

*casme*

*CENTRE FOR THE ADVANCEMENT OF SCIENCE AND MATHEMATICS EDUCATION*

# **Annual** **Report**

# 2016

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**Trust Registration No:** T623/85

**Non-Profit Organisation No:** 54-244 NPO A Section 18A

**Public Benefit Organisation No:** 930023209

## 1. INTRODUCTION AND BACKGROUND

The Centre for the Advancement of Science and Mathematics Education (CASME) is a non-profit, public benefit organisation working in the field of teacher development and support. The Centre was established in 1985 and continues to serve as a key resource in this critical field. CASME possesses a wealth of experience and expertise in teacher professional development, and they implement a range of interventions aimed at improving teaching and learning in Mathematics and Science. Since the establishment of the organisation, CASME's work has focused on providing support in under-resourced and rural schools. CASME prides itself in, and is committed to, its foundational values; humanity, resourcefulness, service excellence and accountability. These values underpin the work of the organisation and the ways in which the CASME staff interact with each other and outside communities and partners. The organisation works with stakeholders in government, corporate social investment projects, universities, national development initiatives, amongst others.

**Our Vision:** To be a world class centre for changing the lives of learners through quality and innovative Mathematics and Science education

**How we achieve this vision is articulated in our Mission:** To provide quality education development opportunities for Mathematics and Science teachers and learners in under-resourced and rural schools in South Africa

## 2. ACTING CEO'S REPORT

As each year draws to a close, it is a good time to pause and reflect. In 2016, CASME celebrated its 30-year commitment to its vision of changing learners lives through quality and innovative mathematics and science education. This vision remains founded on the unbending dedication to redressing educational inequality. At this milestone, CASME concluded a strategic planning phase that sets out key focus areas for the next three years. Our strategic focus includes a recommitment to our core purpose of teacher professional development. Within this focus is a renewed and expanded dedication to work at the primary schooling level, and a plan to deliver accredited programmes both as a South African Council for Educators (SACE) and an Education, Training and Development Practices Sector Education and Training Authority (ETDP SETA) accredited provider.

We have also identified Information and Communication Technologies (ICT) for teaching and learning, and we will be working towards taking our programmes online over the next few years.

The third focus area is in the increasingly important realm of monitoring, evaluation and research. We published the first in a series of Learning Briefs with more to follow as our internal Knowledge Management Working Group sets about turning our internal monitoring and evaluation data into meaningful lessons and reflections.

Finally, acknowledging the scale and depth of the crisis in education, we commit to further partnerships and collaboration in order to increase our impact in education. We are proud to have partnered with the National Education Collaboration Trust (NECT) on delivering a 9-day short course for high school teachers across 6 districts in 3 provinces.

As our partners in education, you will be pleased to know that in 2016 our engagement, through 830 unique activities, was not insignificant. In 2016, we made our mark internationally when we partnered with MAHLE Behr SA, the Ethekewini Municipality, and the University of KwaZulu-Natal (UKZN) in February to break the Guinness World Record for the Largest Practical Science Lesson, with over 2000 Grade 9 learners taking part. In November, we also took a team of Grade 7 learners from Umlazi to Lucknow India to compete in the Wizards at Mathematics Competition (WIZMIC) 2017 contest.

In partnership with East Coast Radio and MAHLE Behr SA, we also took to the airwaves for an enormously successful campaign to spark the interest of learners in science. The campaign took us to high schools from Clermont to Umlazi and reached millions of listeners throughout the province.

None of these successes would be possible without the continued support and commitment to our work given to us by our partners. We are grateful to have had generous contributions by our donor partners from the business sector, and independent trusts who continue to recognise the importance of quality education for the future of all South Africans.



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**Henrè Benson**  
Acting CEO: CASME

## 4. PROJECTS

In 2016, CASME saw a dramatic increase in the number of schools and learners that it reached through its various interventions. 73 417 learners in 1 240 schools participated in different CASME programmes in 2016. This reflects an increase in more than double the number of schools reached in 2015 (607), and almost triple the number of learners reached that same year (23 207). In addition, 3 518 teachers took part in CASME programmes; an impressive cohort that has remained consistently high since 2013.

