

ANNUAL REPORT

for

TRINIDAD and TOBAGO

2018 - 2019

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INTRODUCTION (EXECUTIVE SUMMARY)

GLOBE Partner Trinidad &Tobago (GPTT) thrust during the period October 2018 to August 2019 involved direct interaction with School Managements in the promotion of The GLOBE Program (GP) in Trinidad and Tobago. A collaborative partnership with the National Parents Teachers Association (NPTA) of Trinidad and Tobago has been developed over this period to stem the lack of support from School Administrators and Teachers. Teachers' apathy and their unwillingness to commit time, especially outside their teaching requirement, to GLOBE participation, have been central to the disappointing implementation of GLOBE in Trinidad and Tobago since 1996.

GPTT's new NPTA Partnership arrangement, involves invitation to NPTA Meetings to promote GLOBE, encourage PTAs to underwrite the cost of equipment to either resuscitate or start GP and working to improve the school curriculum delivery through GLOBE integration.

GPTT was given stored GLOBE kits acquired over 18 years by recently closed local oil company, PETROTRIN. The offer of free equipment to start GP, however, does not appear to have positively impacted schools GLOBE interest. Schools interested in participating in GLOBE are now required, as a matter of demonstrating commitment, to get both teachers and students E-Trained in certain GLOBE Protocols as a

prerequisite to accessing free equipment and GPTT coordinated training.

Only one of the two T&T schools registered to participate in the 2018 GLOBE Learning Expedition in Ireland, eventually raised the funds to attend. There was no support from the Ministry of Education!

EDUCATION

GPTT continues to advocate to the Trinidad and Tobago Teaching Community, the importance of integrating the hands-on skills of the GP with Science Technology Engineering and Mathematics (STEM) in all areas of the school curriculum. This approach is being demonstrated by GPTT trainers in GLOBE Training Workshops. Both teachers and students have benefitted from the science inquiry used in Protocol training.

GPTT has been following the development of PILLA (Progressive Incremental Linear Learning Accumulated) MATH, developed by Adolphus Daniel of Trinidad and Tobago, which had a pre-release on Face book in August 2018. This is a unique and modern way of learning Maths which GPTT recommends to schools worldwide to positively impact the teaching of Maths, which has been a universal nightmare to most students and teachers. The sequential steps starting from the

basics to the most complex mathematical ideas will make PILLA a major Maths Curriculum Delivery changer!

PILLAMATH will provide teachers with more time for dealing with the integration of the GLOBE Program hands-on activities in the school curriculum. This approach will serve to strengthen the delivery of subject content in a STEM and student friendlyway.

SCIENCE

The GPTT hands-on activities in GLOBE Training start with safety requirements in conducting science measurements in the classroom or laboratory. GPTT stresses the need in science for developing competencies in calibration, tabulation and presentation of data, accuracy in measurement s and the proper use of analogue and digital meters. Participants are required to develop mastery in the use of different types of scales and equipment.

The role of estimation and common errors in scientific measurements are detailed in the GLOBE training. This is designed to decrease the error contribution caused by experimenter, equipment and environment in order to increase reliability in scientific data collection. The Science Inquiry Process is explored and the importance of STEM in GLOBE is explained.

TECHNOLOGY

Since GLOBE uses high end Technology and equipment in the collection of environment data, GPTT recommends that schools invest in any reliable Wireless Weather Sensor such as the GPS PS – 3209 (PASCO) as this equipment measures several Environment parameters and has multi-function applications with the software used. GPTT has been encouraging Schools Management to consider upgrading their teaching instructions to be more consistent with the digital age in which learning is taking place.

GPTT is cognizant of the many serious health concerns of 4G and 5G communication systems which modern research is unearthing. It is in this context that GPTT will be exploring with other stakeholders the convening of a Symposium to discuss how this Mobile Technology can be best harnessed in the interest of humanity

GPTT is also supportive of the increased use of probes in GLOBE Protocol measurements and recommends to new GLOBE recruits the investment in GLOBE approved digital equipment, once the basic manual competencies have been acquired.

