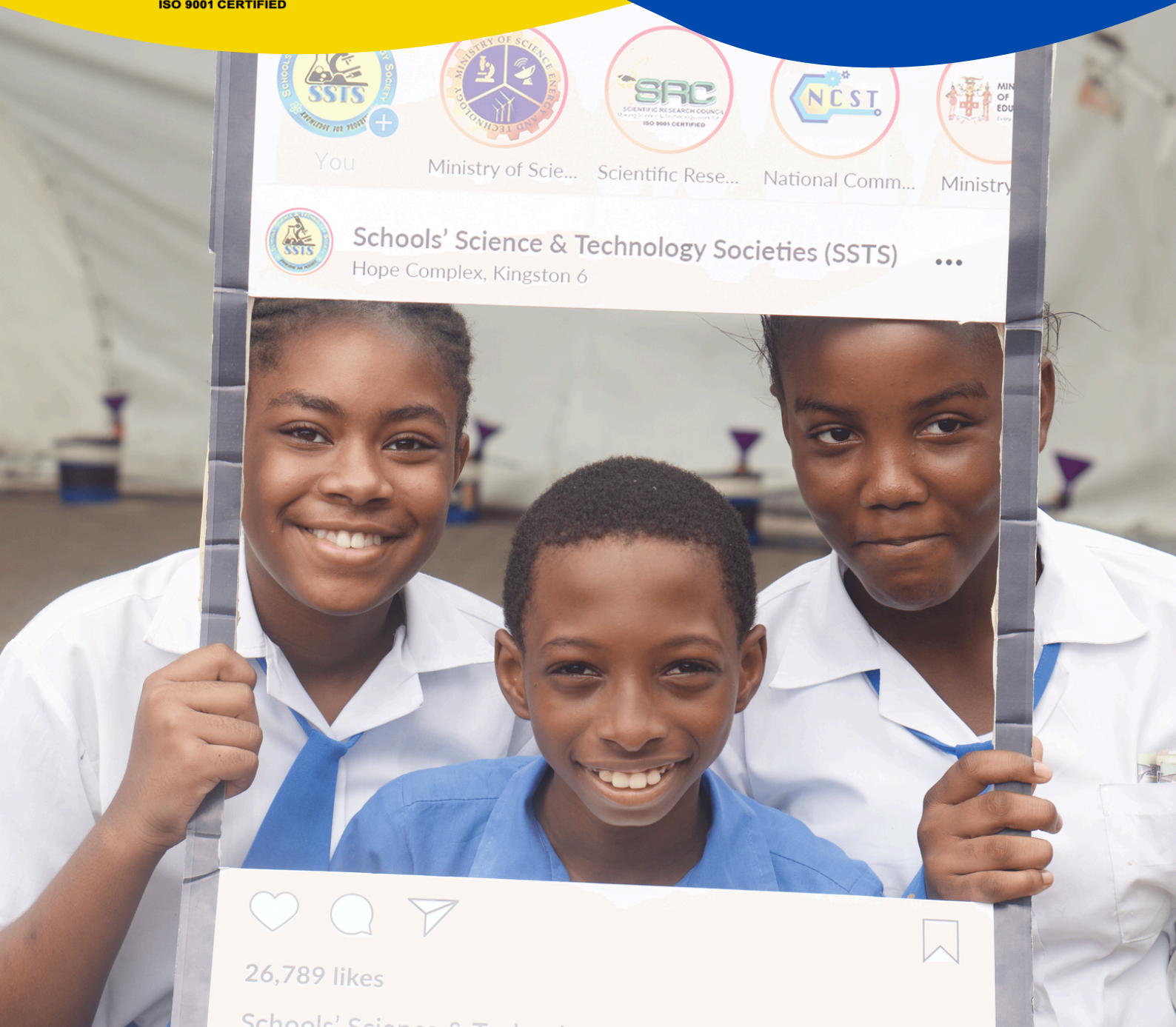


SCHOOLS' SCIENCE & TECHNOLOGY SOCIETIES (SSTS)

# YEAR IN REVIEW

E-NEWSLETTER 2023/2024







## AN IMPACTFUL YEAR FILLED WITH STRIDES!

The Science and Technology Education Unit (STEU) of the Scientific Research Council (SRC) serves the Jamaican youths through its diverse competitions and programmes aimed at improving the relatability of STEM concepts for better classroom receptiveness which should in turn produce the lasting impact necessary to effect a STEM-focused society.

