

Andelka Peko, Snježana Dubovicki and Rahaela Varga

The (re)construction of student overload in the Croatian context

Abstract: This paper deals with the phenomenon of student overload in Croatian primary schools, focusing particularly on the curriculum as one of the most important factors of quantitative overload in this context. Quantitative overload occurs when students spend so much time doing school-related tasks that they become overburdened. The aim of the present study was to investigate whether the curriculum needs to change in order to reduce student overload and whether the school infrastructure could support the necessary changes. The analysis confirmed the existence of student overload and indicated that the curriculum should be reconfigured in order to decrease this overload. An analysis of curricula in use between 1958 and 2016 showed that student overload is increasing, despite constant efforts to alleviate the problem. Some of the impediments to reduction of student overload can be attributed to the curriculum, as well as to the organisation of the school day. The collected data revealed that there is insufficient school capacity for the necessary reorganisation; specifically, schools lack the resources to make the switch to a single-shift school day and to provide teaching assistance during extended-day programmes to allow students to complete all their school-related tasks at school.

Keywords: comparison, curriculum analysis, curriculum reconstruction, student overload, timetables

UDC: 37.011.3-052

Scientific article

Andelka Peko, PhD, full professor, University of Osijek, Faculty of Education, Cara Hadrijana 10, HR-31000 Osijek; e-mail: apeko@foozos.hr;

Snježana Dubovicki, PhD, assistant professor, University of Osijek, Faculty of Education, Cara Hadrijana 10, HR-31000 Osijek; e-mail: sdubovicki@foozos.hr;

Rahaela Varga, PhD, assistant professor, University of Osijek, Faculty of Education, Cara Hadrijana 10, HR-31000 Osijek; e-mail: rvarga@foozos.hr.

Student overload: is it really a problem?

Contemporary discussions on education raise the question of students' inadequate knowledge of certain subjects and propose new school subjects that will better prepare them for life in modern society. For example, in Croatia there has been debate about the introduction of citizenship education as a cross-curricular subject or an independent subject; which worldviews should be incorporated in the sex education curriculum; or whether computer science should be made compulsory from grade 1 (Cjelovita kurikularna reforma 2016).

On the other hand, it is feared that students are already experiencing overload from working on the existing school subjects, which forces them to turn to undesirable ways of coping such as truancy (e.g. Wilson et al. 2008). Such unauthorised absence from school can be linked to disaffection, exclusion from school and criminality (Sheppard 2007) but it can also be a means to maintaining good grades and may be approved of by parents (Marušić 2009). Thus, the question arises whether such a situation is a result of the structure of the education system and the way in which a typical school day has been designed in public schools at a national level.

In Croatia and in certain other European countries, a student is expected to achieve various educational outcomes and develop key competences (Recommendation 2006). These expectations place a burden on students. It is important to note that a competence-based approach to teaching calls for increased cognitive activation on the part of the students (Helm et al. 2016). Overload occurs when the expectations are not in accordance with the students' capabilities at a given stage of their mental and physical development, that is, when the demands on them consume excessive time and effort (Munjiza et al. 2016). This creates an environment that does not encourage students to learn but instead drives them to find ways to avoid their obligations. Students who feel overburdened do not perceive school to be a place of personal growth but solely a source of commitments that they barely manage or even fail to fulfil. This can give rise to a frustration, which in turn represents a barrier to learning at school and at home. In other words, enthusiasm for learning can be negatively linked to student overload (Helm et al. 2016).

Often a teacher, when giving students assignments, has no complete picture of what other tasks they are expected to do during the week. Some of these tasks may relate to school and ordinary classes, some to extracurricular activities, such as projects, competitions, sporting events, learning additional languages or taking music lessons. Therefore, students frequently need assistance from their parents, who then take over the role of teacher in order to help their children complete their work.

If getting an education is for students their “job”, then it should be noted that their working day may be longer than that of adult workers, who spend eight hours at work per day. This is because students spend time both at school and after school working on school-related tasks. They also devote time to school-related tasks during weekends and holidays.

The overwhelming experience of education can be a challenge for students at any level. Younger pupils are often prone to developing psychosomatic issues related to chronic stress, such as pain, headaches and other health problems (Milde-Busch et al. 2010). The school day is organised in such a way that there is not enough free time for recreation (*ibid.*). The overload can be attributed to the amount of homework students are asked to do every day (Munjiza et al. 2016), often compounded by modern technology. Students are expected to continue their learning after school lessons by being active online. Systems are available to keep students in regular contact with their teachers and peers and enable them to take part in collaborative activities when at home, thus contributing to overload (Kear and Heap 2007).

In order to understand the problem of student overload, researchers must take into account the subjectively estimated amount of overload. Students’ perception of the demands made on them is partly connected to the quality of classroom activities (Ruohoniemi and Lindblom-Ylänne 2009). Such overload is seen as an impediment to learning, which makes it counterproductive for students’ development of key skills and competences.

