The Association for Mathematics Education of South Africa

JULY 2018 VOL. 59

From the Former President



By the time you get to read this edition of AMESA News, I will no longer be President of AMESA. Let me thank AMESA members for having faith in me as President from 2014 to 2018. Despite funding challenges, I would like to say it has been an honour and a privilege to serve as

your President. I would like to thank our National Executive Committee and Council for their support at all times. I would like to take this opportunity of wishing the new National Executive and Council, under the very capable leadership of Busisiwe Goba, everything of the best for the next two years. I will continue to serve AMESA, both at a local and national level, as dictated to by the National Council and members of AMESA.

Vasuthavan Govender

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Editor's comment



In this issue, we share with our members experiences of a young member who attended the AMESA National Congress, for the first time, in Bloemfontein. In addition, KwaZulu-Natal and North West regions share activities in their respective regions with AMESA members. I commend North West Region for continuing to show case the hard work they are doing in their region. We are grateful to our sponsors CASIO, SHARP, Cambridge University Press, Oxford University Press, PEARSON, Metropolitan, Answer Series, Marematlou Training Institute, Shuter & Shooter and many more for their continued support in our regional and national activities. Enjoy reading!

It has been an honour to serve as the editor of AMESANews for the past fouryears. Kindly send articles or contributions about AMESA activities in your area to our new vice president at vicepresident@amesa.org.za.

Busisiwe Goba

CHANGES IN THE NATIONAL EXECUTIVE AND THE NATIONAL COUNCIL

At the 24th AMESA Congress held at the University of the Free State in Blo emfontein, , the new President, Vice President and the Secretary were elected. Below are the pictures of the new offic e bearers in the National Executive.



Busisiwe Goba is the newly elected President of AMESA. She is the lecturer of Mathematics Education at the University of KwaZulu-Natal in the School of Education. Busisiwe started teach ing in 1992. In 1996, she became the HOD of Sci ence at Uml azi Secondary School. In 2003, she joined the University of KwaZulu-Natal lecturing in Mathematics Education. In 2011 she was elected as AMESA KZN chairperson, a position she held till 2014, when she was elected as Vi ce-President of AMESA, a position she held until June 2018.



Rajendran Govender, the new vice-president of AMESA, is currently an Associate Professor in Mathematics Education in the School of Science and Mathematics Education, and Deputy Dean of Teaching and Learning in the Faculty of Education at the University of the Western Cape. Rajendran started teaching high school m athematics in 1985, became a college mathematics lecturer in 1995 and then a subject advisor of Mathematics in KwaZulu-Natal in 2002. In 2003, he joined the University of Limpopo as a mathematics

education lecturer, before moving to the University of the Western Cape in 2008.



Kgomotso Pilane is the c urrent North West AMESA Chairperson (2 016-2018) and the regional re presentative to the National Council. Kgomotso Pilane is working at Kloofview Primary School. She is a Mathematics HOD for the Inter-Senior phase. She has been teaching since 1994. She specialized in Mathematics and Natural Sciences. She completed her degree with UNISA and did m ethodology of Mathematics. She furthered her stu dies with University of Potchefstroom, doing Mathematics Literacy, and passed it with distinction. She entered the NTA for excellence in primary teaching in 2003 and proceeded to provincial level. She is currently the chairperson of AMESA in the Northwest region since June 2016. She lives in Rustenburg (NW).



Oniccah Dikeledi Thibodi is the new North West Regional representative on the AMESA National Cou ncil. She has been the Pri ncipal of Ts hirilogang Primary school since 2011. Oniccah is a qualified Mathematics and Commerce teacher. She obtained her BA degree at UNISA majoring with Mathematics. Onicah obtained her Masters' in Education degree at North West University. She is currently busy with her Doctoral studies in Mathematics Education at the Tshwane University of Technology. She became a member of AMESA in 2006. She has served as the Chairperson and Secretary of the Zeerust branch and is currently the Secretary AMESA North West.

NB: The Western Cape Regional representative will be introduced to the members in the next edition of AMESA NEWS.

A FIRST TIME DELEGATE AT THE 24th AMESA CONGRESS IN BLOEMFONTEIN SPEAKS:

Mpho Clementine Kgwasi attended the AMESA National Congress for the very first time in Bloemfontein. This is her story:

When Mr Peace Mojaki extended the invitation for me to join their group for the AMESA



Congress, I had no idea what it was but I was thrilled at the idea of development so with no hesitation I said I would join them. I registered and now I am here in Bloemfontein and this is the best decision I ever made. I have indeed been developed, found the plenary talks mentally stimulating. I am so inspired that I am considering submitting an application for honours next year. Being the youngest person in my group, I have received so much support from my colleagues I am so grateful for the opportunity. I cannot wait for the next Congress in KZN, Durban in 2019. AYEYE AMESA, AYEYE!

