

This thesis deals with the aspect of outdoor education of chemistry in the context of the natural science literacy concept. This concept is approximated here in association with the curricula documents for secondary education level and the Contextual model of learning. Based on the description of individual contexts of the aforementioned model, an alternative variant of an excursion to the Prague Waterworks Museum in Podolí is proposed.

The practical part focuses on the comparison of the efficiency of the "classic" conception of a museum excursion and the alternative approach mentioned previously. The whole concept adheres to the pedagogical experimental scheme. The comparison is achieved through three testings in two groups. The first, control group, had a standard excursion led by a museum guide. The second, experimental group, had an excursion led in the proposed alternative approach. Based on the first tests – the pretests, the starting knowledge of the pupils is analyzed. The second testing is executed as posttests right after finishing each excursion. The third testing is a retention test one month after the excursion. Test results were analyzed using statistical methods.

The results of the analysis point to the considerable importance of the way the excursion is led and to the great benefit of outdoor education as a part of regular schooling. The originally descriptive Contextual model of learning has also proved to be a good foundation for the planning of the excursion.