One of the necessary fields of pedagogical research in the Czech Republic as well as abroad is the problematic of pupils' key competencies development and assessment.

The thesis reflects this problematic and focuses on designing a system of indicators for assessment of pupils' competencies in chemistry basic education. The thesis represents a complex research project. There are several goals in this project, one is to identify meaning and use of basic concepts and their mutual relations, and another is to identify the steps in designing indicators and system of indicators. The main goal is to design the concrete system of indicators for assessing pupils' civic competency in chemistry basic education.

Another aim of the thesis is to define meaning and use of basic terms like indicator, indicator hypothesis, indicator system and educational indicators based on a comprehensive analysis Czech and foreign bibliography. The purpose of this analysis is to establish a system of terminology compatible with terminology in other countries which already use indicators or system of indicators use or those which want to use it.

The thesis also deals with description of how educational indicators are, or can be designed and how comprehension of these indicators can be included into the assessment system of different parts of educational system at international, national and school level.

The key part of the thesis is to design a system of indicators for assessment of pupils' competencies in chemistry basic education which has then been verified and assessed.

The thesis could serve as a base for further research of pupils' competencies in chemistry basic education in chemistry didactics.