AMESA KZN REGIONAL CONFERENCE 2018: Compiled by Sithembiso Khanyile

The AMESA KZN regional conference took place on Saturday 19 May 2018 at the Edgewood Campus of UKZN. The conference theme was: *Teaching Mathematics for Understanding*

AMESA KZN Chairperson Sithembiso Khanyile was the Congress Director with Busisiwe Goba serving as the Academ ic Coordinator. Professor Poobhalan Pillay (retired UKZN Professor) was the plenary speaker. The conference was attended by 261 delegates, including AMESA stalwarts, Professor Michael de Villi ers and Mr D ory Reddy. Both these dedicated members received awards for their outstanding work for AMESA in KZN and nationally.

Pictures from the AMESA KZN conference



Sithembiso Khanyile at the opening ceremony



Section of the audience (with Prof Pillay)



uMlazi District Director: Mr Cele



Breakaway session: Dr Zanele Ndlovu

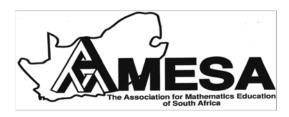


Prof Michael de Villiers receiving an award



Busisiwe Goba at the closure

NB: The conference programme appears on the next page



2018 AMESA KZN CONFERENCE: DATE: 19 MAY 2018 VENUE: UKZN EDGEWOOD CAMPUS

Conference Theme: Teaching Mathematics for Understanding

Programme Director: Mr Sibusiso Khanyile

Activities	Presenter / Facilitator	Times	Venue
Registration and Arrival Tea	Committee Members	8:00 - 08:45	
Opening Prayer	Busisiwe Goba	08:45 - 08:50	MMLT
Welcome	UKZN Edgewood Cluster Leader Mathematics & Computer Science Education: Prof Sarah Bansilal	08:50 - 09:00	
Conference Opening	Conference Director: Sthembiso Khanyile	09:00 - 09:10	
Welcome speech by KZN DBE	Mr M. Cele	09:10 - 09:20	
Plenary Presentation	Prof Poobhalan Pillay- Basics cannot be underestimated	09:20 - 09: 50	
	Breakaway sessions		
Foundation Phase (Grade 1 – 3)	Shuter and Shooter	10:00 – 12:30	MMLT
	Dr Ada Ubah- Use of teaching aids for teaching number bases in the classroom	10:00 – 10:30	LT 2
Intermediate Phase (Grade 4-6)	Dr Zanele Ndlovu - Number sense development: strengthening pre-service teachers conceptions of place value (trading)	10:30 – 11: 30	LT 2
	Xoli Radebe & Zakheni Ngubo –Siyafunda	11:30 – 12:30	LT 2
	Prof Sarah Bansilal- Introducing the variable using think of a number activities	10:00 – 10:30	LT 3
	Ben Shongwe - Preservice primary school teachers' conceptions of a mathematician.	10:30 – 11:00	LT 3
Senior (Grade 7 – 9)	Phatha Mahlabela, <u>Thami Mahlobo</u> & Themba Ndaba - Are we winning the battle against poor performance in mathematics?	11:00 – 11: 30	LT 3
	Saleam Essop -Teaching and learning with technology	11:30 – 12:00	LT 3

	Ms X Dlamini- Exploring challenges when learning equations in Grade 8	12:00-12:30	LT 3
Senior Phase Workshop	<u>Phatha Mahlabela</u> , Thami Mahlobo & Themba Ndaba: Using spread-sheet to enhance mathematical thinking (30 participants)	10:00 -12:30	Computer Lab LAN 5
FET Mathematics (Grade 10 – 12)	Prof Michael de Villiers: Miquel's theorem: an application of circle geometry	10:00 – 11:00	LT 4
	Bule Mbokazi: Exploring Mathematics teachers' use of Technology-based tools to teach Grade 10 Euclidean Geometry in four selected schools in KwaZulu-Natal, South Africa.	11:00 – 11: 30	LT 4
	Dr Biyela: Pre-service teachers' attainment in mathematics content and pedagogy	11:30 – 12:00	LT 4
	Ms N. Khuzwayo: Exploring challenges when learning Trigonometry in Grade 11	12:00-12:30	LT 4
	Thokozani Mkhwanazi & Phatha Mahlabela: A reflection on the interpreting of graphs at the FET phase	10:00 – 11:00	F 204
FET Mathematics Workshop	Vukile Buthelezi: Shuter and Shooter	11:00 – 12:00	F 204
	Mr G H Godebo: Exploring the use of Geogebra in Mathematics teaching in Grade 11	12:00 – 12:30	F 204
Mathematical Literacy (Grade 10 –	Linda de Waal: Finance	10:00 – 10:30	LT 5
12)	Sbu Mahlangu: Measurement	10:30 – 11:00	LT 5
	Glenda Martins: Data handling	11:00 – 11:30	LT 5
	Pam Pillay: Maps and plans	11:30 – 12:00	LT 5
Presentation	Prof Vimolan Mudaly: Creating meaning in a mathematics class	12: 35 -13: 05	MMLT
AGM & Closure	AGM Programme: Chair: Sthembiso Khanyile 1. Welcome 2. Apologies 3. Minutes of the previous AGM 2017 4. Secretariat Report — Thami Nyathi 5. Financial Report — Niven Ramdhani 6. Chairperson's Report- 7. Election of the KZN Secretary 8. KZN AMESA Awardees 8.1. Mr Dory Reddy 8.2. Prof Michael de Villiers 9. KZN AMESA 2018 Presenters 10. Vote of Thanks and Closure - Deputy Chairperson: Thembelihle Madondo	13:05 – 14:15	MMLT

