This bachelor's thesis is a review of scientific studies. It examines a pedagogical approach known as the flipped classroom, which relocates the theoretical component of the class to the home environment and utilizes the group setting for active learning techniques that foster deeper cognitive engagement. The paper emphasizes the value of integrating active learning techniques with independent study, and presents the findings of several studies on the implementation of the flipped classroom approach in science education. The concluding chapter offers a comprehensive assessment of this alternative learning model from the perspectives of educators, students and parents.