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Papadopoulos, Ioannis; Dagdilelis, Vassilios

Students' use of technological tools for verification purposes in geometry problem solving.

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Summary: Despite its importance in mathematical problem solving, verification receives rather little attention by the students in classrooms, especially at the primary school level. Under the hypotheses that (a) non-standard tasks create a feeling of uncertainty that stimulates the students to proceed to verification processes and (b) computational environments – by providing more available tools compared to the traditional environment – might offer opportunities for more frequent usage of verification techniques, we posed to 5th and 6th graders non-routine problems dealing with area of plane irregular figures. The data collected gave us evidence that computational environments allow the development of verification processes in a wider variety compared to the traditional paper-and-pencil environment and at the same time we had the chance to propose a preliminary categorization of the students' verification processes under certain conditions.

Classification: E43 D53 G33

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