PROBLEM-SOLVING WORKSHOP (AMESA NORTH-WEST)



AMESA NORTH WEST

RUSTENBURG

0300

CK Pilane: 083 333 1825

Programme Director: Kgomotso Pilane Facilitator: Graeme Evans (SAMF)

PROBLEM SOLVING WORKSHOP FOR Grade 8 - 12 EDUCATORS

VENUE: KLOOFVIEW PRIMARY SCHOOL

REGION: BOJANALA

SUB-DISTRICT: RUSTENBURG

Day one: 20/04/2018

Time	Activity	Responsibility
8:00 - 8:15	Opening and Welcome	Kgomotso Pilane
		(Chairperson)
8:15 - 8:20	Introduction of all the members present:	Kgomotso Pilane
	Council Members; Facilitator and	
	Teachers	
8:30 - 9:30	Unit 1: Learning about problem Solving	Graeme Evans
	Why Problem solving	
	What is a problem	
9:35 – 10:05	Tea break	Caterer
10:15 - 12:00	Unit 2	Graeme Evans
	More problems to solve (Group	
	work)	
12:05 - 13:00	Mental Maths	Talitha Moore (Sharp)
13:05 - 14:00	Lunch break	Caterer
14:05 - 15:00	Unit 3	Graeme Evans
	More of Problem Solving and	
	Solutions to some of some	
	problems (Group work)	
15:00 – 15:15	Closure	All members

<u>Overview of day one activities:</u> The Regional Chairperson welcomed all the members who attended the workshop. She introduced the facilitator Mr Graeme Evans from SAMF and SES for FET Mr G.M. Tsitsi. Attendance register was circulated and educators attached their signatures. Forty educators from 20 schools attended the workshop

Day two: 21/04/2018

Time	Activity	Responsibility
8:00 – 9:30	RE-CAP Polya's problem solving stages Heuristic: Make a sketch or draw a diagram. Problems & Solutions Heuristic: Introduce some notation or symbolism. Problems & Solutions Heuristic: Guess and Check Heuristic: Make a table, look for a pattern	Graeme Evans
9:30 - 10:00	Tea break	Caterer
10:00 - 12:00	Assessment	Graeme Evans
12:00 - 12:10	Evaluation of the workshop	Facilitator & Council members
12:10 – 12:20	Vote of Thanks	Council Member/AMESA
12:10 - 13:00	Announcements & closure	Kgomotso Pilane

Overview of day two activities: This involved a recap of day one activities. Then teachers wrote a Problem Solving Test. The workshop was highly rated by the participants, who were actively involved from the beginning. The activities for day two ended at 13:00 with Regional Chairperson, Kgomotso Pilane, closing the workshop.



Some of the educators who attended the workshop

Learning about problem solving





Teachers working in groups



A demonstration by Tal Moore from Sharp



Teachers working collaboratively



Teachers busy with the assessment

AMESA NORTH-WEST REGIONAL CONFERENCE 2018 Report by Kgomotso Pilane

Venue: VRYBURG HIGH SCHOOL

Date: 19 May 2018

Time: 07:30 - 17:00

Conference Theme: Mathematics 'shaping 'the future

Plenary Speaker: Dr Kagisho Thomas from WITS University

Conference Director: Kgomotso Pilane

The District Official welcomed the delegates and appreciated the work done by AMESA to uplift the learning and teaching of mathematics in our schools. Thereafter the Regional Chairperson, Kgomotso Pilane, warmly welcomed the members and encouraged them to renew their yearly membership. She outlined all the activities done by AMESA. In addition, she explained how teachers could benefit by being AMESA members. She thank all the sponsors: Cambridge University Press, SHARP, Metropolitan, Red Pencil, Pearson and Macmillan. She also thanked Vryburg High School for hosting AMESA, Department of Education, Principals and most importantly the members.

PROGRAMME: Programme director: Mr TC Setlhare

Time	Activity	Official responsible
8:00 - 9:00	Registration	Ms Thibodi &Ms Morake
9:00 – 9:10	Opening and prayer	Rev. J Jason
9:10 – 9:30	Welcome and Official Opening	Regional chairperson – K Pilane
9:30 – 9:45	MST	Virginia Leketi
9:45 – 10:00	Sponsors: Metropolitan Cambridge University Press	Desmond Heynes
10:00 -10:30	Introduction of guest speaker	Mr TC Setlhare
10:30 – 11:00	Tea break	
11:05 –12:05	Parallel session 1	Different Presenters
12:10 – 13:10	Parallel session 2	Different Presenters
13:15 – 14:15	AGM	Regional Secretary & Regional Chairperson
14:15 – 16:00	Lunch and departure	

Registration per phase

Phase	Number of delegates
Foundation	132
Intermediate	60
Senior	46
FET Mathematics	17
FET Mathematical Literacy	15
Total	270

Our Guest Speaker, Dr Kagisho Thomas from WITS University, shown below, gave an overview of the history of mathematics, ancient mathematical texts, Babylonian tablets, mathematics embedded in culture, the applications of mathematics and current challenges in mathematics teaching and learning .