There are two basic types of student overload, quantitative and qualitative. Quantitative overload occurs when students spend so much time performing school-related tasks that they have too little time in their daily, weekly or yearly schedules to satisfy their other needs, for example relaxation, activities and hobbies. By contrast, qualitative overload occurs when students find lessons too difficult, incomprehensible or abstract, even though they may make great efforts to keep up. A common consequence is that they need help in the form of extra school hours, individual teacher assistance or private tutoring (Munjiza et al. 2016).

It is important to note that not every student is equally affected by overload. Thus, in addition to overload in general, which is the usual focus of discussion, individual differences exist among students. Those students who take part in many extracurricular activities are the ones who are most affected by overload. Because grades are often the basis for determining vertical and horizontal mobility through the education system, they may be regarded as a further significant source of student overload. Grades are also closely linked to parental ambitions for their children. Petrov (2002) claims that there has been a shift in teachers’ expectations from different types of students. Namely, he noticed that teachers in Russia used to

be more focused on students who struggled with learning and strove to bring them up to the average level of attainment, whereas today teachers invest more effort into helping students who show a high degree of interest in their subject, setting them more tasks to prepare them for competitions, engaging them in after-school events and propelling them towards greater challenges.

According to Ruohoniemi and Lindblom-Ylänne (2009), one of the factors commonly recognised as a barrier to learning is the curriculum, which plays a significant role in the process of school improvement. Although the issue of student overload is a starting point for the current curriculum reform in Croatia, the phenomenon can be traced back to the time when institutionalised state schooling was introduced, along with elements of the school infrastructure. Indeed, given that an 1874 law made four years of primary schooling compulsory in Croatia, it may be argued that the phenomenon of student overload is more than 140 years old. Over the years, the problem has become more acute and must now be tackled in the process of introducing changes in the education system and designing a new national curriculum.

Curriculum as a root of the problem in the Croatian education system

As in some other European countries, the national curriculum in Croatia is a document published by the Ministry of Science, Education and Sport, and it specifies which school subjects must be studied by all pupils in the country. It also specifies the order in which they must be learned and the number of lessons (in school hours) that must be delivered per subject. Hence, the scope of curriculum is directly linked to quantitative student overload (time spent on school-related tasks). The curriculum is the source not only of individual student overload but of student overload on the national scale.

Curricula are sometimes inappropriately tailored to the needs of students of a given age. When eight years of education were made compulsory in Croatia, the first curriculum was published, in 1958. In 2016, the curriculum dating from 2006 was still being used. Ever since 1958, the phenomenon of student overload has been recognised as an important pedagogical issue. Indeed, quantitative student overload arising from the 1974 curriculum had become so widespread that it was discussed at the Assembly of Educationists in Croatia in 1976, resulting in a document entitled 'Reducing overload on primary school students' (Rasterećenje učenika osnovne škole 1976).

Moreover, the curriculum is a source of qualitative overload. Biondić et al. (1982) claim that the part of the curriculum that describes the syllabus of school subjects affects student overload in both a direct and an indirect way. The direct way refers to the quantity of facts and data that students are expected to memorise, which puts great strain on their intellectual capabilities. As a consequence, there is an indirect influence on student overload, for the syllabus influences what goes on in the classroom, teachers' choice of teaching methods and the quality of teaching.

The consistency of the phenomenon of curriculum-based student overload is also documented in more recent studies. Vučak (2001) links student overload to over-extensive curricula (on the general level), poor teaching, inadequate student-teacher communication, incomprehensible texts, a large number of extracurricular activities and high parental expectations (on the individual level). Rijavec (2005) recognises the curriculum as the ultimate source of quantitative overload, regulating the number of hours students spend in school. It is also a source of qualitative overload, a function of intensive programmes, inadequate textbooks, a great amount of homework, teaching methods that do not support learning, assessment measures, test anxiety, demands from parents and extracurricular activities. Jurčić (2006) also finds the objective indicators of primary school students' overload in the curriculum and the expenditure of time that it requires for learning and doing school-related tasks (Matijević and Radovanović 2011). Strugar (2012), as well as citing an over-full curriculum as a source of overload, points to subject differentiation made at too early a stage, inadequate classroom technology and teachers' inability to organise and lead the educational process.

Additionally, there are other sections of the school infrastructure that contribute to student overload. These primarily include the school calendar, the five-day week, lessons organised in two shifts (morning shift and afternoon shift) and weekly timetables. The school year in Croatia starts at the beginning of September and ends in mid-June. In that 35-week period, teachers and pupils are expected to cover all topics and objectives stated in the curriculum. For that reason, the five school days have to be up to eight hours long, depending on the grade. Lessons take place between 8 a.m. and 2 p.m. in the first shift and from 1 p.m. to 7 p.m. in the second shift. The intention is to organise schools nationwide to switch to a morning shift for all students, and offer extended-day programmes and after-school programmes that would enable students to do their homework, pursue team projects and revise with the assistance of a highly qualified teacher. In that way, they would be able to spend some quality time at home or with friends, free from school-related tasks.

