The Association for Mathematics Education of South Africa

12th Annual National Congress



3 to 7 July 2006

FIRST ANNOUNCEMENT AND CALL FOR PAPERS



University of Limpopo Turfloop Campus Polokwane **You** are invited to the Twelfth Annual National Congress of the Association for Mathematics Education of South Africa (AMESA) and to submit contributions around the theme

African Pride: Ubuntuism in the teaching and learning of mathematics and mathematical literacy

VENUE: University of Limpopo, Polokwane

DATE: 3 July to 7 July 2006

THE PROGRAMME will include:

- 1. *Plenary addresses* by invited speakers
- 2. Panel discussions on various themes
- 3. Parallel sessions presented by participants

The parallel sessions will be offered in the following areas: *Primary, Secondary, Tertiary* and *Adult Basic Education*

The following formats will be used:

- Long papers (40 minutes plus 20 minutes discussion)
- Short papers (20 minutes plus 10 minutes discussion)
- How I teach sessions (20 minutes plus 10 minutes discussion)
- Workshops (1 or 2 hours)
- 4. Activity centre
- 5. AMESA Annual General Meeting

Other features of Congress 2006:

International speakers Excursions Photocopying Transport Daily social events Child-care centre Daily congress competitions Sweatshirts Conference bags

Limpopo Province

Limpopo, dubbed the province of peace, is situated at the North Eastern corner of the Republic of South Africa. The province is the natural treasure chest of South Africa with some of the greatest reserves in minerals, especially platinum. In addition to the Kruger National Park, the province is home to Mapungubwe, a World Heritage Site

The University of Limpopo

The University of Limpopo Turfloop Campus lies among the bald rock out-crops and hills of the Sovenga district. This is African bush Country, filled with euphorbias, acacias, marulas and lots of other indigenous botanical delights. To the east lie the Hwiti hills and beyond them the great escarpment mountains of the Magoebaskloof. To the West, 32 km distant, is Polokwane, the capital of Limpopo Province and one of the fastest growing cities in South Africa.

The Mathematics Programme of the University of Limpopo has produced a sizeable number of graduates who are to be found in teaching and research positions at various tertiary institutions, public and private sectors. Now after a consolidated and coherent period of post-graduate activity that resulted in the awarding of numerous Honours degrees, opportunities for Masters qualifications abound. A strong area of research within the programme is in the field of topology (the study of geometrical properties and spatial relations). Through the significant contributions from Eskom and other donors, a centre for Mathematical Explorations has been established. The main aim of this centre is to cater to the mathematics needs of educators and learners at the school level.

DEADLINES

Proposals to present paper(s): Submission of papers for reviewing: Receive reviewed papers back: Early Registration: Application for financial support:

CONTACT DETAILS

Complete and mail or fax the registration forms to:

Dora Manamela

AMESA Congress Secretariat UNIFY University of Limpopo Private Bag X1106 SOVENGA 0727

Tel: +27 (0)15 268 2895 Fax +27 (0)15 268 2899 E-mail: amesa@ul.ac.za

Congress director: **Kwena Masha** Tel : +27 (0)15 268 3057/9 E-mail: kwenam@ul.ac.za 17 February 2006 30 March 2006 28 April 2006 19 May 2006 1 June 2006

Those interested in presenting papers or conducting workshops should contact the Congress Academic Coordinator:

Rajen GOVENDER

Dept of Maths, Science & Technology Education University of Limpopo Private Bag X1106 0727 SOVENGA

Tel: +27 (0)15 268 2879 Fax: +27 (0)15 268 3533 E-mail: rajen@ul.ac.za

Congress website: http://www.amesa.org.za/AMESA2006/

Local Organising Committee:

Kwena Masha Mokgoko Sebela Joseph Mongwe Kabelo Chuene Satsope Maoto Indira Chacko Rajen Govender Dimakatso Muthelo Mokgaetsi Ramadisha Drienie DeNejis Kenneth Zimba

PARTICIPATION BY PRACTISING TEACHERS

While all are invited to participate and offer contributions to the programme, participation by practicing teachers is strongly encouraged. Help us make Congress 2006 a celebration of the contribution of teachers to mathematics education.

CALL FOR PAPERS AND GUIDELINES FOR PROPOSALS

You are invited to propose one or more contribution to the programme. To ensure a high standard of presentations and broad based participation.

- the organizing committee
- Will accept no more than two inputs per presenter.
- Have decided no presentation will be accepted for the programme unless a full transcript or workshop outline has been submitted for reviewing.
- Will adhere to the due dates for submission as this ensures time for useful and relevant reviews of submissions.

To help you in planning and writing your proposal, we include below technical guidelines for preparing a paper. An electronic styles template is available on the congress website.

Guidelines for "How I teach it" papers

Length: Minimum 1 page and a maximum of 4 pages

Critical information to be included:

Title: A heading for your paper e.g. how to use paper folding in geometry **Name**: Your Name and Surname

Organisation: Where you are from e.g. the name of your school

Phase: The phase your talk is aimed at i.e. Foundation, Intermediate, Senior or FET

Introduction:

Include here a paragraph on what your talk is about. Why you chose to talk about it. What you are going to do in the talk.