Our Guest speaker, Dr Kagisho Thomas,

Pictures from parallel sessions (AMESA North-West Regional Conference)



Teachers deep in thought at one of the sessions



Practical ways of teaching mathematics in the Senior Phase



Teaching Algebra using Singapore methods in the Senior Phase



FET Mathematics working with 2D and 3D problems in Trigonometry

SPONSORS

We would like to thank our sponsors who continue to support AMESA activities in the NW Region and nationally in South Africa. The sponsorship received in the NW Regional Conference were:

- Cambridge University Press: 250 bags
- Red pencil: 250 bags
- SHARP donated lanyards, name tags and calculators for the delegates
- Metropolitan Life donated 30 bags and 30 water bottles
- Macmillan sponsored R3000, 00 towards Conference expenses













2018 ANNUAL GENERAL MEETING

Minutes of 2018 AMESA AGM University of the Free State Bloemfontein Tuesday 26 June 2018

Welcome and opening

1. The president, Vasuthavan Govender, opened the meeting at 16:35, and welcomed all members. He requested that the meeting be kept to a one hour duration.

2. Finalising the Agenda

The president presented the agenda, as presented in the 2018 Congress Programme The agenda was moved accepted by Simon Baloyi (Limpopo) and seconded by Selby Matsane (Mpumalanga).

The President asked for a moment of silence in remembrance of members who had passed on during the course of the past year.

3. Apologies

Rajendran Govender sent an apology - having to return to Cape Town on a family emergency.

In correspondence, four notices of nomination for elections at this AGM were received.

4. Minutes

The secretary presented the minutes of the AMESA 2017 AGM held in Port Elizabeth, Eastern Cape. The minutes were moved accepted as read by MJ Gae (Limpopo), and seconded by Chris Mjijwa (Gauteng).

Matters arising:

Matome Bopape (Limpopo) queried the issue of the qualified 2016 financial report.

O Thibodi (Limpopo) wanted to know what the National Council was doing about the non-submission of audited finance reports. Manare Setati responded that the National Executive, along with the Regional Representatives to National Council, were taking strict steps to address this challenge.

5. National Council Report on the Activities of the Association

The National Secretary, Gary Powell, presented the national annual report. The national annual report was moved accepted by Vuyani Pop (Free State) and Manthepa Maake (Limpopo) seconded this.

6. Financial Report

The treasurer, Manare Setati, presented the financial report. There was a query as how National Council was going to ensure that regions submit their finance reports on time.

Another speaker commented that she did not feel that the report was clear enough. The treasurer also commented on the training that was afforded to executive members of regions at the 2015 National Congress.

He also went to lengths to explain the difference been a "qualified report" (where there are

comments attached), and an "unqualified report" (where the report has no conditions/comments attached to its approval).

One speaker queried the decrease in salary costs for the office staff.

A speaker from KZN queried why the National Council did not have a finance committee in place and questioned why the council had not raised funds.

Vasuthavan Govender (President) responded by explaining how a major funder had restrategized their funding model, which resulted in AMESA has losing funding (after 20 years). He added how the National Executive had, despite the unfavourable economic climate had raised over R500 000, 00 over the previous the four years.

The financial report was moved accepted by Percy Sepeng (Gauteng), and Joseph Maeba (Free State) seconded this.

7. President's Report

Vasuthavan Govender presented the president's report which focused on the following key principles: AMESA's constitution and mandate; the national office staff; regional development; grade 12 review of Mathematics/Mathematical Literacy papers, AMESA publications, sponsorship and advertising; finances, membership and the AMESA National Congress

8. Motions

One motion was noted – as made by the treasurer – for an increase in membership fees.

He motivated as follows:

That in accordance with Paragraph 28, read together with Paragraph 29, he wished to table to following motion with regard to an increase in membership subscription fees:

These were as follows:

- Individual Membership: R140 to R150 (SA) R190 to R210 (Foreign African) \$70 to U\$80 (Non-African)
- Institutional Membership: R400 to R450
- Associate Membership: R45 to R50
- Life Membership = R3 500 (Remains the same)

There were no counter motions. The treasu rer's motion was moved accepted by MJ Gae and seconded by Velile Macwefa.

9. Elections

Steven Muthige was appointed the returning officer. He explained the voting process to the meeting.

The secretary had received four written notices of nomination.

These were:

- Two for the office of President: One from the AMESA National Council, and one from an AMESA branch in KZN
- One for the office of Vice-President from the AMESA National Council

• One for the office of National Secretary from the AMESA National Council

The AGM agenda had noted the names of the nominees.

The returning officer informed the meeting that due to both contesting nominees were from KZN, that province (KZN) had abstained from voting. Fifty-three votes were therefore counted.

- 48 were in favour of Busisiwe Goba
- 5 were in favour of Alfred Msomi

Busisiwe Goba was therefore elected to be the new President of AMESA.

Rajendran Govender was elected as the new Vice-President.

