MATHEMATICALLY GIFTED STUDENTS' ATTITUDES TOWARD WRITING IN THE MATH CLASSROOM: A CASE STUDY (322 pp.)

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Using a constructivist paradigm, this qualitative case study examined mathematically gifted students' attitudes toward various types of writing in the math classroom and how this writing impacted student learning. Eight fifth grade mathematically gifted students from a rural elementary mathematics classroom were immersed in various transactional/expressive and poetic writing projects throughout the year. Writing included journals, a Math Pledge, Math Nursery Rhyme Book, and a final Journal Project.

The purpose of this study was to investigate and describe mathematically gifted students' attitudes toward transactional/expressive and poetic writing in a classroom utilizing writing in mathematics and its impact on their learning. The theoretical framework for the study consisted of components from sociocultural theory and social constructivism. Interviews, document analysis, and a focus group were conducted and analyzed to determine student attitudes towards writing in the math classroom and how writing in mathematics impacted their learning. To learn about the students' attitudes, a focus group was conducted initially. In order to gain further insight, students, their parent(s), and the teacher were asked to keep a journal. Finally, documents were collected and interviews were conducted with students, their parent(s), and both the

current and former school principals. The results of the analysis showed that the mathematically gifted students generally did not mind writing in math or enjoyed it as they all displayed neutral to positive attitudes, though they preferred poetic writing. Furthermore, analysis of the data revealed transactional/expressive and poetic writing in mathematics positively impacted student learning and benefited the teacher as well.