Content:

You might want to write one or two sentences on your experiences of using such activities in your class and some of the advantages or disadvantages of using the activities. Also provide here a brief conclusion on the talk.

References:

Add here any references that you might have used. In other words, if you took the activities from a textbook or from an internet, please acknowledge that.

Note:

- There might be other headings you want to include (e.g. "teacher tips") please feel free to do so.
- Your paper will be reviewed. Congress 2006 reserves the right to make minor editing changes. If substantial changes to your work are necessary the paper will be returned to you in order to make the changes.

Guidelines for workshop presentations

Length: Maximum of 8 pages of worksheets.

Critical information to be included:

Title of the workshop:

Name (of presenters):

Institution where you are employed:

Target audience: The phase your workshop is aimed at e.g. Intermediate. **Duration:** There will be 1-hour or 2-hour workshop slots. Please ensure that you choose an appropriate length slot.

Maximum no. of participants: You may limit the number of participants in your workshop. Workshop presenters should attempt to cater for at least 30 participants.

Description of content of workshop (200 words)

- What will be done in the workshop?
- How will the time slot be broken up?
- What will participants be doing in the workshop?

Motivation for running workshop

- Max 100 words
- Why is this workshop important?
- How will it help participants:

Note:

- Workshops need to be hands-on sessions where participants are actively involved in doing the activities that you provide for them. Usually these activities will be done in groups, consisting of 3 – 5 participants. There should also be ample time for discussions (approximately 25% of your time is suggested).
- Venues will have loose tables and chairs, an overhead projector and a chalkboard. If you require any other equipment, you need to provide it yourself. (Please contact the conference director if you wish to use a computer laboratory.)
- All worksheets will be printed in a separate volume of congress proceedings. This means that you do not need to bring extra copies of materials unless you require participants to cut, fold etc. any of the pages of worksheets.
- If you have used ideas from other sources, it is essential that you acknowledge these sources. We will **not** accept any submissions where more than 2 pages have been copied directly from another source.
- All materials should be typed and printed on a laser printer if possible.

Guidelines for submission of short papers

Length: 5 – 8 pages

Each short paper presentation will be given a total time of 30 minutes: 20 minutes for oral presentation and 10 minutes for discussion. This kind of presentation is most suitable for work in progress.

- **1. Reflection on teaching or practice** This is mainly for mathematics educators who would like to share their reflections on their teaching or on their participation in a developmental project or research project.
 - 1.1 For reflection on teaching you need to specify the following:
 - The grade and class size;
 - The mathematics topic taught;
 - The mathematical goals and purposes;
 - A description of the lesson;
 - What factors contributed to the success of the lesson;
 - What factors tended to hamper success and how you dealt with them
 - 1.2 For reflection on participation in a mathematics development project you should specify the following:
 - The duration of the project;
 - Mathematical aspects covered by the project;
 - Practical examples of how participation in the project impacted on your teaching.
- **2. The exposition of a piece of mathematics** These papers could have as an objective the presentation of mathematics, relevant to the school curriculum. For details on this type of presentation, see (2) of the long papers below.
- **3. Proposals research or development** This can be a presentation of a proposal for a research or mathematics education developmental project and should include the following:
 - A description of the focus of the research project or developmental project;
 - Motivation for the study or project;
 - Some indication of the theoretical framework of the study or project;
 - Some discussion of the related literature;
 - How the study or project will be undertaken, including some justification of methodology;
 - Participants and time lines;
 - List of references.
- **4. Initial sharing of data** This is mainly for people who have done research and are still working on their analysis. The paper should include the following:
 - A statement about the focus of the paper or the research questions, and a motivation for the significance of the research;
 - Some aspects of the theoretical framework of the study reported;
 - Some discussion of the related literature;
 - An indication of and justification for the methodology used;
 - Some sample data and initial analysis or description of data;
 - List of references.

Reviewing Two reviewers, with experience in the area, will review your paper. Specifically, reviewers will be asked to comment on the following: mathematical content, conceptual coherence, clarity and relevance to the AMESA audience.

Guidelines for submission of long papers

Length: 8 – 12 pages

Each long paper will be scheduled a total time of 60 minutes (1 hour): 40 minutes for oral presentation and 20 minutes for discussion.

The following types of papers are suitable for presentation as a long paper:

1. Research report

This should include the following:

- A statement about the focus of the paper or the research questions, and a motivation for the significance of the research;
- An indication of the theoretical framework of the study reported;
- Discussion of the related literature;
- An indication of and justification for the methodology used;
- Some sample data and findings and a statement of how these help to answer the research questions;
- What your findings mean for mathematics teaching and learning or further research;
- List of references.

2. The exposition of a piece of mathematics

These papers could have as an objective the presentation of mathematics, relevant to the school curriculum, such as:

- An innovative way of dealing with a section of mathematics;
- Alternative proofs for theorems;
- Interesting mathematics that teachers are conversant with; Mathematics that is new in the proposed curriculum;
- List of references.