Kgomotso Pilane was elected as the new National Secretary

10. General

There was no discussion under General

11. Closure

The outgoing President, Vasuthavan Govender, closed the meeting at 19:00

Gary Powell

Secretary

Vasuthavan Govender

President

THE ASSOCIATION FOR MATHEMATICS EDUCATION OF SOUTH AFRICA ANNUAL FINANCIAL STATEMENTS FOR THE YEAR ENDED 31 DECEMBER 2017

DE BRUYN DALY Chartered Accountant (S.A.) Registered Auditor Published 12 June 2018

MEMBERS' RESPONSIBILITIES AND APPRO

The members are responsible for the maintenance of adequate accounting records and the preparation and integrity of the annual financial statem ents and related inform ation. The independent auditor is responsible to determ ine that the annual financial statements are in agreement with the accounting records, su mmarised in the manner required by section 58(2)(d) of the Act.

The members are also responsible for the corporat ion's system of internal financial control. These are designed to provide reasonable, but not absolute, assurance as to the reliability of the annual financial statem ents, and to adequately safeguard, verify and m aintain accountability of assets, and to prevent and detect misstatement and loss. Nothing has come to the attention of the members to indicate that any material breakdown in the functioning of these controls, procedures and systems has occurred during the year under review.

The annual financial statem ents have been prepared on the going concern basis, since the members have every reason to believe that the corporation has adequate resources in place to continue in operation for the foreseeable future.

The annual financial statements set out on pages 4 to 8, were approved by all members on 12 June 2018 and were signed by them or on their behalf by:

Trott		
Member		



Independent Auditor's Report

To the members of THE ASSOCIATION FOR MATHEMATICS EDUCATION OF SOUTH AFRICA

I have audited the Income and Expenditure statements of THE ASSOCIATION FOR MATHEMATICS EDUCATION OF SOUTH AFRICA as set out on page 5. These statements are the responsibility of the Association. My responsibility is to report on the income and expenditure statements.

Members' Responsibility for the Annual Financial Statements

The Association's members are responsible for the preparation and of the annual financial statements in accordance with the basis of accountin g as set out in Note 1 to the financial statements and for such internal control as the members determine is necessary to enable the preparation of annual financial statements that are free from material misstatements, whether due to fraud or error.

Auditor's Responsibility

My responsibility is to express an opinion on these annual financial statements based on my audit. I conducted my audit in accordance with International Standards on Assurance Engagements. Those standards require that I comply with ethical requirements and plan and perform the audit to obtain reasonable assurance whether the annual financial statements are free from material misstatement. An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the annual financial statements. The procedures selected depend on the auditor's judgement, including the assessment of the risks of material misstatement of the annual financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the annual financial statements in order to design audit procedures that are appropriate in the circu mstances, but not for the purpose of expressing an opinion on the effectiveness of theentity's internal control. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made by management, as well as evaluating the overall presentation of the annual financial statements. I believe that the audit evidence I have obtained is sufficient and appropriate to provide a basis for my qualified audit opinion.

Basis for Qualified Opinion

In common with similar organisations, it is not possible for the Association to institute accounting controls over collections from subscriptions, donations, fundraising, hire offacilities and sundry income prior to the initial entry of the collections in the accounting records. Accordingly, it was impracticable for me to extend my examination beyond the receipts actually recorded.

Qualified Opinion

In my opinion, except for the possible effect s of the matter described in the Basis for Qualified Opinion paragraph, the annual financial statements of THE ASSOCIATION FOR MATHEMATICS EDUCATION OF SOUTH AFRICA for the year then ended 31 December 2017 are prepared, in all material respects, in ac cordance with the basis of accounting described in no te 1 to the annual financial statements.

STATEMENT OF FINANCIAL POSITION AS AT 31 DECEMBER 2017

Figures in Rand	Note(s)	2017	2016
Assets			
Current Assets			
Reserve fund	2	278 580	261 906
Cash and cash equivalents	3	894 991	819 170
		1 173 571	1 081 076
Total Assets		1 173 571	1 081 076
Equity and Liabilities			
Members' interest and reserves			
Retained income		695 935	776 578
Liabilities			
Current Liabilities			
Trade and other payables	4	477 636	304 498
Total Equity and Liabilities		1 173 571	1 081 076

STATEMENT OF COMPREHENSIVE INCOME

Figures in Rand	Note(s)	2017	2016
Revenue		745 924	735 182
Other income		27 736	-
Operating expenses		(910 218)	(1 288 362)
Operating loss		(136 558)	(553 180)
Investment revenue		55 915	64 438
Loss for the year		(80 643)	(488 742)

ACCOUNTING POLICIES

1. Presentation of Annual Financial Statements

The annual financial statements have been prepared in accordance with the accounting policies as set out below. The annual financial statements have been prepared on the historical cost basis. They are presented in South African rand.

The financial statements are prepared on the Cash Basis, except for expenses relating to National Congress and Subsidy refunds due to regions which is accounted for on accrual basis.

These accounting policies are consistent with the previous period.

