

## STUDENT OVERLOAD WITH HOMEWORK IN SOCIAL, ENVIRONMENTAL AND SCIENTIFIC EDUCATION

UDC

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**Abstract.** *The aim of this paper is to present research findings on the effectiveness of homework assignments for primary classroom education students, with a particular focus on Social, Environmental and Scientific Education. It seeks to highlight various aspects of this issue and encourage further discussion and research. The paper also includes the results of a survey conducted among parents regarding their children's homework workload, especially in Social, Environmental and Scientific Education subjects. Despite certain limitations, this research aims to explore parental perspectives on homework and emphasize the need for a more systematic approach in future empirical studies.*

**Key words:** *Primary Classroom education students, homework, Social, Environmental and Scientific Education classes, student overload with homework.*

### 1. INTRODUCTION

Despite numerous changes in modern education - aimed at encouraging a more active approach to learning and thereby fostering deeper, longer-lasting knowledge – there remains a prevailing sense impression that these reforms have not produced the expected results. Teachers often resist the demands of modern education, particularly changes to the traditional lecture-and-exam model. At the same time, parents frequently struggle to manage their children's academic obligations, while students themselves feel increasingly overwhelmed.

The role and significance of homework in the lower grades of primary school have been the subject of ongoing debate within the global academic community. Some view homework as a vital part of the educational process, emphasizing its many benefits and considering it as an inseparable didactic process, emphasizing its many benefits and considering it as an inseparable didactic extension of classroom teaching. Others, however, question its value - especially for younger students - arguing that it yields few positive outcomes and may, in fact, contribute to numerous negative effects.

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Received March 15, 2025 / Accepted April 3, 2025

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Given the wide range of perspectives on homework, various questions arise regarding its purpose, advantages, and drawbacks. These considerations often vary based on students' age, their family's socio-economic status, and the broader community context, among other factors.

## 2. THEORETICAL APPROACH TO HOMEWORK AND AN EXAMPLE OF GOOD PRACTICE

Leading methodological literature highlights the widely accepted and well-known functions of homework, and almost every prominent author addresses its educational significance, particularly in fostering students' independence and responsibility. "Modern teaching practice pays special attention to the interdisciplinary connection of teaching materials, because intrinsic integration has largely been achieved." (Spasić Stošić & Tasić Mitić, 2018: 116)

Homework is a student's independent extracurricular activity through which certain requirements of the curriculum are fulfilled. The main purpose of homework is to develop students' independence and responsibility. In regular classroom teaching, which is organized for a large group of students, the teacher should also strive to encourage students' independence through various forms of work. However, homework provides the best opportunity for students to develop habits of independent work (Vilotijević, 2007: 325).

A similar perspective on the role of homework was shared by authors who explored this topic as early as the mid-20th century. Discussing the significance of homework, Pataki highlights in *General Pedagogy*: "Students' homework assignments have multiple values. First and foremost, they represent independent work, fostering students' autonomy in the process of acquiring knowledge, thus serving as essential preparation for life and further self-education. Homework reinforces knowledge and practices habits necessary for continued learning. It also facilitates the application of acquired knowledge and serves as preparation for future schoolwork. Additionally, homework carries a specific educational purpose: it helps develop a sense of duty and responsibility in students toward the tasks assigned to them" (Pataki, 1956: 203).

Šimleša states: "Homework assignments are student activities that stem from the daily obligations of teaching; they serve to achieve educational objectives but are carried out outside of class." (Šimleša, 1968: 453).

The literature emphasizes that homework has a specific function and can be valuable for students if it is directed toward a clearly defined goal. There are different types of homework assignments, depending on the intended outcomes for students.

Prodanović, T. and Ničković, R. identify the following types: *Preparatory homework assignments* (help students prepare for more effective learning), *supplementary homework assignments* (allow students to expand or reinforce what they have learned in class), *control homework assignments* (used to assess knowledge, skills, or habits), *corrective homework assignments* (help identify and eliminate mistakes), *creative homework assignments* (encourage independent, creative work), *differentiated homework assignments* (aim to determine which students accept different task variations), *optional homework assignments* (provide students with the opportunity to pursue their interests by solving specially selected, non-mandatory tasks for all students) (Prodanović, Ničković, 1974).

