

SEMINAR

Evidence-based Learning in the Classroom Direct Instruction at Work: Math Mastery Series

Direct Instruction (DI) is a teaching method originally developed in the University of Oregon. The strategy has long been recognised for the measurable difference it makes to student confidence and classroom achievement.

Based on meticulously scripted lessons the Farkota DI model strikes a balance between teacher-directed and student-directed learning. Recognising that some skills are better acquired through one approach and some through the other, the *Math Mastery Series* maximises every benefit a mental math program is capable of yielding.

The *Math Mastery Series*:

- serves as a daily diagnostic tool
- maps student progress
- identifies precisely where and when students experience difficulty
- contains inbuilt assessment and correction procedures
- instills fluency and automaticity in fundamental math skills.

Dr Farkota will give a practical overview of the *Math Mastery Series* programs, *Junior Elementary Math Mastery* and *Elementary Math Mastery*.

Attendees will learn how these programs help all students, but particularly those who:

- have not reached required numeracy level for their age
- have low motivation to learn, or low self-efficacy
- are classified as at-risk learners
- have difficulty concentrating, and would benefit from repeated structured teaching and practice.

Dr Farkota will also address self-efficacy, and the pivotal role it plays in both teaching and learning. An opportunity for questions and general discussion will follow.

About the presenter

Dr Rhonda Farkota, a Senior Research Fellow at the Australian Council for Educational Research, has directed a wide variety of projects at international, national, state and system levels. With 28 years' experience as a teacher and curriculum adviser, she has long been recognised as one of Australia's foremost experts in Direct Instruction. Her doctoral research into DI, mathematics and self-efficacy was described by Professor DH Schunk, Dean of Education, University of North Carolina, as an outstanding thesis on a topic of great theoretical and applied significance. In 2008 she was specially seconded as Assistant Director of Australia's National Assessment Program (NAPLAN™). In 2013 Dr Farkota received the Mona Tobias Award in recognition of her significant contribution to evidence-based practice in education.

NAPLAN™ is a registered trademark of Australian Curriculum, Assessment and Reporting Authority (ACARA)



Dates and locations:

12 February 2015	Darwin, Northern Territory
19 February 2015	Perth, Western Australia
26 February 2015	Brisbane, Queensland
5 March 2015	Sydney, New South Wales
12 March 2015	Melbourne, Victoria
19 March 2015	Townsville, Queensland
30 April 2015	Launceston, Tasmania
7 May 2015	Adelaide, South Australia

Time: 9.00am – 3.00pm (registration from 8.30am)*

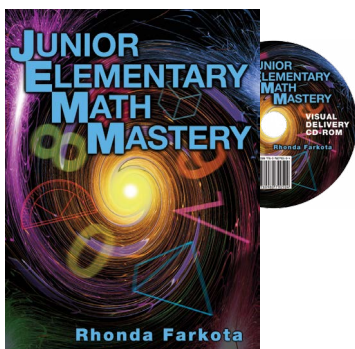
*Northern Territory seminar from 8.30am – 2.30pm (registration from 8.00am)

Cost: \$198 (GST inclusive)

Includes morning tea, lunch and a copy of a student workbook

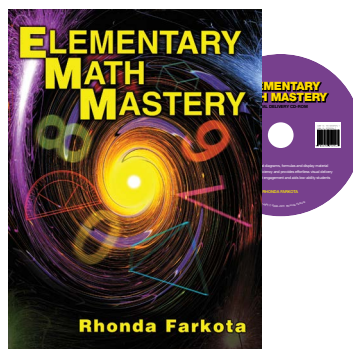
To register visit: <http://acer.ac/math>

Math Mastery Series



Junior Elementary Math Mastery

Rhonda Farkota
OZMATH Press 2010



Elementary Math Mastery

Rhonda Farkota
McGraw-Hill Australia 2003

Junior Elementary Math Mastery (JEMM):

- Ideally suited for middle primary, and upper primary remedial students
- Requires daily 10–15 minutes to implement, plus 3–7 minutes for instant feedback

JEMM features 80 lessons. Students answer one question per strand daily with Lesson 1 introducing:

- Whole number addition
- Whole number subtraction
- Number facts
- Place value
- Number patterns

Building on these base strands, the following lessons introduce:

- Lesson 21 Money
- Lesson 31 Measurement
- Lesson 41 Fractions
- Lesson 51 Time
- Lesson 61 Chance and data

Elementary Math Mastery (EMM):

- Ideally suited for upper primary, first year secondary and secondary school remedial students
- Requires daily 15–20 minutes to implement, plus 5–10 minutes for instant feedback

EMM features 160 lessons, each composed of 20 strands. Students answer one question per strand daily:

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|-------------------------------------|--|
| 1. Addition | 11. Space |
| 2. Subtraction | 12. Geometry |
| 3. Multiplication | 13. Average, percentage, ratio, chance |
| 4. Division | 14. Math language |
| 5. Number patterns | 15. Money |
| 6. Equations and inverse operations | 16. Time |
| 7. Whole number properties | 17. Algebra |
| 8. Fractions | 18. Visual perception |
| 9. Decimals | 19. Data analysis |
| 10. Measurement | 20. Problem solving. |



Student Workbook

Rhonda Farkota
OZMATH Press 2012, 2013

myJEMMdata Student Workbook and myEMMdata Student Workbook

From a teacher viewpoint the Student Workbook is an invaluable diagnostic tool and assessment record, slotting in perfectly with the Australian Curriculum Sub-strand, Data Representation and Interpretation.

Visit the **ACER Online Shop** for more information <http://acer.ac/mms>