The Mathematical Association Secondary Education Mathematics Conference

MATHEMATICAL ASSOCIATION

supporting mathematics in education

Saturday 14th September 2013

Pathfoot Building, Stirling University

PROGRAMME

09:00-09:30	Registration and Coffee
09:40-10:20	Keynote Address: **Peter Ransom**
10:30-11:20	Talks/Workshops/Discussion Groups 1
11:25-12:15	Talks/Workshops/Discussion Groups 2
12:15-13:15	Lunch
13:20-14:10	Talks/Workshops/Discussion Groups 3
14:15-15:05	Talks/Workshops/Discussion Groups 4
15:10	Depart: Tea and Coffee available

IMPORTANT INFORMATION FOR APPLICANTS

No invoices will be sent − so please do not ask

Receipt of the conference fee will book your place, and confirmation will be sent by email (email address required). Fees are non-returnable.

Cheques should be made payable to **The Mathematical Association** and sent to:−

Marcia Murray (2013 Stirling Conference)
The Mathematical Association
259 London Road
Leicester LE2 3BE
Tel 0116 2210013

An application form is enclosed.

PROGRAMME

OPENING SESSION

Keynote Speaker:

Peter Ransom

(*President of The Mathematical Association*)

New Lamps for Old

When and where is appropriate to use new technology?

Why fix it if it ain't bust?

What are the issues for the classroom teacher?

Peter will also describe some of the situations he has faced over the years and how he and colleagues handled them.

Peter Ransom was a classroom teacher throughout most of his career and he is currently engaged in teacher training and consultancy work.

For programme updates visit: *www.m-a.org.uk*

Workshops/Talks/Discussion Groups

A) Senior Phase Benchmarking Tool

Fiona Robertson

As STACS is replaced by the SPBT what does this mean for me as a practitioner and what are the key features of the SPBT?

An opportunity to explore the measures and features of the senior phase benchmarking tool.

B) Curriculum for Excellence

Monica Kirson and Martin Brown

We will help attendees to understand: 1. The National Assessment Standards; 2. Types of Assessment Evidence; 3. Judging Evidence.

C) Engaging and motivating young people in mathematics

Deirdre Murray

From Twitter to Twig this workshop will look at different ways Alness Academy Maths department is trying to engage and motivate pupils from S1-S6.

Using social networking, collaborative learning, ICT and others...

D) A SQUARE MEAL

Adam McBride

On the menu will be a selection of items related to squares in one way or another. There will be something for everyone, not just for the old squares.

E) A potpourri of gems, small and large

Clive Chambers

From the Area Mystery to Linkages, Origami and Hinged Polygons; from some Recreational Geometry connections with Integration to Thirty-four squares; and much more - in short, something to suit all tastes.

F) Developing thinking skills in Mathematics

Jim Reid

Mathematics is a problem solving activity that many young people have difficulty with. One of the main difficulties is to think through and interpret the problem. In this session you will look at some activities that will help improve the skills needed to be a successful problem solver in Mathematics.

G) Teaching using (mostly free) technology

Steven O'Hagan

Using technology effectively and appropriately can be a real time-saver, leaving more time during lessons for problem solving. I will share some of the experiences from my first year in the classroom, including how I made use of a tablet computer and online resources such as Schoology and HSN. There will be lots of demonstrations and opportunities for discussion.

H) Advanced Higher: small changes in approach that may make a difference?

Linda Moon

This session will aim to cover many aspects of the course including resources, appeals, common errors, progression from Higher, changes to the arrangement document and teaching approaches.

I) Advanced Higher Mathematics 2013

Phil Moon

How was AH maths for you in 2013? A chance to discuss the paper and consider where marks were gained and where marks were lost.

J) Another whistle stop tour of even more engaging lesson ideas

Rachael Horsman

Another chance to take a rapid tour of maths activities. All of those that will be described have been developed to encourage engagement with the subject. Active and collaborative learning is used alongside problem solving skills. The resources will include ideas that can be adapted for use with students of any age and participants will have the opportunity to have copies of the activities. Bring a pencil, some paper, a memory stick and a self addressed envelope!

K) Five awesome lessons with circles

Andrew Jeffrey

In this session, we start with the three awesome lessons that are in my head so far but saying five will push me a bit...) And five gives me an olympic logo option as well.

L) Challenging Pupils?

Helen Martin

This challenge is open to Primary 6 and Primary 7 pupils and is an adaptation of the secondary event with five challenges over the day: Poster, Round Table, Team, Head to head and the Relay. It has been run successfully for the past nine years in Aberdeen City and in 2012, the event was offered in Moray and in 2013 Angus joined in. Each school can enter a team of three pupils and this year we had 30 teams in Aberdeen, 17 teams in Moray and 14 teams in Angus.

If you would like to see how it runs and some of challenges the pupils face then come along and join in!

M) Using the Numeracy SSLN Professional Learning Resource

John Sexton

This session will provide a tour of what is available.

N) Old technology: making and using old instruments in the mathematics classroom

Peter Ransom

Come along and make your own sector and proprtional dividers and discover how they can be used in the classroom. A CDrom will be given to all who attend.

O) Knot Theory: an introduction

Méadhbh Boyle

I will give an introduction to some basic ideas in knot theory. A mathematical knot is inspired by everyday knots, except that the ends of the knot are joined together so that it cannot be undone. Interesting results arise from trying to identify when two knots are the same, just viewed from a different angle, and when two knots are fundamentally different. We will look at some of the ways in which this can be determined.

Continued overleaf

P) The Singapore Bar

Fiona Allan (NANAMIC)

The Singapore Bar was first developed in Singapore but is now used widely in the USA and increasingly in Primary classrooms in England. Singapore Maths utilises pictorial models to bridge the gap between concrete mathematical experiences and abstract representation.

During the session, you will learn how to use the 'bar' to work out the answers to problems in topics such as fractions, profit and loss and ratio and proportion and algebra.

Q) Touching the Maths

Nevil Hopley

Texas Instruments' TI-Nspire handheld, computer software and wireless Navigator network were joined earlier this year by the TI-Nspire iPad App. This significant software development puts arguably the most powerful maths teaching software at your fingertips ... quite literally! This session will feature a small class set of iPads for you to have a genuine hands-on experience. You do not need to be an existing iPad owner or TI-Nspire user. You just need to be curious about the new direction that tablet technology could now take your students' learning.

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For your record

Your choices	1	2	3	4	5	6
Workshop/Talks/Discussion Group						

MA Bookstall

A stall will be available for delegates to see the wide range of material which is produced. It will be an opportunity to buy at special conference rates and also for non-members to join.

Come prepared!

Preview at:

http://www.m-a.org.uk/jsp/index.jsp?lnk=910