Clearly, most school obligations originate from the curriculum. Incorporating new content in school subjects means that students acquire more facts and information. Yet, in the present age of information and technology, individuals are able to access more information than they can take in, understand or put to effective use. As much as continuous innovations in the curriculum are intended to support student development, students' capacity to select and process everything that is believed to be necessary for them to learn is unknown. Expecting students to acquire knowledge to excess undoubtedly has a negative effect on their learning and well-being. The way in which teaching is organised is a crucial factor in their well-being and development (Kodele and Lesar 2015). An up-to-date curriculum would need to be interesting, relevant and capable of providing students with cognitive tools to use in everyday life situations.

Against this background, the research questions are as follows:

1. Does the curriculum need to be changed in order to reduce student overload?
2. Does the school infrastructure have the capacity to reduce student overload?

- In order to answer these questions, the following tasks need to be undertaken:
- Compare how much work students have ordinarily had to do in the period from 1958 up to 2016.
 - Determine the number of schools that operate in one shift and have organised extended-day programmes.

Method

The research involved analysing documents relating to teaching and learning and national statistics. As part of the first task mentioned above, six curricula needed to be examined to see if there was an improvement over time. The first curriculum examined was from 1958, the first to be published after eight-year primary education was made compulsory in Croatia. The last curriculum examined dated from 2006, which was still in use in 2016. In the intervening period, there were curricula from each decade (1965, 1974, 1982 and 1991).

The curricula were analysed to determine how many school subjects they contained, as well as the total number of school hours. The current curriculum has also been interrogated to determine the daily and weekly amount of quantitative student overload in the fourth and eighth grades of primary school. Comparing quantitative student overload in the past and today reveals whether and how the overload has changed over time, namely whether it has increased, decreased or remained the same. This makes it possible to answer the first question, namely whether or not the current curriculum is in need of revision.

The second research task involved exploring whether schools have the capacity to reorganise their schedules in order to support the reduction of student overload. To this end, schools would need to have sufficient resources to operate in a single shift (morning shift) and to provide teacher support for learning in the extended-day programme. The number of schools in the Republic of Croatia that offer the extended-day programme was compared with the total number of schools. These data are available on the Ministry of Science, Education and Sport's website¹, which shows how many primary schools with the extended-day programme there are in each county.

Results and discussion

The collected data are grouped so that they correspond to the research questions. The first question was aimed at finding out whether the existing curriculum needs to be changed in order to reduce student overload, whereas the second question was about determining whether schools can realistically implement the revised curriculum.

¹ The document is available at: <http://public.mzos.hr/fgs.axd?id=18409>. During the time when this paper was being written, it was not possible to find data for the school year 2015/2016.

Comparison of quantitative student overload in the past and today

Data obtained from various curricula were compared to highlight the differences between them, specifically in the number of hours that students should spend in class. Figure 1 shows the weekly number of hours of regular classes, additional hours of classes for students who are especially able and extra hours for students who need extra help with their learning, as well as extracurricular activities and optional subjects arranged for students in the fourth and eighth grades of primary school. All students attended the regular classes, which formed the core curriculum. In relation to all other types of class, substantial individual differences come to the fore, since some students might participate in more such groups and activities and thereby experience a greater quantitative overload than other students who participate in fewer groups and activities. Until 1991, students were obliged to take part in at least one but no more than two extracurricular activities of their choice. In reality, they often did more. Since 1991, students can take part if they wish in only one group of extracurricular activities, but usually the number is much greater. Most teachers take a special interest in students who excel in their subject and offer them additional lessons in order to prepare them for school competitions and to represent their school in inter-school competitions at local and state level.

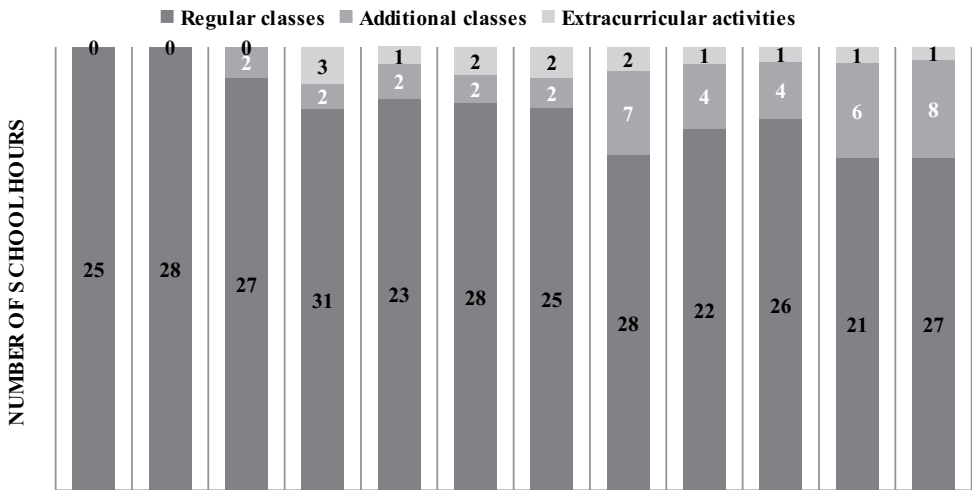


Figure 1. Number of hours students spend in school per week, according to the curricula in force from 1958 to 2016.

