

## **ABSTRACT**

CHARLES UNIVERSITY IN PRAGUE – *Faculty of Science*

Department of Teaching and Didactics of Chemistry

Albertov 3, 128 40 Praha 2, Czech Republic

### ***Use and effectiveness of activation methods in chemistry education***

**Bc. Miroslav Pražienka**

mprazienka@seznam.cz

Executed pedagogical survey reflects the requirements of modern pedagogy and didactics - the teacher should have a new approach to teaching, both from a technical standpoint, both in the methods. At present, preparation of future teachers, but also in lifelong adult education teachers, computers are preferred, modern electronics (and everything associated with them) and such methods, where the pupil is actively involved in teaching and not just a passive "recipient". For the purposes of my thesis was, therefore, a wide range of teaching aids (PowerPoint presentations, worksheets, educational teaching games, demonstration experiments, tests, including methodologies and manuals), through which pupils were taught. Before and after instruction was given them knowledge and skills test, which was then evaluated. They were also sampled pupils from other primary schools and the results were compared. At the beginning of the survey were established two hypotheses (knowledge and skills gradually decreases with increasing time from the subject and taught for a long time since taught subject students will have better results when using activation methods for acquiring knowledge) that have been verified. The results of this simple survey for various reasons, can not unambiguously confirm the efficacy of activation methods for teaching effectiveness can not be statistically meaningful value for very large sample surveyed. Despite the bias described by many factors but survey clearly shows that using modern teaching techniques and methods of activation is much more attractive for students and teachers, because education is fun and interesting not only for the subject of chemistry.