Children's leisure time, filled with activities unrelated to school obligations, is significant not only in terms of leisure and entertainment but also plays a crucial role in

the overall development of the child. "Leisure activities are especially important for children and young people. Through them, a sense of creativity develops, a proper attitude toward work is built, perseverance in work is fostered, children are taught to love and appreciate work, and their work discipline becomes conscious and takes on the character of a human need." (Grandić, Letić, 2008; cited in Budimir-Ninković, Stojanović, 2013: 188).

Since younger students cannot independently organize their leisure time and require the assistance of adults – primarily parents but also guidance from teachers – it is crucial that teachers do not "overload" them with school obligations and remain aware of the importance of leisure for children's development.

Therefore, independence, work habits, and a responsible attitude toward obligations are highly complex concepts that are not developed simply by assigning homework. Instead, homework provides an opportunity to assess the extent to which these traits are present in a child and whether specific attention needs to be given to fostering them.

Just half an hour of daily homework for younger students represents a significant burden and stress. Moreover, this burden is not only intellectual. What about the child's body, which is undergoing the most sensitive and dynamic stage of development? After spending several hours sitting in school, the child then spends several more hours at home, also sitting and doing homework. Psychiatrist Svetomir Bojanin believes that the body is completely neglected in school, as if the child participates in school life only with their head. The connection between physical and psychological development must not be overlooked (Pešikan, 1990: 91).

In the context of discussing homework, attention is drawn to an attempt to introduce innovations in homework assignments through the project "Homework – the Exception, Not the Rule", which was implemented over a ten-year period at "Vijenac" Elementary School in Osijek. The project focused on ensuring that students had insight into the expected learning outcomes of their homework, the ability to choose assignments according to their individual characteristics and interests, clear instructions for completing them, and, most importantly, as the project's name suggests, that homework would be the exception rather than the rule. In other words, students did not receive homework in the traditional way or on a daily basis. Instead, they had the freedom to decide whether and which assignments they would complete at home. Although initially concerned, both parents and teachers now speak very positively about this approach to homework. Besides experiencing significant relief and being freed from the stress faced by students in other schools, it was found that this approach also increased students' responsibility, independence, and ability to assess which parts of the curriculum required more practice at home to achieve success. This positively influenced their self-confidence, motivation, and willingness to take responsibility for their own success or failure. Additionally, there are indications that these students performed better in high school compared to their peers from other schools.

Unfortunately, objective data comparing the achievements of these students with others is not available. Published research on this project primarily examines teachers', parents', and students' attitudes toward homework and compares the new system with the previous one (for more details, see Sokol, Vrbošić, 2013 and 2017).

### 3. PERSPECTIVES ON HOMEWORK IN EMPIRICAL RESEARCH

Renowned researcher on the application of homework, Cooper (2006), stated that variations in homework can be classified according to several factors: quantity, subject area, the skills they target, purpose or objectives, the degree of student choice, the deadline for completion, the level of individualization, and the social context. All these variations have been and can continue to be subjects of interest for researchers, highlighting the scope and seriousness of the issue, as Cooper (2006) emphasizes. When discussing the quantity of homework, Cooper points out differences that may arise in the frequency and duration of individual assignments. According to him, homework can be empirically examined across different subject areas, encompassing all skills taught in school. Based on reviewed research, Cooper states that the most common purpose of homework is to provide students with the opportunity to practice or review material covered in class. Meanwhile, preparatory assignments introduce material that will help students gain the most benefit when new topics are covered in class. Homework can also aim to facilitate the transfer of previously learned skills to new situations and integrate separately acquired skills. Beyond objectives aimed at improving teaching, homework can serve other purposes as well. It can be used to establish communication between parents and children and to inform parents about what their children are learning in school.

Unfortunately, in school practice, there have been instances where homework has been used as a form of punishment for students. Typically, homework rarely reflects just one specific objective; instead, most assignments serve multiple objectives. The degree of student choice in homework, as well as deadlines for completion, are also important factors for potential consideration. The level of individualization – whether the teacher designs assignments to meet the needs of each student or assigns the same tasks to the entire class – can be linked to the social context and the possibility of students receiving help from others when completing their homework, making it a subject of research as well.

Based on an analysis of 120 studies on the effects of homework published between 1987 and 2003, along with an additional 60 studies published in 2006, Cooper concluded that homework requiring less than two hours of engagement has a moderate impact on academic progress for high school students. However, no such benefits were found for primary school students. Instead of academic gains, homework may contribute to negative feelings toward school among younger students. Cooper also challenges the idea that homework has an educational function in terms of fostering responsibility and independence, arguing that these values can be encouraged through other activities, such as taking care of pets or being assigned age-appropriate household chores.