The 1958 curriculum represented an integrative approach to social and natural sciences, so there was a relatively small number of subjects, resulting in 25 hours of regular classes per week in the fourth grade and 28 hours in the eighth grade. Instead of “outdated” subjects (Arts and Crafts, Singing, Drawing and Farming), new subjects were introduced: Technical Culture, Visual Arts, Music and Physical Education. The curriculum had nine subjects, five of which were related to conventional education and four to upbringing. No other types of classes were part of that curriculum.

The 1965 curriculum incorporated some significant changes. It differentiated between social sciences and natural sciences, resulting in more school subjects. In the area of natural sciences, subjects such as Natural History, Biology, Chemistry and Physics were allocated separate hours in school timetables. In the area of social sciences, the same applied to History, Geography and Introduction to Social Systems. All subsequent curricula kept this division of subjects (although sometimes under different names) and numbers of hours. Apart from regular classes, this curriculum provided for additional classes, extra hours and extracurricular activities.

The greater number of subjects and greater differentiation between them meant a greater amount of quantitative student overload. The 1965 curriculum was ambitious, specifying 29 hours for the fourth-graders and 37 hours or up to 39 hours for the eight-graders. In addition to the hours allotted for classes and activities, overly academic teaching approaches in all subjects, including those in the area of personal and social education, as well as over-frequent testing, contributed to the burden on pupils.

The 1974 curriculum started the process of reducing student overload. It aimed at decreasing the quantity of information that needed to be learned, but the amount of time students were supposed to spend at school remained relatively high, 28 hours per week in the fourth grade and 32 hours per week in the eighth grade. Also, there was an attempt to reverse the process of differentiation by grouping together general subjects, subjects about social sciences, subjects about natural sciences and subjects that emphasised personal and social education.

The 1982 curriculum continued that trend and employed a more integrative approach, so that the whole schedule of subjects was sorted into areas: Language and the Arts, Science and Maths, Social Studies, Technology and Industry, Physical Education, National Defence and Self-defence. There were eight hours per week for the study of the Croatian or Serbian language. Visual Arts and Music were represented in the curriculum with an hour per week. Regardless of the areas, each subject had its own allocated time in the school timetable, so reducing student overload by applying this integrative approach remained just wishful thinking. Later on there were to be new attempts to apply it but with equally unsatisfactory results.

A study by Biondić et al. (1982) showed that quantitative student overload measured by hours that students spent in school tended to increase continuously and steadily, from around 20 hours per week in the first grade to more than 30 hours per week in the eighth grade. Total quantitative overload that students experienced in school and after school also increased with each year of schooling. In the first grade, pupils were committed to 33.5 hours per week and in the seventh grade to 55 hours per week, i.e. 9 hours a day.

When Croatia gained its independence in 1991, there was a new opportunity to create a curriculum that would truly reduce quantitative student overload. The new curriculum was supposed to reduce it by 30% compared to the previous curriculum. Unfortunately, it was not much different from the previous one, except that several subjects were replaced with new ones for ideological reasons. In terms of reducing overload, there were no meaningful differences between the previous and the new curriculum, suggesting that all the effort put in to that end had been in vain (Bežen 1999).

The curriculum in current use was published in 2006. It offered more optional subjects, but the overall quantitative student overload was not reduced. Fourth-graders have 21 hours of regular classes and seven hours of other types of classes, equalling 28 hours spent in school each week. In the case of eighth-graders, the number of hours per week varies between 27 and 36.

In order to gain a more holistic impression of student overload, documents produced as part of the ongoing curriculum reform (Cjelovita kurikularna reforma 2016) were also analysed in the present study. One of the announced goals of the reform was decreasing student overload. However, the documents only pay lip service to this goal, since the proposed changes do not reduce quantitative overload, and indeed some new subjects have been proposed. Overall, the data suggest that quantitative student overload has been a constant in the Croatian education system throughout the investigated period (1958–2016).

The curriculum is the document that determines how much time a student will spend in school, but it is the weekly timetables that indicate how this translates into practice. In order to illustrate student overload for each day of the week, the present study presents timetables² for the fourth and eighth grades in the school year 2016/2017. These timetables, for the second shift of the school day, reflect the quantitative overload of a particular class each day of the week. Nationwide, schools have broadly similar timetables.

