ABSTRACT

This diploma thesis deals with the introduction of equations in an eight-year Grammar school during distance learning. This thesis focuses on action research in the context of distance learning in the first year of the eight-year Grammar school. It consists of a series of lessons focusing on equations that I have taught at OPENGATE Grammar School. This thesis aims to monitor my progress in the field of didactics.

The thesis is divided into two main parts - theoretical and practical. The theoretical part itself is further divided into five chapters: Definition of key terms, Closing and re-opening of schools in the Czech Republic with a comparison with other countries of the European Union, Specifics of online teaching, theory of linear equations, analysis of textbooks. The practical part builds a priori on analyses of a continuous reflection. The practical part expands on the theoretical by the creation of scenarios. The description of scenarios is accompanied by a continual reflection and a posteriori reflection. The conclusion presents the key points of the reflection.

The analysis and the reflection are put into the context of the linear equation curriculum analysis presented in a selected series of textbooks both at the primary and lower secondary school levels. The practical part was realized at the lower secondary level of an eight-year Grammar school, specifically in the first year of studies (i.e., the sixth grade of Elementary school).

The thesis summarizes individual CSI published during the pandemic which studied the impact of the pandemic from the viewpoint of teachers, students and parents. The conclusion of the thesis presents a summary of acquired experience and recommendations formulated in a broader context of online teaching.

KEYWORDS

online teaching; school mathematics; grammar school; equation