3. Theoretical or philosophical essays

These should include the following:

- A statement about the focus of the paper and a motivation for its significance;
- An indication of the theoretical or philosophical framework within which the focus or theme of the paper is developed;
- Reference to related literature;
- A clearly articulated statement of the author's position on the focus or theme;
- What your findings mean for mathematics teaching, learning or research;
- List of references.

Reviewing Two reviewers, with experience in the area, will review your paper. Specifically reviewers will be asked to comment on the following: mathematical content, theoretical framework and related literature, methodology (if appropriate), statement and discussion of results, clarity and relevance to the AMESA audience. If your paper is not accepted for this category it will automatically be considered as a short paper presentation.

Start planning for Congress 2006 ...

We look forward to seeing you in Polokwane, Limpopo

AMESA MEMBERSHIP APPLICATION / RENEWAL FORM

1.	Membership No (if renewal):					
	Membership type: Individual Institutional Associate (e.g. student)					
2.	Field of Interest: Primary / Secondary / Tertiary (circle one)					
3.	For Individual and Associate members only: Surname:					
	Postal address:					
	Tel. no: () Fax: () E-mail:					
4.	For Institutional members only: Designation of person to whom correspondence should be addressed (e.g. The HOD Mathematics / Librarian)					
	Name of Institution:					
	Postal address: Postal Code:					
	Tel. no: () Fax: () E-mail:					
5.	<i>For student members only:</i> I hereby declare that I am a full-time, pre-service student at the following institution: Signature:					
 6. Payment: Current subscription rates are: Individual – R90; Institutional - R260; Associate – R25 You may pre-pay your subscription at the current rate for up to three years. Choose one of the following methods of payment (indicate with an X): 						
	□ Cash R					
	□ I enclose a postal order/cheque for R payable to AMESA					
	□ Please debit my credit card account with R					
	Type of card: VISA MASTER CARD					
	Card number: 3 Digits on back:					
	Name on card: Expiry date:					
	Signature:Date:					
	Please renew my membership <i>automatically</i> each year by debiting my credit card each year. This authorisation will remain valid until I or AMESA cancel it in writing.					
	 Bank transfer. Bank details are as follows: Bank: ABSA Branch Code: 632 005 Account No: 1640 146601 Account Name: AMESA Type of Account: Current NOTE: It is vitally import that you fax a copy of the transfer slip and this renewal form to the number below to 					

note: It is vitally import that you fax a copy of the transfer slip and this renewal form to the number below to ensure that your membership renewal is recorded. Please enter you membership number or name in the reference section of the deposit slip. The onus is on you to ensure that the office receives the relevant information.

Post the completed application form (with the necessary fee) to: AMESA Membership, P.O. Box 54, WITS, 2050 Only if payment is by credit card or bank transfer you may fax the form to: (011) 339-1937 Enquiries: Tel: (011) 403 6977 Fax: (011) 339-1937 E-mail: Membership@amesa.org.za



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E-mail: rajen@ul.ac.za Fax: (015) 268 3533

PRESENTATION PROPOSAL FORM AMESA Congress 2006

Note: Closing date is 17 February 2006

PLEASE TYPE OR HAND-WRITE USING ONLY CAPITAL LETTERS

Name:					
Postal address:					
Postal code:					
Institution:					
Tel: (code)	(h)	(w)			
Fax: (code)	(h)	(w)			
Email:					

I would like to offer to present (please tick one or more blocks): *Note, you may not present more than two inputs.*

	Foundation Phase	Intermediate Phase	Senior Phase	FET	Tertiary	ABET/ Inset
Full paper						
Short paper						
How I teach						
Workshop (1 h)						
Workshop (2 h)						

Note:

- Return the completed form to Rajen Govender at the address above by the deadline of 17 February.
- Your full paper or workshop outline must be submitted for reviewing by 30 March 2006.
- Please consult the Guidelines for preparing your paper.
- This form must also be submitted with your paper.



AMESA Congress 2006 UNIFY University of Limpopo Private Bag X1106 SOVENGA 0727

E-mail: amesa@ul.ac.za Fax: (015) 267 0485

Application for financial support AMESA Congress 2006

Note: Closing date is 1 June 2006

I, .	(full name and surname),
wou	Id like to apply for financial support to attend AMESA Congress 2006.
Suri	name:
Firs	t names:
Post	tal address & code:
Inst	itution:
Area	a of expertise:
Tel:	() home
	() work
E-m	ail::
Plea	ase complete:
1.	I am an AMESA member ¹ YES / NO (membership number \dots)
2.	I am able to contribute R of the projected R costs for my attendance ² .
3.	I undertake to write an article/report on AMESA Congress 2006 which may be published in AMESA News.
Sigr	Date:
¹ P	Preference for funding will be given to paid-up AMESA members who will be participating in the ongress programme.

² Please supply a budget showing the costs.