The majority of learners involved in CASME activities in 2016 were in the GET Phase (24 082); as has been the trend over the past four years. The number of FET learners reached, however, remains high, and in 2016, 18 208 FET learners participated in CASME Science, Mathematics and English programmes. The Resource Centres continue to play a critical role in reaching both educators and learners, and in 2016, the Centres reached 31 127 learners. In 2016, the Resources Centres also supported 158 schools, and 3 518 teachers, both of which are higher than the figures reached in the last three years.

	Learners Reached				Teachers Reached				Schools Reached			
	2013	2014	2015	2016	2013	2014	2015	2016	2013	2014	2015	2016
<b>GET (Grade 1 to 9)</b>	6000	2786	4102	24082	473	1319	1891	1073	212	381	223	443
<b>FET (Grade 10 to 12)</b>	454	2105	1284	18208	1563	470	939	1477	372	102	276	639
<b>Resource Centres</b>	23193	22155	17821	31127	238	609	631	968	121	121	108	158
<b>TOTAL</b>	<b>29647</b>	<b>27046</b>	<b>23207</b>	<b>73417</b>	<b>2274</b>	<b>2398</b>	<b>3461</b>	<b>3518</b>	<b>705</b>	<b>604</b>	<b>607</b>	<b>1240</b>

### Some project highlights from 2016

Project Highlights 2016	
<b>January</b>	NECT Training of Trainers Session 2 in Joburg
	Visit from Prof Lamanauskas (Luthiania)
<b>February</b>	Mahle/CASME Guinness World Record Achievement (Worlds Largest Practical Science Lesson)
<b>March</b>	Education NGO Leadership Summit
	Partnership with UKZN's Science4U
<b>April</b>	Launch of the Pinetown Hub of the Computer Science Teacher's Association of South Africa
	eThekwini Municipality STEM Careers Symposium
<b>May</b>	AMESA KZN Provincial Conference
	East Coast Radio Big Walk
	Kick off of ELITS Lab Assistants Training
	Take a Girl Child to Work Day
<b>June</b>	Accreditation Workshop hosted by Sharma Bhikha
	NECT Certificate Ceremonies (Eastern Cape and Limpopo)
	AMESA National Conference
<b>July</b>	Inkanyezi Inter-School Club Competition
	EduWeek Conference
	CASME Networking Breakfast
	Kicked off East Coast Radio Live Broadcasts
<b>August</b>	Zenex Mini-Conference on High School Learner Support
	East Coast Live Broadcast
	Thami Mahlobo Accompanies Learners to East Coast Radio's Business Womens Breakfast

<b>September</b>	East Coast Live Broadcast
	Biblioref Book Distribution
	Etsheihle Primary School Fun Sports Day
	Grade 9 Careers and Subject Choice Expo
	Jika Imfundo Educator Fair
<b>October</b>	NECT Certificate Ceremony (Uthungulu)
	WIZMIC International Mathematics Competition
	Night at the Museum: Durban Natural Science Sleep Over
<b>November</b>	SAPREF Live Broadcast and Lab Handover (Menzi High School)
	Science2Go Olympiad
<b>December</b>	SAASTEC Conference
	CASME Staff Team Building

## 5. CASME RESOURCE CENTRES: RESOURCING FOR TEACHING AND LEARNING

CASME operates six Resources Centres across the KwaZulu-Natal Province. The Centres are located in Pinetown, Phungashe, Richards Bay, Msinga, Pietermaritzburg and Ndwedwe. Each Centre is an important amenity to teachers and learners in the surrounding area. Schools are able to affiliate themselves to the Centres, and through payment of a nominal annual fee, they are able to loan resources, including laboratory equipment and interactive teaching aides. Providing these resources is crucial given the high number of schools that do not have access to resources for practical work. In order to assist educators further, the Centres offer training workshops to demonstrate CAPS aligned, practical science lessons and experiments.

In 2016, only four of the six Resource Centres were fully operational. Despite having two Centres out of operation, the remaining Centres were still able to reach an impressive 31 127 learners, 3 518 teachers, and 158 schools. The Centres in Pinetown and Phungashe were particularly busy in 2016, with 57 and 56 affiliated schools respectively. In addition, a total of 644 Mathematics, Science and Life Science resources (Grades 6-12) were hired from the Centres, which demonstrates a growing demand for quality resources in schools. Learners are also able to directly benefit from the Resource Centres, as schools continue to hire the services of CASME facilitators to demonstrate practical lessons for their students.

