

**Charles University in Prague  
Faculty of Science**

**Chemistry Education**



**Attitude of Students to Study Chemistry  
at the Different Types of Secondary Schools**

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## **Abstract**

In the theoretical part, author quotes technical literature which describes the effects specifying the access of students to study and he estimates expressions of individual effects in real teaching practice in chemistry lessons. Author describes the difference between students studying secondary vocational school and students from apprentice school with regard to absence. Author also illustrates the crucial influence of family background on the example of educational achievements of one student in 8 past years. Furthermore, the teoretical part summarizes the various influences that participates in the access of students to the school subject of chemistry, recommended approaches and didactic methods. There is also defined the issue of cousework as a project teaching method. Everything is evaluated in the context of conditions prevailing on the different types of secondary schools in the Czech Republic. Is describing the position of the general courses at the apprentice school on a small sample of teachers. The teoretical part is devoted to different approach of different types of secondary school students to study, particularly to study of chemistry. There is also compared the general educational program of chemistry in elementary schools, apprentice schools and secondary vocational schools (non-chemical direction). Author points out here to the issues in teaching practice what causes the incorrect use of the Gaussian distribution, its real occurrence and real statistic distribution of students' educational achievements which occur in practice.

In the practical part, author evaluates the questionnaire which was distributed to 523 students (return 100%) at 3 grammar schools, 3 secondary vocational schools and 2 apprentice schools in the South Moravian region. Author compares schools of the same type and sums of these results among each other.

Based on the results of author's research, he describes the differences between students of different types of schools, their approach to study in general, their approach to school lessons of chemistry, homework from chemistry, usefulness of chemistry, its popularity and other aspects (theory, terminology, calculations and experiments), students' evaluation of teacher, school and field of study etc. Furthermore, he describes the conditions for teaching chemistry which exist at various schools. In conclusion, he summarizes the results and introduces some recommendations to change the teaching of chemistry at the different types of secondary schools.

**Key Words:** Secondary Schools, Grammar School, Secondary Vocational School, Apprentice School, Teaching Chemistry, Popularity, Acces to Study