The Unit's members operate with a strategy that employs passion for promoting STEM and its career opportunities and also encouraging critical thinking, innovation and problem-solving skills in students.

The main goal of the Unit is to demystify STEM through stimulating and focused activities that empower students to think critically and participate actively in these pertinent discussions. The competitions, which are open to primary, secondary, and tertiary schools are designed with thought-provoking themes and quests that challenge students and teachers to be innovative and push beyond normal thought.

As enthusiastic as the team is to direct the attention of students toward the dynamic happenings within STEM, the aim is to improve the attractiveness of STEM careers and to encourage exploration of these fields in schools. Therefore, allowing for the transition from the traditional curbs that bordered the definition of Science and Technology and consequently expose students to the options available to them within these areas.

Hosted are programmes such as the Conversations in Science series, the Essay, Oratory, Performing Arts and Poster Competition, STEM Ambassador Programme, Summer Attachment Programme, STEM Virtual Experiment series, Young Inventors and Innovators Competition and CSEC Workshops. Through which, the STEU aims to multiply the impact and reach of the Scientific Research Council by enabling and enriching the voices of future generations through the mobilization and expansion of Schools' Science and Technology Societies in schools toward a STEM-oriented future.



## Conversations in Science Series for males was a success!



The 8th staging of the Conversations in Science Series was held at the Montego Bay Convention Centre, and themed "Zero Male Suicide: Men's Life Matter" delivered an exciting and thought-provoking panel discussion, just after an elucidating speech from guest speaker Dr. Donovan A. Thomas, Founder and President of Choose Life International (CLI).

Designed to bring experts, advocates, students, and the public together in discussion, the Conversations in Science series did just that by unravelling mental health through an inspection with the lens of science. Dr. Thomas engaged the students, bringing to the forefront a very important and timely topic from the unique perspective of Science. Students were engaged in a comprehensive discussion about male suicide and mental health. This theme reflected a growing recognition that male mental health and suicide prevention deserve attention and concerted efforts to reduce the incidence of male suicides to zero. It addressed the distinct challenges faced by men and how the biological man processes these challenges. Presented was a platform aimed at effecting

open and deep dialogue with justifiable content, awareness, and action.

The panel discussion led by Manager of Human Resources at the SRC, Mr. Kirk Johnson, included psychologist Dr. Jordan Eaton, STEM ambassador and 2023 Rhodes Scholar, Mr. Nile Anderson, STEM ambassadors Mr. Hubert Manning and Mr. Damani Brown, and entrepreneur and HOD at Cornwall College, Richardo Smith. Students, particularly the males in attendance were ardently tuned in to the discussion, leaving with strategies on properly identifying and dealing mental health struggles.



# SERVING SCHOOLS' SCIENCE & TECHNOLOGY SOCIETIES (SSTS) FROM ONE PARISH TO THE NEXT



The Unit, which included STEM ambassadors visited 17 schools across the island inclusive of primary, secondary and tertiary institutions. Amongst the schools visited were the Grace Kennedy STEM centre, Manning's School, St. Elizabeth Technical High, St. Hilda's Diocesan High, Naggohead Primary, Excelsior Community College and Portmore Community College. Notably for the financial year, School's Science & Technology Societies were launched in 49 new schools with continuance in 59 schools.

The Science and Technology Education Unit supports the Schools' Science and Technology Societies and schools in general by attending SSTS launches upon request, STEM days, career days, research days, science fairs and expositions amongst other requests. The opportunity to launch the STEM Ambassador Programme is also utilized as the Ambassadors are integral to the execution and success of all our projects.



## MESSAGE FROM OUR SSTS PRESIDENT

**Alsade Daley,**  
Immaculate Conception High



Greetings from your SSTS president. This year of service has been a thrill, filled with STEM-tastic experiences. The executive team has connected with Schools' Science and Technology Societies across the island with the intention to improve the effectiveness of the body through a concerted effort. The executive body worked this school year to help spread the word about the interesting world of Science and Technology. We have been contacting various schools to encourage them to get registered with the Scientific Research Council to help with the institution of science programmes. The SSTS has also been spreading the word about the SRC's programmes particularly the STEM experiment series on YouTube, and various competitions like the Young Inventors and Innovators Pitch competition. Going forward and as a result of our efforts, we hope these programmes flourish even more with uptake from students and we hope the incoming year of service will be one that maximizes impact. Keep an eye out for the great things to come, and to all students, keep being STEM stars!







