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**Watson, Jane**

**TinkerPlots as an interactive tool for learning about resampling.**

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). 421-436 (2014).

Summary: The question motivating this study was the feasibility of students in grade 10, aged about 15, assimilating the ideas of inference through resampling procedures. The tool to be used to achieve repeated random sampling was the software TinkerPlots, which includes a pseudo-random Sampler capable of reassigning data to treatments and keeping a history of such simulations to calculate frequencies of occurrence of particular statistics to compare with experimental values. Two grade 10 teachers volunteered their classes for 5 weeks of a unit on “statistics and probability” to take part in the study. Although lessons with detailed instructions were provided by the researcher, the project, because it took place in actual classrooms, became an action research project as the teachers adapted the material to their needs and the needs of their students. Although there were several research questions associated with the study, this chapter focusses on issues associated with the students’ use of TinkerPlots and the goal of their appreciation of the nature of randomization and resampling.

*Classification:* K73 K43 U73

*Keywords:* resampling; use of technology; statistical software; randomization; inferential statistics  
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