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Abstract

In the frame of a design-based research project, this paper presents analysis of Danish grade 8 students working together to prove conjectures, which they formulated based on guided explorations in a dynamic geometry environment. A systematic account of the rationale and hypothesis behind the task design is described in the form of objectives, hypotheses, and choices, which are then evaluated in light of the analysis of data. The case indicates that the designed task can bridge a connection between conjecturing activities in dynamic geometry environments and deductive reasoning. The students manage to explain theoretically, what is initially empirically evident for them in their exploration in the dynamic geometry environment. The proving activity seems to make sense for the students, as a way of explaining “why” the conjecture is true. The Theory of Semiotic Mediation frames the design of the study and the data analysis.

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