

# **Does homework as a learning strategy stimulate additional student overload?**

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*POVZETEK – V prispevku proučujemo, ali predstavlja domaća naloga kot strategija učenja dodatno breme učencev. O tem problemu najdemo v pedagoški teoriji zelo nasprotna stališča, zato je treba celovito analizirati elemente obremenjenosti učencev. Na osnovi empirične raziskave o obremenjenosti učencev od prvega do osmega razreda ugotavljamo, da so v hrvatskih osnovnih šolah učenci preobremenjeni. Dnevna obremenitev učencev prvega razreda je 6,4 ur; učencev osmega razreda pa celo 10,4 ur. Rezultati kažejo, da predstavljajo domače naloge kot učna strategija dodatno breme učencev v hrvatskem obveznem izobraževanju, zato jih je treba med posamičnimi predmeti uskladiti in ustrezno dimenzionirati.*

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*ABSTRACT – The article examines whether homework as a learning strategy constitutes an overload for students. In teaching theory, this issue is very polarising, making it necessary to analyse the elements of student homework load comprehensively. Based on empirical research on the homework load of students from grades one to eight, we have established that students in Croatian primary schools are subject to homework overload. First grade students show a daily homework load of 6.4 hours and eighth grade students even 10.4 hours. The results show that homework as a learning strategy is an additional load for students in Croatian compulsory education, which is why it is necessary to balance it out among the various school subjects and dimension it accordingly.*

## **1. Introduction**

Homework has always been a part of Croatian school culture. Almost from the first day of school, homework becomes a part of a child's life and its aim is to develop a more independent form of work directed to improving the final overall mark. It derives from and is reflected through the effectiveness of teaching in the process of learning. The effectiveness of teaching and learning is determined through the quality of the results achieved and is directly related to producing the desired outcome. Homework in the context of learning mostly derives from classes.

Those classes which promote each student's progress, the successfulness, and improvement and stimulation of the overall development are deemed effective. In modern societies, it is vital to teach an individual how to form their own opinions and develop a sense of personal responsibility, as well as to allow students to develop the capability of anticipating changes and adapting to these; in other words, life-

long learning is essential (Delors, 1998). The objectives of teaching are nowadays focused on developing student's competencies, the role of an active citizen, and a positive self-image. The effectiveness of teaching and homework, the latter being one of learning strategies, directly depends on the engagement of the teacher. The teacher takes decisions on the teaching methodology, which he/she will use to achieve the pre-set goals and allow for each child's development. Besides conventional main knowledge, abilities and skills, it is desirable to develop critical thinking, problem solving and IT literacy, as well as to develop positive attitudes, adaptability and responsibility. Planning that is focused on students' results requires setting up standards of successfulness in the planning of the teaching process. If students are acquainted with the standards of successfulness, which determine the result, learning will be more successful. When planning classes and thinking of ways how to achieve the expected results, teachers will make a decision on how much time is needed for teaching and learning based on which students will develop certain abilities and skills whilst doing their homework independently. "Independent" is the key word for continuous personal development. The ability to learn independently is acquired after a certain amount of time of interaction with the teacher. The relationship student-teacher aims at fully developing the student's personality, with an emphasis on independence, and therefore the authorities available to teachers are from this point of view always in contradiction (Delors, 1998). In other words, teachers help students to look for, organise and manage knowledge, and as a means to this end there is homework. Teaching stops being a process which is generally known, foreseeable and unquestionable and becomes more student-oriented (Matijević & Radovanović, 2011). It has now become evident that classes are focused on a different purpose and goals than what was the case in the past. Homework arises from the processes of teaching and learning which are mostly achieved in classes. It is intended for deepening knowledge and developing the students' abilities and skills. Homework should have five main features (Herrig, 2013) relative to: the purpose or giving importance to practice; efficiency, which shows learning and good time management; uniqueness in respect of the adequacy of the assignments in order to respond to the students' learning styles and their interests; competency, i.e., giving assignments that will ensure the students' success and; aestheticism in respect of the structure of the homework, which should be attractive to the students (colours, illustrations, pictures, real life stories).