While homework is considered an essential element of the educational process in our system, its usefulness remains a debated issue worldwide. Schools in more autonomous educational systems, such as those in Canada, have completely abolished homework. An interesting point highlighted by a professor at the University of Pennsylvania, Gerald LeTendre (2015) is that, in the 19th century, homework was used solely as a form of punishment and as a way to deprive children of their free time. Based on findings from a decade-long study, he concluded that there is no evidence of any benefits from homework, particularly for younger students. He also points out that, for example, in the Trends in International Mathematics and Science Study (TIMSS), the lowest-performing students come from countries where excessive homework is assigned, such as Morocco, Algeria, and Kuwait.

The same author discusses the harmful consequences of spending hours on homework, particularly regarding children's health. These children experience poorer sleep, more frequent illnesses, and higher levels of daily stress, as young students' bodies are simply not adapted to such strain.

Similar results can be found in the works of other authors. For example, Doz et al. point out "On the other hand, fuzzy grades are negatively and strongly correlated to students' homework regularity: students who are more regular in turning in their assignments, get higher fuzzy grades." (Doz et al. 2023: 100)

#### 4. PARENTS' ATTITUDES ON THEIR CHILDREN'S HOMEWORK LOAD IN SOCIAL, ENVIRONMENTAL AND SCIENTIFIC EDUCATION

The concept of workload in pedagogical literature is defined as the totality of physical and psychophysical efforts that students experience in the learning process within a given time frame. The main factors determining this workload include the curriculum, the teaching program, the difficulty level of subjects, and the quality of the teacher's work – specifically, the rigor of their demands on students and the time distribution of tasks. Workload is also defined as the inappropriate setting of requirements that exceed students' psychophysical capabilities. (Spasojević, 2011)

Ana Pešikan highlights the following regarding this issue: "Overload occurs when students are given extensive demands that they must fulfill within a certain timeframe, requiring great effort that is not psychophysically appropriate for them. As a result, the student is either unable to complete them at all or, by completing them, their health and proper development are jeopardized." (Pešikan, 1990: 87-88)

One of the most significant factors contributing to student overload, especially in the lower grades of primary school, is excessive homework assignments with unclear objectives.

"Whether we want to admit it or not, the most important question for all primary school students in the lower grades – the very first thing many ask upon returning home from school – is: 'What do you have for homework?' Years, decades, and centuries have passed; school systems have changed, ministers and governments have come and gone; new families have grown up; old school buildings have been replaced with new ones; yet one thing has remained unchanged – His Majesty, Homework." (Sokol, Vrbošić, 2013: 79)

It seems that there is hardly a child – or a parent – for whom homework does not occasionally present a significant challenge. Surprisingly, experience shows that children are often reluctant to engage with so-called "creative" assignments, and it is a well-known fact that completing homework frequently becomes the responsibility of parents.

Teachers are often criticized for the way they assign homework, as well as for its excessive volume and the lack of clearly defined objectives – or even the complete absence of them. Homework is most commonly assigned at the very end of the lesson, when students are already tired, and there is no longer time for proper instructions from the teacher. It is given with the expectation that students will either complete their learning independently or with the help of their parents, or that they will practice what they have supposedly "mastered" in class at home. Assigning homework in this manner is likely to negatively impact student motivation or even create an aversion to school-related responsibilities. Additionally, the common practice of dedicating very little (or no) time to reviewing and analyzing homework –

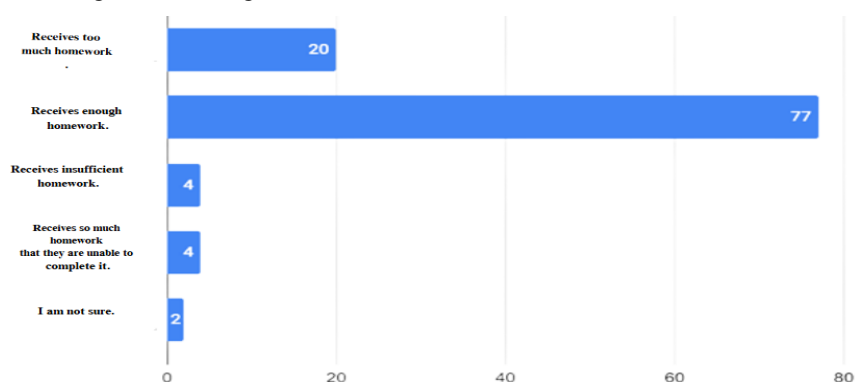
meaning that students rarely receive feedback on what they have done, whether independently or with assistance – raises the question of whether it might be better not to assign homework at all than to assign it in this way.

