a high level of functional literacy. Teenagers could explain that in any situation, they need to be functionally literate, be interested in situational cases, and have a clear idea of applying their knowledge and skills in different activities.

The average level is 65%. With a variety of tasks related to real-world situations, students manage themselves quite well. They take pride in using their knowledge and abilities to resolve various cases. Most of the time, they can explain one or more approaches to the problem; their needs are highly valued. The existing ideas are well-expressed and substantial, and the work that has been assigned is completed on time, responsibly, and with diligence.

Children showed a low level of about 23.6%. This category of adolescents not only lacks an idea of proper functional literacy but also its application in real life; they do not sufficiently reflect functional literacy in situational tasks because children do not apply the acquired knowledge to solve real problems.

The content of this experiment stage shows that the respondents had full-fledged ideas about using functional literacy in real life; adults believe that modern children are quite capable of solving simple everyday tasks. In addition, teenagers are sufficiently familiar with the personal characteristics of a functionally literate person. The study's results showed the correctness and necessity of forming the basis of functional literacy in adolescents in the process of various activities.

In comparison with the experimental data, it was noticed that the respondents are sufficiently aware of the concept of functional literacy, and they have a general understanding of literacy as many people do; for example, literacy is the ability to read and write, express themselves, and communicate with people around them on everyday topics, etc. Functional literacy is the ability to write according to grammar and spelling rules, to put accents in the right place, and to speak in a way that makes sense and does not have spelling or punctuation mistakes.

While monitoring functional literacy, researchers found that teenagers had a lot of knowledge and ideas about how people solve problems in their active lives. On average, schoolchildren have the skills to recreate functional reality in different activities. The average level of formation of the cognitive component is indicative. The teenagers being interviewed can solve real-life problems correctly and know enough about using their skills and abilities at work and in everyday life. Although, in the active speech of adolescents, you may not notice the frequent use of concepts or vocabulary about functional literacy, according to the study, it became clear that functional literacy is reflected in their active life.

There is quite a sufficient formation of the basics of the functional behavior of schoolchildren based on the implementation of an activity approach that considers children's age and individual capabilities. We agree with the

pedagogical research (V.V. Davydov, A.A. Nesterenko, N.F. Talyzina, R.A. Habib), which shows the need to fill tasks with activity content and subject knowledge. This contributes to the rethinking of educational content and the expansion of task functions, making the phenomenon multidimensional. The task becomes a way to get things done, a way to gain knowledge, skills, and relationships on purpose, and a bridge between theory and practice [25].

In this regard, the theory of Y.N. Kulyutkin is quite convincing. He highlighted a distinctive feature of educational tasks: In his opinion, the solution to any problem has twofold results: external and internal. In the first case, the result is expressed in finding a concrete solution (material); in the second, it is expressed in developing the subject's knowledge, skills, and relationships. In teaching, the second result is the main one since it acts as the goal of pedagogical influence [26].

Considering the function of tasks in the learning process, G.I. Sarantsev and E.Yu. Miganova note that the attitude toward tasks depends on the education status, teaching methods, and various pedagogical concepts of learning [27]. Based on the study of this phenomenon, the authors conclude that tasks contribute to the assimilation of knowledge and skills and the formation of a particular style of thinking that cannot be carried out outside the activity.

Today, digital technologies are of particular importance, including in the issues of functional literacy of children. So, in the study of G.U. Soldatova, it is indicated that today the environment of "living" and socialization of schoolchildren is an information environment filled with electronic gadgets, laptops, social networks, online goods, online games, various Internet access to various services that provide work without leaving home. All this and more contribute to the formation of ideas about functional literacy.

One of the crucial factors influencing the development of functional literacy in schoolchildren is specially selected tasks, which is not to "discover something unknown for theory and practice but to form a certain system of knowledge, attitudes, and practical skills among students. By solving educational tasks, students are involved in independent cognitive activity – they learn previously unknown properties of the studied object, reveal cause-and-effect relationships, the meanings of which allow them to deeply navigate the phenomena of reality, master new and new methods of studying facts, patterns, theories" [28].

Also, our study revealed a proportional dependence on the development of functional literacy: the higher the development of functional literacy in 15-year-olds, the more they paid attention to the application of their knowledge and abilities.

At the same time, we found that a certain number of schoolchildren (33%) do not make a direct relationship between the acquisition of knowledge and its application. The main reasons for this situation are, first of all, difficulties in

solving problems at the initial stages. It seems impossible because the student is used to working on the task only in a situation of choice, i.e., to choose one of the alternatives known to him (UNT - unified national testing), relying on memorization or his experience. Students are accustomed to following a predetermined sequence of steps to solve problems, frequently without conducting a critical analysis of the conditions under consideration or a proper analysis of the results obtained.

Teachers of school educational state organizations, the National Center for Advanced Training "Orleu," are aware of the need to develop functional literacy in adolescents aged 15 and work systematically with teachers in preparation for PISA. Teachers are taught to develop and regularly apply tasks in the classroom to develop functional literacy among schoolchildren. After all, global competence is the ability of our students to learn new technologies and to gain knowledge for modern working and living conditions. Of course, such competitiveness is ensured primarily by the quality and accessibility of education.

The study results are typical for schoolchildren of 15 years of the urban environment. Of the 176 schoolchildren who participated in the study, all are residents of the regional city. As the findings show, our central scientific hypothesis about the relationship between functional literacy development in children of secondary school age has been confirmed. The higher the level of specially selected tasks, the higher the level of functional literacy in a teenager. Thus, the revealed results of the study confirm the data that the average school age is sensitive to the development of functional literacy. The data indicate an acceleration in the functional socialization of modern schoolchildren: teenagers not only know but can also apply their acquired knowledge and skills to appropriate life situations and are aware of the impact of literacy on the quality of life in general.

At middle school age, children can assimilate ideas about applying their skills and knowledge in solving everyday tasks, making an online purchase in a store, correctly entering their data on the website, successfully registering for testing on training courses, etc. They form functionally literate qualities and develop functional skills in specially organized case studies. One of the tasks of the school is to consolidate these messages and develop a meaningful basis for functional literacy among 15-year-olds. The results of experimental data confirm the position of functional literacy as a remarkable integrated quality reflecting the totality of different categories of literacy ("ability," "skill," "literacy," "skill," "knowledge," "thinking," and others), the ability to apply the knowledge gained in different activities, and socio-moral qualities (responsibility, enterprise, diligence, and others).

The current study is the first stage of investigating the characteristics of functional literacy development in adolescents aged 15 years. The next step in the

direction of the study will be a comparative analysis of the development of functional literacy among schoolchildren aged 15 in rural and urban environments, the development of pedagogical conditions, and the content of the development of functional literacy of children aged 15 using a wide range of interactive and digital technologies.

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