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## ***Cooperative Learning in the Field of Getting to Know and Understanding the World around Us and in Teaching Science and Social Studies***

### **Extended summary**

As a process which nurtures academic and social skills through a direct interaction, individual responsibility, and positive interdependence, cooperative learning enables the process of co-construction of knowledge, contributes to the development of self-regulation in learning and supports learning in the socio-cultural context. Research has shown that despite the observed positive effects of cooperative learning, practitioners are still reluctant to plan their teaching practice and teach using cooperative learning activities.

Different program concepts of preschool and primary education in Serbia entail different views on preschool and primary school children's learning. While learning through cooperation with peers in the primary school curricula is viewed as one of the ways of learning, in the Fundamentals of the Preschool Education Curricula learning based on cooperation and exchange with peers is observed, in addition to learning by doing, as the fundamental way of the preschool children's learning. The representation of cooperative learning in working with preschool children has almost not been the area of the previous empirical research in Serbia, whereas in the recent research, aimed at examining the representation of cooperative learning in teaching, the data were obtained almost exclusively on the basis of examining teachers' attitudes towards cooperative learning. Given that the general perception of the practitioners about the representation of cooperative learning in practice does not have to correspond to the real situation in practice, we considered it important to examine the real representation of cooperative learning in the work with preschool and primary school children and examine the

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relationship between cooperative learning and the specific program concept, as well as the nature of the learning content.

This paper presents the results of one research aimed at examining the prevalence of cooperative learning of children aged 5 to 10 in the field of learning about and understanding the world around us and teaching Science and Social Studies, as well as examining the attitudes of preschool and primary school teachers towards the benefits and weaknesses of cooperative learning. We opted for the area of getting to know and understand the world around us and teaching science and social studies because this segment of educational practice includes the content that belongs to different scientific disciplines, as well as different approaches to the content and different ways (methods) of learning and teaching. For the realization of this research, a descriptive method was used with systematic observation and scaling as research techniques. During the systematic observation of the situations of planned learning and lessons, the time that children spent in cooperative learning was recorded. For this purpose, a protocol of observation within time samples was created. The systematic observation covered 52 situations of planned learning in six kindergartens and 104 lessons in junior classes in six primary schools from the territory of Belgrade. The examination of the attitudes of the preschool and primary school teachers about the values and weaknesses of cooperative learning was performed using two assessment scales of the Likert type developed for the purposes of this research. The internal agreement of the scales was determined using the Cronbach's alpha coefficient. The calculated Cronbach's alpha coefficient for the scale related to the examination of the practitioners' attitudes towards the values of cooperative learning has a value of 0.87, and for the scale related to the examination of the practitioners' attitudes towards the weaknesses of cooperative learning it is 0.90. The survey included 71 preschool and 86 primary school teachers.

The results of the research indicate that the representation of cooperative learning in Serbia is very low, both in preschool and junior primary school education. It is interesting that children of age 5-10 spend more time in a noisy or quiet waiting for further activities than in cooperative learning. The difference that exists in the time that children of preschool and younger primary school age spend in cooperative learning is not statistically significant, which further indicates that different conceptual starting points of the preschool and primary school education do not have a significant impact on the representation of cooperative learning. A statistically significant difference in the time that children aged five to ten spend in cooperative learning was found when it comes to the content belonging to different thematic areas – the children of this age spend most time in cooperative learning when the learning content belongs to the thematic areas of Living and Non-Living Nature and Ecology, and the least time when the contents of learning belong to the thematic area Movement and Orientation in Space and Time. Regarding the attitudes of the practitioners towards cooperative learning, the results of the research show that preschool teachers have a significantly more positive attitude towards cooperative learning compared to primary school teachers. Based on this, we can observe that there is a certain coexistence between the ways in which the basic program documents promote the values of cooperative learning and the attitudes of practitioners towards it, but also that the differences in the way of promoting the values of cooperative learning in these documents and the practitioners' attitudes have not been recognized in working with children.

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Therefore, the initial education of the practitioners and their professional development, as a space between the program concept and its application in practice, need to be strengthened by theoretical and empirical findings on the effectiveness and importance of cooperative learning and personal experience of cooperative learning.

**Keywords:** cooperative learning, field of getting to know and understanding the world around us, teaching Science and Social Studies, the context of learning and teaching, the nature of the learning content.

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