Abstract

Reports worldwide indicate that students are having difficulty with mathematics, specifically with their ability to problem-solve and communicate (EQAO, 2014; Muliis, Martin, Foy & Arora, 2012; OECD, 2012). This study investigated how blogging in grade nine applied and academic classrooms could be used to increase mathematical knowledge, communication and confidence. This study used a mixed methodology, with quantitative survey data and qualitative data from open-ended questions, performance tests, and blog analysis. Forty-eight participants (31 male, 12 female, 5 no response) in this study were grade nine students, aged 13-16 years old. Twenty-one students were enrolled in an applied mathematics program, and 27 were enrolled in an academic mathematics program. The results indicated students had a positive attitude toward blogging in mathematics class. Blogging had little impact on students' mathematical confidence, however the confidence scale was not specific enough to measure confidence by unit. Blogging increased mathematical knowledge, however they cannot be directly linked as other teaching strategies were used during the study. Mathematical confidence did not increase, as students lacked the requisite collaborative skills and the ability to scaffold their learning on the blog site. Academic mathematical communication was slightly higher overall.