When it comes to the subject of Social, Environmental and Scientific Education, this issue becomes even more pronounced. Homework assignments are often given in the form of workbook tasks that are too extensive. These assignments typically require students to reproduce content from class, but they also frequently include research tasks, long-term observations of certain natural phenomena, mini-projects, and experiments – yet without clear instructions from the teacher or the necessary time for proper completion. As a result, such homework often becomes the responsibility of parents, who may struggle with it themselves. Tasks that could be engaging and foster students' curiosity often turn into a nightmare instead. This is certainly unacceptable, especially given the variety of learning opportunities that the Social, Environmental and Scientific Education / World Around Us curriculum naturally offers.

In order to gain a better understanding of this issue, we sought *parents' opinions on their children's homework workload, with a particular focus on Social, Environmental and Scientific Education*. To this end, we conducted a survey using a questionnaire specifically designed for this purpose. A total of 107 parents of children attending the lower grades of primary school were surveyed. The participants were randomly selected from the territories of Vranje and Belgrade, forming a random sample. The questions addressed various aspects of the issue, including the structure of homework assignments, their volume, the time children spend completing them, the involvement of parents in the process, students' independence, and the potential need for professional assistance, such as private tutoring. Additionally, we explored whether children have enough time for play and leisure activities and how homework assignments have changed compared to when today's parents were in primary school themselves.

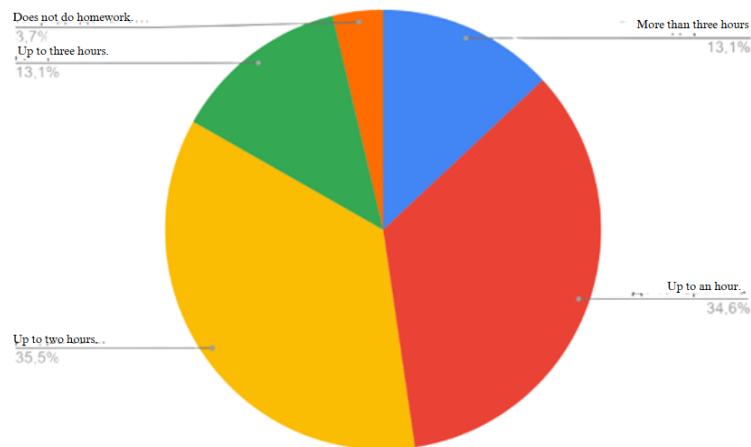
While presenting results in percentages from a random sample is not a precise statistical measure, we believe that the findings indicate general trends in parents' attitudes toward homework.

Regarding the amount and volume of homework, the majority of participants (72%) believe that their child receives an appropriate amount, while 18.7% consider it excessive. Although only a small percentage, some parents also pointed out that the workload is overwhelming and unmanageable.



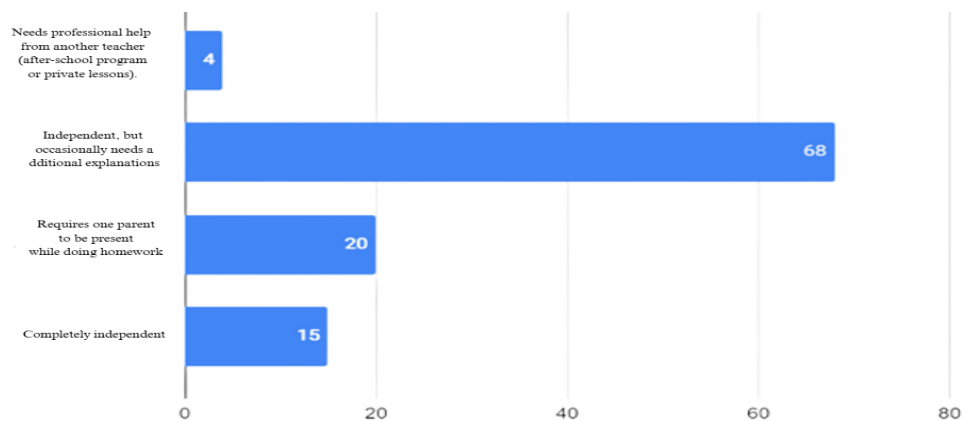
**Fig. 1** Parents' opinion on the amount of homework their child receives at school

When estimating the time their child spends on homework, 35.5% of parents stated that their child spends up to two hours, 34.6% reported up to one hour, and 13.1% indicated that their child spends up to three hours or more on homework.



