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**FINANCIAL LITERACY OF THE RUSSIAN SCHOOLCHILDREN:  
DEVELOPMENT PROBLEMS**

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*Abstract*

The article analyzes certain aspects of the financial literacy development of students of comprehensive schools when they study the basic educational programs at the level of secondary school. The PISA research has actualized a number of issues related to financial education as one of the dominant factors in the development of the financial literacy of the student. The purpose of the study was to identify the typical characteristics of the teaching financial literacy practice in the implementation of secondary school educational programs to specify the results obtained in the course of the OECD international research concerning financial education in Russia. The Social Science is in the focus of the authors' attention, which is one of the subjects of the secondary school educational programs. The authors present data that were obtained from studying the practice of teaching financial literacy as the implementation of secondary school educational programs on the basis of a questionnaire survey of teachers. The conducted questionnaires of teachers showed that the most frequently used form of work with materials on financial literacy is the solution of problems from the social life situations. The researchers suppose financial and economic component of the Social Science course of the secondary school to have a significant potential for the development of financial literacy of adolescents.

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**Keywords:** Financial literacy, PISA, educational programs.



## 1. Introduction

The task of developing the functional literacy of schoolchildren is one of the modern educational priorities in Russia. It is focused not only on the students' acquisition of various knowledge, but also on helping to make this knowledge operational, applied in further cognitive and practical activities, in real life situations.

Financial literacy is seen in this regard as one of the functional literacy components. (Gorodetskaya, 2017; Kovaleva, 2017; Rutkovskaya, 2017). The level of financial literacy reflects not only students' understanding of key financial concepts, but also the willingness to use this knowledge to make rational decisions and to carry out literate actions in the financial environment (Financial Literacy Around the World). The financial literacy of schoolchildren is based on the skilful management of personal and family funds, on the implementation of financial planning, on the ability to protect themselves from the actions of unscrupulous participants in financial relations (Sistema (ramka) finansovoj kompetentnosti..., 2015).

The financial component of functional literacy acquires special significance in connection with the Strategy for Improving Financial Literacy in the Russian Federation for 2017-2023 approved by the Russian Government in 2017 (Rasporyazhenie Pravitel'stva RF ot 25 sentyabrya 2017 № 2039-p).

Students, including secondary school students, are one of the target groups whose level of financial literacy attracts the attention of Russian and international researchers. (Kovaleva, 2017; Rutkovskaya, 2014 ; Johnson & Sherraden, 2007; Goodbye to Complacency, 2005; National Standards in K-12 Personal Finance Education 12, 2015; OECD 2013, 2017 ; PISA 2012; Financial Literacy Assessment Framework 2015)

## 2. Problem Statement

15-year-old Russian schoolchildren in 2012 and 2015 participated in a comparative international research "PISA-financial literacy" conducted by the OECD (Organization for economic cooperation and development). The results demonstrated by Russian schoolchildren and their comparison with the results of 15-year-old students from other countries gave the opportunity to assert that along with direct life experience and various social practices, a significant role in the development of financial literacy is played by financial education provided by educational institutions. In this regard, it is urgent to focus on the content of financial education, its place in the educational programs of the modern Russian school, its development potentials. (Kovaleva, 2017; Rutkovskaya, 2017)

## 3. Research Questions

The PISA research has actualized a number of issues related to financial education as one of the dominant factors in the development of the financial literacy of the student: What does school financial education look like today? How is it assessed by school teachers? What deficiencies can be found in it? Which of the modern training courses of the Russian schools is dominant and necessary for the development of students' financial literacy? Is the ability to apply for the financial knowledge trained in the process of studying it?

Specialists who develop the content of the Social Studies school course and disclose its developmental capabilities began to search for answers to these questions, studying the practice of developing students' financial literacy while receiving Social Science knowledge at the secondary school level (grades 6-9).

#### **4. Purpose of the Study**

The purpose of the study was to identify the typical characteristics of the teaching financial literacy practice in the implementation of secondary school educational programs to specify the results obtained in the course of the OECD international research concerning financial education in Russia. It was important to identify possible deficiencies, the overcoming of which will allow teachers to develop the schoolchildren financial literacy more efficiently.

#### **5. Research Methods**

Immersion in the problem was facilitated by the analysis of the results of the international study PISA-financial literacy of 2012 and 2015 in terms of the overall results of students and the organization of financial education in Russian schools. The identification of the content potentials of the Social Studies school course was the result of a focused analysis of the secondary school sample programs and author's programs, on the basis of which learning kits and teaching aids on this subject were created.