THE ASSOCIATION FOR MATHEMATICS EDUCATION OF SOUTH AFRICA Annual Financial Statement for the year ended 31 December 2017

Notes to the Annual Financial Statements

110	tes to the Annu	iai Financiai Statements		
Figu	ures in Rand		2017	2016
2.	Reserve fund			
3.	Term - Account Term - Account Term - Account Term - Account 32 day notice -	20-6641-6798 20-6519-7783 20-6245-3984 20-6108-0279 Account 91-8606-5955	16 776 102 513 52 876 43 599 62 816 278 580	16 036 95 429 49 813 40 586 60 042 261 906
	Cash and cash	_		
	Cash and cash equ	ivalents consist of:		
	Bank balances Depositor Plus acc Education fund	count	216 653 641 349 36 989	180 074 603 584 35 512
			894 991	819 170
4.	Trade and oth Amounts due to R Subsidy refunds d	egions for National Congress profits	372 130 105 506	222 130 82 368
	Succia Toruna a	40 to 148.0110	477 636	304 498
	Subsidy refun	ds due to regions		
	Eastern Cape 201 Eastern Cape 201 Gauteng 2017 Kwazulu-Natal 2 Kwazulu-Natal 2 Mpumalanga 201	6 7 016 017	6 736 6 232: 13 376 22 984 16 972:	6 736 - - 22 984 - 23 764

	372 130	222 130
National Congress 2017 - Eastern Cape	150 000	8 04
National Congress 2015 - Mpumalanga	8 040	214 09
National Congress 2014 - Northern Cape	214 090	
Profits due to regions for National Congress		
	105 506	82 368
Western Cape 2017	9 074	
Western Cape 2016	11 116	11 11
Northern Cape 2017	1 248	
North West 2016	17 768	17 76

5. Taxation

No provision has been made for 2017 tax as the entity is exempt from Income Tax.

6. Auditor's remuneration

	24 138	30 392
Congress audits prior years	6 817	12 323
Fees	17 321	18 069

AMESA DETAILED INCOME AND EXPENSES STATEMENT

Figures in Rand	Note(s)	2017	2016
Revenue			
Congress		484 965	226 560
Member fees		223 921	299 482
Oppenheimer Memorial Trust		-	200 000
Sundry income		37 038	
		745 924	735 182
Other income		18 104	_
Royalties received		9 632	_
Other income - Math Challenge		55 915	64 438
Interest received		33 913	04 430
		83 651	64 438
Operating expenses			
Accounting fees		8 828	10 955
Auditor's remuneration	6	24 138	30 392
Bank charges		28 839	27 723
Employee costs		179 316	206 888
Honorarium and editor fees		6 000	-
IT expenses and web hosting		18 822	6 588
National Congress expenses		95 484	314 859
National Council Meeting expenses		40 475	27 027
Postage		82 164	35 360
Printing AMESA news		16 530	296
Printing LTM		94 124	-
Printing, stationery and photocopies		6 065	8 610
Publishing Pythagoras		111 215	106 385
Subscriptions		3 797	-
Subsidies refunded to regions		120 102	383 520
Telephone and fax		11 189	12 708
Travel reimbursements, flights and accommodation		63 130	117 051
		910 218	1 288 362
Loss for the year		(80 643)	(488 742)



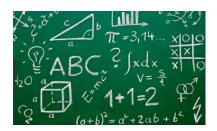
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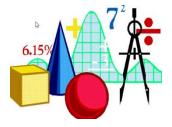
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AMESA Report of Grade 4 to 7 Mathematics Training 2018 for the Department of Basic Education: First Phase



JUNE 2018



Report compiled by Dr VG Govender (AMESA Executive Member and Former President)

1. Introduction

This report focuses on the first phase of Mathematics teacher training for grade 4-7 teachers in five South African Provinces. Negotiations for the training started in earnest in July 2017 when AMESA was asked by the DBE to come up with a proposal for training of Mathematics teachers in grades 4 to 7. This proposal was submitted and later approved in November 2017. Both AMESA and the office of Mr Philip Dikgomo (Director: Teacher Development: DBE) worked together on the implementation plan.

2. Provinces, Districts, Dates and Facilitators

Provinces	Districts	Dates	Facilitators
KwaZulu-Natal	Pinetown and Umlazi	9; 10; 17 March 2018	BB Goba; Z Ndlovu
Eastern Cape	Nelson Mandela Bay	16; 17; 24 March 2018	VG Govender; N
			Baart; ME Sokutu; CF
			Heradien
Limpopo	Capricorn	19; 20; 22 March 2018	M Setati; S Muthige
Free State	Fezile Daba	13; 14; 21 April 2018	JJ Gordon
	Motheo	20; 21 April 2018;	M Rabaza
		2 May 2018	
Western Cape	Metro Central	19; 26 May 2018;	G Powell; K Hassan
		2 June 2018	

3. Number of teachers trained

Provinces	Number of teachers trained	Comments
KwaZulu-Natal	94	More than 94 teachers attended the various sessions; not all were present for all three days
Eastern Cape	106	About 140 teachers in total attended a minimum of one day of training; 106 attended all three days
Limpopo	98	More than 98 teachers attended the various sessions; not all were present for all three days
Free State	94	More than 94 teachers attended the various sessions; not all were present for all three days
Western Cape	62	Remaining number to be done in term; training concluded in one District.
Total	454	

4. Modules/topics covered and SACE Points

Module 1: The nature of mathematics and its role in the development of children:

Module 2: Working with numbers, operations and relationships (including numeric and geometric patterns

Module 3: Geometry (Space and shape)

Module 4: Measurement in different contexts

Module 5: Simple data handing & probability

Module 6: Problem solving

The training programme comprised **15 SACE accredited points**. For participants to get these points, they should attend all three days of training and write both pre-and post-test.

