

Abstract

This work is cross-examining of thinking pupils in an environment of numbers, perceived through their eye movements, hands and other gestural expressions associated with an accompanying oral commentary.

First personal contact with the detection of numerical relationships through the eyes of children I made at work with pupils. Later I analyzed the video where such work is recorded. And I watched not only pupils, but also myself as teacher while working with them. Support for me was also my individual work on similar tasks, which approached me of thinking pupils. Closer analysis of the video I conducted with two pupils. This analysis allowed me to record a detailed description of pupils' work and gradually revealing their gestural expressions, which were for me hidden information needed to analyze their individual practices. The experience gained from analyzes of both students' will serve me as pedagogical diagnostic tools.