

PRESERVICE TEACHERS' ABILITY TO NOTICE CHILDREN'S ALGEBRAIC THINKING

Joana Cabral¹, Hélia Oliveira², and Fátima Mendes¹

¹Instituto Politécnico de Setúbal, Escola Superior de Educação, ²Universidade de Lisboa, Instituto de Educação

The professional noticing skill is an important aspect of teacher's practice and thus it is crucial that preservice teachers (PTs) have opportunities to develop it. Specifically, it is necessary to understand how teacher education can contribute to PTs' noticing skill of children's thinking as they analyze different classroom resources as students' written productions or videos (Magiera & Zambak, 2021; Zapatera-Llinares, 2019).

The present study aims to understand the development of PTs' ability to notice (to describe and to interpret) 4 to 10 years old children's algebraic thinking, through a teacher education course in an undergraduate program in elementary education. The study follows a qualitative methodology and focuses on a pair of PTs as participants. The methods of data collection were observation of the course's classes, with audio and video recordings, and collection of the PTs' written productions. The data analyses framework results from crossing the skills of describing and interpreting children's thinking with specific aspects of algebraic thinking. The results show that PT's ability to notice children's algebraic thinking evolved favourably throughout the teacher education course, with a positive impact of PTs' analysis of videos and children's written productions. Although PTs express some difficulties in the interpretation dimension, the results show that even without professional experience they can notice important aspects of children's algebraic thinking. The study also allows us to reflect on some limitations of the research on the noticing skill namely when it focuses on PTs' written analysis and thus on possible implications for teacher education.

Acknowledgements

FCT – Fundação para a Ciência e Tecnologia, Portugal, the REASON Project – *Mathematical Reasoning and Teacher Training* (PTDC/CED-EDG/28022/2017).

References

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