ABSTRACT

The diploma thesis is focusing on explaining the teaching of hydrobiological topics in natural science classes at the secondary level of primary schools, specifically in the Central Bohemian Region.

The aim of the thesis is to:

- introduce the issues of hydrobiological topics in natural science classes to the reader
- to implement these topics into teaching at the secondary level of primary schools
- to find out how these teachings are applied into practice on the secondary level of primary schools in the Central Bohemian Region
- (and) to find out how much the students are interested in learning about hydrobiological topics

The diploma thesis is divided into two parts, theoretical and practical. The theoretical part talks about hydrobiological theory, aquatic environment, and individual representatives of fauna and flora that occur in the studied area. It also explores the idea of anthropogenic activity (which has an impact on the aquatic environment), and the protection of waters and their habitats in the Czech Republic. In the second part, the thesis explores the characteristics of the Central Bohemian Region from the perspective of hydrobiology and selected places that are interesting and suitable for excursions. In the practical part of the thesis, selected natural science textbooks were compared, and their content was evaluated from the perspective of hydrobiology. The used textbooks were from publishers Prodos, Taktik, Fraus and Nová škola. In the next steps, it was investigated how students are introduced to hydrobiology in natural science classes at school, whether it is understandable for them and how much they are interested in learning about this topic. In order to determine the interest and comprehensibility of hydrobiology in primary schools, an online anonymous questionnaire was used. It was sent to selected primary schools in the Central Bohemian Region. Based on the obtained information from these questionnaires, two programs of practical teaching in hydrobiology were developed: mosses and moss fauna, and aquatic invertebrates. These two programs were subsequently implemented in the seventh and sixth grade of primary school in Velké Popovice. The whole survey was exclusively based on the opinions of the students.

KEYWORDS

hydrobiology, natural science, 2nd level of primary school, aquatic environment, aquatic fauna and flora, bioindicators of aquatic environment, water on Earth, water protection, protected species, natural science textbooks, practical teaching.