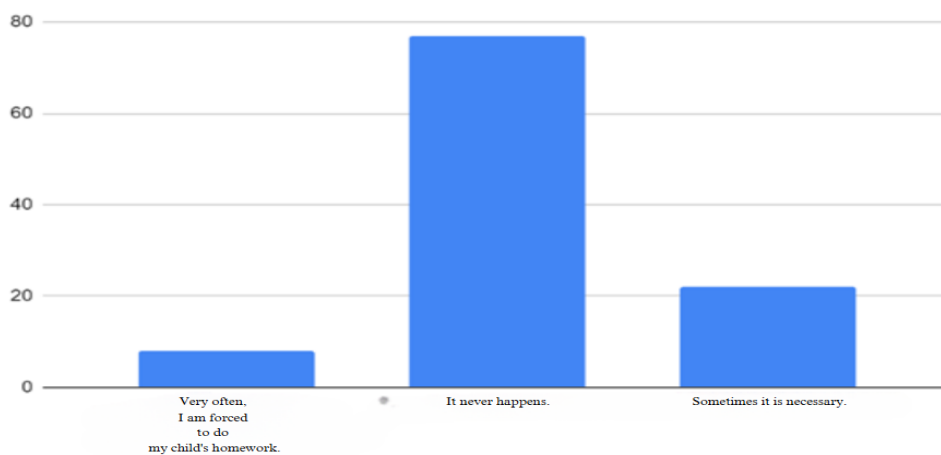
**Fig. 2** Time students spend doing homework

Regarding children's independence in completing homework, respondents expressed the following opinions: 63.6% of parents stated that their child is generally independent but occasionally needs additional explanations, 18.7% reported that constant parental involvement is necessary, and only 14% indicated that their child is completely independent. Unfortunately, some children require professional assistance, such as hiring a tutor, to complete their homework.



**Fig. 3** Student independence in completing homework

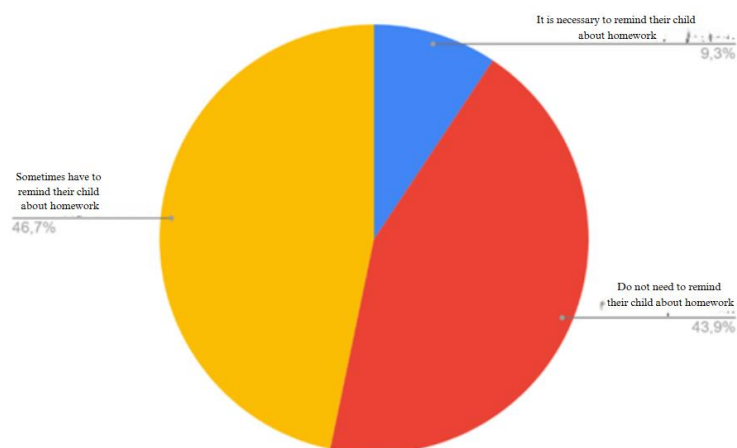
The majority of parents (72%) stated that they never write their child's homework, while 20.6% said it is sometimes necessary. Additionally, 7.5% of participants report that they are very often compelled to do so.



**Fig. 4** Frequency of parents writing their child's homework

A total of 68.2% participants stated that their child never goes to school without completing their homework, while 31.8% said it occasionally happens.

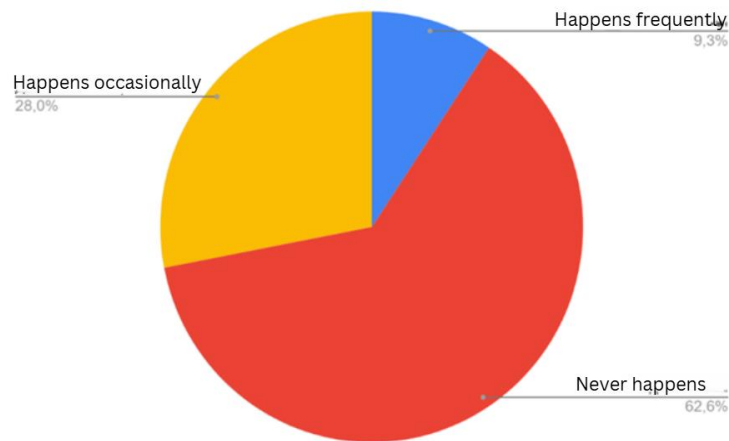
Interestingly, 46.7% of parents reported that they sometimes have to remind their child about homework, 9.3% said they always have to do so, while 43.9% indicated that they do not need to remind their child about school obligations.