The fourth-graders spend up to 27 hours in regular classes, extra lessons or extracurricular activities. The national curriculum (Nastavni plan i program, 2006, p. 12) suggests that students should spend a maximum of 18 hours per week in regular classes (subjects that are compulsory for all students). They also have optional classes (Religious Studies or a second foreign language, in this case German), two hours per week each, which potentially makes a total of 22 hours per week. In this case, there is also one hour per week of Computer Science for students who opt for it. All students also take part in Homeroom (one hour per week) discussing learning progress and issues from the previous week, making plans for field trips etc. Some students also choose to engage in one or more extracurricular activities, just one of which will bring the total number of school hours to 25. Occasionally, pupils stay behind to access additional learning support, for example in Maths, if it is their weak subject, or to attend additional classes in subjects in which they have a special interest or aptitude, for example Art. The final total of hours per week could then rise as high as 27.

Students in the eighth grade spend even more hours (34) in school, as well as taking more time to do their homework. In addition, some of the students also spend a lot of time travelling from home to school and vice versa, depending on distance and the availability of transport to school, as well as on the socio-economic status of their parents.

² Table 1 and Table 2 show the timetable for primary school students in the fourth and eighth grades at Visnjevac Primary School (additional timetables are available at: http://os-visnjevac.skole.hr/rasporod_sati).

A-week	Monday	Tuesday	Wednesday	Thursday	Friday
1.	8.00 - 8.45				
2.	8.55 - 9.40				
3.	9.50 - 10.35				
4.	10.40 - 11.25				
5.	11.30 - 12.15				
6.	12.20 - 13.05				
7./0.	13.10 - 13.55	Extracurricular activity	Extracurricular activity	Additional lesson	Additional lesson
1.	14.00 - 14.45	Homeroom	German language (optional)	Croatian language (optional)	Religious Studies (optional)
2.	14.50 - 15.35	Maths	English language	Maths	English language
3.	15.45 - 16.30	Croatian language	Croatian language	Nature and Society	Physical Education
4.	16.40 - 17.25	Nature and Society	Maths	Physical Education	Croatian language
5.	17.30 - 18.15	Art	Religion (optional)	Music	German language (optional)
					Maths
					Computer Science (optional)
					Nature and Society

Table 1: Timetable for primary school students (fourth grade)

A-week	Monday	Tuesday	Wednesday	Thursday	Friday
1.	8.00 - 8.45				Computer Science (optional)
2.	8.55 - 9.40				Computer Science (optional)
3.	9.50 - 10.35	German language (optional)			
4.	10.40 - 11.25	German language (optional)			
5.	11.30 - 12.15				
6.	12.20 - 13.05				
7./0.	13.10 - 13.55			Citizenship Education (optional)	
1.	14.00 - 14.45	Maths	Music	Maths	Croatian language
2.	14.50 - 15.35	English language	Maths	Croatian language	Maths
3.	15.45 - 16.30	Religious Studies (optional)	Biology	Croatian language	English language
4.	16.40 - 17.25	Physical education	Homeroom	Geography	Physics
5.	17.30 - 18.15	Technical Culture	History	Religious Studies (optional)	Biology
6.	18.20 - 19.05	Technical Culture	English language	Physical Education	History

Table 2: Timetable for primary school students (eighth grade)

The picture with regard to daily overload looks much the same. Students are sometimes obliged to go to school for the shift that is not their normal one (usually to attend lessons in optional subjects), which may mean going to school in the morning and again in the afternoon, with a trip home between the shifts. Moreover, reading assignments, projects, book reports and homework add up directly and indirectly to overall school-related overload. The new curriculum reform (Cjelovita kurikularna reforma 2016) that is currently being debated lacks specific measures that would lead to a systematic reduction of student overload. Once again, this duty falls on individual teachers and others in the system.

Single-shift schools and the extended-day programme

The second task was to try to answer the question whether schools have the capacity to make changes to the curriculum to reduce the pressure on pupils. According to Matijević (2006), in Croatia, an “extended-day programme” is an organised stay in school after scheduled lessons, when students have lunch, learn together and do their homework under the supervision of experienced teachers.

Schools included in the present study were city- or county-funded primary schools with a general educational programme. Primary schools catering exclusively for children with special needs and schools funded by other institutions were omitted. To determine the number of schools that operate a single (morning) shift, records from the school year 2011/2012 were analysed. These records are available on the website of the Ministry of Science, Education and Sport. There were 352 primary schools that met the above criteria. Figure 2 shows the distribution of these schools across the country.

All counties in Croatia except Koprivničko-križevačka have schools with an organised extended-day programme. In Koprivničko-križevačka, only special schools have extended-day programmes, so they were excluded from the study. Most of the relevant schools are situated in the City of Zagreb (99 schools), followed by Primorsko-goranska county with 60 schools, although 21 of these run an extended-day programme for lower grades because of the sparse bus service in rural areas³ (students stay at school to wait for their transport home).

