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PHYSICAL-GEOGRAPHICAL CONTENTS IN SCIENCE AND SOCIAL STUDIES TEACHING – FROM THE PERSPECTIVE OF TEACHERS IN SERBIA[15]

Summary: *The aim of this paper is to look at the situation in terms of representation and realization of physical-geographical contents in the school subjects The World Around Us and Science and Social Studies through teachers' opinion. The obtained results indicate that the physical-geographical contents are sufficiently represented in the curricula of the subjects The World Around Us and Science and Social Studies, and that the learning outcomes related to the physical-geographical contents are partially concretized and in accordance with the provided contents. Most teachers consider that all physical-geographical contents are suitable for children's ability to comprehend in regards to their age and that the pupils adopt and understand with ease the contents that are familiar to them from everyday environment, and which are more obvious (such as contents about relief, as well as plants and animals). The results show that most of the surveyed teachers only sometimes use fieldwork, field trips and other forms of empirical cognition. Thus, it is important to raise awareness about the significance of applying different forms of empirical cognition in pupils' natural and social environment, and at the same time to provide support and assistance to teachers through various seminars in the framework of continuous professional development.*

Keywords:*physical-geographical contents, Science and Social Studies teaching, teachers' opinion, younger school age pupils, natural and social environment.*

INTRODUCTION

Physical-geographical contents in Science and Social Studies teaching

Throughout history, man has been forced to discover the space around him, to get to know his surroundings and explain natural phenomena. That is why geography is said to be one of the oldest sciences, representing a link between the natural and social sciences (Živković et al. 2015). For that reason, learning geographical contents essentially begins from the earliest childhood – when we start walking, conquering the space around us (Blagdanić – Banđur 2018). Then, geographical education begins in preschool institutions, where the

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foundations of geographical literacy are laid by getting to know the environment (Džinović 2015). Geographical contents from the 1st to the 4th grade are summarized through the subjects The World Around Us (in the 1st and 2nd grade) and Science and Social Studies (in the 3rd and 4th grade). By studying them, pupils acquire basic concepts from all geographical disciplines – from physical geography, social geography, regional geography, cartography, etc.

The contents of teaching Science and Social Studies are said to be of an interdisciplinary character (Vidosavljević 2010), because it is actually a consequence of phenomena and processes in natural and social reality. In order for geographical contents, but also the contents of other sciences (biology, history, chemistry, physics, etc.) to be applied in teaching and to be appropriate for the pupils' age, they must be didactically transformed (Vilotijević et al. 2010). As geography is said to represent „spatial science", so the teaching of Science and Social Studies deals with the contents that exist in the space we study, that is, spaces of different sizes (Braičić– Franić 2014). In the first grade, the spatial and temporal framework in which the teaching contents and learning outcomes are placed is limited to the immediate environment of the pupils. Roughly, the immediate environment of a pupil would be the space from home to school, that is, the space that is closest to the pupils of that age (the settlement in which the pupil lives). In the second grade, the spatial framework expands to the settlement in which the pupil lives and the immediate environment, i.e. settlement with environment. Then, in the third grade, the spatial framework expands to the pupil's homeland, while in the fourth grade it covers the territory of the Republic of Serbia (Službeniglasnik RS – Prosvetniglasnik 10/2017, 16/2018, 5/2019, 11/2019). Geographical contents in the teaching of Science and Social Studies are a good example of how the contents, in addition to spatial expansion, deepen and expand from grade to grade, and thus show another important characteristic of the content of teaching Science and Social Studies: the ascending-spiral development that is consistent with the pupils' age characteristics. This means that the role of the teacher is to illuminate and create a system of concepts in pupils, i.e. the whole picture, and not to interpret the teaching contents only as geographical, biological, historical and other (Službeniglasnik RS – Prosvetniglasnik 10/2017). The experiential base with which pupils come to school, i.e. certain prior knowledge based on everyday experience, represents the basis of learning the content of teaching Science and Social Studies (MarušićJablanović– Blagdanić 2019). The development of scientific (geographical) concepts not only relies on experiential knowledge, but their relationship is also mutual, i.e. scientific concepts have a reciprocal effect on experiential concepts, building a system with all its key characteristics-comprehension and willingness (Vygotsky1983). Therefore, taking into account the environment in which pupils live, it contributes to pupils' experience and understanding of the complexity and interconnectedness of factors operating in their natural and social environment, while encouraging their curiosity to discover phenomena and processes in the natural and social environment (MarušićJablanović – Blagdanić 2019).

