

DCCD 2020**Dialogue of Cultures - Culture of Dialogue: from Conflicting to Understanding****PROBLEMS OF HOMEWORK IN RUSSIA AND ABROAD**

Irina M. Osmolovskaya (a)*, Irina V. Uskova (b), Irina A. Tagunova (c), Oksana I. Dolgaya (d)

*Corresponding author

(a) Institute for Strategy of Education Development of the Russian Academy of Education, 105062, 16 Zhukovskiy St., Moscow, Russian Federation, osmolovskaya@instrao.ru

(b) Institute for Strategy of Education Development of the Russian Academy of Education, Moscow, Russian Federation

(c) Institute for Strategy of Education Development of the Russian Academy of Education, Moscow, Russian Federation

(d) Institute for Strategy of Education Development of the Russian Academy of Education, Moscow, Russian Federation

Abstract

The article analyzes the homework of schoolchildren in Russia and abroad. It is considered as an independent extracurricular educational activity of schoolchildren, designed and accompanied by a teacher to achieve planned learning outcomes. In the changing conditions of life, the question arises of revising the foundations of homework, solving the problem of its effectiveness, which requires identifying the difficulties faced by teachers in planning the homework and its implementation. The conducted research allows us to solve the questions of whether homework can be dispensed with, how education should be built for this, and what are the specifics of homework in Russia and abroad. The aim of the study is the analysis of pedagogical literature, as well as pedagogical practice to identify teacher's problems in the design, organization, and implementation of homework. As research methods, methods of analysis, generalization, and systematization of the results of pedagogical research were used, as well as empirical methods, including pedagogical observation of students, questioning of teachers, students, and their parents. The study identified the main functions of homework. The factors that teachers need to consider when developing modern homework are shown, modern teaching strategies homework is described. The problems of homework are considered, including the monotony of homework, their students' overload, poor-quality organization of the stage of checking homework, etc. The study shows that a complete rejection of homework in domestic education is not advisable, it is necessary to change the practice of designing, organizing and supporting homework by teachers, expanding the functions of it.

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Keywords: Homework, design, organization, pedagogical support.



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1. Introduction

One of the goals of school education in the 21st century is the formation of a personality that can adapt to a rapidly changing world professionally and vitally, ready for lifelong education, self-development, and self-education, owning modern ways and means of acquiring knowledge and experience.

Currently, the need for homework, its functions, and the potential for change to successfully achieve the goals set for school education are actively being discussed.

In our study, homework is understood as “an independent extracurricular educational activity of schoolchildren, designed and accompanied by a teacher in order to ensure that they achieve the planned learning outcomes” (Uskova, 2019, p. 38). Homework assignment - a training assignment specially selected or designed by a teacher, designed for independent fulfillment by students in extracurricular time (Uskova, 2019).

Homework, as a form of independent activity of students in comprehensive schools, can be considered as an intermediate stage between classwork conducted under the guidance of a teacher and the stage at which the skills and independent work are already formed by the student and are actively used in further education and self-education.

In domestic pedagogy, the homework of schoolchildren was studied in the 50s and 70s of the XX century, now these studies are classical and serve as the basis for all subsequent ones. So, homework during these years was considered as an integral part of the learning process (I.P. Podlasy, L.P. Krivshenko), the form of organization of training (Pospelov N. N., Likhachev B.T.), a means of forming students' self-learning skills educational activities (Danilov M. A., Esipov B. P., Skatkin M. N., Kolbasko I. I., Gromtseva A. K.), overcoming student failure (Arakelyan G. A., Danilov M. A.), development of creative independence (Stepanova L. V., Filonenko L. A.), the formation of self-control skills (Orobey I. S., Sotova I. A.).

