This thesis is aimed at the effect of the educational reform, carried out in 2004, on the performance of Czech students. Moreover, the thesis analyses the impact of factors such as for instance sex, economic and social status, nationality, age on the results of Czech schoolchildren. The thesis deals with the importance of education as an indicator of level of development of a state. For the purposes of the research about educational system the thesis uses data from a survey PISA (Programme for International Student Assessment). The PISA is the best-known international comparative survey for the evaluation of the standard of an educational system of a country. The theoretical part of the thesis gives information about the methodology used during the data collection. The thesis also describes a critical perspective on the assessment, which is considered a controversial topic nowadays. In order to measure the impact of the reform the empirical research works with a pooled cross section containing data from 2003, 2006, 2009 and 2012. According to the thesis inquiry performances of pupils are influenced by sex as well as by social and economic status. However, due to a lack of time periods, the analysis fails to measure the effectiveness of the educational reform. The thesis is concerned with themes such as an educational system, a comparative assessment and correlative factors of education. The thesis can in fact function as groundwork for future analyses.