5. Pre-and Post-test

Teachers participating in the programme wrote a pre-test prior to the commencement of the training and a post test at the end of the training. Due to certain local issues, not all teachers wrote both the pre and post-test..

6. Teacher evaluation of the training (Summary)

Classroom observations

- The teachers welcomed the sharing of mathematical ideas in groups with peers from other schools and whole class discussions.
- The teachers acknowledge the opportunities for critical thinking and good collegiality amongst members.
- However, some acknowledge that some teachers still battle "to teach basic concepts to learners who cannot grasp simple bonds and tables".
- All commented on the classroom setup to be conducive for individual and group participation. Others commented on the us e of resources, which they found to be stimulating and interesting.
- There was good communication in classroom; able to address our problems and address misconceptions
- The programme was well planned and no time was wasted
- Teachers they were able to listen and communicate with each other and they were actively engaged in the lessons; they learnt how to engage their learners in the various activities/
- Facilitators were very knowledgeable and well prepared; outstanding presentations
- There was good use of audio-visual technology

Highlights

- The teachers welcomed new strategies of teaching mathematics concepts.
- Some teachers enjoyed working with teachers from different grades from different schools. Others liked the materials used during the training.
- Besides teachers saying it was an excellent workshop and they enjoyed it, others pointed out that they learnt how to use diffeent resources like "flard" cards and creating maths games.
- Others pointed out that in number operations they learnt how to make it meaningful to learners.
- Given ways of working with learners with barriers; exercising patience
- How to support learners who are not on par with others
- Gained new knowledge and techniques; questions answered well by facilitators
- Develop mental process that enhance logical thinking
- Develop a love for mathematics (in the teacher and the learner)
- Good practical methods of working with the content
- Different strategies of problem solving
- How to link different topics
- Concepts easily explained
- The need for teachers to always be prepared and not to not take learners for granted

Challenges

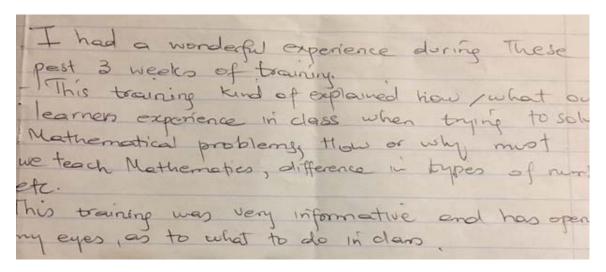
- Late arrival of the materials in KZN (only arrived at the end of the first day).
- The availability of the technology such as overhead projector, data projector, sound system and the board as a school hall was used for training in one province
- In some provinces, teachers complained about having to attend a workshop on a Saturday; they preferred weekdays.
- In one province, the notification of the workshop was received very late
- In some provinces, teachers were not notified about writing pre and post-tests and expressed surprise about having to write these tests.
- There were complaints about the early starting time 8:00 on Saturdays
- There were not enough manuals. As per agreement, only 100 manuals were printed per province. Thus, the manuals were allocated per school rather than per teacher (where numbers were high in provinces such as the Eastern Cape)
- Being able to introduce certain concepts in a meaningful manner
- Some teachers have been teaching for years and are "set in their ways"; need to change their attitudes and be patient
- Understanding and teaching Probability
- Big numbers of learners in classes at school cannot isolate "gifted" learners
- There is a need for more training; suitable Mathematics materials for primary school learners are lacking
- Some teachers are "forced" to teach mathematics despite not having a sufficient background to teach the subject.

Overall comments

- Well organised; build a positive self-esteem amongst teachers and learners
- Thanks for a good workshop; look forward to another one in future
- Need for more workshops and training
- Good hands on activities
- Workshops should be held at the beginning of each term
- Very impressive workshop learnt new strategies
- Exceptional workshop; informative and developmental
- I am new in Maths but since the Doc and Mrs engaged with us I am enlightened
- I have learnt a lot; I am willing to implement every strategy I have learnt
- I have become more confident
- Workshop was enjoyable and fruitful
- Changes the mind-set; teaching is not only for a salary

7. Scanned teacher comments

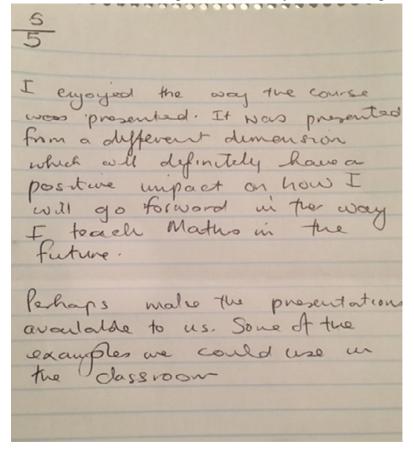
One of the provinces also scanned teachers' comments on the training. After each scanned extract a summary of key points are written:



- Wonderful experience during the training
- The training explained how/what learners experience in class when trying to solve mathematics problems
- The training was informative and opened my eyes as to what to do in class.