The objectives of homework represent measurable results with regard to repeating what is learnt and adapting it to personal understanding, preparing for research and the research itself and applying the learnt knowledge in a new situation. Giving homework to students depends on the objective one wishes to accomplish. The objective must be understandable to students so that their activities focused on its achievement are clear and enticing. The most frequent homework objectives are related to practicing new knowledge, abilities and skills. With homework it is necessary to establish: the specific goal, the necessary scope, and parental role. Homework must have a clear focus. Its goal, as one of teaching strategies, is to facilitate learning success. In terms of functionality, homework stimulates reading, problem solving, writ-

ing, drawing, programming, construing and creating artwork. Motivation to work on homework should focus on the fact that homework is a measure of the learning continuity and possibility to plan independently, express one's own ideas and approaches, but most of all that one can accomplish self-control when attempting to achieve the desired goal (Hadžibegović, 2013). Teachers should know what their students understand and what they can do independently. At school, a teacher is a professional who monitors the process of the work done, checks its accuracy and directs the student's learning process by timely feedback. Students must be fully acquainted with knowledge so that repetition and practice make sense. It is important for them to see the sense in the set goals and in the benefit of repeating and practicing.

The main purpose of homework is to allow each child individually to improve and expand their knowledge, as well as to develop abilities and skills. Since students function in various ways and have individual interests and needs, different homework is needed for each student so that these differences are addressed. Therefore, stimulating learning requires clear objectives, which are oriented towards developing the abilities and skills of each student and the linkage with the achieved items of the teaching process that preceded learning.

However, the research conducted in 2013 (Peko & Varga) indicates that the teacher is the one who determines what the students will learn, who sets goals and manages the teaching process. This shows that knowledge is seen as something that is transferred to students, rather than their individual construction. Functionally, knowledge is acquired by practicing and repeating, which are two forms of learning necessary to acquire any kind of knowledge. Forgetting is an unstoppable process. We can reduce it by practicing and repeating. Practice transfers knowledge to the level of applicability and is reflected in skills. It allows for functional knowledge, that is, for the progress in students with respect to accuracy, speed and precision. In order for skills to be formed correctly, it is necessary to prepare and monitor, or direct, the practicing process. Clear instructions are necessary with regard to what needs to be done and the reasons for which it is required. It is important to continuously evaluate the outcomes of practice. By repeating, students deepen their existing knowledge. Homework can be focused on the preparation of students for a new content or a deeper elaboration of the already processed content. One must not lose the sight of homework that aims at research which will expand the processed information. When the students' age is concerned, homework should enable greater independence in the choice of topics, method of work and literature research, as well as other necessary sources of information. The homework content and difficulty should be commensurate with the students' abilities and the goals set, and should provide clear instructions as to the work that needs to be done on it.

All participants in the teaching process should agree and equally interpret not only the outcomes but also the values and paths to achieving it. Each homework assignment must be checked and feedback or evaluation must be provided. Evaluation is an important element of learning regulation, which shows how close students

have come to the goals set. The standards and criteria for evaluation should be clear to all students. Feedback on each homework assignment is vital to them. The comments and marks will orient their further work. Feedback enhances homework efficiency, especially if it is provided rapidly, within one day. Timely feedback improves students' learning by correcting mistakes, developing the process of valuation and identifying thinking errors. The homework with comments to the assignments done is much more efficient than the simply evaluated homework. Copying or using homework of others is not only unethical but is in contradiction to the idea of training a student to work independently. When a student's independent work is stimulated, this also stimulates his/her responsible individual work. The importance of guidance and supervision provided by teachers, as well as of training students to work independently and self-monitoring is evident.

American scientists wondered, what is the optimum quantity of homework?. Homework extends the possibility to learn after school, as school covers 13% of daily hours in the first 18 years of life in the USA (Marzano et al., 2006). The analysis of more than 60 studies conducted on the subject of homework in the period 1987–2003 at Duke University in the USA shows that within certain limitations there is a positive interaction between homework and the final mark. It has also been established that too much homework can be counterproductive. The research confirms the 10-minute rule, in proportion to the year of education. For first graders, the optimum time to be spent on homework is 10 minutes, for fifth graders 50 minutes etc. Therefore, students in the 4<sup>th</sup> grade of high school in the Republic of Croatia should spend 120 minutes a day on homework, which is equivalent to the 12<sup>th</sup> grade in the USA. This analysis shows a much stronger correlation between homework and the final mark in senior compared to junior classes (from 7<sup>th</sup> grade onward). It is emphasised that many schools give much more homework than recommended and do not feel that there is a benefit in giving reading as homework. In Great Britain, the recommended amount of homework is 10 minutes for five-year olds and up to 2 h and 30 min for final graders. In the Republic of Croatia, this is equivalent to the 1<sup>st</sup> and the 2<sup>nd</sup> grades of high school. Based on Marzano et al. (2006) Cooper (1989.a & b) established in his research that there is a minor effect of homework on students of lower grades of elementary school. On several occasions Cooper (1989.a, 2008) and Cooper et al., (2006) pointed to the problem of homework and assessed its efficiency. Research shows that parents are inclined to accept the amount and content of homework their children have to do. Thirty-five less correlational studies showed low or no correlation between homework and the achievements of elementary school students. The average correlation between the time spent on solving homework tasks and achievements was only significant for high school students but not for elementary school students. It is considered to be acceptable for lower grade students of elementary school to spend 10–20 minutes a day doing homework and 30–60 minutes for higher grades, depending on the subject. Cooper (1989.b) also developed ideas on how to facilitate writing homework and how to prepare better working conditions.