**Schools Affiliated with CASME Resource Centres (2013 to 2016)**

YEAR	PINETOWN	PHUNGASHE	RICHARDS BAY	MSINGA	PIETERMARITZBURG	NDWEDWE	TOTAL
2013	29	17	34	26	15		121
2014	30	13	36	27	15		121
2015	30	10	35	15	13	5	108
2016	57	56	26	19			158
<b>Total</b>	<b>89</b>	<b>40</b>	<b>105</b>	<b>68</b>	<b>43</b>	<b>5</b>	<b>350</b>

**Resources used and loaned from CASME Resource Centres (2013 to 2016)**

Grade	Year 2013			Year 2014		Year 2015			Year 2016		
	Maths	Science	Life Science	Science	Life Science	Maths	Science	Life Science	Maths	Science	Life Science
Grade 6 - 8	11	91	39	13	25	10	12	12		39	5
Grade 9		1	12	32	44	12	13	29		21	7
Grade 10	8	107	105	47	84	6	65	66	2	90	52
Grade 11	5	56	94	64	104	19	79	72		91	26
Grade 12		122	88	97	139	20	120	119	1	247	63
<b>Total</b>	<b>24</b>	<b>377</b>	<b>338</b>	<b>253</b>	<b>396</b>	<b>67</b>	<b>289</b>	<b>298</b>	<b>3</b>	<b>488</b>	<b>153</b>
<b>Grand total</b>	<b>739</b>			<b>253</b>		<b>654</b>			<b>644</b>		

## 6. CHANGING LEARNERS LIVES

In 2016, CASME continued a number of learner tuition interventions for Grade 10 to 12 learners. These interventions have been highly successful. With the generous funding from Mahle and Cennergi, a combined total of 358 learners participated in learner tuition programmes. In addition to the tuition programmes, CASME also engaged in a range of other programmes and interventions aimed at supporting learners.

The Mahe sponsored Science2Go programme, for example, aims to provide rural and under-resourced schools with science and laboratory equipment to conduct CAPS aligned practical experiments. The initiative was designed to respond to the lack of scientific equipment in many marginalised schools. The Science2Go van thus travels to these schools, where CASME facilitators demonstrate practical experiments to learners. The programme works with Grades 7 to 12 learners and covers practical work in Physical Science and the Natural Sciences. In 2016, the Science2Go programme reached 3000 learners in the GET Phase and 994 learners in the FET Phase. As part of the programme, the participating learners at the Grade 7 level also took part in an inter-school Natural Science Olympiad, which was held in November 2016. The Olympiad, which is facilitated and organised by CASME, invited learners from 20 Science2Go schools, as well as learners from 20 schools that did not participate in the Science2Go programme. In total, 77 Grade 7 learners took part and the results revealed that the Science2Go learners outperformed their peers, which demonstrates the effectiveness of the programme.

In partnership with FNB and Biblionef, CASME also embarked on an exciting project to help assist in the establishment of reading corners in 17 primary schools in the Umlazi and Umgungundlovu Districts. The aim of this project was to create a corner in either a classroom, school library, or in a room within a school that could accommodate books, readers, charts, posters, visual stimuli and themes. In these corners, teachers were encouraged to open up the world of reading to their learners. A total of 3400 books were generously donated by Biblionef, and Biblionef staff also visited the schools to motivate teachers and learners, instilling new and innovative ways to inculcate a passion for reading, and helping staff and children understand how to take care of their newly acquired books.

Finally, CASME also assisted its partners in providing bursaries for learners. In partnership with Mahle, CASME was able to provide four successful learners from the tuition programme with bursaries to further their studies at a tertiary level in Science and English. In 2016, CASME also partnered with the Alan Orbis Foundation to hold learner recruitment workshops for their bursary programme, which targets high performing Grade 8 learners for awards. CASME assisted the Foundation by organising these workshops in the schools that CASME works in. Finally, it is with great delight that CASME staff were able to attend the graduation party of Pearl Khati. Pearl was part of the CASME learner tuition programme and she matriculated in 2010. This diligent young lady then went on to study Pharmacy and she completed her degree in 2015. Her graduation was held in 2016, and a party was organised for her at the Phungashe Resource Centre.