## 117 SUBMISSIONS FOR THE INAUGURAL ESSAY, ORATORY, POSTER & PERFORMING ARTS (EOPP) COMPETITION!

The awards ceremony held at the Stella Maris Church Hall on March 25, 2024, marks the 32nd staging of the EOPP competition which received 117 submissions from over 50 schools across Jamaica. The competition, held under the theme: "STEMing into the Future", tasked students to formulate pieces in categories of essay, poster and performing arts, and was open to primary, secondary and tertiary institutions. It gave them the opportunity to express their thoughts using their talents. The overarching objective of the competition is to empower students to explore, express, and creatively highlight how STEM serves as the driving force propelling us into a future marked by progress and innovation.

Participants delved into the multifaceted ways in which STEM contributes to shaping a better tomorrow, encompassing improved living standards, job opportunities, technological breakthroughs, advancements in healthcare, and sustainable solutions for food production. Celebrating over 31 years, this yearly competition has been a platform for students to contribute to the dialogue

surrounding STEM. The competition encourages participants to take a holistic view, exploring the multifaceted ways in which STEM influences and shapes various aspects of our future.



Dr. Charah Watson, Executive Director at SRC crisply charged participants to lead with STEM following which a resonant speaker, Mrs. Ray-Anne Shaw-Philips, Team Leader of Analytical Services at SRC, delivered potent words of inspiration to the young minds reminding them that they can do anything they put their minds to.





Other winners included Riley Lowe of Belair Early Childhood and Preparatory School, who came out on top in the poster category for primary schools, while Nevina Williamson of Enid Bennett High School won for secondary schools; and Tanakay Clayton of St. Joseph's Teachers' College emerged victorious in the tertiary level. Cross Keys High School and Free Hill Primary successfully placed as winners in the performing arts category. Schools were awarded gift certificates, gadgets, baskets, trophies and medals.

Awardees in the performing arts category of the competition got to show off their exceptional pieces at the ceremony which were followed by resounding cheers and applause.

Winners in the essay and oratory categories were recognized for their impressive narratives that narr and eloquent deliveries. These include Giovanni Heavens of Chetwood Memorial Primary, Kevina Rowe of Maggotty High School. Toshaunae Norris of the University of the West Indies emerged as the victor in the tertiary category.





## STEM AMBASSADOR PROGRAMME DOUBLES IN REGISTRANTS



The programme trained and inducted sixty-two (62) new ambassadors for the year 2023-24, more than tripling admittance to the programme from the previous year, with each new member being assigned a school. Received were registrations from STEM professionals within the three regions of Jamaica as well as other countries within the Caribbean.

The STEM Ambassador Programme currently serves seventy-eight (78) schools of the primary, secondary, and tertiary levels across Jamaica. Purposed at aiding the launch and continuance of Schools' Science and Technology Societies in schools, as well as design and coordination of science and technology-based activities for further promotion and building of interest for STEM amongst youths, the financial year saw increased registration proceeded by the training and induction of enthused and gearing ambassadors.

The programme saw partnerships with the University of the West Indies, Mines and Geology Division, eGov Jamaica Limited, and Jamaica Institution of Engineers, all coming on board as the need was seen to help lift the profile of STEM in Jamaica.

## MESSAGE FROM STEM AMBASSADOR KEMAR ROSE



2023-2024 has been a productive year for the STEM Ambassador programme in which the Ambassadors were able to share and foster interest in the areas of science, Technology, Engineering, and Technology. Personally, the initiatives that I have been a part of allowed me to impart knowledge about the wonderful world that is Science and Technology. Students were allowed to not only witness exciting experiments upon visits to schools but were also able to actively participate in the process. I can vividly recall the expressions seen on their faces as the students experienced the elephant toothpaste and balloon experiments.

The STEM Ambassador Programme is critical, especially at the grassroots level in order to achieve our goal of gauging national interest and participation in STEM areas. It is truly a joy to know that I have this opportunity to engage the nation's next generation of scientists, engineers, doctors, nurses, etc. My hopes for the future of the STEM Ambassador Programme are for it to have a noticeable influence on a national level and that we will have a plethora of Ambassadors in every parish.





