

e-Newsletter

A Connected Commonwealth

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Editorial

CASTME links science, technology, engineering and mathematics (STEM) educators across the Commonwealth. It has a UK-based board of trustees, with regional groups in Africa, Asia, and Europe. There are three ways in which active individuals can work with CASTME and its Trustees:

- 1 **Advisors** who provide advice to the Trustees on activities and policy
- 2 **Associates** who undertake activities in the name of CASTME, with the approval of the Trustees
- 3 **Affiliates** are those interested in CASTME's work and receive the newsletter.

Data Protection – With the introduction of New Data-protection rules, the Editor is putting an important item about this at the end of this Newsletter so that you may continue to receive it.

The CASTME Website

www.castme.online is up and running. CASTME is indebted to Hi Impact and its staff for facilitating the working of the website and making some basic amendments. Dr Bala Chandra, CASTME Trustee and Vice-Chairman, updates our website along with CASTME information in the Cameroon Journal of Studies in the Commonwealth, which he edits.

We are exceedingly grateful for this service.

The Engineering Education Conundrum – Defining a Path for the Future



Professor Robin Clark

Professor Robin Clark of WMG, University of Warwick provided the biennial Chisman Memorial Lecture on Tuesday 30th April 2019. It was held in the Gulbenkian Room of International Students House in Great Portland Street, London. Professor Clark reflected on the education of engineers at all levels and all age groups, explored some of the major achievements of recent years and asked the question 'What next for Engineering Education?' He made it clear that knowledge and understanding through Science, Technology, Engineering and Mathematics (STEM) education are essential for successful engineering capability, as is the development and application of problem-solving skills through experience: through such activity as work-based learning through the application of the skill-sets necessary for a professional engineer to succeed, active learning and the development of capability, leading to highly competent engineers. The use of creative and technological approaches and the resulting long-term value to business and society, Professor Clark suggested, would enable our next steps to potentially have a profound effect on the future of our world. **pdf copies of Robin's presentation are on www.castme.online**

CASTME regularly commemorates the late Dennis Chisman, who died in 2008, with a prestigious Memorial Lecture. His wife, as always, was invited and played an active part in our discussions that evening. He was an inspirational founding member of both CASTME and ICASE (International Association of Associations for Science Education) and also its President.

Dennis Chisman:



CASTME People:

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Denise Balmer, Rachel Morgan & Dr Birendra Singh

Groups

Mauritius: The Rajiv Science Centre &
The Society of Biology (Chair Ellora Dhunoo)
Bangladesh: Mothers Talking Everyday Science
Antigua: Mothers Group (leader Edrys Joseph)
Mauritius: Aeronautical Society (Captain Richard Twomey)
Malta: National Council for Women

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For 2019 the theme has been “A Connected Commonwealth”. to encourage the protection of our natural environment, cooperation on trade and to encourage inclusive economic empowerment for all people - particularly women, youth and marginalised communities.

Each year a theme is chosen for Commonwealth Day to mark the day and to help to guide activities by Commonwealth organisations throughout the year.

The theme is proposed by representatives of the Commonwealth civil society organisations to the Secretary-General of the Commonwealth, and presented for approval by Her Majesty the Queen as Head of the Commonwealth. It guides activities through the year, including events to

mark Commonwealth Day which, since 1977, has been celebrated annually on the second Monday in March. In the previous year, the Chairman of CASTME, Sue Dale Tunnicliffe, was invited to Buckingham Palace for the opening of CHOGM by HM Queen Elizabeth and the reception and lunch with Foreign Ministers and Prime Ministers. These were the special CHOGM events for Non-Governmental Organisations (NGOs). A great deal of interest in early years and STEM was shown by Prime Ministers and officials from many countries. Inquiries about membership of CASTME, for individuals themselves, and regions of the Commonwealth were made, as were questions about running CASTME workshops and other events.

The Commonwealth offers opportunities for the people, governments and institutions of this richly diverse worldwide family of nations to connect and cooperate at many levels through far-reaching and deep-rooted networks of friendship and goodwill. These are being celebrated in the 2019 theme ‘A Connected Commonwealth’. The values and principles around which the 53 member countries and their 2.4 billion people connect are brought together in the Commonwealth Charter.

This year people in Commonwealth countries in Africa, Asia, the Caribbean and Americas, the Pacific and Europe observed the day with a range of activities, including faith and civic gatherings, debates, school assemblies, flag raising ceremonies, street parties and cultural events.

CASTME Awards Presentation on Commonwealth Day in Malta

On Commonwealth Day, Mrs Michelle Muscat, the wife of the Prime Minister of Malta, presented the Findel CASTME Award to Mrs Doris Bingley, who is European Head of the Commonwealth Women’s Network and Honorary Secretary of the National Council of Women Malta. at the NCW Learning Centre in Blata-I-Bajda, Malta. The Award was to the National Council of Women Malta for the Talking Science STEM Summer Activities which were held at the NCW Centre in 2017 and 2018 for pre-schoolers and toddlers accompanied by their parents, grandparents and carers. Dr Lady Sue Dale Tunnicliffe and Kathleen Nugent attended the ceremony. Lady Tunnicliffe spoke about the CASTME Early Years

2020: “Delivering A Common Future: Connecting, Innovating, Transforming” is the theme for the next Commonwealth Heads of Government Meeting (CHOGM) which will be held on 22nd June in Rwanda. It has been officially launched in a video message from the President of Rwanda, Paul Kagame and the Commonwealth Secretary-General, Patricia Scotland. It will be held at the Kigali Convention Centre during the week starting 22 June. Leaders from all 53 Commonwealth countries are expected to attend. Five sub-themes have been identified for discussion: Governance and Rule of Law, ICT and Innovation, Youth, Environment, and Trade.