## 7. TEACHER PROFESSIONAL DEVELOPMENT

At the core of CASME's operational goal is a focus on teachers and their professional development. The development of teachers is critical to CASME's theory of change, which views improved teacher competence in curriculum delivery and teaching methodologies as one of the crucial components in improving learner performance in Mathematics and Science. In 2016, CASME facilitated various interventions designed to support educators, including content and pedagogy training workshops, curriculum management support, and in-school coaching and mentoring.

What emerged more clearly with the organisational strategic planning in 2016 was a need to focus more systematically on the professionalisation of our service offerings. Thus 2016 began a process of CASME beginning to look at issues of accreditation and certification, evaluating modes of teacher training and support (e.g. mentorship and coaching), and how the work of CASME relates to teacher associations and programmes set up for the purpose of promoting teacher networks. Although not new within the scope of CASME's engagement with teachers, the revised strategic plan looks at the issue of assessment (in particular self-

assessment) both as a tool for teachers in their teaching, and in determining opportunities for teachers' professional development.

In line with the focus of the strategic plan, CASME partnered with the National Education Collaboration Trust (NECT) to provide Mathematics and Science teachers with a SACE accredited training course in 2016. The 9-day course, which provided participants with 30PD points, reached a total of 400 teachers in 6 Districts across 3 Provinces. NECT subject coaches were responsible for facilitating the training workshops, and CASME provided additional support, as well as assistance with the development of training materials. Not only did teachers benefit from the course, but Subject Advisors also took part, which supported the initiative's goal to build capacity in each of the Districts.

In 2016, CASME also made great strides in establishing teacher communities of practice through the Inkanyezi/Zenex project. This project, which ran for eight years, culminated with a Mini-Conference on High School Learner Support. The conference provided a platform for stakeholders to share experiences and lessons learnt from the project implementation. One of the key lessons to emerge in terms of ensuring the sustainability of teacher professional development was to establish professional communities of practice. CASME has since begun to establish these communities in response to the conference recommendations.

## 8. DRIVING EFFECTIVENESS, IMPACT AND INNOVATION THROUGH ICTS IN EDUCATION

ICT for Education is an area rich with opportunity and one which has the potential to serve as an enabler for CASME to increase its impact both qualitatively and quantitatively through, for example, online learning and remote support. In 2016, CASME continued to integrate innovative ICTs into their training programmes.

Moving forward in the New Year, CASME's key focus will be on continuing the development of a Technology Pedagogical Content Knowledge (TPCK) model for teacher training and support. CASME has already taken an in principle decision to focus on Open Education Resources rather than proprietary equivalents and this now features in our programmes that seek to integrate ICT in the teaching and learning of Mathematics and Science.

## 9. KNOWLEDGE MANAGEMENT, MONITORING AND EVALUATION

In March 2016, CASME established a Knowledge Management Working Group tasked with reviewing and improving the organisation's monitoring and evaluation, reporting (MER), and knowledge management functions. The Knowledge Management Working Group is primarily tasked with establishing the foundation for achieving the Knowledge Management objectives of the Strategic Focus Area.

In July 2016, CASME produced its first learning brief, drawing lessons from the BHP Billiton funded project, which assisted a group of FET Maths and Physics educators to obtain a BSC degree from UKZN. The Learning Brief is the first of a series that will be developed to reflect on project implementation and impact and share information and learning with wider audiences.

In terms of strengthening CASME's MER capabilities, the Working Group has undertaken a process of revising and standardising all of the organisation's reporting templates. This process will help ensure the reliable collection of information and it will improve the ease of reporting. The Working Group have also been able to support the development of individual project logframes and M&E indicators. These M&E frameworks have been developed with project stakeholders, including funders, government partners, and CASME staff. Having a framework and set of indicators for CASME projects has greatly assisted in monitoring programme implementation, addressing emerging challenges, and with evaluating and reporting on programme impacts.

