

Annotation

The thesis focuses on the topic of motoric activities in Math classes, and the connection between Mathematics and physical movement. Its goal is to demonstrate that physical movement is an inseparable part of a child's life and that it can also be used in Math classes. Apart from the introduction and conclusion, the work is divided into two parts – theoretical and practical.

In the theoretical part, the importance of physical movement in the life of young children is described. The attention is focused on rhythm and its use in the form of children's rhymes and motoric activities. Furthermore, the importance of rhythm for the development of mathematical skills and abilities in the field of arithmetic and geometry is highlighted.

In the practical part, not only motoric activities offered in new student books for pupils of the first, the second and the third grade, employed by some first grade teachers, are offered, but also a series of five tasks where mathematical relationships are directly connected with physical movement. The tasks connected with rhythm (steps coordination, thinking and clapping, and regularity in a circle) are the instruments of six experiments. The task „running dictation“, focusing on comparison of pupils' results when solving similar tasks in movement and in calm state, is a part of experiments 1, 2 and 3. The tasks working with shaping the geometrical shapes and solids with the use of movement are the instruments for evaluation of the experiments 1, 3, 4, 5 and 6. Through the experiments, the way of children's reactions to instructions of mathematical tasks in movement is investigated and their solution strategy of the given task examined.

The conclusion of the thesis brings the author's reflection of the processing and contributions of the work.