

Critical Agendas "Where Knowledge and Foresight are Paramount"

Doug Williams

presents

Learning to Work Like a Mathematician !

**For Primary and Secondary Teachers
(Years 3 to 10)**

3 Workshops in 3 days!

May 17th, 2010 : Working Like a Mathematician!

May 18th, 2010 : Multiplication, Meaning and Times Tables!

May 19th, 2010: Fractions in a Fraction of a Time!

Come for One, Two or Three days!

Overnewton Castle
Conference Centre
Overnewton Rd, Keilor, Vic

***Free
Parking
on site!***

Total PD Hrs: 18 hrs

Enquiries : Ph. 1800 638 012
www.criticalagendas.com.au
admin@criticalagendas.com.au

ABN 14 108 211 703

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Learning to Work Like a Mathematician!

TIMETABLE for each day

Registration: 8.30am - 9.00am Session 1: 9.00am - 10.30am
 MORNING TEA: 10.30am -11.00 am Session 2: 11.00am - 12.30pm
 LUNCH: 12.30 pm - 1.30 pm Session 3: 1.30pm - 3.30pm

May 17th, 2010 - Working Like a Mathematician!

Numeracy and literacy develop hand-in-hand in a curriculum that focuses on learning to work like a mathematician. The workshop provides evidence for this proposition and explores the development of student confidence, concepts and skills through small group and whole class investigations, some of which use integrated software. This practical, problem solving approach is well suited to mixed ability classrooms. Reflecting a Multiple Intelligences approach, the day is designed to challenge current conceptions, stimulate thought and support the growth of inclusive teaching practices.

May 18th, 2010- Multiplication, Meaning & Times Tables!

Times tables are close to every teacher's heart - and too often very far from many students' minds! A mathematician needs a full and effective toolbox to solve problems and times tables are one of the most important of those skills. In this full day workshop visit and revisit times tables as we build a 'brain picture' of multiplication and multiplicative thinking through:

- * exploration of a conceptual model
- * times tables practice with a problem solving twist
- * using times tables as a skill to solve problems

Take the drudgery out of times tables and long multiplication, work backwards to explore division, add meaning through hands-on activities, software and purposeful challenge. Achieve skill objectives while engaging higher order thinking. Extend easily into algebraic generalisations and formulas.

May 19th, 2010 - Fractions in a Fraction of the Time!

Fractions seem to be one of the major points at which students 'fall over' in their mathematics learning. If you have the feeling that what has been done in the past ... and usually done again the next year ... and the next ... simply hasn't worked for many students in this topic, this workshop will help you discover alternatives. Explore different ideas, activities and structures which have helped other teachers make learning fractions a successful experience. Fractions, decimals and percentages will all be involved in this practical, hands-on, problem solving approach that is supported by integrated software.

Doug Williams taught mathematics at both Primary and Secondary level from 1970 to 1992 when he became a freelance consultant working almost exclusively in mathematics education. He has been involved in many ways over many years with the AAMT and MAV having been president of the MAV and editor of both its primary and secondary journals. He has written for an extensive number of journals and authored, or co-authored, several books. His most recent articles have been published in the 2009 December Conference papers of the MAV, Mathematics Teaching, March 2010, Association of Teachers of Mathematics (UK) and Primary Mathematics, Spring 2010, The Mathematical Association (UK). Doug's presentations at these sessions are from his Maths on the Move series of workshops.

Critical Agendas

Office: 107 McKillop St, Geelong, 3220
Postal address: P.O. Box 1427 Geelong 3220
Phone: 1800 638 012 **Fax:** 1800 638 021
Email: admin@criticalagendas.com.au

BOOKING CONDITIONS

No applications for this program will be accepted after all vacancies have been filled. Unsuccessful applicants will have their monies refunded in full. Cancellation prior to two weeks before the program date (cut-off date) will incur a 15% service charge per applicant. This program will be payable in full for cancellations made on or after the cut-off date or for failure to attend the program. All cancellations must be in writing and emailed to us. In the event of insufficient applications this program will not proceed and registration monies be fully refunded. In the event of this program being cancelled due to unforeseen circumstances registration monies only will be refunded as Critical Agendas will not accept liability for the payment of any other associated costs. Critical Agendas reserves the right to vary the advertised programs prior to commencement.

ABN 14 108 211 703

Venue:

Overnewton Castle
 Conference Centre
 Overnewton Rd, Keilor, Vic

**Free
 Parking
 on site!**

For directions please go to maps.google.com.au

Cost (GST incl.):

ONE person attending **ONE** day: \$249
SAME person attending **ANY TWO** days: \$399
SAME person attending **THREE** days: \$549
 (Two or more people each attending **ONE** day \$249 ea)

Total PD hours: 18 hours

Please try to bring a notebook computer.

Book by Fax or Mail!

A letter of confirmation will be sent to the school

Cost includes: Program, issued notes, participation certificate, morning tea and lunch.

Registration Form - May be photocopied (Tax Invoice)

Learning to Work Like a Mathematician! 6 PD Hrs per day

Overnewton Castle Conference Centre

Cost (GST incl.): **ONE** person attending **ONE** day: \$249
SAME person attending **ANY TWO** days: \$399
SAME person attending **THREE** days: \$549
 (Two or more people each attending **ONE** day \$249 ea)

Please complete and fax or mail to

CRITICAL AGENDAS
 P.O. BOX 1427 GEELONG 3220

FAX: 1800 638 021

Name/s (Please Print Clearly and in CAPITAL letters)

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School _____

School Address _____

_____ P/code _____ Ph _____

Mob. Phone _____ Fax _____

1. _____

2. _____ Email _____

3. _____ Email _____

4. _____ Email _____

5. _____ Email _____

Please specify any special dietary needs: _____

School Order No (If wishing to be invoiced). _____

Name of Contact for Invoice: _____

Contact Email: _____

OR

Enclosed is payment for \$ _____ payable to CRITICAL AGENDAS or please debit my

Card No. Mastercard Visa for \$ _____

Name on Card _____

Exp Date _____ Signature _____