## 10. PARTNERSHIPS FOR COLLABORATION

Given the great challenges facing mathematics and science education in South Africa, it is necessary that different organisations and stakeholders work together in order to make a significant impact. CASME have a long tradition of meaningful collaboration with stakeholders across the education sector. In 2016, continued to strategically leverage partnerships, most notably with MAHLE Behr SA, to have a very successful year of marketing.

In February 2016, CASME undertook the Guinness World Record for the Largest Practical Science Lesson. This not only generated excellent publicity but also cemented our relationship with the Ethekewini Municipality. This further led to our Primary Mathematics Facilitator being invited to put together a team to contest the WIZMIC Competition in Lucknow, India in early November from which the CASME team returned with 1 medal.

On the back of our successful second year of implementing our mobile resource centre under the Science2Go brand, CASME also teamed up with East Coast Radio for a series of early morning broadcasts from local high schools. A total of four broadcasts were undertaken generating significant exposure for CASME, which resulted in the renewal of interest by some past funders and the introduction of new funders. In 2017, CASME intends to further cement existing partnerships as well as establish new networks and connections.

## 11. INNOVATION AND SUSTAINABILITY

During the strategic review process that was undertaken in 2016, the theme 'Innovation and Sustainability' was identified as a cross cutting theme relevant to all four strategic focus areas. The focus of this cross cutting theme is to find innovative ways in which the sustainability of CASME projects and funding can be assured. Within each focus areas, there are opportunities for CASME to demonstrate leadership and generate second stream revenue, which will assist in decreasing donor dependency. This theme is prominent in the organisational 3-year plan (2017-2019), where opportunities will be identified and put into action.

## 12. BOARD OF TRUSTEES AND STAFF

### BOARD OF TRUSTEES:

**Prof John David Volmink (Chairperson):** Prof Volmink serves as the Chair of Umalusi, the Council for Quality in General and Further Education and Training. Prof Volmink's association with CASME began when he worked as the Director from 1991 to 1996, after returning from teaching positions in Botswana and Cornell University. He has served on several on the Ministerial Commissions and Task Teams on Education, as well as on the Boards of education NGOs such as the Media in Education Trust, Africa Ignite, and the Environment and Language Education Trust, amongst others.

**Prof Renuka Vithal:** Prof Vithal is the Deputy Vice Chancellor: Teaching and Learning at University of KwaZulu-Natal (UKZN), having previously held the position of Dean of the Faculty of Education. A full professor in Mathematics Education, she has published widely in the social, political and cultural dimensions of mathematics education and in mathematics education research from a critical perspective. Currently, Prof Vithal is Chairing an International Commission for Mathematical Instruction (ICMI) Study on "School Mathematics Curriculum Reforms: Challenges and Changes", with Prof Shimizu (University of Tsukuba, Japan). Prof Vithal has also served as an advisor on Ministerial Committees and Task Teams on Education.

**Dr Shamrita Bhikha:** Former Chief Director: Accreditation and Quality Assurance in the National School of Government (8 years). Dr Bhikha started her career as a high school teacher. She served as a lecturer, an Education Specialist, Deputy Director responsible for teacher education in the then Department of Education

at national level, and as the Director of Standards Setting and Development in the South African Qualifications Authority (SAQA). Dr Bhikha serves on the Board of the SAQA and is a member of the Qualifications and Standards Committee, a subcommittee of SAQA. She is now an independent consultant in the field of education, training and development.

**Mr Magnate Ntombela:** Mr Magnate Ntombela held the position of KwaZulu-Natal Regional Director at the University of South Africa (UNISA) from 1999 to 2016. Prior to that he served as Director of the Centre for the Advancement Science and Mathematics Education (CASME). Before joining CASME, Mr Ntombela was Deputy Director of the Science Education Project (SEP). Mr Ntombela continues to serve on a number of advisory boards of 'Not for Profit' Organizations involved in education.

**Mr Sifiso Mncube:** Divisional Procurement Manager at Foskor. Mr Mncube started his association with CASME whilst still working as a Development Officer at the University of KwaZulu-Natal (UKZN) Foundation. Following this, he took up a position as the Black Economic Empowerment and Supplier Development Manager at Foskor.