## CLOSE TO 50 TEACHERS PARTICIPATED IN THE SUMMER ATTACHMENT PROGRAMME!

The Scientific Research Council's Summer Attachment Programme was first staged in 1998 and was relaunched in August 2022 as a hybrid event that included a series of online workshops and a Hope Complex tour. The aim of the programme is to assist pre- & in-service educators with understanding how best to present STEM topics to their students and inspire students to pursue careers in STEM. Teachers first gained an understanding of STEM principles through a series of online workshops facilitated by local and international experts in STEM education. Teachers then had the opportunity to tour the facilities of the Hope Complex discovering fun and impactful ways to introduce STEM to students as the group got exclusive exposure to riveting advancements in the fields of Science, Technology, Engineering and Mathematics.

The teachers' visit to the various organizations in the complex was "a necessary and worthwhile experience", as exclaimed by teacher participant of the Lister Mair/ Gilby High School for the Deaf Miss. Tainia Taylor. The programme, she shares, is

currently assisting her delivery of STEM concepts and has refined her skill of engagement to further generate interest and passion for STEM.

The 2023 Summer Attachment Programme surpassed its target of 30 teachers- engaging close to 50 educators from various parishes of Jamaica. The programme was brought to a close on August 14, where stakeholders convened and commemorated the experience. Sponsors of the event were Wigton Windfarm Limited, Betting Gaming and Lotteries Commission, Port Authority of Jamaica, Jamaica Private Power Company and Jamaica Broilers Group Limited. Other stakeholders include the Jamaica Bauxite Institute, Nature Preservation Foundation, The Caribbean Public Health Agency (CARPHA) and Mines and Geology Division.





## STEM VIRTUAL EXPERIMENT SERIES EXPLORE MODERN-DAY SCIENCE!

Premiered were six (6) exciting episodes of the SRC's STEM Virtual Experiment series hosted primarily by SRC STEM ambassadors who were impassioned in their deliveries. Some experiments carried out were extraction and use of purple-cabbage indicator, simple aeroponics and aquaponics set-up, preparation and observation of colour-changing flowers through capillarity demonstration and the making of brilliantly coloured borax crystal gems in the laboratory. These experiments are further enhanced with lively discussions that aligns STEM principles. The series featured SSTS president, Alsade Daley in two episodes, who was delighted to serve and participate.

The series is intended to convey the practicality of scientific principles through simple, fun and pragmatic demonstrations whilst enforcing safe and basic laboratory skills. A connection is established with hopes of expanding the subscription base amongst children for SRC's social media, meeting the children where they are- dissecting the concepts and bolstering receptiveness through enjoyment and entertainment.



## SCIENCE IN THE PARK " A MEMORABLE EXPERIENCE!"



Science in the Park was spotlighted as a distinguishable celebration of Science and Technology month. Functioning as a joint effort between units within the Information Services Division, the exposition was marked with success as students arrived in hordes filling the Emancipation Park with an eagerness to learn and explore.

Close to 2000 students from the nearest and furthest parishes of Jamaica gathered in this central location of the capital to observe science and technology as the contributive function it sustains in nation building. Exhibitions from scientific and technological organizations based locally, inclusive of departments within the Scientific Research Council, bordered the corridors of the park where students and teachers lined up to witness the inspiring and astir demonstrations. Of mention, are student booths with innovations on display created with sustainable development in mind. There were virtual reality engagements along with other varied categories of S&T on display which also highlighted the nation's advances in these areas.



## YIIC IDEATION SESSIONS SERVING WESTERN SCHOOLS WITH FACE-TO-FACE WORKSHOP

Ideation sessions for the Young Inventors and Innovators Competition was hybridized with a virtual session for central and eastern schools, and a face-to-face workshop for western schools as SRC aimed to intensify its reach and impact in rural Jamaica. The presenters articulated an immaculate and interactive session that inspired ideas for the competition, taught students how to measure and ensure the feasibility of their ideas, how to market their ideas and how to magnify the impact of their ideas. The session saw the likes of Caribbean Flavors and Fragrances limited who demonstrated product development through making of a delicious juice-drink that had students' taste buds tantalized and their desire to create and innovate livened.

Participants rode the waves of excitement from the presentations sharing that they were equipped and ready to craft their big idea.

The western session was hosted at the St. Hilda's Diocesan High School in the parish of St. Ann which facilitated the assembly of rural

schools as the STEU team sought to encourage greater involvement from rurally based schools and to cultivate a culture of innovation -creativity, experimentation, and risk-taking were emphasized to be core in achieving this.

