

# Analysis of Structural Elements in Lower-secondary Chemistry Textbooks in Czechia

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## ABSTRACT

Textbooks are one of the most important and also most frequently used educational tool. Their influence on education is therefore enormous. To perform optimally, textbooks need to contain certain integral elements which differentiate them to e.g. mimeographed subject matter or encyclopedia. The set of these elements in textbooks are referred to as textbook didactical equipment. The higher didactical equipment a textbook contains, the more didactically suitable it is. In this contribution, four the most often used lower-secondary chemistry textbooks in Czechia were analyzed with respect to their didactical equipment. Also, teachers' opinion about importance of particular structural elements of textbooks were acquired with the use of a questionnaire. Out of 15 provided structural elements, the teachers (n = 387) consider explanatory text, educational illustrations and subject-matter summary to be the most important ones. On the contrary, the teachers consider a vocabulary of terms, explicit educational aims and links to other sources of information the least important - evaluated the importance as. In the analyzed textbooks in Czechia, all the structural elements the teachers consider important are present. On the other hand, the least important elements were found only in some of the textbooks. The results may serve to the publishers and textbook authors, but also for interpretation of educational outcomes once textbooks and the extent to which it is being used in education is taken into account.

**Keywords:** Textbook Analysis; Intended Curriculum; Textbook Structural Elements; Chemistry Education; Lower-Secondary Education

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