

Using Vedic Mathematics in Teaching Algebra and the Algebraic Skills of Grade Eight Students

Mary Joy B. Morada¹, Allen E. Pasia²,

¹<https://orcid.org/0000-0002-8520-6387>, ²<https://orcid.org/0000-0003-1346-8641>

¹maryjoy.bagolantoy@deped.gov.ph, ²allen.pasia@lspu.edu.ph

¹Masico National High School, Division of Laguna, Philippine

²Laguna State Polytechnic University, Faculty of College of Graduate Studies and Applied Research, Philippines²

Abstract

Vedic mathematics is an intriguing, quick, straightforward, rational, and significant aspect of ancient Indian civilization that derives from the Vedas, specifically the "Atharva Veda," and it is used in almost all branches of mathematics, including algebra, which is considered to be one of the most difficult subjects for most students. Thus, this study sought to determine the effectiveness of using Vedic Mathematics in teaching algebra to the algebraic skills of grade eight students at Masico National High School in Pila, Laguna, Philippines. A pre-test and post-test design were used in this study, which is a type of quasi-experimental research that allows for the simple and direct evaluation of an intervention given to a group of study participants. It was evidently revealed that the mean pre-test and post-test scores of the respondents in algebraic skills in terms of factoring polynomials, solving linear equations, and solving systems of linear equations are significantly different, which may imply that vedic mathematics is highly effective in the algebraic skills of the students. It was found that there is a significant correlation between the respondents' perceptions of the effect of vedic mathematics and their post-test in algebraic skills in terms of solving linear equations. However, there was no significant correlation found in terms of factoring polynomials and solving systems of linear equations. It is recommended that vedic mathematics be used in the teaching of factoring polynomials, solving linear equations, and solving systems of linear equations because students find it to be highly effective in their algebraic skills and their post-test score is significantly higher than their pre-test.

Keywords: Vedic Mathematics Techniques, Algebraic Skills, Intervention, Limited Face-to-Face Classes.