STEM ambassadors too were integral to achieving the objectives of the workshops as they functioned as presenters, sharing practices within their fields. Mr. Damani Brown, the exemplar of a dream meets actualization through his company Transforming Inspirational Minds Ltd and expert in the field of Computer Science, presented on 'What is your big idea?' where he pointed to his journey in entrepreneurship through an inspiring address.

Following the Ideation Sessions are the Pitch Competition that gives students the opportunity to present a pitch deck live before judges, and the National Science Fair where students will showcase the prototypes of their inventions through exhibitions.





## RURAL SCHOOLS EMERGE AS WINNERS IN THE STEM OLYMPIAD COMPETITION

STEM Olympiad champions Grove Town Primary and Infant School, and Manning's School attained victory copping first place in the STEM Olympiad Competition. The competition, revamped as a celebration and recognition of S&T month presents schools with a theme and a challenge to develop a proposal that addresses some current issue within science and technology.

For the 2023-2024 year, the theme for S&T month was STEM Unlocked: Opening doors to limitless possibilities. Students were given the chance to find out more about STEM and show what they can do to help mitigate the effects of climate change. From this, they would be able to recognize just how integral they are to the future state of their environment and how STEM subjects are involved in their lives.

Principal, Mrs. Debbie Hutchinson, of Grove Town Primary and Infant of Grove Town, Manchester reveled in the experience and win, promising improved focus on STEM activities to get students more interested and involved.

Manning's School, based in Westmoreland and repeated entrants and winners in SRC's competitions took first place in the secondary category, with Jahmeek Walker and Justin Skeen scoring high points to bring the school to first place.

Winning schools received a cash prize of \$50,000 each, the winning trophy for the respective levels, gadgets, gift baskets and gift vouchers. Supporting teachers were also recognized.



## AN IMPRESSIVE TURNOUT FOR CSEC WORKSHOPS

The Scientific Research Council (SRC), through its Science and Technology Education Unit (STEU) and partnership with the University of Technology, hosted a series of STEM CSEC Examinations Workshops from May 5, 2023, to June 01, 2023. Through this initiative, the council created an opportunity for students and science professionals to virtually meet and engage in preparation for the 2023 CXC Examinations. The workshops included syllabus review and working with past papers, tips and strategies for sitting exams, and expert advice from CXC Examiners, Lecturers/Teachers, and the SRC's STEM Ambassadors.

The overall goal of each session is to help students improve their examination skills through practice and preparation. For each workshop a presentation was done, the purpose of this was to educate the students about some of the common errors they make when answering questions that prevent them from receiving the highest possible scores on their exams, as well as giving them important information from the CSEC subject report.



Virtual  
**STEM CSEC** | Theory Review  
Exam Prep Techniques  
Past Paper Practice Questions

# MATH WORKSHOP 2023

**Time: 3:00 P.M. - 5:00 P.M. | Free on Zoom**

FRIDAY MAY 5	Mathematics
<b>Presenter</b>	<b>Tutors</b>
<p>Senator Damion Crawford</p>	<div style="display: grid; grid-template-columns: repeat(3, 1fr); gap: 10px;"> <div> <p>Ms. Ana-Alicia Beckford Math Educator</p> </div> <div> <p>Mr. Tejayne Stephens Engineering Student, STEM Ambassador</p> </div> <div> <p>Mr. Horie Chambers Math Educator</p> </div> <div> <p>Mr. Garret Brooks Math Educator, Math Teacher of the Year, Region 6</p> </div> <div> <p>Mr. Winston Johnson Math Educator (20 years' experience), Former CXC Examiner</p> </div> <div> <p>Dr. Jaffes McDonald Medical Doctor, STEM Tutor</p> </div> </div>

Learn from experienced Science Educators and STEM Professionals, how to achieve excellent grades in Mathematics, Biology, Chemistry, and Physics.

**FREE WORKSHOPS!**  
Register Now: <https://forms.gle/6YVdpRnr5SDfPcQw8>

For more information, contact Kavelle Hylton  
 (876) 927-1771-4  
 (876) 506-6055  
[kavelleh@src-jamaica.org](mailto:kavelleh@src-jamaica.org)  
 @srcjamaica

The main highlight of the workshop was the breakout room sessions where students actively engaged and interacted with tutors in answering past paper questions. Students learned how to use available resources adequately as well as strategies they can employ for managing the pressure associated with exams prior to and during.

659 students participated in the workshops exceeding the target of 300 and the unit intends to exceed this amount in the CSEC workshops following, as the goal is to improve passes in STEM subjects so that more students matriculate to study for STEM careers at the university level.

