The goal of this doctoral thesis is to find and implement possible ways to facilitate secondary school students' understanding of relativity. The thesis starts with an overview of existing literature as well as ongoing studies concerned with teaching relativity to secondary students, especially in connection with possible misconceptions and other learning difficulties. Furthermore, it maps available book and internet sources on relativity in both Czech and English that students might use outside of school. A research of Czech curricular documents for upper secondary education and an online survey among gymnasium physics teachers were used to assess the current situation of teaching relativity in these schools. Based on the mentioned research, it was decided to develop learning resources focused on General Relativity. Following an analysis of a selection of relativity textbooks on this topic, a study website for interested students as well as a teaching-learning sequence for teachers to adapt in their own teaching were developed. The development and assessment of these materials are described in detail.