**Prof Herbert Khuzwayo:** Director: School of Science & Mathematics Education at the University of the Western Cape (UWC). Before joining UWC, Prof Khuzwayo was the Head of Mathematics, Science and Technology Education at the University of Zululand. Prof Khuzwayo completed his PhD through Aalborg University in Denmark. He is a former Fulbright Scholar. Prof Khuzwayo has participated in a number of research studies in the field of Mathematics Education, such as the Learners' Perspective Study.

**Prof Sibusiso Moyo:** Prof Moyo obtained her doctorate in Mathematics from the former University of Natal, Durban, and she holds a Masters in Tertiary Education Management from the LH Martin Institute, University of Melbourne Australia. She is currently the Director for Research and Postgraduate Support at the Durban University of Technology (DUT), as well as the Acting Deputy Vice-Chancellor: Engagement. Outside of DUT, Prof Moyo has also served as a guest editor of the Mathematical Methods in the Applied Sciences Journal (published by John Wiley & Sons) and the Journal of Engineering Mathematics (published by Springer). She has published widely in the Mathematical Sciences and continues to supervise and mentor Masters and Doctoral students.

#### MANAGEMENT STAFF

**Mr Henre Benson:** Acting CEO

**Ms Fynall van Rooy:** Office Manager

**Mr Sizwe Khumalo:** Project Administrator and Resource Centre Manager

**Mr Themba Ndaba:** Management Committee Staff Representative

#### PROGRAMME STAFF

Mr Sandile Hlongwane

Mr Themba Leslie Ndaba

Mrs Nokuthula Xulu

Mr Mokhulu Matshika

Mrs Thami Mahlobo

#### SUPPORT STAFF

Mr Zamokuhle Nxumalo: Pietermaritzburg Centre

Miss Bongiwé Buthelezi: Msinga Centre

Mr Linda Memela: Phungashe Centre

Miss Sinenhlanhla Xulu: Richards Bay Centre

Miss Thandiwe Nzimande: Edgewood Centre

Mr Ngcino Luthuli: Phungashe

## 13. INDEPENDENT AUDITOR'S REPORT

To the trustees of Centre For The Advancement Of Science And Mathematics Education Trust

### **Opinion**

We have audited the Annual Financial Statements of Centre For The Advancement Of Science And Mathematics Education Trust set out on pages 7 to 17, which comprise the Statement of Financial Position as at 31 December 2016, and the Statement of Comprehensive Income, Statement of Changes in Funds and Statement of Cash Flows for the year then ended, and notes to the Annual Financial Statements, including a summary of significant accounting policies.

In our opinion, the Annual Financial Statements present fairly, in all material respects, the financial position of Centre For The Advancement Of Science And Mathematics Education Trust as at 31 December 2016, and its financial performance and cash flows for the year then ended in accordance with the International Financial Reporting Standard for Small and Medium-sized Entities.

### **Basis for opinion**

We conducted our audit in accordance with International Standards on Auditing. Our responsibilities under those standards are further described in the Auditor's Responsibilities for the Audit of the Annual Financial Statements section of our report. We are independent of the trust in accordance with the Independent Regulatory Board for Auditors code of Professional Conduct for Registered Auditors (IRBA Code) and other independence requirements applicable to performing audits of financial statements in South Africa. We have fulfilled our ethical responsibilities in accordance with the IRBA Code and in accordance with other ethical requirements applicable to performing audits in South Africa. The IRBA Code is consistent with the International Ethics Standards Board for Accountants Code of Ethics for Professional Accountants (Parts A and B). We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

### **Other information**

The trustees are responsible for the other information. The other information comprises the Trustees' Report which we obtained prior to the date of this report. Other information does not include the Annual Financial Statements and our auditor's report thereon.

Our opinion on the Annual Financial Statements does not cover the other information and we do not express an audit opinion or any form of assurance conclusion thereon.

In connection with our audit of the Annual Financial Statements, our responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the Annual Financial Statements or our knowledge obtained in the audit, or otherwise appears to be materially misstated. If, based on the work we have performed, we conclude that there is a material misstatement of this information, we are required to report that fact. We have nothing to report in this regard.

### **Responsibilities of the trustees for the Annual Financial Statements**

The trustees are responsible for the preparation and fair presentation of the Annual Financial Statements in accordance with the International Financial Reporting Standard for Small and Medium-sized Entities, and for such internal control as the trustees determine is necessary to enable the preparation of Annual Financial Statements that are free from material misstatements, whether due to fraud or error.