Physical-geographical contents in the curricula of the subjects The World Around Us and Science and Social Studies

Geography as a science should be viewed as a system of scientific disciplines that are grouped into the following units: (1) physical-geographical disciplines, (2) socio-geographical disciplines, (3) general-geographical disciplines. In this paper, the emphasis is placed on physical-geographical disciplines, that is, physical-geographical contents in the teaching of Science and Social Studies. Physical geography is a system of natural disciplines of geographical science that study the geographic envelope of the Earth in a complex way, so the physical-geographical contents include: contents about relief, climate, bodies of water, land, flora and fauna. Most of these contents can be taught directly in the natural environment, but those contents that cannot, are taught with the help of teaching aids: school experiments (Džinović– Tadić 2020), geographical maps, educational films, instruments (e.g. compass and thermometer) and other(Radivojević 2014). A thorough understanding and adoption of physical-geographical contents, phenomena and processes, aims at forming a scientific view of the world, as well as raising the general culture of pupils (Živković et al. 2015). Respecting the environment in which the pupils live and their daily direct experience from a specific environment, teachers encourage pupils to be curious about discovering phenomena and processes in the natural and social community (Službeniglasnik RS – Prosvetniglasnik 10/2017, 16/2018, 5/2019, 11/2019). Having an insight into the current Teaching and Learning Programs for the subjects The World Around Us and Science and Social Studies (Službeniglasnik RS – Prosvetniglasnik 10/2017, 16/2018, 5/2019, 11/2019), we concluded that within the recommended teaching contents there is a large number of physical-geographical contents studied by pupils from 1st to 4th grade of primary school. In relation to geospheres, that is, scientific disciplines that study the processes in those geospheres, we give examples of physical-geographical contents given in the Teaching and Learning Programs.

Within the *Atmosphere*, pupils learn e.g. Changes in heating and cooling of air (change in temperature, volume and air movement). Measurement of water, air and body temperature (3rd grade), etc. These contents are recommended in order to achieve the following learning outcome: *upon finishing the grade, pupil will be able to connect temperature changes with the changes in air volume and movement; to read the water, air and body temperature values using a thermometer, etc.*

The *Lithosphere* layer includes physical-geographical disciplines that study the relief of the Earth's surface. An example of such physical-geographical content in the Programs – Relief and forms of relief: elevations (hills, mountains), depressions (valleys and basins) and plains (2nd grade). The content is recommended in order to achieve the learning outcome: *…that the pupils distinguish the forms of relief in their settlement and surroundings.*

The *Hydrosphere* studies bodies of water in nature, and in the Programs these are the contents: Bodies of water in the immediate environment (1st grade); Surface water: river and its tributaries (left and right banks), pond and lake (3rd grade), etc. The learning outcomes that need to be achieved with the help of these physical-geographical contents are: *…that the pupils recognize the bodies of water in the immediate environment: streams, rivers, ponds and lakes; …to determine the position of a given object in relation to the prominent forms of relief and surface water in their area*.

The *Biosphere* includes content about plants and animals, but also about ecology (Jovanović et al. 2017). Examples of such contents recommended in the Programs are: Typical rare and endangered species of plants and animals – significance and protection. National Parks of Serbia (4th grade), where the following learning outcome is achieved: *…that the pupils present the natural beauties by which Serbia is recognizable in nature.*

As the learning outcomes represent the specifically described results that pupils should achieve at the end of a certain grade, the teachers are given a task, and freedom, to realize the learning outcomes in the way they consider most appropriate using the recommended content or content of their choice.