Glasser (1994 and 2004), Mijatović (1999), Sokol (2005) and Sokol and Vrbošić (2013) used the analyses to advocate a reduction in compulsory homework and the stimulation of students to learn as much as possible at school.

Homework in Croatian schools, as a phenomenon of the additional burden placed on students, was investigated by Sokol (2005) who has been warning of this problem for years now. This author used the sample of  $N = 217$  subjects to investigate the arguments of advocates and opponents of homework in their elementary schools. It was reported that 100% of teachers gave homework. This is particularly interesting for first graders. It was seen that Croatian and maths are subjects with 100% of homework given, whereas with subjects such as nature and society this figure is 98%. Almost 88% of teachers, parents and students said that they get and write homework almost on a daily basis with few exceptions. Sokol and Vrbošić (2013) repeated their research only to confirm the continuity in the demands of teachers with respect to homework. The largest number of students, students and parents report that they mostly get homework in the subjects such as maths and foreign languages, and considerably less in Croatian, especially during subject teaching. Teachers report that they give homework occasionally with the aim of completing the work initiated during classes. Students and parents see homework as a commitment that they are assigned and must do on a regular basis. It is underlined that most participants in the research agree that it takes up to 20 minutes per subject to do their homework and up to 45 minutes for maths during subject teaching. They also agree that homework is regularly checked.

Homework is a learning strategy that takes place in an extracurricular context but is firmly determined by it. In this extracurricular context, an important role is played by parents' support. When stimulating the independent work of a child at home is concerned, parents are expected to get involved. According to some research, it is useful if parents are involved in homework assignment solving. However, the general consensus is that excessive involvedness of parents in problem solving is counterproductive (McGrath & Herman, 2003). It goes without saying that homework becomes useless if parents solve the tasks, write essays and compulsory reading list concepts etc. Are parents trained to help their child in fulfilling school commitments? In an innovative "Parent Learning Support" in the Philippines, parents are advised on the ways in which they can contribute to their children's education. Under the guidance of teachers, parents help their children with their school commitments either at home or at school (Delors, 1998). In Croatian schools there is no such parent training programme which would address the issue of educational support to children provided at their parental home. Does this imply that children of different socio-economic statuses do not stand an equal chance of reaching the desired achievements? It is also necessary to clearly determine the parents' participation in homework completion. Teachers should instruct and advise parents not to complete homework assignments on behalf of their children, nor to correct their homework. The process of reaching results is as valuable as the result itself. Teachers' feedback and grades refer to the student's rather than parents' work or cooperation between students and parents.

Students should work on homework independently, as that is the only way in which homework makes sense.

The results of a research conducted by Sokol (2005) and Sokol and Vrbošić (2013) show that the understanding of the concept of homework varies from teachers to students and parents. Teachers emphasize the importance of independent work and acquiring working habits as a justification for giving homework assignments.

The problem of homework goes beyond mere academic discussion or periodical questioning. It is important to check the objectives, contents, monitoring, factors involved and time needed, in order to get an objective picture of the context of homework. All of this should be considered in the context of the overall burden placed on students through classes and further work required based on these.

Due to the above-mentioned reasons, a research of this important phenomenon was conducted. It can represent an additional overload (or not), and this is the main aim of the paper. Therefore, the research conducted seeks to answer the following question: *Is homework a learning strategy that represents an additional student overload in Croatian compulsory education?*

The research conducted contributes to the findings on student overload in elementary schools.

## 2. Method

### *Research problem*

To establish the student overload in respect of:

- total weekly hours of teaching determined by basic school documents,
- daily teaching student overload in different grades,
- daily curricular and extracurricular student overload across grades.

### *Instruments*

Collecting data based on the prescribed school documents and the corresponding protocol, which is shown in the tables.

The empirical part analyses whether homework represents additional student overload in the compulsory eight-year school system.

The comparative analysis revealed trends of overload in students in elementary schools in the period between 1958 and 2013. The analysis of pedagogical documentation with respect to student overload based on the Curricula of 1958, 1965, 1974, 1982, 1991, 2006 was carried out. Particular emphasis was placed on student overload based on the current Curriculum for the Academic Year 2013/2014. The relevant pedagogical literature and first and eighth grade timetables were analysed.

