Usage of Tinker Plots to Address and Remediate 6th Grade Students’ Misconceptions about Mean and Median

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ABSTRACT Current need for interpreting data, making inferences from existing data, leads to an increased emphasis on the teaching of statistics in mathematics curricula. Recent studies suggested that using educational technology supports students’ meaningful understanding of statistics. This study addresses the importance of technological tool usage to introduce introductory statistical concepts; mean and median and diagnose student’s misconceptions about these concepts. Three teaching experiment sessions were conducted with three 6th grade US students and this study reported one of the students’ work in the teaching experiment. Dynamic data exploration software TinkerPlots was used in the study. Study findings indicated that appropriate usage of the TinkerPlots support enhance students’ meaningful understanding about mean and median. In addition the proper usage software gives a mean for teachers to diagnose and remediate students’ statistical misconception.