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**Halat, Erdoğan; Jakubowski, Elizabeth; Aydin, Nuh**

**Reform-based curriculum and motivation in geometry.**

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Summary: The aim of this study was to compare motivation of sixth-grade students engaged in instruction using reform-based curriculum with sixth-grade students engaged in instruction using a traditional curriculum. There were 273 sixth-grade mathematics students, 123 in the control group and 150 in the treatment group, involved in the study. This study took place in North Florida. The researchers used a questionnaire, the Course Interest Survey (CIS), administered to the students before and after a five-week of instruction. The paired-samples t-test, the independent-samples t-test, and ANCOVA with  $\alpha = 0.05$  were used to analyze the quantitative data. The study showed that there was a statistically significant difference in motivation between the groups favoring the treatment group. In other words, the reform-based curricula designed on the basis of van Hiele theory, compared to a traditional one, had more positive effects on students' overall motivation in learning geometry at the sixth grade level.

*Classification:* C73 D33 G13

*Keywords:* van Hiele theory-based curriculum; traditional curriculum; motivation; elementary geometry; lower secondary; empirical investigations; comparative studies