Almost all researchers of that time single out the main problem of homework implementation - the problem of overloading students with homework and suggest ways to normalize the workload (Vivyursky V. Ya., Mendlina S. L., Pospelov N. N., Skatkin M.N., Sukhomlinsky V. A.), ways to regulate the amount of homework (Garshina E. A., Mendlina S. L., Monakhov V. M.), the introduction of a complex of health-saving teaching technologies (Dzyatkovskaya E. N., Skokova L. V.).

In the 70s of the twentieth century, the study of the practice of designing homework began to develop in private methods, and after the 90s of the twentieth century, the problem of organizing homework taking into account the updating of socio-cultural conditions, the regulatory framework in the field of education and the development of information and communication technologies were not investigated.

Abroad, the problem of homework is discussed quite actively, including questions of its effectiveness. In several countries, homework has been significantly reduced, as the results of some studies have shown that homework does not improve schoolchildren's performance but contributes to the development of stress among students and their parents, the growth of social inequality. It significantly reduces the time students spend on sports, develop their talents and rest, especially in elementary school (Alfie, 2006; Cheung & Leung-Ngai, 1991; Galloway et al., 2012).

Homework abroad is based on constructivist and sociocultural approaches, of which the first supports homework, highlighting its aspects important for personal development, and the second calls into

question its necessity, noting the negative aspects. So, the constructivists Wood and Bruner believed that homework contributes to the development of independent and critical thinking in students. Wood (1988) became convinced that the help of parents plays a huge role not only in the quality of homework but also in the development of self-reflection in students. Parents who help children with homework develop their “conditional learning” skills, thanks to which schoolchildren can adjust learning tasks by their pace and progress in learning (Wood, 1988, p. 79). This approach assumes that parents discuss each homework with a child, think and discuss with the children how to approach the task, what needs to be done.

Constructivists Light et al. (1991) in their studies emphasized the important role of children's homework in socialization. Thanks to close communication with parents in the process of homework, the perception of the environment changes - from perceiving oneself as a lonely thinker to perceiving oneself as a participant in the educational process embedded in social relations.

Constructivists drew attention to the positive role of homework in developing students' motivation for learning. They attached importance to encouraging children and developing students' sense of pleasure in the ability to control their educational activities, which is formed, first of all, in the process of doing homework with the participation of parents (Harlen & Qualte, 2004).

The sociocultural approach emphasizes the need to consider educational activities in a social and cultural context. Modern school collectives of students are children who belong to different educational cultures with different physical and mental abilities. The main thesis against homework is that they contribute to the social stratification of students. Not all families can organize a workplace for a student, not all parents can help with homework, not all families can invite tutors, etc.

Homework was almost completely abandoned in Spain. In Norway, Finland and the Netherlands, homework is extremely rare. So, on average, homework in Finland takes 2.8 hours a week. In Brazil and Argentina, 3.3 and 3.7, respectively. In Japan, Hong Kong, Taiwan, and Israel, homework are not available in primary school, and there are very few in primary school. In Japan, it takes 3.8 hours a week to do homework, while in Israel it takes 4.6. (Homework around the World, 2017; Minke, 2017).

2. Problem Statement

The changed living conditions, and, accordingly, the requirements for education, make it necessary to review the foundations of homework, make changes to its design and organization. For this, first of all, it is necessary to find out what problems confront teachers in the design of homework and students in its implementation.

3. Research Questions

- How effective is homework, under what conditions can you do without it;
- What are the specifics of homework in our country and abroad;
- What problems arise in the organization and scientific and pedagogical support of homework.

4. Purpose of the Study

To analyze the studies of foreign and Russian scientists on the organization of homework for schoolchildren, as well as pedagogical practice to identify problems of teachers in the design, organization, and implementation of homework in Russia and the world, to describe the difficulties of its implementation by students.

5. Research Methods

Analysis and generalization of the results of pedagogical research, analysis of normative documents and local acts of educational organizations, pedagogical observation of students in the classroom and after-school activities, questionnaires for schoolchildren and their parents, conversations with teachers.