The survey of teachers, conducted in 2017 by the staff of the Center for Social and Humanitarian Education of the Institute for the Development Strategy of Education of RAE (Russian Academy of Education), was directed to identifying various aspects of teaching financial literacy issues and the problems that teachers encounter in this regard. This questionnaire covered more than 500 school teachers in five regions of the country (Volgograd Region, Tomsk Region, Altai Territory, Krasnodar Territory, Krasnoyarsk Territory). The questionnaire included issues that help to comprehend the existing teachers' experience in the context of developing the schoolchildren financial literacy. Among them were questions related to the acquisition level of key financial concepts, forms of students' cognitive activity, educational and methodological support of the educational process and etc.

#### **6. Findings**

The level of financial literacy of 15-year-old Russian students in 2015 was significantly higher than in 2012. It exceeded the international average level. By rating, Russian students moved from the 10th place from 18 countries to the 4th place among the 15 countries that participated in the research. Among the factors that contributed to the development of financial literacy of Russian students, international experts pay attention to how financial education is organized in educational institutions where students are trained.

Noting the contribution to the formation of financial literacy of various subjects in the school curriculum (including Mathematics, Information Technology, History, Geography, Literature, Economics, Law), the vast majority of respondents expressed the opinion that financial literacy is formed primarily during the study of Social Studies course. The examination of the economic component of this course contents at the level of secondary school showed that this subject not only presents knowledge

about the financial and economic sphere of life, but also fosters the development of basic financial skills, skills of rational financial behavior corresponding to typical activities ( social roles) in this area (consumer, employee, owner, investor, taxpayer, etc.)

In this regard the Social Science course as a whole creates certain opportunities for considering the applied meaning of knowledge, their reflection in practical activity. Along with the theoretical content, Social Science includes a variety of practice-oriented tasks that call for addressing social realities and assessing the behavior of participants in social relations. (Bogolyubov, 2013; Rutkovskaya, 2017).

The analysis of teaching aids, learning kits and Social Science programs for the secondary schools (Bogolyubov, Gorodeckaya & Ivanova, 2014; Primernaya osnovnaya obrazovatel'naya programma osnovnogo obshchego obrazovaniya) made it possible to reveal the considerable theoretical potential of the course for the formation of financial literacy of students. This potential is rendered to concrete below with reference to individual social roles, which the Social Science course contributes to prepare for the implementation.

The most massive social role is the role of the consumer. To prepare for its successful implementation, a significant influence can be made by the students learning the following meaningful units of the Social Science course: Exchange. Consumption. Trade and its forms. Money and their functions. Inflation, its consequences. Market and market mechanism. The capital market. Banking services provided to citizens. Consumer Rights. Insurance services. Obtaining theoretical knowledge on these issues can contribute to the formation of skills to disclose the rational behavior of the consumer, analyze the effect of market laws, supply and demand factors, characterize the role and function of money, and assess the consequences of inflation for the economy as a whole and for various social groups.

The second is the role of the employee. Its successful implementation can contribute to the following topics: Wages and labor incentives. Entrepreneurial activity. Costs, revenues, profits. When studying these topics, it is possible to form, for example, the ability to disclose the financing opportunities of small and large firms, to simulate practical situations related to the calculation of costs and producer profits.

The third is the role of the family member. Its formation is connected to such topics as the Family Budget, Sources of income and expenses of the family, Assets and liabilities, Personal financial plan, Saving. These topics have the potential to develop skills to analyze the structure of the family budget, make up a personal and family budget, and conduct financial planning.

Next, let's look at the role of a taxpayer. Topics: Taxes, The system of taxes and their functions. Citizens' taxation contributes to the formation of skills like taking into account taxes in the structure of the family and personal budget, as part of the necessary personal expenses and family expenses.

Another role that the content of the Social Science course can really guide students is the role of the investor. Studying the topic Investing in real and financial assets gives a primary understanding of the need for a competent choice of investment objects.

In general, the mentioned above subjects testify to the significant potential of the Social Science course and the ability to model situations that require the use of the acquired knowledge to determine the appropriate behavior in specific situations.

However, according to the teachers, the content of the course, which is a theoretical basis for the development of financial literacy, is not fully assimilated by students.

Here are some results of teachers' assessments of the extent to which students are studying the key financial issues of the Social Science course. Thus, teachers believe that the most successfully teenagers learn the following thematic components: money and their functions (91% of the surveyed teachers noted this topic as successfully acquired), savings (79% of teachers noted), taxes paid by citizens (indicated 64% of respondents).

Significantly less successful in acquiring was the question of financial planning and the family budget (only 52% of respondents expressed an opinion on its successful obtaining).

Teachers do not consider the students' learning the topic related to the financial institutions activities (banking and insurance services) and complex financial and economic relations in the society (finances and business, protection of consumers of financial services) as successful.

It was possible to admit that there is a problem in the financial and economical content teaching of the Social Science course, associated with the acquirement of the presented topics which was fixed by the teachers.