Past themes

2018	Towards a Common Future
2017	A peace-building Commonwealth
2016	An Inclusive Commonwealth
2015	A Young Commonwealth
2014	Team Commonwealth
2013	Opportunity through Enterprise
2012	Connecting Cultures
2011	Women as Agents of Change
2010	Science, Technology and Society

India by Sue Dale Tunnicliffe

We very much welcome Dr Birendra Singh as a CASTME Adviser.

He and his brothers have founded and run a primary school in Eastern India in the village where he grew up: the school is focusing on everyday science which is very pertinent to CASTME’s commonwealth initiative. He has a doctorate on assessment, was formerly a science inspector in London and worked closely with Dennis Chisman



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The Findel CASTME Education Awards

Two Awards are made by Findel: The Findel CASTME Education Award and the Findel CASTME Community Award:

The Education Award

Submitted by: **Rajesh Bhaskar Patil** on behalf of Saraswati Junior College, Khamgaon, Maharashtra, India:
“**Creating indigenous learning resources through Environmental Project work using inexpensive and easily available material in collaboration with teachers and students of Saraswati Junior College, Paras**”

Saraswati Junior College receives a £300 Voucher for equipment and educational resources from the FINDEL Philip Harris International Catalogue.

The Community Award

There were two entries that were awarded this prize:

1. Submitted by **Dr Lalit Kishore** of Jaipur, India on behalf of **Disha: A Resource Centre for Multiple Disabilities**
“**Adjusting Science Instruction to Needs of Children with Specific Learning Disabilities:
Designing and Clinical Trialling of Select Lessons for Standardization of Visual Support Material**”
2. Submitted by **Rina Chak, Sreepur Village Bangladesh**
“**Mothers Talking Everyday Science**”

Each Centre receives a £50 Voucher for equipment and educational resources from the Hope Education International Primary Catalogue

Mauritius: BUILDING a FUTURE for our CHILDREN - *Synopsis of article by Dick Twomey*

There are many organizations in Mauritius which take part in the showcasing of careers known as “National Science Week”, which is organized annually by the Rajiv Gandhi Science Centre in Bell Village. Among the groups taking part is the Aeronautical of Mauritius (AeSM), better known in the island as the technical partner of RGSC for the very popular annual competition to “design, build and fly a small model glider”.

The aero society has developed a series of other extra-curricular educational activities for our Mauritian youngsters, which are also designed to help them to move forward into the future. This is by forming a young people’s section called the “Junior Aviators”, introduced with a view to satisfying the fast-growing interest of the millennium generation in all branches of Aviation and even of Space flight. Since this STEM-encouraging scheme was first launched on the 22nd July 2017, applications to join the group (from secondary school students, the target audience) have risen rapidly, and new requests continue to flow in every week. The idea, which received immediate support from many parents and teachers across the country – and also immediately welcomed by the Ministry of Education – consists of offering these motivated youngsters group-visits to places of aeronautical interest in Mauritius, listening to their dreams, answering their questions and sharing with them our own experiences – with all this taking place outside the more disciplined atmosphere of the classroom.

At the introductory meeting of the “JAs” Children were asked what in particular they would like to see or learn, and a list emerged which is being worked through and added to. Visits are normally arranged in the school holiday periods, and to date the children have made day-trips to the following venues:

- 2017: Mon Loisir airfield at Belleview Maurel, base for several Microlight private aircraft and for the Austral Skydivers;
- 2018: The Headquarters of the Maritime Air Squadron of the Coastguard and Police Helicopter Unit;
The Air Traffic Control “Area Control Centre” of the Department of Civil Aviation;
St Martin field, for a demonstration of internal-combustion and jet-engine model aircraft flying;
Visit to see an Air Mauritius Airbus A350 in the MK Hangars at SSRIA;
- 2019: Model Glider Competition Finals at Reduit;
Celebration, at RGSC, of the first human landing on the Moon in 1969.



ASTME

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When you ask students the question “Who wants to be a pilot/engineer/airline cabin crew member/rocket scientist or astronaut?”, many hands go up – but rather tentatively, because “we don’t know how we can prepare for these careers”, say the children. Those of us who are educators and curriculum specialists have some serious work to do to identify the jobs of the future and to build clear pathways to reach them. Fortunately, there will soon be a lot of employment opportunities in these and other STEM-based disciplines, exemplified by the current unprecedented worldwide growth in high-technology fields like those of Aviation, Aeronautics and Astronautics. In Mauritius, if we can come up with the right amount of foresight and political will, a new economic pillar is ready to replace King Sugar and the ailing Textiles industry too, in a major change that will be vital for our future economic performance.



Glider Questions for Dick

The AeSM together with the Rajiv Gandhi Science Centre, the Ministry of Education, and other societies are able to promote the choice of scientific and technological subjects that will give entry to these careers. From our “air-minded” standpoint we are recommending a national aviation investment plan for “Aviation and Aerospace Mauritius”.

Note: *Captain Richard “Dick” Twomey is a retired Air Mauritius flight operations director, general manager with British Airways, and co-founder of the Aeronautical Society of Mauritius.*

Latest photographs from “mothers talking everyday science” in Bangladesh:



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Editor’s Note: For the next edition of this newsletter please send articles to Jonathan Ling at:

j.g.ling@btinternet.com by 31st March 2020.

CASTME website: [http:// www.castme.online](http://www.castme.online)

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