The smallest numbers of schools with an extended-day programme are found in the counties of Krapinsko-zagorska, Bjelovarsko-bilogorska, Ličko-senjska, Virovitičko-podravska, Požeško-slavonska and Vukovarsko-srijemska, each of which has just a single qualifying school. This finding suggests that the reality is far from the ideal of organised after-school programmes or extended-day programmes being offered in every school in order to allow students to do their homework (read books, write essays, make posters, compile portfolios, etc.) and then spend weekends socialising with their family and friends. Extended-day programmes would not solve the problem of student load entirely, but would potentially make helpful modifications to the school day. Moreover, the professional support of teachers in

³ ‘Student transport is organised so that students in grades 1–4 are transported together with grades 5–8. Younger students have fewer hours at school, so they have to wait for the older ones to finish. Thus, the extended-day programme lasts 1–3 hours a day’ (Mreža osnovnih škola, 2011/2012, p. 10).

extended-day programmes contributes to equal opportunities for the children, since not all parents are equally involved in their children's education.

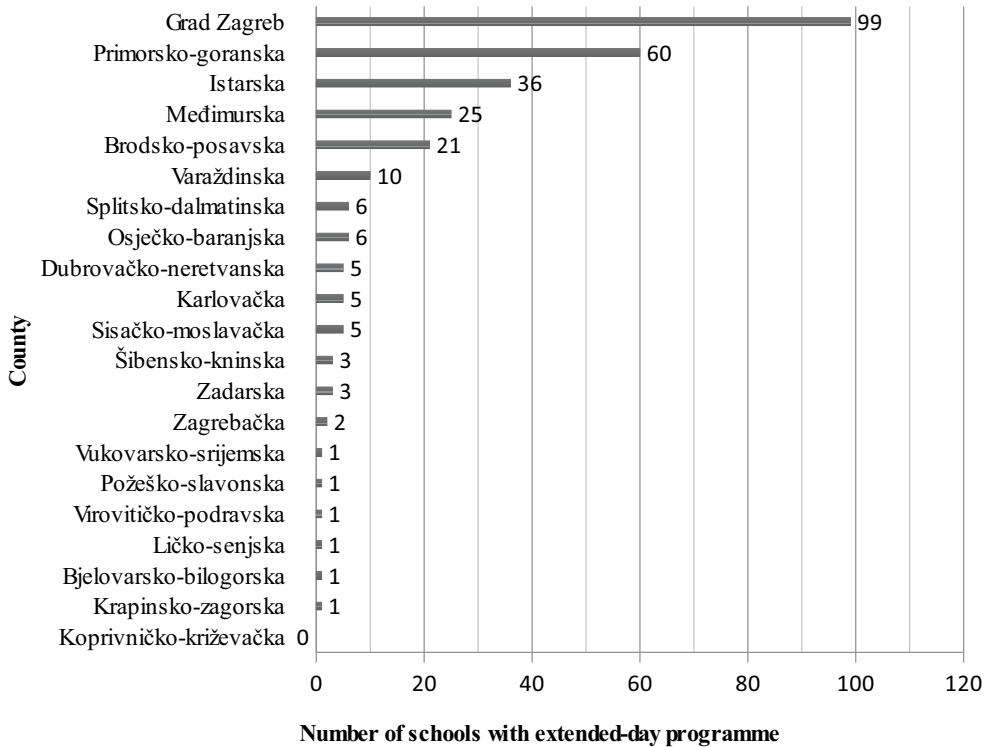


Figure 2. Primary schools with an extended-day programme in each county in Croatia.

Of all primary schools in Croatia that are organised in a single shift, offer a general programme of education and are funded by a city or a county ($N=352$), 292 have an extended-day programme. One third of these schools ($N=99$) are situated in the Zagreb area. In addition, there are schools with after-school programmes in four counties (namely Primorsko-goranska, with ten primary schools, and Istarska, Splitsko-dalmatinska and Virovitičko-podravska, with one such school each).

Given that there are 2,055 primary schools in Croatia (Basic Schools, 2016), it is clear that there are too few schools that operate in a single shift and also have an extended-day programme. This arrangement makes it difficult or impossible to organise after-school activities. Matijević (2006) also considers the two-shift school day less advantageous than the scheduling arrangements in schools in other European countries and emphasises the advantages of after-school programmes that offer pupils the opportunity to satisfy their needs for study, work, activity and play. The author points out further that after-school programmes need to be run by competent teachers who develop their skills during initial teacher education and afterwards as part of their continuous professional development.

Although a positive trend in the single-shift school day can be observed in 2016, this is attributable less to improved educational practice than to a continuous decrease in the number of students in primary schools in Croatia.⁴ Often, the reasons for organising extended-day programmes lie in social and security issues (looking after children), and not pedagogical ones (Matijević, 2006). It would also be desirable to have single-shift school days so that students could spend more after-school time with their parents.

