INSTITUTE FOR THE ADVANCEMENT OF VEDIC MATHEMATICS

Inspirational Maths from India III: a webinar series

From the point of view of the presenters, as well as from feedback given by the participants, the 4-day IMI-III webinar series was a great success.

Some important Observations

- Despite the online webinar, the interaction between the presenters and participants was excellent. The participants communicated a sense of feeling more empowered due to a deeper understanding of mathematics (which already started developing over the relatively short period of 4 days).

- Many participants remarked on the fact that the workshops had made them far more enthusiastic about maths. Their scope of the subject had widened considerably. They loved the surprisingly quick and efficient one-line methods for finding the answers to specific problems.

- The renewed motivation and excitement with which many participants left the workshops, is, perhaps, also indicative of how Vedic Maths appears to stimulate the more creative right side of the brain, leading to greater enjoyment, satisfaction, and happiness.

Results of Survey

A short post-survey was provided, the results of which are given below.

- As shown in more detail in the charts in **[Appendix A],** most of the participants:
    - found that the workshops lived up to their expectations
    - would like to expand their Vedic Maths learning
    - would recommend Vedic Maths to a friend or colleague
    - agreed that Vedic Maths can enhance their learning of mathematics
    - found that the workshops gave them a better insight into some fundamental concepts of mathematics
    - agreed that Vedic Maths should become part of teacher training
    - agreed they would perform better had they been introduced to Vedic Mathematics at school level

- Besides the topics covered in the 4-day workshop **[See Appendix B]** further topics were suggested by the students to be covered in future workshops:
    - Algebra, Probability and Statistics, Calculus, Fractions, Trigonometry, Integers, Solving word problems, Geometry, Ratio and proportion, Square roots, Cube roots, Solid geometry and mensuration, Strategies in teaching Math, and Advanced Vedic Mathematics

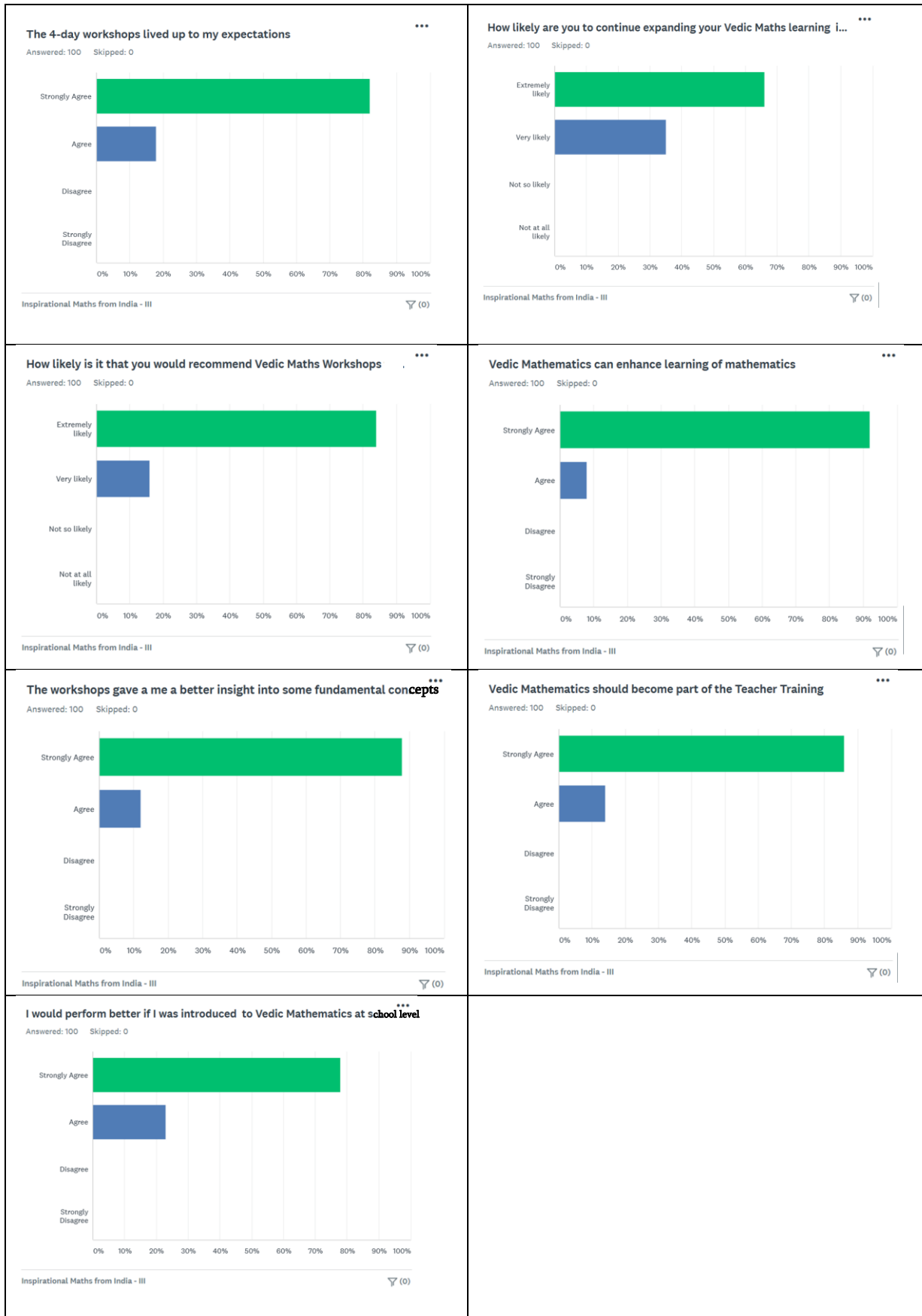# Inspirational Maths from India III: a webinar series