**Fig. 5** Frequency of parents reminding their child about homework



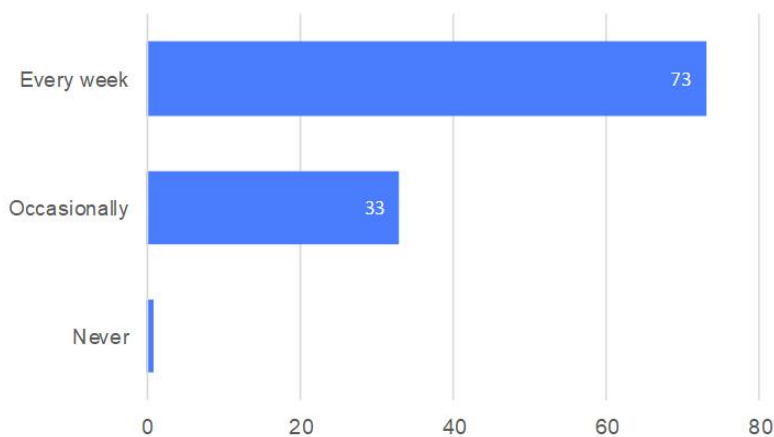
For 37.3% of respondents, homework occasionally or frequently represents a source of stress, while 62.6% disagreed with this statement.



**Fig. 6** Homework as a source of stress and conflict

According to the results, 48.6% of participants stated that their child spends up to four hours playing, 27.1% up to two hours, 15.9% more than four hours, while 8.4% of participants said their child has no time for play.

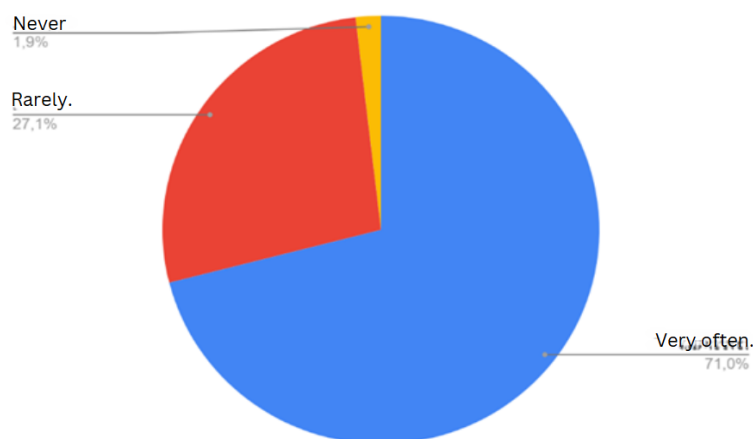
Regarding the frequency of homework in this subject, 68.2% of participants reported that their child receives homework every week, 30.8% said occasionally, and only one participant (0.9%) stated that their child never receives homework in this subject.



**Fig. 7** Frequency of homework in social, environmental and scientific education/ (the world around us)

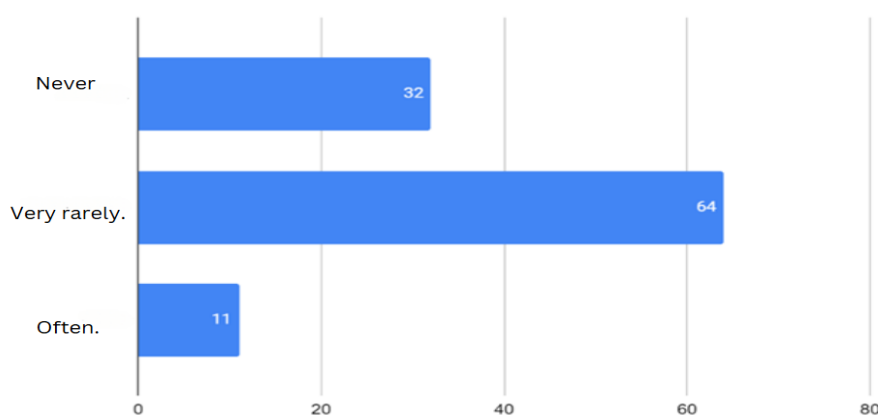
In the context of this study, the responses to the question about how often homework in the field of Social, Environmental and Scientific Education involves the reproduction of material, i.e., memorizing lessons, are particularly significant.