MATERIALS AND METHODS

The aim of the research is to look at the situation in terms of representation and realization of physical-geographical contents (relief, bodies of water, climate, flora and fauna, etc.) in the school subjects The World Around Us and Science and Social Studies through teachers' opinion.

From the defined aim, the following *research tasks* were formulated:

1. Examine teachers' opinion on whether, and to what extent, physical-geographical contents are represented in the curricula of The World Around Us and Science and Social Studies, and whether the learning outcomes are sufficiently concretized and in accordance with the given contents;
2. Determine the teachers' opinion on whether the physical-geographical contents in teaching Science and Social Studies are appropriate for children's ability to comprehend, as well as determining the contents of physical geography which pupils adopt or understand with ease or not;
3. Analyze which teaching methods teachers most often use in teaching Science and Social Studies, in the realization of physical-geographical contents;
4. Determine the extent to which teachers use fieldwork, field trips and other forms of empirical cognition in the realization of physical-geographical contents in teaching Science and Social Studies as well as whether the type of settlement in which the school is located has an impact on it.

Research methods, techniques and instruments. The aim and the tasks of the research caused the application of the descriptive method, that is, the survey technique. The questionnaire with a three-level assessment scale was constructed with the intention of examining teachers' opinion on physical-

geographical contents in Science and Social teaching, that is, on how they are represented in the curricula of the school subjects The World Around Us and Science and Social Studies, as well as on how teachers implement them in teaching (https://forms.gle/PbqpTjMcEFQiiWS2A). The data were collected through an online survey in May 2021.

The research sample consisted of 68 teachers from different schools in Serbia, with 80.9% of respondents being female and 19.1% male. In relation to the type of settlement in which the school is located, teachers are classified into two groups – urban settlement (66.2%) and other settlements (33.8%). Based on years of work experience, i.e. professional experience, respondents were divided into four groups: from 0 to 10 years (30.9%), from 11 to 20 years (19.1%), from 21 to 30 years (30.9 %) and more than 31 (19.1%).

Data processing. The aim and the tasks of this research caused the application of quantitative and qualitative analysis of the collected data. Quantitative data processing refers to the basic measures of descriptive statistics (*f*, %) when presenting the frequency of respondents' answers, as well as the application of non-parametric procedure (χ^2 test) to test the significance of differences in teachers' answers on fieldwork, field trips and other forms of empirical cognition in realizing physical-geographical contents, in relation to the type of settlement in which the school is located. Qualitative analysis of the collected data included categorization of answers to open-ended questions, which referred to the specific physical-geographical contents in teaching and learning programs that are not sufficiently suitable for children's comprehension, contents that pupils both easily and with difficulty adopt and understand, as well as the reasons for not applying fieldwork, field trips and other forms of empirical cognition in the teaching of Science and Social Studiesteaching.

RESULTS AND DISCUSSION

Representation of physical-geographical contents in the curricula of The World Around Us and Science and Social Studies

With the first task of the research, we wanted to determine the teachers' opinion on the representation of physical-geographical contents in teaching of the subjects The World Around Us and Science and Social Studies. The majority of teachers (66.2%; f=45) believe that the physical-geographical contents in the teaching are sufficiently represented, while almost 30% (f=19) of teachers believe that they are not sufficiently represented. Only 4 teachers think that the physical-geographical contents are excessively represented in the teaching of The World Around Us and Science and Social Studies.

