

**Abstract:**

The aim of this thesis is to find out, with the help of a questionnaire survey and a preferential test, the preferences of pupils of lower secondary education for various types of teaching aids in biology. The preferential test was carried out on real zoological preparations (liquid cylinders, eventually embedded in resin) and on corresponding 3D educational models made of plastic or other modeling materials. The research is a follow-up to a diploma thesis examining the same preferences in upper secondary school students (Šibravová, 2016). The main objective is to extend this issue to younger pupils and to compare the results of both age groups. The goal is to find out whether and how the preferences change with the age of pupils and if it is necessary to adjust the choice of teaching aids in accordance to pupils' age.

The first pilot research was carried out on one class of a grammar school. Then other classes of lower secondary education in Prague were tested. The total number of respondents was almost 200 pupils. This was followed by statistical processing and data evaluation.

The results showed that 3D teaching models are better rated for lower secondary education than the corresponding real zoological preparations. This is the exact opposite to the results of upper secondary school students. This result was also confirmed in the case of the division of models and preparations into anatomical and overall. The effect of gender on preferences has not been demonstrated; only in the case of girls the correlation between preferences and sensitivity to potentially phobic stimuli and interest in objects of animal origin was conclusively confirmed. Overall, the research showed that primary school pupils are more sensitive to potentially phobic stimuli and have less interest in objects of animal origin.

**Key words:**

didactics of biology; lower secondary education; zoology; attractiveness; teaching aid; preparation; model