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**Chance re-encounters: “Computers in probability education” revisited.**

Wassong, Thomas (ed.) et al., Mit Werkzeugen Mathematik und Stochastik lernen. Heidelberg: Springer Spektrum (ISBN 978-3-658-03103-9/pbk; 978-3-658-03104-6/ebook). 165-177 (2014).

Summary: In recognition of *R. Biehler's* contribution to probability and statistics education, we chose to re-visit his chapter [“Computers in probability education”, in: R. Kapadia (ed.) and M. Borovcnik (ed.), *Chance encounters: probability in education*. Dordrecht: Kluwer Academic Publishers. 169–211 (1991)]. In particular, we examine three themes concerning the concept-tool gap, levels of access to concepts, which can be concealed by technology, and issues around demonstration and proof. We found many insights that resonate with current practice two decades later. Nevertheless, we argue that during that time, some progress has been made in how we can conceptualise the issues. For example, we discuss: (i) how it is now possible to unpick the metaphorical understanding that could emerge from the use of black boxes by reference to utility-based understanding; (ii) four principles that could inform how black boxes might be designed to support utility-based understanding; (iii) how the importance of explanation may overshadow a more traditional emphasis on proof.

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