A total of 71% of participants stated that this is a very common occurrence, 27.1% reported that it happens rarely, while only 1.9% (two participants) said it never happens.



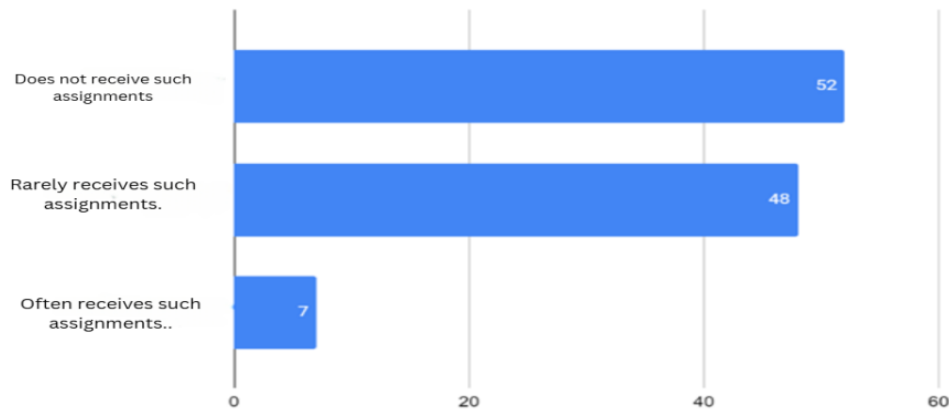
**Fig. 8** Frequency of homework assignments that involve reproduction of material

In response to the question, “How often do homework assignments in the subject Social, Environmental, and Scientific Education / The World Around Us involve visiting the library, consulting encyclopedias, magazines, manuals, etc.?” the majority of participants (59.8%) stated that this happens very rarely. Additionally, 29.9% reported that it never happens, while only 10.3% indicated that such assignments are frequent.



**Fig. 9** Frequency of social, environmental and scientific education homework assignments that involve visiting the library and using additional literature

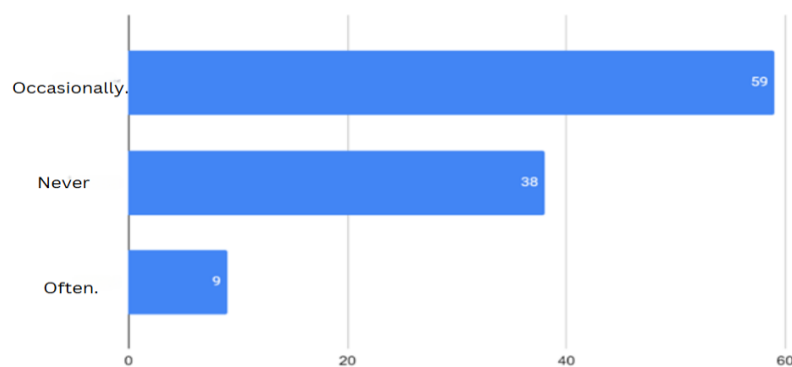
Parents also provided indicative responses regarding the frequency of Social, Environmental and Scientific Education homework assignments that involve independent or group research tasks. Nearly half of the participants – 48.6% – stated that their child never receives such assignments, 44.9% reported that this happens rarely, while only 6.5% of participants indicated that this is a common occurrence.



**Fig. 10** Frequency of Social, Environmental and Scientific Education homework assignments that involve independent and group research tasks

The responses to the question, "Have you, as a parent, been involved in completing a creative homework assignment for the subject of Social, Environmental and Scientific Education (The World Around Us) (such as planting a plant, creating a weather calendar, conducting an experiment, etc.)?" are particularly noteworthy.