6. Findings

The study of foreign literature showed that there are three basic goals of homework: consolidation of knowledge and skills; preparation for the introduction of new educational material and the formation of skills to use the already acquired knowledge and skills in a new educational situation.

When consolidating knowledge and skills in the process of homework, tasks that have already been entered in the class are performed to increase the speed of their execution, hone their skills, and consolidate specific skills.

Preparation for the introduction of new educational material is aimed at preparing students for the next lesson. Students look at the materials that will be presented in the next lesson, using, as a rule, a textbook and write out basic ideas to make it easier to perceive new knowledge.

The formation of skills to use the already gained knowledge and skills in a new educational situation contributes to an easier transition of students to new learning tasks. Teachers use this form of homework to encourage students to collaborate with peers and be creative in their learning process (Rosário et al., 2015).

In order for homework to be carried out effectively, according to a number of foreign researchers, it is necessary to specify the educational goals. As their definition becomes clearer, the homework toolkit design becomes more focused. At this stage, the minimum level of knowledge and skills that students must master is determined. The next stage of homework planning involves clearly defining the time needed to complete it. Time should be enough for all students, including the weak and lagging (Cooper et al., 2006).

Vatterott, in his book *Rethinking Homework: Best Practices That Support Diverse Needs* (2018), shows how contemporary challenges to education are changing the role of homework in learning. He notes that the traditional approach to homework, namely, the proposal to consider the same problems for all students and the punishment of schoolchildren for not doing homework does not contribute to the educational achievements of all students. Vatterott identifies a number of factors that teachers need to consider when developing modern homework: 1) development of a style of thinking; 2) using the best practices of research in the field of cognitive sciences; 3) developing, based on new knowledge, homework that can encourage students to do homework without abusing the balance between school and life (Rosário et al., 2015; Vatterott, 2018).

Foreign studies show some modern learning strategies that cognitive psychologists recommend for successful homework. These are search practices, interval practices, and alternation practices. As the names suggest, “search” is the extraction of information from memory without the use of notes or a textbook; “Interval” is the amount of time a student needs between homework sessions. Actions that work to extract information, synthesis, and analysis, are more effective than re-reading. The practice of alternation in the conditions of doing homework by students suggests that the student postpones homework for some time, turning to another task; later, as a rule, he finds a more interesting solution to his problem. This style of work contributes to the development of long-term memory, and educational achievements become much higher compared to those obtained by cramming (Boaler, 2015).

Alternating homework is also a modern learning strategy in which students integrate or alternate several topics or problems within one day of homework. Studies show that such homework practices are especially effective for developing categorization and logic skills (Ellis et al., 2015).

Foreign pedagogy in the new conditions offers a variety of methodological approaches to organizing and conducting homework. One of them is the so-called “Two-tone approach to weekly homework”: 1) initially, students work on tasks outside the classroom, writing down their thoughts about what they do not understand in the teaching material; 2) returning to the class, students discuss and find out things that they do not understand, correct mistakes and write down teacher comments on the problem areas that they identified.

The “Inverted Class” methodology represents a homework system in which a lesson in a school changes places with homework. The textbook, in this case, acts as a teacher and is the source of the first contact of students with the material. With such a system, several tasks cover the same topic, and only some of them are performed as part of group work in the classroom. In this case, initially, students should focus not on specific material, tasks, examples, but on a conceptual understanding of the general subjects of tasks (Greenwald & Holdener, 2019; Hoeke, 2017).

Note that elements of the above strategies are also applied in Russian schools. At the same time, it is important to note that in Russian education, the formation of students' learning skills, that is, independently acquire knowledge, comprehend, embed in the existing system, apply to solve emerging problems. In this regard, there should be restructuring of homework, its orientation to the formation of educational activities, the expansion of its functions. However, in practice, such restructuring has not yet occurred.

