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# REMOVING MATH BARRIERS: INCORPORATING VEDIC METHODS FOR STUDENT SUCCESS

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Presentation title:

## **Removing Math Barriers: Incorporating Vedic Methods for Student Success**

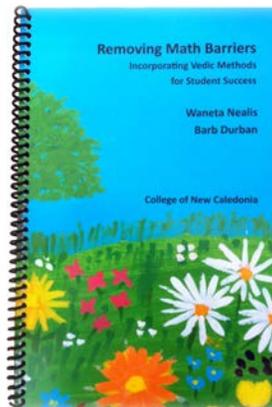
Education Topics & Focus Area: **Adult Education and/or Special Education**

**Target Audience:** Anyone teaching fundamental math with struggling learners

This workshop will involve a brief description of the research (using power point) followed by a hands-on demonstration of the teaching methods.

**Part 1** – Barb will share her research methods and results of her master’s project: *Vedic Mathematics in the ABE Fundamental Math Classroom*. Her 2012 research found that using Vedic techniques to teach ABE fundamental curriculum resulted in improved outcomes compared with current practice.

**Part 2** -- Waneta will introduce participants to a few Vedic math methods used in the research project: subtracting from left to right, adding and subtracting fractions without having to calculate common denominators, a quick way to check arithmetic questions using digit sum checks, and a method to learn those difficult times tables if memorizing isn’t working. Waneta will share her students’ reactions to this different method of math and introduce the newly developed workbook for Vedic teaching methods.



A limited amount of workbooks will be available free of charge for participants

### **Research Abstract:**

For adult students, succeeding at fundamental math is a cornerstone to expanding their educational and occupational options. The rates at which students are able to progress through fundamental math vary, and for some achieving a basic understanding of math is challenging. Students who exhibit persistent difficulties with understanding the first level of fundamental math (CNC Math 015) skills were

the focus of this project. Vedic math was chosen as the instructional method for a ten week project with students who are enrolled in fundamental Math 015. It was hypothesized that a different approach to teaching and learning math may result in an improvement in student success and in students' perceptions about learning math. After the ten week period, 40% of the Vedic math class completed Math 015 compared to approximately 8% for all Math 015 completions for the years 2007 – 2011. Chi-squared analysis indicated this result was statistically significant. I was also interested in the student's and instructor's experiences with learning and teaching math in a very different way. Students reported their learning experiences to be very favourable and the instructor reported the teaching experience to be very worthwhile. Students experienced more academic success and increased confidence and enjoyment while learning math skills. Overall, results suggest Vedic math is an approach worthy of further exploration.

**Researchers and Presenters:**

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