Teachers' opinion about the perceived content was compared with the actual results demonstrated by students in the financial literacy international research. This comparison allowed, along with the problem of acquirement, to discover one more problem - the problem of the effectiveness of the received knowledge. Let's stop as an example on the block of content "Money and operations with them", singled out separately by the PISA research. Only 46% of Russian schoolchildren fulfilled the tasks of this block. At the same time, we recall that 91% of teachers noted the successful acquiring the theoretical knowledge of the course content "Money and their functions". To conclude we may say that for the financial literacy formation, the acquiring the theoretical knowledge is not enough. It is important to emphasize the need to bring received knowledge to its application in students' real life situations which may cause their personal interest.

The conducted questionnaires of teachers showed that the most frequently used form of work with materials on financial literacy is the solution of problems from the social life situations. The question is: what is the content of these situations? Studying the teaching aids and learning kits has shown that in a Social Science course, situations from the life of the whole society are dominating. The same situations which apply more for the individual actions, decisions, choices of alternatives, are insignificantly presented in the course. This conclusion concerns each of the thematic components mentioned above in the description of financial and economic roles. Emphasizing their importance in the development of financial literacy, we will give a concrete example of a task that puts students in the context of a specific situation and contains a personally significant problem, several options for solving it, and the requirement to make rational choice and justify it.

Example. The decision making situation when buying goods.

You are going to the country in summer and decided to buy a guitar and new sneakers. You have several options for choosing the place and terms of purchase, but each has its own advantages and disadvantages.

1. Local market of consumer goods. The assortment of goods is large, the prices are wholesale (lower than in the store), there is no quality guarantee, reliable information about the product is limited or absent.

2. Announcement of the sale of goods in the newspaper. The price is negotiable. There is no quality guarantee. There is no reliable information about the product.

3. Department store. Prices are retail (higher than in the market). There is a quality guarantee, reliable and complete information about the product.

What kind of purchase would you consider rational? Explain your answer.

Organizing work on the task above in the context of the situation presented, it is worthwhile to focus on the advantages and disadvantages of each of the described locations and terms of purchase. It is important to help students to record the fact that the desired goods can be purchased in different places, based on the quality assured by one or another seller, prices that can be different at different points of sale, as well as the availability of a sufficient assortment. At the same time, it is important to bring students to the understanding that different consumers in this situation can make different choices based on their preferences and capabilities. Further, while listening to the students' choices, it is important in each case to motivate students to argue for their own personal decision, possibly different from all others.

Turning to the results of the PISA study, we should pay attention to the fact that the highest results were demonstrated by the students of those schools where financial education began to develop in recent years. The practice of financial education at the Social Studies lessons in such educational institutions demonstrates the appeal of teachers to personally significant social situations. These situations are used in lessons in various didactic functions: both as a means of motivating students to study a specific material, and as a basis for presenting new content, and as an illustration of the practical significance of the knowledge being mastered. But the main thing is that, using in the educational process the social life situations, teachers began to realize the special value of situations that estate a certain problem for students and require a choice of the way to solve it.

## **7. Conclusion**

In general, a comparison of the views of teachers and the real results of Russian students allows us to draw the following conclusion: the knowledge obtained in the learning process, including those that are directly studied in the course of social studies of the secondary school, are transferred by the students with great difficulty to the specific life contexts. Students themselves do not realize the practical and personal significance of the material being studied, do not perceive it as the basis on which their practical actions can be formed and decisions necessary for life can be made. We need to use goal-oriented work in teaching this material, and for this, include simulated situations of social life in the educational process, which require making decision based on a certain knowledge.

The financial and economic component of the Social Science course of the secondary school has a significant potential for the development of financial literacy of adolescents. The creation of conditions for students to learn financial and economic roles and develop the ability of schoolchildren to apply their financial knowledge to problem-specific, personally significant situations will allow to raise the level of their financial literacy.