Puževski (2001) and Seme (2002) agree that it is important to give students the opportunity to take part in an extended-day programme or an after-school programme but it is equally important to organise it properly. Activities should not take place in the same area where regular classes are held, and the activities should be different from what normally goes on in lessons. Fashola (1998, 2001) suggests that existing programmes should be refined and made more goal-oriented, bearing in mind students' needs and interests. The author also argues that it is important to understand *why* the programmes have been introduced so that they can be designed appropriately to suit the needs of a particular group of pupils. Matijević (2006) claims that alternative schools provide a variety of ideas that could be used to create an after-school programme to support pupils' development in a holistic way.

Conclusion

This study aimed to determine the quantity of student overload and whether it is tending to increase or decrease. The results are based on the comparison of curriculum-derived student overload in the period from 1958 to 2016 and on investigation of the infrastructural capacity of schools to support more significant changes in the current curriculum.

The curriculum is undeniably one of the most important factors of student overload in primary school. It has not been reduced over a long period, despite several attempts to do so. On the contrary, it appears to be growing continuously. Two main contributors to student overload are a) overly heavy school timetables on a daily and weekly basis, and b) insufficient numbers of schools that offer an extended-day programme or an after-school programme. Thus, pupils are compelled to spend time on school-related tasks out of school, which eats into their weekends and holidays. Constant student overload leads to consistent negative emotions towards school and can result in more serious disorders that require professional intervention.

The results of the study suggest that the problem of student overload is permanent and can be traced back to the first curriculum created for eight-year primary education. This reflects a need to reorganise the curriculum and reduce the number of school subjects, as well as to introduce some structural changes.

The study focused merely on the issue of quantitative student overload. Hence, it is suggested that further research should consider qualitative student overload, which means taking into account how difficult students find it to learn each sub-

⁴ In September 2016, there were 1,300 children fewer than in the previous year enrolled in the first grade of primary schools in the Republic of Croatia.

ject. The degree of perceived difficulty influences the time a student needs to spend studying a subject and doing tasks related to it.

References

- Basic schools: End of 2014/2015 school year and beginning of 2015/2016 school year* (2016). Zagreb: Croatian Bureau of Statistics. Retrieved from: http://www.dzs.hr/Hrv_Eng/publication/2016/08-01-02_01_2016.htm (Accessed on 6.4.2017).
- Bežen, A. (1999). Nastavnik i (pre)opterećenost učenika. In: V. Rosić (Ed.) *Nastavnik-čimbenik kvalitete u odgoju i obrazovanju*. Rijeka: Filozofski fakultet u Rijeci, pp. 228-235.
- Biondić, S., Furlan, I. and Rozmarić, A. (1982). *Opterećenost učenika osnovne škole*. Zagreb: Školske novine.
- Cjelovita kurikularna reforma (2016). *Rani i predškolski, osnovnoškolski i srednjoškolski odgoj i obrazovanje*. Retrieved from <http://www.kurikulum.hr/> (Accessed on 8.5.2016).
- Fashola, O. S. (1998). *Review of Extended-Day and after School Programs and their Effectiveness. Report No. 24*. Johns Hopkins and Howard University: Center for Research on the Education of Students Placed at Risk (CRESPAR)
- Fashola, O. S. (2001). *Building Effective Afterschool Programs*. California: Corwin Press, Inc.
- Helm, C., Kemethofer, D., Moosbrugger, R., Bröderbauer, S. and Luthe, S. (2016). Effekte der aus Schulleitersicht wahrgenommenen Belastungen des schulischen Lernens auf die Unterrichtsgestaltung und die Schülerkompetenzen in Mathematik sowie auf die Schulzufriedenheit. *Zeitschrift für Bildungsforschung*, 6, issue 1, pp. 245–264.
- Jurčić, M. (2006). Učeničko opterećenje nastavom i razredno-nastavno ozračje. *Odgojne znanosti*, 8, issue 2, pp. 329–346.
- Kear, K. L. and Heap, N. W. (2007). “Sorting the wheat from the chaff”: investigating overload in educational discussion systems. *Journal of Computer Assisted Learning*, 23, issue 1, pp. 235–247.
- Kodele, T. and Lesar, I. (2015). Do formal and professional documents in the field of education promote pupil participation? *Journal of Contemporary Educational Studies*, 66, issue 3, pp. 42–58.
- Marušić, M. (2009). Izostanci učenika s nastave. *Školski vjesnik*, 58, issue 3, pp. 315–329.
- Matijević, M. (2006). Alternativna pedagogija i boravak učenika u školi. In: P. Janković (ed.), *Prolonged and full-day stay of pupils in contemporary elementary school*. Sombor: Pedagoški fakultet, pp. 30–37.
- Matijević, M. and Radovanović, D. (2011). *Nastava usmjerena na učenika*. Zagreb: Školske novine.
- Milde-Busch, A., Blaschek, A., Borggräfe, von Kries, R., Straube, A. and Heinen, F. (2010). Besteht ein Zusammenhang zwischen der verkürzten Gymnasialzeit und Kopfschmerzen und gesundheitlichen Belastungen bei Schülern im Jugendalter? *Klinische Pädiatrie*, issue 222, pp. 1–6.
- Mreža osnovnih škola: Škole s produženim boravkom*. (2011). Zagreb: Ministarstvo znanosti, obrazovanja i sporta Republike Hrvatske. Retrired from <http://public.mzos.hr/fgs.axd?id=18409> (Accessed on 11.2.2016.)
- Munjiza, E., Peko, A. and Dubovicki, S. (2016). *Paradoks (pre)opterećenosti učenika osnovne škole*. Osijek: Sveučilište J. J. Strossmayera, Fakultet za odgojne i obrazovne znanosti.
- Nastavni plan i program* (2006). Zagreb: Ministarstvo znanosti, obrazovanja i sporta.
- Petrov, A. (2002). Schoolwork Overload. *Russian Education & Society*, 44, issue 9, pp. 40–51.

