

EFFECTIVENESS OF TRIANGLE QUEST IN TEACHING CONGRUENCE AND SIMILARITY OF TRIANGLES AMONG GRADE 8 LEARNERS AT NOVALICHES HIGH SCHOOL

ABSTRACT

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This study examined “Triangle Quest,” an interactive, student-centered instructional strategy for teaching congruence and similarity of triangles to Grade 8 learners. The study employed a quasi-experimental design using pretests, posttests, and student-perception surveys. The intervention was evaluated in relation to achievement and perceived dimensions including student culture, engagement, learning experience, perspective, problem-solving skills, and constructed learning. Mean achievement scores increased from 8.32 on the pretest to 15.47 on the posttest. The difference was statistically significant ($t = 17.62$, $p < 0.001$), supporting improved mastery of congruence and similarity concepts after the intervention. Survey responses were also favorable: problem solving obtained $M = 3.30$, student experience and background obtained $M = 3.30$, and student-constructed learning obtained $M = 3.26$, all interpreted as “Strongly Agree.” The overall weighted mean was reported as 3.90. Students initially experienced adjustment difficulties, conceptual confusion, and distractions in the learning environment. Clearer instructions, structured scaffolding, and supportive classroom conditions may help address these concerns. Overall, Triangle Quest was associated with improved conceptual understanding, engagement, and problem-solving performance, however, its implementation should be refined using student feedback and contextual support.

RECOMMENDED CITATION

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