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## References

- Bogolyubov, L.N. (2013). *Obshchestvoznaniye v sovremennoy shkole: aktual'nye voprosy teorii i metodiki*. Social Studies in Modern School: Current Issues in Theory and Methods of Teaching. Moscow-St.Peterburg; Nestor-Istoriya, 256 p. [in Rus].
- Bogolyubov L.N., Gorodeckaya N.I., Ivanova L.F. (2014). *Obshchestvoznaniye. Rabochie programmy. Predmetnaya liniya uchebnikov pod red. L.N.Bogolyubova. 6-9 klassy*. Posobie dlya uchitelej obshcheobrazovat. organizacij. Social Science. Teaching programs. A set of textbooks, ed. L.N. Bogolyubov. 6-9 grades. The manual for teachers of secondary schools. Moscow, Prosveshchenie, p. 63. [in Rus].
- Financial Literacy Around the World*. (2015). Ed. L.Klapper, World Bank Development Research Group, Annamaria Lusardi, The George Washington University School of Business, Peter van Oudheusden, World Bank Development Research Group. Retrieved from: [http://gflec.org/wp-content/uploads/2015/11/Finlit\\_paper\\_16\\_F2\\_singles.pdf](http://gflec.org/wp-content/uploads/2015/11/Finlit_paper_16_F2_singles.pdf) (Accessed: 16.04.2018).
- Goodbye to Complacency. Financial Literacy Education in the U. S. 2000–2005*. (2005). Eds. L. A. Vitt, G. M. Reichbach, J. L. Kent, J. K. Siegenthaler. Institute for Socio Financial Studies, Middleburg, VA, USA. AARP. Retrieved from: <http://www.isfs.org/documents-pdfs/GoodbyetoComplacency-nocover.pdf> (Accessed: 10.04.2018).
- Gorodetskaya N.I. (2017). *Formirovaniye finansovoy gramotnosti shkol'nikov – imperativ vremeni*. Formation of financial literacy of schoolchildren - the imperative of time. Aktual'nye voprosy gumanitarnykh nauk: teoriya, metodika, praktika: sbornik nauchnykh statej. Current issues in the humanities: theory, methodology, practice: a collection of scientific articles. Moscow: Knigodel, no. IV, pp.34-42 [in Rus].
- Johnson E., Sherraden, M. S. (2007). From Financial Literacy to Financial Capability among Youth. – *Journal of Sociology & Social Welfare*, Volume XXXIV, no. 3.
- Kovaleva G.S. (2017). Finansovaya gramotnost' kak sostavlyayushchaya funktsional'noj gramotnosti: mezhdunarodnyj kontekst Financial literacy as a component of functional literacy: the international context. *Otechestvennaya i zarubezhnaya pedagogika*. Vol.1, № 2 (37). pp.31–43 [in Rus].
- National Standards in K-12 Personal Finance Education. 4th Edition* (2015). Retrieved from: <https://bgcutah.org/wp-content/uploads/2014/08/Jumptart-K-12-National-Standards.pdf> (Accessed: 10.04.2018).
- OECD (2013), *PISA 2012 Assessment and Analytical Frameworks: Mathematics, Reading, Science, Problem Solving and Financial Literacy*, PISA, OECD Publishing. Retrieved from: <http://dx.doi.org/10.1787/9789264190511-en> (Accessed: 10.04.2018).
- OECD (2017), *PISA 2015 Results (Volume IV): Students' Financial Literacy*, PISA, OECD Publishing, Paris. Retrieved from: <http://dx.doi.org/10.1787/9789264270282-en> (Accessed: 10.04.2018).
- PISA-2012. (2012). *Financial Literacy Assessment Framework*. Retrieved from: <http://www.oecd.org/pisa/pisaproducts/46962580.pdf> (Accessed: 10.04.2018).
- Primernaya osnovnaya obrazovatel'naya programma osnovnogo obshchego obrazovaniya (n.d)*. Approximate basic educational program for secondary schools. Retrieved from: <https://xn--80abucjiibhv9a.xn--p1ai/%D0%B4%D0%BE%D0%BA%D1%83%D0%BC%D0%B5%D0%BD%D1%82%D1%8B/938> (Accessed 10.04.2018). [in Rus].
- Rasporyazhenie Pravitel'stva RF ot 25 sentyabrya 2017 g. № 2039-r. *Ob utverzhdenii Strategii povysheniya finansovoy gramotnosti v Rossijskoj Federacii na 2017 - 2023 gg*. Order of the

Government of the Russian Federation No. 2039-r of September 25, 2017 On Approving the Strategy for Improving Financial Literacy in the Russian Federation for 2017-2023. Retrieved from: <https://www.garant.ru/products/ipo/prime/doc/71675558/> [in Rus].

Rutkovskaya, E.L. (2014). Finansovaya gramotnost' kak neobhodimyj navyk zhizni v sovremennom sociume: celi, sodержanie i pervye rezul'taty mezhdunarodnogo issledovaniya. Financial literacy as a necessary skill of life in modern society: goals, content and first results of international research. *Prepodavanie istorii i obshchestvoznaniya v shkole*, no. 4, pp. 36-45. [in Rus].

Rutkovskaya, E.L. (2017). Faktory formirovaniya finansovoj gramotnosti shkol'nikov. Formation factors of financial literacy of schoolchildren. *Otechestvennaya i zarubezhnaya pedagogika*, Vol.1, № 2 (37). pp.44–54. [in Rus].

*Sistema (ramka) finansovoj kompetentnosti dlya uchashchihsya shkol'nogo vozrasta ot 05.06.2015* = The system (frame) of financial competence for pupils from 05/06/2015. Retrieved from: <http://xn--80aaeza4ab6aw2b2b.xn--p1ai/upload/iblock/3b5/3b5fd21fa1b65a377d6be7a355ffa88d.pdf> [in Rus].