

Abstract

My diploma thesis focuses on formative assessment of natural sciences, such as Biology and Chemistry on the ISCED 2 and 3 level. The aim of the work is to introduce formative assessment as such and to present designs of materials and activities for formative evaluation development in natural sciences.

The theoretical part examines the school assessment matter. It describes a formative assessment in detail including assessing methods and techniques.

The aim of the empirical part was to map materials for formative assessment development in the school subjects of Biology and Chemistry. Moreover, all the materials were tested in practice. Another goal was to identify what was the effect of using the new methods of formative assessment in the school. It also explores the possibility of students attitude change in learning and whether it successfully affected their performance in the subjects. The research method used in the work was action research which was conducted in the author's teaching. Interviews in focus groups in third year of four-year academy and fifth year of eighth-year academy at a private grammar school were used for the collection of data. The research findings show that using methods such as feedback, peer evaluation and evaluation according to defined criteria in Biology and Chemistry is beneficial. The author's expectations were fulfilled since the students were engaged in the lessons, they began to understand that the focus should not be on grading, their inner motivation for learning and student success increased in the subjects mentioned above.

Keywords

Formative assessment, methods of formative assessment, techniques of formative assessment, science subjects.