

Mathematical development in preschoolers is a crucial area of modern education, as this stage lays the foundation for understanding numbers, measurements, geometric shapes, and spatial relationships. However, traditional approaches to teaching mathematics often present difficulties for children, as abstract concepts can be challenging to grasp without a real-world connection. Integrating fairy tales into the learning process can serve as an effective tool to make mathematics more comprehensible, engaging, and enjoyable.

Fairy tales are an integral part of a child's world, as they stimulate imagination, foster cognitive development, and help children understand the logic of their surroundings. Each fairy tale contains elements that can serve as a basis for introducing mathematical concepts. For instance, in *The Three Little Pigs*, children can compare the sizes of the houses, analyze their stability, and determine which materials are the strongest. *Thumbelina* introduces the concepts of «big» and «small», allowing children to compare the sizes of characters in the story. *The Gingerbread Man* offers opportunities to explore shape, movement, and sequence of events.

Beyond simply listening to fairy tales, an effective teaching method involves active engagement with the storyline through interactive games, situation modeling, and role-playing. For example, children can build houses for the pigs using different materials and test their durability, which helps them understand geometric concepts while also developing engineering skills. Another approach is to create a model of Rapunzel's tower, allowing children to practice measuring height and length while working with mathematical units.

Spatial reasoning tasks, often found in fairy tales, play a crucial role in developing mathematical skills. Many stories feature characters navigating their way through different environments, making spatial decisions that influence the progression of the plot. In *Little Red Riding Hood*, for example, children can analyze the protagonist's route, create a map of her journey, or estimate the time required to reach her grandmother's house. These exercises enhance logical thinking and the ability to analyze event sequences.

Thus, using fairy tales as a medium for teaching mathematics proves to be an effective approach for introducing fundamental mathematical concepts in a natural and engaging way. Combining traditional storytelling with interactive methods and modern

technologies enables a more dynamic and effective learning process. Future research in this field should focus on developing methodological guidelines for educators, creating new interactive learning materials, and assessing the impact of fairy tale-based teaching strategies in preschool education.