In preparing the Annual Financial Statements, the trustees are responsible for assessing the trust's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless the trustees either intend the trust to cease operations, or have no realistic alternative but to do so.

## **Auditor's responsibilities for the audit of the Annual Financial Statements**

Our objectives are to obtain reasonable assurance about whether the Annual Financial Statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but it is not a guarantee that an audit conducted in accordance with International Standards on Auditing will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users on the basis of these Annual Financial Statements.

As part of an audit in accordance with International Standards on Auditing, we exercise professional judgement and maintain professional scepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the Annual Financial Statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting in error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override on internal control.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the trust's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by the trustees.
- Conclude on the appropriateness of the trustees use of the going concern basis of accounting and based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the trust's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the Annual Financial Statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the trust to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the Annual Financial Statements, including the disclosures, and whether the Annual Financial Statements represent the underlying transactions and event in a manner that achieves fair presentation.

We communicate to the trustees regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

**C&S Chartered Accountants Inc.**

**Registered Auditors**

**Per: DC Saville  
Director**

**Suite 9**

**3 Warwick Place**

**Pinetown  
3610**

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**17 May 2017**

### 13.1 TRUSTEES' RESPONSIBILITIES AND APPROVAL

The trustees are required to maintain adequate accounting records and are responsible for the content and integrity of the annual financial statements and related financial information included in this report. It is their responsibility to ensure that the annual financial statements fairly present the state of affairs of the trust as at the end of the financial year and the results of its operations and cash flows for the period then ended, in conformity with the International Financial Reporting Standard for Small and Medium-sized Entities. The external auditor's are engaged to express an independent opinion on the annual financial statements.

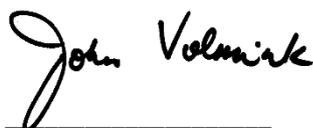
The annual financial statements are prepared in accordance with the International Financial Reporting Standard for Small and Medium-sized Entities and are based upon appropriate accounting policies consistently applied and supported by reasonable and prudent judgments and estimates.

The trustees acknowledge that they are ultimately responsible for the system of internal financial control established by the trust and place considerable importance on maintaining a strong control environment. To enable the trustees to meet these responsibilities, the trustees set standards for internal control aimed at reducing the risk of error or loss in a cost effective manner. The standards include the proper delegation of responsibilities within a clearly defined framework, effective accounting procedures and adequate segregation of duties to ensure an acceptable level of risk. These controls are monitored throughout the trust and all employees are required to maintain the highest ethical standards in ensuring the trust's business is conducted in a manner that in all reasonable circumstances is above reproach. The focus of risk management in the trust is on identifying, assessing, managing and monitoring all known forms of risk across the trust. While operating risk cannot be fully eliminated, the trust endeavours to minimise it by ensuring that appropriate infrastructure, controls, systems and ethical behaviour are applied and managed within predetermined procedures and constraints.

The trustees are of the opinion, based on the information and explanations given by management, that the system of internal control provides reasonable assurance that the financial records may be relied on for the preparation of the annual financial statements. However, any system of internal financial control can provide only reasonable, and not absolute, assurance against material misstatement or loss.

The external auditor's are responsible for independently auditing and reporting on the trust's annual financial statements. The annual financial statements have been examined by the trust's external auditor's and their report is presented on page 4.

The annual financial statements set out on pages 6 to 17, which have been prepared on the going concern basis, were approved by the board on 17 May 2017 and were signed on its behalf by:



**Prof J.D Volmink (Chairperson)**

## 13.2 TRUSTEES' REPORT

The trustees submit their report for the year ended 31 December 2016.

### **Review of activities**

#### **Main business and operations**

The object of the Trust shall be to develop and provide:

- continuing teacher professional development programmes and opportunities;
- school based support to advance the teaching and learning of mathematics, science and technology education; and
- access to quality educational resources in disadvantaged, under resourced and rural schools in South Africa.

#### **Going concern**

The annual financial statements have been prepared on the basis of accounting policies applicable to a going concern. This basis presumes that funds will be available to finance future operations and that the realisation of assets and settlement of liabilities, contingent obligations and commitments will occur in the ordinary course of business.