Both quantitative and qualitative methods were used in the cognitive analysis. The quantitative method was used to analyse the collected data and classify and present them numerically. Based on these, the qualitative method was used to explain and interpret the findings and to identify mutual links and tendencies. Besides the above-mentioned, various screening protocols were used to analyse the pedagogical documentation and their form is visible in the presentation of the results.

### 3. Results and discussion

Homework is a direct extracurricular burden placed on students, which cannot be looked at comprehensively without an overall analysis of the student overload.

*Student overload in relation to the total number of classes per week as determined in the school documents*

In order to objectify student overload in the framework of compulsory education within the Republic of Croatia, it was necessary to analyse the basic school documents which provide the dimensions of the student overload in the compulsory part of the curriculum and other forms of class education. Table 1 provides a comparative analyses of course components of the school curriculum in the period 1958–2013.

*Table 1: Total weekly number of classes as stated in the curricula for the period 1958–2013*

<i>Classes</i>	<i>1958</i>	<i>1965</i>	<i>1974</i>	<i>1982</i>	<i>1991</i>	<i>2006/2013</i>
Compulsory core curriculum	28	32	27	27	26	26
Other forms of classes	0	1–3	3	7	4	9
Extracurricular activities	0	2–4	2–4	2–4	1–2	1–2
Total student overload	28	35–39	32–34	36–38	31–32	36–37

Table 1 presents a historical overview indicating that students had the most overload in 1965 (35–39 classes), and that the situation in 2006 (applicable to the year 2013) with 36–37 teaching classes was not encouraging either. Chances are that this number would soon escalate to the number found for the year 1965. The 1965 curriculum opened doors to a new student overload (subsequent curricula would mainly follow that pattern) mostly due to the differentiation of subjects, the introduction of new and more numerous types of classes and extracurricular activities and continuous multiplication of other forms of classes. This category implies additional teaching, remedial (compensatory) education, course classes (course classes are organized in continuous cycles and was not included in the timetable), optional/elective subjects,

(there are three elective subjects, i.e., catechism, a second foreign language and computer science. The number of classes presented in Table 1 comprise information for the eighth (final) class year of the primary school) as well as the homeroom class or the class that used to be dedicated to “young pioneers” organization.

Furthermore, a new curriculum was introduced in 1974 after the initial insight in the student overload but also after the political, social and scientific community underlined the phenomenon of student overload. From 2006 to date or until 2013, the same curriculum has been applied, which clearly indicates the problem of student overload with formal classes in Croatian schools. This is the basic problem that demands further consideration by all education stakeholders.

According to the PISA testing, it seems that there is only a small dependency between the number of planned classes in the public education system and the overall students’ success. Countries with better results in all academic fields included in the PISA testing rely on the time spent in formal education to a lesser degree as an incentive for studying (Finland, Korea, Japan), whereas countries with much lower results (Italy, Portugal and Greece) require much more formal education for their students (Sahlberg, 2012). According to the PISA testing, Croatia belongs to the latter category due to the large amount of time dedicated to formal education by means of compulsory, optional or other forms of education.

It is worrying that a student needs to spend their full working time (as defined for adults) at school. Curricular activities are followed by certain obligations that additionally extend the duration of the working week and provide an additional burden for students. Since it is impossible to introduce any new subjects, lately we see that new content is being introduced without reducing the content of subjects to which such content is being introduced. It is evident that students are being continuously exposed to the expansion of work overload by means of other forms of classes. It would be necessary to put an end to this negative trend of overloading students in compulsory primary education.

#### *Daily class student overload in different grades*

In the 1980’s the Croatian school system saw a massive introduction of a five-day school week. At the moment it was introduced the intention was to match students’ school obligations with their parents’ working week in order to provide more time spent with the family and increase the educational aspect. According to the recommendations from that time, it was advisable not to give any homework during weekends because weekends were meant for relaxation and entertainment. Table 2 indicates the present situation with student overload in correlation with the timetable.

*Table 2: Timetable of an eighth-grade student with an average workload*

<i>Classes</i>	<i>Monday</i>	<i>Tuesday</i>	<i>Wednesday</i>	<i>Thursday</i>	<i>Friday</i>
1 <sup>st</sup> class	Physical education	Catechism	Croatian	English.	Computer science
2 <sup>nd</sup> class	Catechism	Physics	Croatian	Physics	Computer science
3 <sup>rd</sup> class	Mathematics	Mathematics	Music	Mathematics	Chemistry
4 <sup>th</sup> class	English	Biology	Chemistry	Biology	Croatian
5 <sup>th</sup> class	Geography	English	Geography	Physical education	Technical culture
6 <sup>th</sup> class	Croatian	History	Mathematics	History	Visual arts
7 <sup>th</sup> class	Homeroom class	German		Stage music	
8 <sup>th</sup> class		German		Goldwork	
9 <sup>th</sup> class				Goldwork	

The above timetable shows that this eighth-grade student has a 35-hour working week (if we take into consideration that his/her computer science classes take place every other week, the real workload amounts to 34 hours per week). However, at the same time it indicates that the student in question does not have a single class of additional or compensatory education, which would clearly multiply his/her weekly workload.