The next segment, which is a part of the first research task, refers to the learning outcomes for the subjects The World Around Us and Science and Social Studies. That is, we wanted to examine teachers' opinion on whether the outcomes related to the physical-geographical contents are sufficiently concretized and in accordance with the provided contents. The relationship

between outcomes and program's content is such that one outcome can be achieved by working on different contents and vice versa, one content can be useful in achieving different outcomes (Nastavausmerenanaishode, kompetencije, standarde, priručnikzanastavnike – Svetokonas/Prirodaidruštvo 2015). This is a very important information for every teacher, especially when it comes to planning and organizing teaching aimed at achieving subject outcomes and evaluating learning processes and outcomes. Therefore, teachers choose the contents that will enable the achievement of outcomes, and in parallel with the forms, methods and techniques of teaching and pupils' activities because it will, sometimes to the same extent and sometimes more, depend on them whether the outcomes will be achieved or not.

Having an insight into the obtained answers of the teachers, shown in Graph 1, we see that the opinions are very different. Namely, almost half of the teachers believe that the outcomes related to physical-geographical contents are partially concretized and in accordance with the provided contents, while about 40% of teachers think that the outcomes are *sufficiently* concretized and uniform.

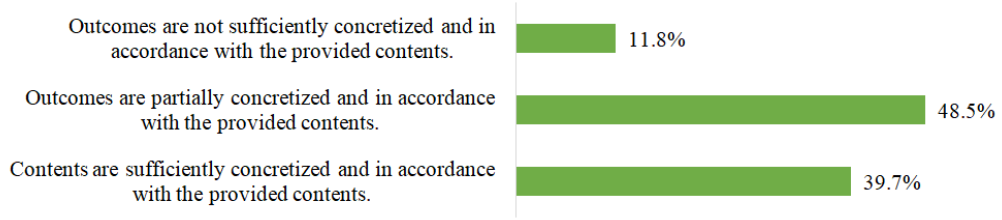

Figure 1. Concretization and accordance of learning outcomes with the provided physical-geographical contents

Physical-geographical contents in Science and Social Studies teaching which pupils adopt with ease/difficulty

At a younger primary school age, pupils should be introduced to a proper geographical observation and observation of natural objects, phenomena and processes in the local environment, because such activities stimulate children's curiosity and develop a research spirit (Džinović 2015). As learning geographic content is inseparable from pupils' experience, it is necessary that teachers do not require memorization of facts and numbers, but try to make the acquired pupils' knowledge applicable, and that pupils become able to independently observe, research and analyze geographical objects, phenomena and processes (Blagdanić– Banđur 2018; Džinović 2015). In order for that to happen, it is necessary to adopt a system of concepts, through understanding geographical concepts and their connection(Radivojević 2014), in order to achieve lasting knowledge that is applicable in new situations (Živković– Jovanović 2008; Vidosavljević 2010). The second task of the research was to determine the opinion of teachers on: (1) whether the recommended physical-geographical contents in the teaching of The World Around Us and Science and Social

Studies are appropriate for children's comprehension and (2) what are the contents of physical geography that pupils adopt with ease, and which contents they adopt with difficulty. The obtained results indicate that almost 80% (f=52) of teachers believe that all physical-geographical contents given in the teaching of The World Around Us and Science and Social Studies are appropriate for children's ability to comprehend in regards to their age, 22.1% of them (f=15) think that only some contents are not appropriate for the pupils' comprehension, while only one teacher stated that they are not appropriate at all.

Teachers listed the following as physical-geographical contents that are not suitable for children's comprehension, and are given in the curricula of The World Around Us and Science and Social Studies: the concept of relief and forms of relief (f=6), contents about climate (f=3), bodies of water (f=2) and other.

Then, within the next two questions, we asked the teachers to state which, according to their experience and work with pupils, are the specific contents of physical geography that students adopt and understand with ease, and with certain difficulties. As these two questions were of an open type, the teachers listed several specific contents, and we presented their answers, i.e. the frequency of the same responses, in Table 1.

Table 1. Physical-geographical contents which pupils adopt with ease/difficulties.

