

Abstract

The content of the thesis consists of a description of constructivist teaching of the topic of percentage in the primary school, that is the teaching in which not the teacher, but the pupil is in the center. The principles of constructivist teaching and the learning process in terms of the theory of generic models are described on the basis of literature. In accordance with these principles, a number of textbooks have been analyzed, in which the the topic of percentage is introduced, and experimental teaching based on the above principles has been prepared. Experimental teaching was realized in two classes of the 7th grade with a different experience with the teaching of mathematics in their 6th grade. The main goal of the work was to prepare, implement, describe and evaluate the teaching of percentage based on pupils' activity and their individual discovery. The lessons have been described and evaluated on the basis of audio recordings, notes from the lessons, records of pupils solutions, interviews, notes and interviews with a teacher assistant, pre-tests and post-tests. The lessons were analyzed mainly in terms of pupils' involvement in teaching, their discoveries and knowledge acquisition, including its anchoring in the knowledge structure. In both classes, part of the pupils managed to find a generic model, but they took different time. In some cases, some help was required, some pupils were more independent in this respect. The pupils of class 7. C were more active during most lessons. In both classes, there were some disciplinary problems. However, in both classes, there were signs of the acquisition of necessary knowledge and deeper understanding. At the end of the thesis, there are proposed some modifications of the experimental teaching, especially in terms of time, preparation of other tasks and setting of group work.

Keywords

percentage, constructivism, theory of generic models, learning process, discovering