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- Presenters were very good and address teachers' needs in terms of how to teach mathematics in order to develop learner understanding
- Learnt a lot about various concepts, especially measurement; cleared misconceptions and made me feel positive about my understanding and teaching mathematics



- Enjoyed the course and the way it was presented
- Training will have a positive impact on my teaching
- Some of the examples could be used in class "as is"

Liked the way it was conducted. It was interesting and the lecturers were not monotonous. This course really helped improve my personal development as a teacher and I am some testain that itswith praticultance what I have learned will enhance my teaching as well as the learning in my classoom. It would have liked the course to be doinge and to allow for more practical activities.

- Liked the way the course was presented; lectures were not monotonous
- It really helped my development as a teacher; will enhance my teaching and the learning in my classroom.
- The training should allow for more practical activities

The coarse was very informative. I have been given you invigate on topics that I have been together and university. We were inclined to use The knowledge That we already have to think costically and us problem-solving thist the to answer questions that was posted to w. I also enjoyed being invited with the dicursions that were had.

I would have liked, by spend more time on certain gaps to be filled in my knowledge - base.

Rating: 4/5

- The course was very informative; given a new insight in mathematics teaching
- Good skills developed to solve problems
- Good discussions in class
- Would like more time to be spent on certain topics

8. Teachers in action (in pictures)



KwaZulu-Natal (Busy with pre-test)



KwaZulu- Natal (Showing their SACE certificates)



Eastern Cape (Class activity: venue 1)



Eastern Cape (Class activity: venue 2)



Western Cape (Practical class activity)



Western Cape (Practical group activity)

9. Recommendations

- Subject advisors and curriculum specialists need to follow up teachers who attended the training
- Once a teacher is registered, the teacher must attend for all days/sessions. They should not attend as they please they lose out a lot. Further, all must write both the pre-and post- tests.
- Clearly primary school mathematics teachers are need of support/training and this should come from Subject Advisors, Teacher Development institutes, NGOs, Subject Associations (such as AMESA) and Higher Education Institutions
- The language skills of mathematics teachers should improve as this play a significant part in the way lessons are delivered in Mathematics
- There should be more communication between grade 3 and 4 teachers within the school; grade 7 teachers need to know what is happening in the previous grades and vice versa
- Teachers must be able incorporate problem solving in their lessons evidence from the pre and test suggests that teachers are not familiar with problem solving type questions. This may mean that their learners are not exposed to such questions.
- Teachers need to know how to set questions of various cognitive levels (and not just basic questions)
- There should be two manuals available for training. One for the facilitator and one for the teachers/participants. This will ensure that the facilitator has all the answers and the methodology behind the content/concepts that needs to be trained.
- More time needs to be invested in the training of the young teachers who still have nore years to spend in the teaching field than old teachers. It was more evident that young teachers take the training workshop more serious than older teachers.

- The continued support and mutual relationship between the Association and Department is very important and vital to the development of mathematics teachers
- Further workshops are needed in the following sections: Data handling especially Probability; Problem solving and Geometry

10. Conclusion

AMESA is a key role player in Mathematics Education in South Africa and is thankful for the opportunity for assisting with the herculean task of training and supporting Grade 4-7 Mathematics teachers. In this phase of training, just over 450 teachers were trained. Phase two of this training will probably take place in August/September in the four remaining provinces (Northern Cape; North West, Gauteng and Mpumalanga). The remaining 50 teachers from the Western Cape (owing from the first phase) will also take place on suitable dates in August/September.

11. Future Cooperation with the DBE

AMESA is ideally placed to assist the DBE with training of Mathematics teachers throughout South Africa. Once phase two of the grade 4-7 training has been rolled out to the remaining four provinces in August/September 2018 there is a need to identify other districts in the provinces for possible training in early 2019.

The grade 9 Mathematics ANA results in 2013 to 2015 has shown that teachers in grades 8/9 need further support. Much of the current training initiatives in South Africa focus on the FET phase. AMESA is ideally placed to support teachers in grades 8 & 9. This could be done by arrangement (with the DBE) also in 2019.

Dr VG Govender

AMESA Coordinator (Grade 4 – 7 Mathematics training)

Obituary

It is with deepest regrets that we inform AMESA members of the passing away of Dr Helena Wessels. Helena contributed to the South African Mathematics Education Community in many ways. Helena was one of the Organising members together with Prof Dirk Wessels who hosted The International Community of Teachers of Mathematical Modelling and Applications (ICTMA 18) in July 2017 in Cape Town. Helena will be dearly missed.



It will be appreciated if we can receive information about AMESA members who have recently passed away in order to honour their hard work in AMESA. A brief description of their AMESA involvement and a recent photograph will be appreciated. Send the information to vicepresident@amesa.org.za.



MEMBERSHIP

Will members please note that should their postal address change, to **PLEASE** let the Membership Secretary know as soon as possible of the change so that the member can continue getting all the publications that they are entitled to as a paid up member.

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