

Teachers Perceptions of the Construction of Mathematical Concepts in Everyday Contexts

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Abstract

Background: As it is important to link the disciplines to real contexts, it is necessary to propose teaching-learning strategies based on diverse situations, inside or outside the mathematical field. This study considers strategies and conceptions of teaching in contextual mathematics used by basic education teachers in the Maule Region, Chile. **Objectives:** Establish beliefs of basic education teachers in this region about the use of contexts in the mathematics teaching and learning processes. **Design:** Mixed in nature, considering the collection of quantitative and qualitative data simultaneously. The descriptive research design uses closed and open questions to collect data. The closed questions, presented on a Likert scale from 1 to 5, exploring five dimensions related to the mathematical topic in context were: 1) processes, 2) skills and 3) mathematical contextualisation, 4) national curriculum and 5) favourable/unfavourable conditions to work in context. **Settings and Participants:** 99 primary education teachers from the Maule region, who guide pedagogical practices in mathematics of primary teachers in training. **Data collection and analysis:** The qualitative data were grouped into deductive categories considering the literature and the participants' answers. **Results:** The teachers' valuation of the quantitative dimensions and aspects used to build mathematical knowledge is highlighted, but they also value the exercise-Type activities, which they relate mainly to mathematical concepts of numbers and operations. **Conclusions:** Mathematical practice in contexts is well valued by teachers, but not yet assumed as an adequate strategy to evaluate learning achievements. © 2021 Lutheran University of Brazil. All rights reserved.

Author keywords

Conceptions; Contexts; Mathematical concepts; Teachers