

**ZMATH 2014d.00807**

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**Contextual considerations in probabilistic situations: an aid or a hindrance?**

Chernoff, Egan J. (ed.) et al., Probabilistic thinking. Presenting plural perspectives. Dordrecht: Springer (ISBN 978-94-007-7154-3/hbk; 978-94-007-7155-0/ebook). Advances in Mathematics Education, 641-656 (2014).

Summary: We examine the responses of secondary school teachers to a probability task with an infinite sample space. Specifically, the participants were asked to comment on a potential disagreement between two students when evaluating the probability of picking a particular real number from a given interval of real numbers. Their responses were analyzed via the theoretical lens of reducing abstraction. The results show a strong dependence on a contextualized interpretation of the task, even when formal mathematical knowledge is evidenced in the responses.

*Classification:* K50 K60 M10 D70

*Keywords:* contextual probability; Platonic probability; infinite sample space; abstraction level; reducing abstraction; real numbers; teachers' knowledge; formal knowledge; randomness; task interpretation  
doi:10.1007/978-94-007-7155-0\_34