According to this weekly timetable, the student in question has seven classes every day, without the time spent on coming to and returning from school (which has to be treated individually, especially in case of students who have to travel long distances in order to get to school). The web pages of most primary and secondary schools provide timetables for all grades and classes. Special attention should be given to first-grade timetables (see Table 3).

*Table 3: Example of a first-grade timetable*

<i>Classes</i>	<i>Monday</i>	<i>Tuesday</i>	<i>Wednesday</i>	<i>Thursday</i>	<i>Friday</i>
1 <sup>st</sup> class	Croatian	Physical education	Croatian	Physical education	Croatian
2 <sup>nd</sup> class	Nature and society	Croatian	Mathematics	Croatian	Mathematics
3 <sup>rd</sup> class	Visual arts	Mathematics	English	Mathematics	English
4 <sup>th</sup> class	Homeroom class	Catechism	Catechism	Musical culture	Nature and society
5 <sup>th</sup> class	ECA	DOD		Remedial teaching	Physical education

Table 3 shows that an average student needs to spend their full working hours in school (planned for adults). The above timetable leads to the conclusion that a first-grade student has more classes than his/her teacher. Therefore, with respect to the timetable a first-grade student's overload is greater than his/her teacher's overload. A first-grade student's timetable comprises 24 classes per week whereas his/her teacher's timetable comprises 20 classes per week (catechism and English are taught by different teachers).

Apart from the time spent in school, students also have to undertake various tasks that additionally prolong every working week and burden the students. Having in mind that it is not possible to introduce any new subjects (because there is absolutely no time left for them in the weekly timetables), new programmes are simply integrated through teaching principles. Therefore, new content is added to the curricula that are already too exhaustive without reducing the existing content. Every curriculum foresees homework and thus places additional burden on the students.

*Daily regular and extracurricular workload of students undergoing compulsory education in the Republic of Croatia*

In order to get a more comprehensive overview of the workload to which students are exposed, it is necessary to get an insight into the direct workload in the classroom and possible resulting obligations outside of the classroom. Table 4 presents the daily student workload expressed in hours.

*Table 4: Cumulative daily workload for each grade expressed in hours*

<i>Grades</i>	<i>Classes</i>	<i>Average reading</i>	<i>Homework</i>	<i>Total</i>
1 <sup>st</sup>	5	1.1	0.3	6.4
2 <sup>nd</sup>	5	1.5	0.4	6.9
3 <sup>rd</sup>	5	1.8	0.5	7.3
4 <sup>th</sup>	5	2.2	0.7	7.9
5 <sup>th</sup>	6.2	3.8	1.0	11.1
6 <sup>th</sup>	6.4	2.4	0.7	9.5
7 <sup>th</sup>	7	2.5	0.8	10.3
8 <sup>th</sup>	7	2.6	0.8	10.4

Table 4 indicates that the first grades of primary school already encompass working hours very close to the working hours of adult workers with a tendency towards an increase in higher grades of primary school. The daily student workload (presented in Table 4) has been taken from the current curriculum and empirical results indicating

the total student workload resulting from the obligatory components of the teaching process (Grubor, 1972; Kombola, 1974; Ovčar, 1972; Popadić, 1974; Radović, 1979).

The existing homework system practised nowadays by Croatian teachers and part of the traditional Croatian school culture places an additional burden on students who are already exposed to student overload. Back in 1884, Čurčić underlined that “*Children should not be overloaded with homework. It is contrary to school hygiene when children get as much homework during the holidays.*” (Čurčić, 1884, p. 393).

School laws from 1888 and 1929 identify several sources of student overload. All the identified sources of student overload can be grouped into the basic two categories: regular school activities and activities outside of school. School sources, apart from the curricula, their comprehensiveness and depth, extremely wide content in textbooks, too frequent examinations and evaluations and out-dated teaching methods as well as didactical materialism and formalism, also include extensive homework.

A brochure titled *Disburdening Students in Primary Schools* (1976, p. 8) identifies the causes of overload and recommends so-called *disburdening measures*. It was possible to give homework only from subjects such as Croatian, a foreign language and mathematics. It was also advised not to give any homework during the holidays.