As a result of a study conducted in Russian secondary schools, it was revealed that homework is a traditional component of the educational process and is given to students almost every lesson every day (Vinogradova, 2019; Uskova, 2019; Zhdanov, 2019).

Generalization and systematization of the results of the study allowed us to draw conclusions about the problems of homework, which include:

1. *The uniformity of homework assignments that make up the homework of students.* Homework in form and content is a traditional component of the educational process: most homework assignments are exercises from a textbook or printed workbook. However, the daily implementation of monotonous homework assignments leads to a decrease in educational motivation, a loss of interest in the subject being studied, and selectivity in completing homework.

2. *The purpose of homework is mainly to repeat and consolidate the material studied in the lesson, as well as the completion of classwork.* When setting goals when designing homework, teachers are guided, first of all, by repeating and consolidating the knowledge gained in the lesson, often the content of the students' independent work becomes part of the classwork that they did not have time to complete in the lesson.

3. *Students overloaded with homework.* The problem of overworking schoolchildren with homework has been raised in pedagogical literature since the mid-19th century and has not yet been resolved. At the same time, with the introduction of new academic subjects, the expansion of the content of educational programs and the development of a corps of additional teaching aids and educational literature, the volume of homework is growing rapidly.

The problem of overloading students with homework assignments is closely related to the problem of teaching subject teachers how to design a modern lesson in universities and advanced training courses, in which knowledge of the organization of homework is presented as insignificant. That is why often teachers do not adhere to the time standards set out in the sanitary and epidemiological requirements allocated to students for preparing homework, and they cannot always correctly calculate the time to complete the set given the age and psychophysiological stage of development of students.

4. *Poor organization of the verification phase of homework.* Due to the volume of homework assigned to students, the teacher is not always able to organize a quality check of each completed homework. However, the lack of a systematic review of homework leads to the fact that students stop doing homework or do it irregularly.

5. *Lack of uniform requirements for the implementation and evaluation of homework.* In educational organizations, there is no single regulation for homework. So, teachers of mathematics or the Russian language, working in the same school, may have different requirements for the design of independently completed work in a notebook.

Evaluation of homework is not regulated in terms of putting marks in the journal. The final grade and current performance are affected by the grade put in an electronic or traditional journal. But when performing daily homework in the Russian language, mathematics, and other subjects, the student receives only the grade put in the notebook. The initiative of the student, the thoroughness of the assignment, the consistency of completion, accuracy, and precision are not encouraged or supported by a good grade.

6. *Insufficient implementation of individual and differentiated approaches in training.* Homework is the kind of work in which an individual and differentiated approach to learning can be fully realized. However, in a comprehensive school, teachers call a typical example of the implementation of a differentiated approach additional one or three tasks from the textbook, added to the main homework for poorly performing students. Moreover, most often one homework is set for the whole class.

7. *Inadequate use of the resources of the educational information environment in the practice of designing homework.* In the practice of teaching lessons by modern teachers, different types of electronic teaching aids and computer programs are used, training materials are shown on screens, however, in the process of organizing homework, the new features of the information and educational environment are practically not used. Analysis of electronic diaries of schoolchildren showed that they are used only for recording homework.

8. *The problem of writing off answers to assignments from the textbook.* The organization of homework based on a textbook is becoming ineffective in the modern world due to the fact that almost all teaching and methodological kits now have ready-made answers to all tasks printed in a traditional form or posted on Internet sites. Thus, students do not fulfill the set, but simply rewrite the answers that are often offered with significant errors.

7. Conclusion

The study allows us to draw several conclusions:

- at the present, stage of development of the Russian school the complete abolition of homework is not advisable;

- it is necessary to change the practice of designing, organizing and supporting home teaching work by teachers;

- it is legitimate to expand the functions of homework from repeating and consolidating the material studied in the lesson to the formation of skills to learn, independently acquire and process knowledge, and apply them to solve new cognitive problems.