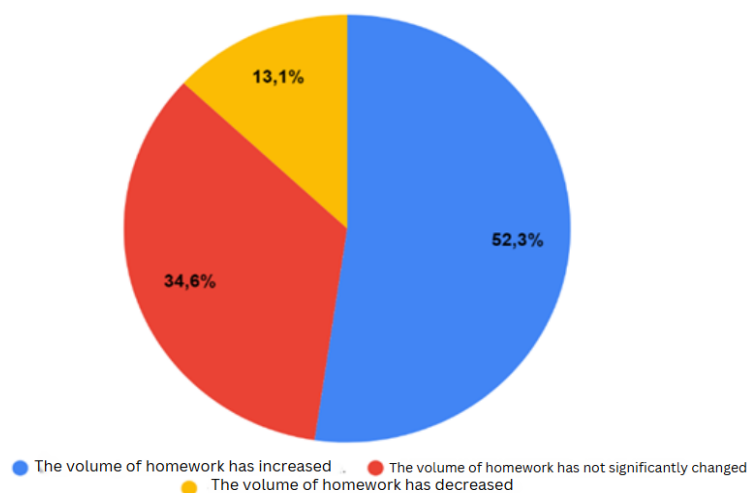
A significant 35.8% of participants stated that they have never participated in such activities, while only 8.5% reported frequent involvement. The majority, 55.7%, indicated that they were occasionally involved in joint activities when completing homework assignments related to Social, Environmental and Scientific Education.



**Fig. 11** Parental involvement in the completion of creative homework assignments in social, environmental and scientific education

The final question asked participants to compare the volume of homework they had as students with the amount their children receive. More than half of the participants (52.3%) stated that the volume has increased, 34.6% indicated that it has not changed significantly, while only 13.1% claimed that the volume of homework has decreased.

Thus, unexpectedly, despite the educational reforms that schools have undergone, a total of 86.9% of participants either see no changes or perceive negative changes in modern teaching regarding homework.



**Fig. 12** Parents' opinions on the change in homework volume

## CONCLUSION

The goal of this study was not to negate homework a priori but rather to highlight the numerous shortcomings of the traditional approach to assigning it and to emphasize the possibilities and necessity for its redefinition. This involves insisting on purposefulness, focusing on student achievement, and providing greater opportunities for students to participate in deciding the nature of their homework.

The survey conducted among parents of primary school students indicates that there is room for improvement in teachers' approaches to assigning homework. The assessment of children's workload in completing homework by a significant number of participants suggests the need to change current practices. However, as the survey was conducted on a random sample, with a relatively small number of participants, and without displaying results according to control variables – such as differences among specific categories of parents – the obtained data should be interpreted with caution. Designing empirical research on a larger sample, using a standardized questionnaire, and processing the collected data more precisely could help shed light on various issues related to homework.

Nevertheless, the issue of homework deserves attention from both practitioners and researchers, making the planning of a more systematic approach to this topic justifiable. Parents represent a significant group with a vested interest in this issue, and their assessments

can highlight the challenges they and their children face when completing homework. These insights could serve as a guide for improvements that would align homework with the expectations outlined in theoretical discussions. Parents can also collaborate with teachers in practice, both in enhancing the quality of homework assignments and in defining their role in the homework process. However, establishing such a collaborative relationship requires enhancing parents' competencies to effectively take on this role.

Additionally, given the diversity of content in the subject Social, Environmental and Scientific Education (or The World Around Us), and the various opportunities it offers for assigning homework, it is unacceptable that an overwhelming percentage of participants indicate that the primary type of homework consists of reproductive tasks. Therefore, the issue of excessive and purposeless homework in Social, Environmental and Scientific Education classes warrants a more serious examination of this complex topic.

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## **OPTEREĆENOST UČENIKA DOMAĆIM ZADACIMA U NASTAVI PRIRODE I DRUŠTVA**

*Cilj ovog rada je da prikaže neke od rezultata istraživanja o efikasnosti primene domaćih zadataka sa učenicima razredne nastave (sa posebnim osvrtom na nastavu prirode i društva), sa namerom da istakne različite aspekte istraživanja ovog problema i otvori probleme za nova istraživanja. U radu će biti saopšteni i rezultati sprovedene ankete sa roditeljima o opterećenosti njihove dece izradom domaćih zadataka, posebno u nastavi prirode i društva. Naša je namera da, uz sva ograničenja ovog istraživanja, otvorimo problem sagledavanja stavova roditelja o primeni domaćih zadataka, uz očiglednu potrebu da se ovim problemom pozabavimo sistematičnije u budućim empirijskim istraživanjima.*

**Ključne reči:** *učenici razredne nastave, domaći zadaci, nastava prirode i društva, opterećenost učenika domaćim zadacima.*