So-called *expanded textbooks* were introduced during the 1960's. Expanded textbooks implied the basic textbook and a series of extra resources such as workbooks, exercises, control papers and history and geography textbooks. Their function was to ensure individual forms of work within the learning process but, unfortunately, they created an additional and very strong source of student overload in the form of homework.

Consequently, the basic purpose of homework is providing time for students to practice what they have previously learnt at school. Time spent in preparation for examinations also makes part of the total student overload being linked to individual student work outside of the classroom. In the Republic of Croatia there are special norms for monitoring and evaluation used in order to set dimensions for exam preparation. In line with the Rules on monitoring and evaluation from 1995, eighth-grade students should have in total 56 tests annually or on average 1.6 tests per week. If we are to reduce this number by educational subjects, students still have to take more than one written test every week. On the other hand, if we add an uncritical approach to testing (quizzes, five-minute tests, tests in the function of punishment, tests for preserving class discipline), the situation becomes even more alarming because students have to study for each category of those tests individually or practice what they have already learnt in order to be successful. The new Rules on monitoring and evaluation adopted in 2010 stipulate that students should take four tests per week at the most. Persistent implementation of the Rules additionally increased the possibility of testing knowledge with the use of written exams. If we multiply 35 school weeks by 4, we see that students can potentially have 140 written tests annually. This is the upper limit allowed but yet it exists as a possibility. Taking into account student overload arising from homework, it is hard to grasp the efficiency of all the above-stated components.

The daily time load related to reading prescribed literature for an average student in lower grades amounts to less than 2 hours, and in higher grades to approximately 2.5 hours. This obligation also creates difficulties because apart from reading students have other obligations (homework, practice). Even in the category of an average student it is possible to find a slight overload related to reading and the prescribed literature. In higher grades, students may have more individual obligations but they need to be diversified. At the same time, such obligations should not take too much of a students' time and create an additional overload (Grubor, 1972; Kombola, 1974; Ovčar, 1972; Popadić, 1974).

Teachers in Finland are not of the opinion that a greater quantity of homework necessarily leads to better learning results, especially if students have to deal with routine or less demanding tasks, which is often the case with homework. According to several international studies, Finnish students in primary schools and the lower grades of high school have the smallest workload related to homework and in many cases have to work on homework only half an hour per day. Many Finnish students in primary and high schools manage to do most of their homework while still at school (Sahlberg, 2012). Glasser (1994) underlines that homework should be removed from schools since there are only a few students who write quality homework when it is obligatory. Sokol and Vrbošić (2013) are against homework in the form that is mostly used in Croatian schools because they find it useless for those who do not really understand what they have to do. On the other hand, the students who have the necessary skills only suffer the loss of time. Sokol and Vrbošić also indicate some directions to change the approach to homework. They recommend the introduction of optional homework and the possibility to do homework in school during classes (Sokol & Vrbošić, 2013).

At the moment it is necessary to question the very purpose of homework in the light of the new guidelines for teaching in schools. While discussing the possible advantages and disadvantages of homework, we can say that the advantages are mostly linked to quality time management, the development of learning habits, a positive approach to learning, continuity of work at school and at home, a positive influence on the overall student success, creativity and useful work and the participation of parents in the upbringing of their children. Some of the possible disadvantages often attributed to homework comprise additional, even uncontrolled student overload, a negative attitude towards learning, an uncertain influence on the student's success, extensive inclusion of other negative factors, routine work, useless work and excessive parental interventions in relation to the work their children are involved with.

The analysis of the total expected student overload plus the demands concerning homework results in indicators showing that a first-grade student has 6.4 hours of workload and related obligations per day, whereas the number of hours for a fifth-grade student increases to 11.1 hours per day. Research results extracted from the relevant pedagogic documents lead to an affirmative answer to the question: *Is homework a learning strategy that places an additional burden on students.*

The conclusion is that homework as a learning strategy presents an additional burden on students in Croatian primary schools.

#### **4. Conclusion**

In the analysed period between 1958 and 2013 all the identified school sources of student overload increased. The weekly time schedule increased from 32 to 36 (37) hours in the period 1974–2013. It is evident that students are faced with overload: their cumulative daily overload ranges from 6.4 hours in the first grade to 10.4 hours in the eighth. Homework is not standardized and it is increasingly becoming a factor of additional student overload for all age groups, which logically raises the question of its effectiveness.

Taking into account the present situation, it hard to believe that the problem with overload will be tackled and reversed any time in the near future, despite some measures that have been announced. This problem requires prompt action. Any kind of improvement implies change. Fostering change implies relevant innovations for improvement based on the needs, quality, practical aspects, clarity and complexity, the readiness of all stakeholders to engage as well as the availability of support and resources, including time (Fullan, 1991). Our opinion is that it is necessary not only to reflect on the changes but to start resolving the problem of student overload with the full awareness that there is not enough time for postponing action related to disburdening students.