Physical-geographical contents		*f*
Contents that pupils adopt and understand with ease	Relief	17
	Plants and animals	15
	Bodies of water	13
	Other	< 3
Contents that are most difficult for pupils to adopt and understand	Relief	16
	Climate	11
	Bodies of water	6
	Plants and animals	4
	Other	< 3

Having insight into the obtained results, a contradiction is seen in the teachers' answers. Namely, the contents about the relief were most often mentioned by the teachers as contents that the pupils adopt and understand with ease, but also as the contents that the pupils do not adopt and understand so easily. Stating the reasons why the contents about the relief (but also other contents they listed – about bodies of water, flora and fauna) are easy to adopt and understand, is that the processing of these contents is based on the principle of obviousness, that is, these contents are available to pupils in their environment, they are familiar to them from everyday experience, and are therefore more motivated to learn the content about which they already have some prior knowledge. However, it is up to the teacher to take care of the integration of experiential and scientific knowledge (Blagdanić– Banđur 2018), but also, due to the nature of the content of the subject and the given outcomes

that need to be achieved, to organize activities outside the classroom, that is, in a natural and social environment (Službeniglasnik RS – Prosvetniglasnik 11/2019). The most common contents about the relief that pupils do not adopt or understand with ease are the forms of relief such as: gorges, basins and canyons (f=9). Relief contents provide the teacher with a wide range of opportunities to integrate theory and practice through experiments, which can be of great help to pupils in understanding these contents. In addition to school experiments, various obvious methods can be used in teaching, such as a variety of illustrative material (photographs, illustrations, tables), school and environment plans, various models, videos and more (Džinović– Tadić 2020). Learning from different sources is very important for active knowledge acquisition and understanding of the given content (Grbović– Draganić 2017).

In addition to the mentioned forms of relief, pupils find it difficult to adopt and understand the contents about the climate. As it is not sensually accessible such as relief and bodies of water, climate is a very abstract term for pupils of younger primary school age, because the climate of an area is determined on the basis of decades of measuring. However, various activities can be organized in the classroom, such as monitoring changes in meteorological elements during the year (temperature, precipitation, wind, etc.), so that pupils can understand more easily the characteristics of the climate of their area.

Among other teachers' answers, of which there were less than 3, there were mostly contents that do not even belong to the contents of physical geography: orientation, cartographic literacy, contents about movement, etc.

Selection of teaching methods in realization of physical-geographical contents in Science and Social Studies teaching

Creating an efficient and innovative learning environment implies a professional and well-thought-out choice of different teaching and work methods (Zuljan et al. 2021; Maričić – Trbojević 2021).Teaching methods are „procedures, work methods aimed at achieving the goals and tasks of teaching a particular subject" (Blagdanić– Banđur 2018: 228). The choice of such system of methodical procedures, by which geographical contents are processed in Science and Social Studies teaching, depends on many factors: the geographical content itself, educational goals and tasks, pupils' age, pupils' prior knowledge, teachers' methodical competency, school equipment, etc. (Džinović 2015;Braičić et al. 2015).Through the third task of the research, we wanted to determine which teaching method teachers use the most in the realization of physical-geographical contents during the classes of The World Around Us and Science and Social Studies. As general didactic teaching methods are most often used in the teaching of Science and Social Studies, which are adapted to the specifics of the subject, we offered teachers 6 teaching methods: the oral presentation method (monologue), the discussion method (two-way communication), the study assignment method, the text-based method, the

demonstration method, and the practical method. The results indicate that the majority of teachers most often apply the method of demonstration in the realization of physical-geographical contents (44.1%; f=30), while in the second place is the discussion method (27.9%; f=19), and in the third is the practical method (17.6%; f=12). Other teaching methods were marked by less than 6% of teachers.