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References

- Alfie, K. (2006). *The Homework Myth*. Da Capo Press.
- Boaler, J. (2015). *Mathematical Mindsets: Unleashing Students' Potential through Creative Math, Inspiring Messages and Innovative Teaching*. Wiley.
<https://doi.org/10.1080/14794802.2016.1237374>
- Cheung, S. K., & Leung-Ngai, J. M. Y. (1991). Impact of homework stress on children's physical and psychological well-being. *Journal of Hong Kong Medical Association*, 44(3), 146-150.
- Cooper, H., Robinson, J. C., & Patall, E. A. (2006). Does homework improve academic achievement? A synthesis of research, 1987-2003. *Review of Educational Research*, 76(1), 1-62.
<https://doi.org/10.3102/00346543076001001>
- Ellis, J., Hanson, K., Nuñez, G., & Rasmussen, C. (2015). Beyond plug and chug: An analysis of Calculus I homework. *International Journal of Research in Undergraduate Mathematics Education*, 1(2), 268-287. <https://doi.org/10.1007/s40753-015-0012-z>
- Galloway, M., Conner, J., & Pope, D. (2012). Nonacademic Effects of Homework in Privileged, High-Performing High Schools. *The Journal of Experimental Education*, 81(4), 490-510.
<https://doi.org/10.1080/00220973.2012.745469>
- Greenwald, S. J., & Holdener, J. A. (2019). The Creation and Implementation of Effective Homework Assignments. *Problems, Resources, and Issues in Mathematics Underground Studies*, 29(2), 103-110. <https://doi.org/10.1080/10511970.2018.1553809>
- Harlen, W., & Qualte, A. (2004). *The teaching of science in primary schools*. David Fulton.
<https://doi.org/10.4324/9781315398907>
- Hoeke, C. H. (2017). Homework Practices: Teacher and Parent Perceptions of Efficacy and Purpose (Master Thesis). East Tennessee State Univ.

- Homework around the World (2017). <https://teach.com/blog/homework-around-the-world>
- Light, P., Sheldon, S., & Woodhead, M. (1991). *Learning to Think*. Routledge.
<https://doi.org/10.4324/9781315824758>
- Minke, T. A. (2017). Types of Homework and Their Effects on Students. *Culminating Projects in Teacher Development*, 39. <https://doi.org/10.1111/j.1944-9720.2000.tb01993.x>
- Rosário, P., Núñez, J. C., Vallej, G., Cunha, J., Nunes, T., Mourão, R., & Pinto, R. (2015). Does homework design matter? The role of homework's purpose in student mathematics achievement. *Contemporary Educational Psychology*, 43, 10-24. <https://doi.org/10.1016/j.cedpsych.2015.08.001>
- Uskova, I. V. (2019). Didakticheskie osnovaniya domashnej uchebnoj raboty v osnovnoj shkole v usloviyah sovremennoj informacionno-obrazovatel'noj sredy [The didactic foundations of homework in a basic school in a modern information and educational environment]. *Otechestvennaya i zarubezhnaya pedagogika*, 2(59), 35-49. <https://doi.org/10.24411/2224-0772-2019-10004>
- Vatterott, C. A. (2018). *Rethinking Homework: Best Practices That Support Diverse Needs* (2nd edition). ASCD.
- Vinogradova, N. F. (2019). Nuzhny li domashnie zadaniya, i esli nuzhny, to kakie? [Do you need homework, and if so, which one?]. *Nachal'noe obrazovanie*, 7(3), 3-9.
- Wood, D. (1988). *How Children Think and Learn*. Blackwell Publishers.
- Zhdanov, A. A. (2019). Nuzhny li domashnie zadaniya? Sekrety effektivnyh domashnih rabot [Do I need homework? Secrets of effective homework]. *Sbornik statej po materialam foruma «Shkola 20:35», v ramkah Dnej nauki MGPU. Moskovskij gorodskoj pedagogicheskij universitet*. 85-94.