

ZMATH 2000f.04089

Duval, Raymond

Basic issues for research in mathematics education.

Nakahara, Tadao et al., 24th Conference of the International Group for the Psychology of Mathematics Education (PME 24). Vol. 1. ,. 55-69 (2000).

Our purpose in this paper is to come back to basic issues and to explain why our research has progressively led us to choices which are diverging from those considered as essential and obvious. In other words, the main question about mathematics learning is: does mathematics understanding require specific ways of cognitive working in comparison with the other fields of knowledge? Or, from a phenomenological point of view, do visualization, language and conceptualisation work in mathematics in the same way as in other situations? If it is not the case, what kind of cognitive working is required in order to understand mathematical objects and processes, in order to become equally able to apply them, and how can any student master it? (From the introduction)

Classification: D20