As we have already pointed out, the choice of teaching methods in the realization of certain content depends on many factors. This means that teachers should take into account the specifics of the contents of physical geography and realize them by using visual methods, first of all the method of demonstration (which was determined by our research), which enables pupils to use their senses to get to know the world around them (Maričić – Trbojević 2021). This does not mean the end of the cognitive process, but it is only the initial step in gaining clear ideas and understanding of the concepts and laws of the natural and social environment. Then, the teacher should direct the pupils' attention to the questions by applying different teaching methods, e.g. the discussion or presentation method, in order to verify the pupils' understanding of the content through discussion and / or to open some new unresolved issues (Zuljan et al. 2021). An adequate combination of teaching methods in the teaching of Science and Social Studies should be such that pupils are placed in the center of the teaching process, so that they can explore, conclude and construct knowledge based on experience (Trivić et al. 2019). Some examples of such teaching methods are inquiry-based methods, computer-assisted teaching, mind maps, etc. These methods have proven to be effective both in the natural (Radulović– Stojanović 2019; Radulović 2021) and in the social sciences (Knežević et al. 2020).

The application of fieldwork, field trips and other forms of empirical cognition in Science and Social Studies teaching

If properly planned and implemented, teaching in nature is of great importance for the education and upbringing of pupils in the broadest sense (Mihajlović 2012). Due to the very nature of the content of the subjects The World Around Us and Science and Social Studies and the given learning outcomes that need to be achieved, it is desirable to organize activities outside the classroom as often as possible (Službeniglasnik RS – Prosvetniglasnik 11/2019), or process content in pupils' natural and social environment. This stems from the fact that „physical geography with its contents studies the nature of the Earth's surface, its spheres, their complexity and interdependence" (Živković– Jovanović 2008: 260). That is why it is good to acquire basic geographical knowledge through direct teaching in the field (Grbović– Draganić 2017). In addition to fieldwork and learning outside the classroom linking theory to the „real world" (Day 2012), they represent a significant motivating factor for pupils (Catling– Willy 2018). Through fieldwork, pupils are brought to the forefront, gradually becoming more

independent and autonomous, while encouraging their thinking, research and drawing conclusions (Grbović– Draganić2017).

However, although it is considered that classes, which deal with geographical content, are the most successful and of the highest quality when realized in nature, research has shown that not all teachers are in the mood for this type of teaching or do not apply it for some other reasons (Borić et al. 2010; Kadijević– Gutvajn 2020; Mihajlović 2012; Sever et al. 2017; Džinović 2015). We obtained very similar results with the penultimate question in the questionnaire, which asked the teachers to state to what extent they use fieldwork, field trips and other forms of empirical cognition in the realization of physical-geographical contents in the subjects The World Around Us and Science and Social Studies. As we anticipated, the results have shown that most teachers (73.5%; f=50) sometimes use fieldwork, field trips and other forms of empirical cognition, 16.2% (f=11) often use them, and 10.3 % (f=7) never. It should be noted that all teachers who stated that they never use fieldwork, field trips and other forms of empirical cognition, have over ten years of work experience and as the main reason (for not using such teaching methods) they stated that the school administration has no understanding for that kind of teaching.

Having insight into the obtained results, we wanted to check whether there is a connection between the type of settlement in which the school is located and the application of fieldwork, field trips and other forms of empirical cognition. We started from the assumption that teachers from rural areas more often apply different forms of empirical cognition in regards to teachers from urban areas. Based on the calculated χ^2 test (χ^2=0.825, df=2, p=0.662), which is less than the limiting values (5.991 and 9.210), we conclude that there is no statistically significant correlation between the settlements in which the teacher works, i.e. in which the school is located, and the application of various forms of empirical cognition in Science and Social Studies teaching.

According to some research in our country, it is very important to provide support to teachers, primarily in order to raise awareness of the importance of studying the teaching contents in nature (Mihajlović 2012), especially when it comes to studying physical and geographical content in teaching Science and Social Studies. Otherwise, mechanically acquired knowledge will remain only formal and unrelated to geospace and geographical reality (Živković– Jovanović 2008). Also, the interests and desires of pupils who like when classes are organized in nature should not be neglected, because then they learn by direct experience in the natural environment (Sever et al. 2017).