The intention of this research is to make the scientific and expert public more sensitive to the different phenomena related to student overload in relation to homework and especially in the period when new comprehensive measures are being introduced (announced reduction of school textbooks in terms of volume and content). This research also tries to indicate some so far unidentified sources of student overload (where homework figures as one of the most important factors) in order to be able to focus on systematic modification.

At the same time, the in-depth analysis of the results related to student overload in the Croatian compulsory education system opens doors to new areas that have not been discussed in this paper. It is recommended to further investigate student overload in relation to the use of supplementary textbooks and to survey the parent population in order to establish the extent of their involvement with homework.

Research into the effectiveness of homework as a learning strategy is becoming a very dynamic and important field. It is necessary to introduce positive modifications in the very pedagogical concept of homework which would reflect on the disburdening of students and consequently on the overall teaching culture and school culture. Adaptation of the school culture requires redesigning its structure in all its parts. Homework is one of key factors for disburdening students and it can serve as an excellent starting point.

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## **Ali je domača naloga kot strategija učenja dodatno breme učencev?**

*Prispevek preučuje, ali je domača naloga učna strategija, ki predstavlja obvezno in optimalno ali nedoločljivo dodatno breme za učence. Da bi odgovorili na to vprašanje, moramo preučiti cilje, ki jih pripisujemo domači nalogi. Glavni cilj le-te kot ene izmed učnih strategij je, da učencem omogoča uspešno učenje. Cilji domače naloge so v glavnem osredotočeni na ponavljanje že znanega s prilagoditvijo osebnemu razumevanju, pripravi na raziskave, pa tudi raziskavam ter vajam in uporabi naučenega znanja v novih situacijah. Domače naloge spodbujajo branje, pisanje, reševanje problemov, raziskave, programiranje, oblikovanje, risanje ... Učencem morajo biti razumljivi cilji, da bi bile tudi dejavnosti, usmerjene k njihovi uresničitvi, jasne in spodbudne. Pri domačih nalogah je treba določiti poseben namen, potreben obseg in vlogo staršev kot pomočnikov pri doseganju zastavljenega cilja. Domača naloga mora imeti jasno osebno usmerjenost učencev oziroma možnost spoznanja, da je naloga ukrep, ki omogoča neprekinjeno učenje in sposobnost za samostojno načrtovanje, izražanje lastnih idej in pristopov, še najbolj pa zmožnost samokontrole v poskusu, da bi dosegli želeni cilj. Učitelji so strokovnjaki, ki odločajo o domačih nalogah in morajo vedeti, kaj njihovi učenci razumejo in kaj lahko delajo samostojno. V šoli je učitelj tisti, ki spremlja delovni proces, pomaga, usmerja, preverja točnost in s pravočasno povratno informacijo usmerja učenčevu učenje. Na podlagi tega smo izpostavili značilnosti domače naloge, kot so: postavitve jasnih ciljev in njihovo sprejemanje s strani učencev; primernost nalog za učence glede na njihove interese in potrebe ter različne učne stile; učinkovitost in racionalna izraba časa; posebnosti glede na kompetence (učenec, učitelj, starši) pri zastavljanju nalog, da se zagotovi uspeh učencev in omogoči priznavanje pomembnosti funkcionalnega znanja.*

*V pedagoški teoriji in praksi najdemo nasprotujoča si stališča v zvezi z domačo nalogo kot učno strategijo. Ameriške študije potrjujejo korist domače naloge, če so učenci časovno obremenjeni deset minut na dan v sorazmerju s številom let šolanja. V prvem razredu je optimalen čas, ki ga bo učenec porabil vsak dan za nalogo deset minut, v petem razredu petdeset minut in tako naprej. V zvezi s predlaganimi standardi naj bi dijaki v četrtem letniku srednje šole na Hrvaškem dve uri na dan porabili za domačo nalogo, saj je to enakovredno dvanajstemu razredu v ZDA. Rezultati raziskave so pokazali malo učinka domačih nalog na učence v nižjih razredih osnovne šole. Močnejša je korelacija med domačo nalogo in šolskim uspehom v višjih razredih (od sedmega razreda dalje) v primerjavi z nižjimi. Treba je poudariti, da v številnih šolah dajejo veliko več nalog, kot je priporočljivo. To pomeni, da je za učence v nižjih razredih osnovne šole sprejemljivih 10–20 minut domače naloge na dan, v višjih razredih pa 30–60 minut, odvisno od predmeta. Hrvaška izobraževalna skupnost se zavzema za občutno zmanjšanje obveznih domačih nalog. Pričakovati je, da bi zmanjšanje domačih nalog spodbudilo nadaljnje aktivnosti učencev, da bi se čim več naučili v šoli.*

