

ABSTRACT

The bachelor's thesis deals with the development of informatics and algorithmic thinking among students in the first grade of elementary school. The purpose of the work is to verify whether these skills can be effectively developed through didactic activities and games designed by the author. The theoretical part of the work characterizes the concepts of informatics and algorithmic thinking and their importance in education. The theoretical part also includes an overview of methods for developing these skills. The practical part of the thesis focuses on the development and testing of the educational game „Sheep“ (didactic activities and games designed by the author), which is designed to support the development of algorithmic thinking. The game was developed through an iterative process involving prototyping, testing with students, and subsequent adjustments based on feedback. The testing took place in several elementary schools and included different age groups, which made it possible to gain valuable information about the effectiveness and accessibility of the game.

KEYWORDS

unplugged activities, computational thinking, algorithmic thinking, activities and games in education