CONCLUSIONS

In this paper, we wanted to look at the representation, understanding and realization of physical-geographical contents in Science and Social Studies teaching, i.e. in the subjects The World Around Us and Science and Social Studies. Based on the obtained results, we came to the following conclusions:

• Physical-geographical contents are sufficiently represented in the curricula of The World Around Us and Science and Social Studies, while the learning outcomes (which refer to the contents of physical geography) are partially concretized and in accordance with the provided contents;

• Contents in the field of physical geography given in the curricula of The World Around Us and Science and Social Studies are appropriate for children's ability to comprehend in relation to their age. According to the experience of the surveyed teachers and their work with pupils, the specific contents of physical geography that pupils adopt and understand with ease are the contents about the relief, as well as about the flora and fauna. The contents about the relief were most often mentioned by the teachers as content that the pupils adopt and understand with certain difficulties (especially geographical terms: gorge, canyon, basins). The reason for this contradiction probably lies in the different ways of realizing physical-geographical contents. The diversity of geographical contents implies the application of various forms and teaching methods in their processing, as well as the use of various teaching aids. In addition, it is good that basic geographical knowledge is acquired through teaching in the field, i.e. in the natural and social environment of pupils;

• The previous conclusion is followed by the result of the research, which is that teachers most often apply the method of demonstration in the realization of physical-geographical contents. In accordance with the nature of the subjects The World Around Us and Science and Social Studies, an adequate combination of teaching methods is necessary, which should be such as to place pupils in the center of the teaching process so that they can explore, conclude and construct knowledge based on experience;

Although it is considered that classes that deal with geographical content are the most successful and of the highest quality when realized in nature, most teachers included in our research only occasionally use fieldwork, field trips and other forms of empirical cognition in the implementation of physical-geographical content in the subjects The World Around Us and Science and Social Studies. Therefore, it is very important to constantly raise awareness of the importance of applying different forms of empirical cognition in the natural and social environment of pupils, and at the same time to provide support and assistance to teachers through various seminars in continuous professional development.

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ФИЗИЧКО-ГЕОГРАФСКИ САДРЖАЈИ У НАСТАВИ ПРИРОДЕ И ДРУШТВА – ИЗ ПЕРСПЕКТИВЕ УЧИТЕЉА У СРБИЈИ

Сажетак: *Циљ рада је да се кроз мишљење учитеља сагледа ситуација у погледу заступљености и реализације физичко-географских садржаја у наставним предметима Свет око нас и Природа и друштво.Добијени резултати указују да су физичко-географски садржаји довољно заступљени у програмима наставних предмета Свет око нас и Природа и друштво, а да су исходи учењакоји се односе на физичко-географске садржаје делимично конкретизовани и усклађени са предвиђеним садржајима. Већина учитеља сматра да су сви физичко-географски садржаји из програма наставних предмета Свет око нас и Природа и друштво примерени дечјим могућностима разумевања у односу на узраст и да садржаје који су познати ученицима из свакодневног окружења, који су очигледнији, ученици усвајају и разумеју са лакоћом (као што су садржаји о рељефу, као и о биљкама и животињама). На учитељу је да води рачуна о интеграцији искуствених и научних сазнања, али и да, због природе самих садржаја предмета и датих исхода које је потребно остварити, што чешће активности организује ван учионице, односно у природном и друштвеном окружењу. Међутим, резултати показују да већина испитаних учитеља само понекадкористи теренске вежбе, екскурзије и друге облике емпиријског сазнавања. Због тога је важно стално подизати свест о значају примене различитих облика емпиријског сазнавања у природном и друштвеном окружењу ученика, а истовремено и пружати подршку и помоћ учитељима путем разних семинара у оквиру сталног стручног усавршавања.*

Кључне речи: *физичко-географски садржаји, настава природе и друштва, мишљења учитеља, ученици млађег школског узраста.*