- The topics or aspects of the workshops found most useful or interesting were:

  - Mental Math Techniques, Multiplication techniques, addition and subtraction of fractions, Squaring, Completing the whole, Algebra, By One more than the one before, Calculus, Division, Fresh Approach to trigonometry, Doubling and halving, Divisibility rules, Number splitting, Digit sums, Proportionately, Bar numbers, and Fractals

- Recommendations by students to improve future workshops in terms of total duration, time allotted to each session and opportunity for practise:

  - More examples, more time to practise

  - Break-out rooms for each grade level

  - Shorter time, more days

  - Hopefully, face to face seminars

  - Weekday only sessions

  - Saturday only sessions

  - Mother-tongue based math

  - Live quiz with prizes

  - More speakers like mam Nika Prudente.

  - extend the topics to geometry

- Quite a few were satisfied with the workshop time allocation as it was – no improvements needed.

Suggestions and Recommendations

- Weekly Vedic Maths sessions (perhaps presented by the participant teachers) can be held, so that over a period of several months, the concepts introduced at the workshops can be practised and ingrained.

- Consider how Vedic Maths can be incorporated as a mandatory professional development course for the teachers.

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<u>Appendix A</u>

Bar Charts of Responses

The 4-day workshops lived up to my expectations
Answered: 100   Skipped: 0

- Strongly Agree
- Agree
- Disagree
- Strongly Disagree

0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%

Inspirational Maths from India - III

How likely are you to continue expanding your Vedic Maths learning i...
Answered: 100   Skipped: 0

- Extremely likely
- Very likely
- Not so likely
- Not at all likely

0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%

Inspirational Maths from India - III

How likely is it that you would recommend Vedic Maths Workshops
Answered: 100   Skipped: 0

- Extremely likely
- Very likely
- Not so likely
- Not at all likely

0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%

Inspirational Maths from India - III

Vedic Mathematics can enhance learning of mathematics
Answered: 100   Skipped: 0

- Strongly Agree
- Agree
- Disagree
- Strongly Disagree

0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%

Inspirational Maths from India - III

The workshops gave a me a better insight into some fundamental concepts
Answered: 100   Skipped: 0

- Strongly Agree
- Agree
- Disagree
- Strongly Disagree

0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%

Inspirational Maths from India - III

Vedic Mathematics should become part of the Teacher Training
Answered: 100   Skipped: 0

- Strongly Agree
- Agree
- Disagree
- Strongly Disagree

0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%

Inspirational Maths from India - III

I would perform better if I was introduced to Vedic Mathematics at school level
Answered: 100   Skipped: 0

- Strongly Agree
- Agree
- Disagree
- Strongly Disagree

0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%

Inspirational Maths from India - III

<u>Appendix B</u>

<u>Topics Covered in the 4-Day Series</u>

#	Elementary Students	High School Students
1	Numbers in Nature	
2	By one more than the one before	
3	Completing the whole	
4	All from 9 and the Last From 10	
5	Special Case Multiplication	
6	Multiplication using a base	
7	Vertically and Crosswise Multiplication	
8	Using Bar numbers	
9	Doubling and Halving	
10	Using digital Roots to check Arithmetic and Algebraic Operations	
11	Squaring Numbers and Polynomials	
12	Number splitting	Linear equations I- Think of a Number
13	Completing the whole II	Linear equations II - with 2 x terms
14	Proportionately (direct)	Algebraic Division
15	Proportionately (Inverse)	Solving simultaneous linear equations
16	Divisibility I	Cube, Cube roots and Binomial Theorem
17	Base Division	Triples
18	Divisibility II	Using the average
19	Fractions and Decimals	Using coefficients in factoring
20	Addition and subtraction of Fractions	Coordinate Geometry
21	Four rules of Mixed Numbers	Introduction to Calculus