#### **Events after the reporting period**

The trustees are not aware of any matter or circumstance arising since the end of the financial year that has a material impact on the annual financial statements.

#### **Trustees**

The trustees during the year and to the date of this report are as follows:

Prof J.D. Volmink  
Dr S.D. Bhikha  
Mr S.G. Mncube  
Mr G.M. Ntombela  
Prof R. Vithal  
Dr B.H. Khuzwayo  
Prof S. Moyo

#### **Auditor's**

C&S Chartered Accountants Inc. will continue in office for the next financial period.

**Statement of Financial Position as at 31 December 2016**

	<u>2016</u>	<u>2015</u>
<b>Assets</b>		
Non-Current Assets		
Property, plant and equipment	4 195 467	4 268 290
<b>Current Assets</b>		
Trade and other receivables	253 033	1 332 779
Cash and cash equivalents	3 741 008	1 741 868
	<b>3 994 041</b>	<b>3 074 647</b>
<b>Total Assets</b>	<b>8 189 508</b>	<b>7 342 937</b>
<b>Funds and Liabilities</b>		
<b>Funds and reserves</b>		
Accumulated surplus	5 516 325	6 178 161
<b>Liabilities</b>		
Current Liabilities		
Trade and other payables	198 288	387 701
Income received in advance	2 286 240	606 492
Provision for leave pay	188 655	170 583
	<b>2 673 183</b>	<b>1 164 776</b>
<b>Total Funds and Liabilities</b>	<b>8 189 508</b>	<b>7 342 937</b>

**Statement of Comprehensive Income**

<b>Revenue</b>		
Project income	7 604 054	9 359 431
<b>Other income</b>		
Donations received	9 080	16 411
Investment revenue	71 089	61 367
Other operating income	51 998	27 839
Sundry income	17 882	791 305
	150 049	896 992
<b>Expenses (Refer to page 9)</b>	<b>(8 415 774)</b>	<b>(8 671 918)</b>
<b>Operating surplus (deficit)</b>	<b>(661 671)</b>	<b>1 584 435</b>
Finance costs	(165)	(597)
<b>(Deficit) surplus for the year</b>	<b>(661 836)</b>	<b>1 583 838</b>
Other comprehensive income	-	-
<b>Total comprehensive (loss) income for the year</b>	<b>(661 836)</b>	<b>1 583 838</b>

**Statement of Cash Flows**

	<u>2016</u>	<u>2015</u>
<b>Cash flows from operating activities</b>		
Cash receipts	9 981 440	8 838 959
Cash payments	(7 916 247)	(7 709 927)
Cash generated from operations	2 065 193	1 129 032
Interest income	71 089	61 367
Finance costs	(165)	(597)
<b>Net cash from operating activities</b>	<b>2 136 117</b>	<b>1 189 802</b>
<b>Cash flows from investing activities</b>		
Purchase of property, plant and equipment	(136 977)	(37 352)
<b>Cash flows from financing activities</b>		
<b>Total cash movement for the year</b>	<b>1 999 140</b>	<b>1 152 450</b>
Cash at the beginning of the year	1 741 868	589 418
<b>Total cash at end of the year</b>	<b>3 741 008</b>	<b>1 741 868</b>

Detailed financial statements including notes and reconciliation of property, plant and equipment, project income and detailed expenditure are available on request.

## 14. FUNDERS AND PARTNERS

As 2016 comes to a close, we would like to take this opportunity to express our heartfelt thanks to all of our partners and funders. There is still an enormous amount of work to do in South African schools to ensure that each and every child is afforded quality education and a solid foundation to reach their dreams. Without the ongoing support and commitment from our partners, CASME would not have been able to achieve the successes that it has in 2016. We thank all of you and we look forward to strengthening our relationships in the future.

- Anglo American Chairmans Fund
- Cennergi
- Chevron
- EduTrade
- Education, Training and Development Practices Sector Education and Training Authority (ETDP SETA)
- First National Bank
- Zenex Foundation in partnership with BANKSeta and the Michael and Susan Dell Foundation
- Mahle Behr SA
- National Education Collaboration Trust
- Natal Portland Cement/Intercement
- Programme to Improve Learning Outcomes
- Sibaya Community Trust
- Spring Light Gas