- Puževski, V. (2002). Škola otvorenih vrata. Jastrebarsko: Naklada Slap.
- Rasterećenje učenika osnovne škole. (1976). Zagreb: Zavod za unapređivanje osnovnog obrazovanje SR Hrvatske.
- Recommendation of the European Parliament and of the Council of 18 December 2006 on Key Competences for Lifelong Learning* (2006). Official Journal of the European Union. No. 394, pp. 10–18. Retrived from <http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex:32006H0962> (Accessed on 6/12/2016).
- Rijavec, M. (2005). Preopterećenost učenika i kako je smanjiti. *Metodika*, 6, issue 1, pp. 44–54.
- Ruohoniemi, M. and Lindblom-Ylänne, S. (2009). Students' experiences concerning course workload and factors enhancing and impeding their learning – a useful resource for quality enhancement in teaching and curriculum planning. *International Journal for Academic Development*, 14, issue 1, pp. 69–81.
- Seme, Z. (2001). Problemi u organizaciji produženog boravka. *Zbornik Učiteljske akademije u Zagrebu*, 3, issue 1, pp. 363–370.
- Sheppard, A. (2007). An approach to understanding school attendance difficulties: pupils' perceptions of parental behaviour in response to their requests to be absent from school. *Emotional and Behavioural Difficulties*, 12, issue 4, pp. 349–363.
- Strugar, V. (2012). *Znanje, obrazovni standardi, kurikulum: teorijsko-kritički pristup obrazovnoj politici u Hrvatskoj*. Zagreb: Školske novine.
- Vučak, S. (2001). Opterećenost učenika razredne nastave školskim obavezama. *Napredak*, 142, issue 3, pp. 322–334.
- Wilson, V., Malcom, H., Edward, S. and Davidson, J. (2008). “Bunking off”: the impact of truancy on pupils and teachers. *British Educational Research Journal*, 34, issue 1, pp. 1–17.

Dr. Anđelka PEKO, dr. Snježana DUBOVICKI in dr. Rahaela VARGA (Univerza v Osijeku, Fakulteta za vzgojne in izobraževalne vede)

(RE)KONSTRUKCIJA OBREMENITVE UČENCEV V HRVAŠKEM KONTEKSTU

Povzetek: Članek obravnava pojav preobremenjenosti učencev v hrvaških osnovnih šolah in se posebej osredotoča na kurikulum kot enega izmed najpomembnejših dejavnikov kvantitativne obremenitve. O kvantitativni preobremenitvi govorimo, ko učenci za opravljanje s šolo povezanih obveznosti porabijo toliko časa, da so preobremenjeni. Namen naše raziskave je bil proučiti, ali je kurikulum treba spremeniti, če bi želeli zmanjšati obremenitev učencev, in ali je šolska infrastruktura zmožna potrebne spremembe podpreti. Analiza je potrdila, da so učenci preobremenjeni, in nakazala, da bi bilo kurikulum treba preoblikovati in s tem obremenitev zmanjšati. Analiza kurikulumov, ki so bili v veljavi med letoma 1958 in 2016, pokaže, da se je obremenitev učencev vseskozi povečevala, in to kljub nenehnim prizadevanjem za ublažitev tega problema. Nekaj ovir, ki zavirajo proces zmanjševanja obremenitve učencev, lahko pripišemo kurikulumu pa tudi organizaciji šolskega dneva. Zbrani podatki kažejo, da šole za potrebno reorganizacijo nimajo dovolj zmogljivosti, še posebej pa manjka virov, da bi lahko uvedli enozimski pouk ter učencem med razširjenim poukom ponudili ustrezno pomoč pri opravljanju vseh njihovih šolskih obveznosti že v šoli.

Ključne besede: primerjava, analiza kurikula, rekonstrukcija kurikula, obremenitev učencev, urniki

E-naslov: apeko@fozos.hr