Kako nujna je bila skupna analiza vseh elementov obremenjenosti učencev s šolski-mi obveznostmi, pa tudi analiza domače naloge v tem okviru, je pokazala raziskava o obremenjenosti učencev z domačo nalogo kot učno strategijo v obveznem izobraževanju na Hrvaškem. Prizadevali smo si za določitev obremenitve učencev glede na: skupni tedenski urnik, ki je določen v osnovni šolski dokumentaciji, dnevne učne obremenitve učencev v različnih razredih ter vsakodnevne obremenitve pri pouku in v občolskih dejavnostih po razredih.

Potrebne podatke smo zbrali z analizo predpisane šolske dokumentacije in z uporabo ustreznega protokola. Preučili smo pedagoško dokumentacijo v zvezi z obremenitvijo učencev po učnih načrtih in programih iz let 1958, 1965, 1974, 1982, 1991, 2006. Posebej je analizirana obremenitev učencev po trenutno veljavnem učnem načrtu za šolsko leto 2013/2014. Analizirana je tudi ustrezna pedagoška literatura in urniki prvih in osmih razredov. Za analizo pedagoške dokumentacije so poleg običajnih postopkov uporabljeni tudi različni protokoli snemanja.

Iz dobljenih rezultatov lahko sklepamo, da so bili učenci v tem zgodovinskem obdobju najbolj obremenjeni leta 1965 (35–39 ur). Učni načrt iz leta 1965 je omogočal novo obremenjevanje učencev (kasnejši učni načrti praviloma sledijo temu trendu) z diferenciacijo učnih predmetov, uvajanjem novih in številnih učnih oblik in izvenšolskih dejavnosti ter s stalnim povečevanjem drugih oblik poučevanja. To pomeni dodatni pouk, dopolnilni pouk, tečajji (tečaj je pouk, organiziran v zaporednih ciklih, ki ni vpisan na urniku), fakultativni pouk, izbirni pouk (iz treh izbirnih predmetov: verouk, drugi tuji jezik in informatika). Položaj glede obremenjenosti učencev v letu 2006 (ki velja tudi za leto 2013) s 36–37 urami formalnega pouka je neugoden in kaže, da bo kmalu prerasel število ur iz leta 1965.

Novi učni načrt je bil po začetnem vpogledu v preobremenjenost učencev sprejet leta 1974. Socialna in strokovna javnost je opozorila na pojav preobremenjenosti učencev. Od leta 2006 do leta 2013 velja enak kurikulum. Analiza učnega načrta kaže na preobremenitev hrvaških učencev s formalnim poukom. Učenec ima 35-urni delovni teden (če upoštevamo, da ima informatiko vsak drugi teden, potem je dejanska obremenitev 34 ur na teden). Toda hkrati je razvidno, da ta učenec nima nobene ure dopolnilnega ali dodatnega pouka. Če k temu prištejemo obremenitve učenca s tem poukom, se njegova tedenska obremenitev povečuje. Presenetljivo je, da povprečni učenec dela polni delovni čas (predviden za odrasle) v šoli. Iz urnika je razvidno, da ima učenec prvega razreda višjo učno obremenitev od svojega učitelja. Urnik formalnega izobraževanja za učenca nižjih razredov osnovne šole na Hrvaškem obsega 24 ur na teden, za učitelja pa 20 ur na teden (verouk in angleščino poučujejo drugi učitelji). Torej, že v začetnih razredih se skupno število ur na urniku učencev približuje številu delovnih ur odraslih delavcev, na predmetni stopnji pa je že bistveno preseženo. Analiza celotne obremenitve učencev z dodanimi zahtevami po domačih nalogah je pokazala, da je na Hrvaškem več kot očitna preobremenitev učencev v obveznem (osnovnem) izobraževanju.

Ugotovitve, ki temeljijo na empiričnih podatkih, predstavljenih v tem prispevku, kažejo skupno obremenjenost učencev od prvega (6,4 ure na dan) do osmega razreda

*(10,4 ur na dan). Rezultati poudarjajo, da domača naloga kot učna strategija dodatno obremenjuje učence v hrvaškem obveznem (osnovnem) izobraževanju. Problem obremenjenosti učencev se mora sistematično reševati. Za učence je neizogibna razbremenitev učnih obveznosti, ki vključujejo tudi obseg in vsebino domače naloge kot dejavnika dodatne obremenitve. Zato je treba to zadevo nujno urediti.*

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