COMMUNITY OUTREACH

GPTT continues to expand its local Community Environment Outreach in T&T and is in the main driver in creating a network of local and international organizations to collaborate in education, environment stewardship and social issues. GPTT is presently spear-heading a Community Outreach Initiative, the Arima Rebranding Team which is committed to transforming the town of Arima to be the:

- 1. first bilingual (Spanish will be the second language) town in the Republic of Trinidad and Tobago**
- 2. foremost local community in which all public services are operating at a premium level**
- 3. collaborator with other stakeholders to achieve acceptable social and moral behaviour.**

GPTT, therefore, seeks the support of GLOBE LAC members in achieving these community objectives and intends to work with governmental agencies to promote the following GLOBE interactions:

- Outreach to the Incarcerated**
- GLOBE Zika Education and Prevention**
- GLOBE and the Elderly: helping to bridge the gap between youth and the aged through GP**
- GPTT Environment Camp and local GLOBE Learning Expedition**
- Resuscitating of the Junior Environmentalists of Trinidad and Tobago (JETT)**
- GLOBE Mall Displays operated by the Trinidad and Tobago GLOBE Alumni**
- Promoting the national community to participate in GLOBE Observer**

COMMUNICATION

GPTT has started upgrading the country's GLOBE website and will be working with the Arima Broadcasting Network in Twinning and collaborating with local and international schools to promote the GLOBE Agenda. GPTT will also be partnering with Government Ministries and Environment NGOs to present a unified approach to Environmental Stewardship. Support for Tobago schools will continue in 2019. A T&T GLOBE hotline will be created to respond to the

expected growing GLOBE interest through the support from the National PTA.

The creation of a bi-monthly GLOBE Digital Newsletter will be promoted by the online Arima Broadcasting Network and an annual GLOBE T&T Magazine highlighting the work being done by GLOBE schools will be commissioned before the end of 2019. GPTT is giving support to the initiative, started in 2019, of the Environmental Management Authority (EMA) and Solid Waste Management Company Limited (SWMCOL), to collect plastics and glass for recycling in all schools in the town of Arima.

SECRETARIAT

GPTT intends to set up a Secretariat for its operation during the period September 2019 to August 2020. As such, it will be discussing with the MOE ways in which the implementation of the GP in the school system can be effectively managed. The MOE will be approached to provide the office space and clerical staff to support this initiative.

APPENDIX

1. Achievements of Brazil Secondary School 2018 – 2019

SUMMARY OF ACTIVITIES BY BSS GLOBE ENVIRONMENTAL CLUB FOR 2018 -2019

- May 2019: Collected GLOBE-PASCO AWS
- May 2019: BSS participated in WE Schools "WE Connect Programme", once again being the only school in the Caribbean to do so. A team came in from Canada specifically to BSS to assist in hosting the local leg of the programme.
- April 2019: T&T GLOBE Alumni launched, initial members all from BSS
- April 2019: BSS participates in GLOBE's IOP and Field Campaigns - Tree Height, Land Cover and Surface Temperature Field Campaigns
- Feb. 2019: BSS only school in the Caribbean to participate in *WE Schools* Global Classroom event on Child Labour, carried on CNN
- Jan. 2019: Elections held for BSS GLOBE Environmental Club executive members
- Dec. 2018: GLOBE training session held at Saraswati Girls' Hindu College with GLOBE equipment donated by Petrotrin and prepared by students of BSS
- Oct. 2018: Adrian Ragoo of BSS among one of nine students representing T&T at WE Schools/RBC Young Leaders' WE Day experience in Toronto, Canada
- Sept. 2018: BSS collects and prepares GLOBE kits from Petrotrin for distribution to other schools getting ready to join The GLOBE Program
- Sept. 2018: Brazil Secondary School was the first of ten schools to receive the rebranded iCARE recyclable collection bin following its successful participation in the EMA's Green Leaf Challenge in June 2018. The placement of the iCARE recycling bins at the top ten Green Leaf Awarded

schools signalled the start of the iCARE School Recycling Programme which was subsequently formally launched by the EMA on November 14th 2018.

- Sept. 2018: BSS represented at The Climate Change Leadership Academy, organised by UNESCO ASPnet, the Embassies of Costa Rica and France, The UN Information Centre for the Caribbean Area, CZITT, and Sustain TT. The academy provided training on climate change science, leadership skills and communication/advocacy techniques for the attendees to become better champions for sustainability and climate resilience, not just within their schools but the country as a whole.