



# Empowering Women and Girls in STEM/ STEAM

Alisha Koulen, Operations Manager- STEM Guyana



# Educational Background

- Undergraduate Degree in General Biology- 2014
- Interned with Iwokrama as a Research assistant
- Post Graduate Diploma in Education (Science)-2017
- Awarded ECCAM(Education for Climate Change & Mitigation) Scholarship- MSc in Biodiversity Conservation & Sustainable Development at UWI- Trinidad (2019/2020)

# Professional Roles



- High School Science Teacher – Ministry of Education – 3 years
- Interned at Department of Environment- Data Management Unit , Antigua and Barbuda in 2020 for 3 months.
- Mitigation and GIS Apprentice- also apart of National Coordinating team for project ICAT- Initiative for Climate action Transparency- 1 year.
- Operations Manager, STEM Guyana- present
- International Youth Climate Delegate- attending PRECOP28 , COY18 & COP28 in Abu Dhabi & Dubai



# SKILLS GAINED

- Data Collection/ Data Analysis – using R
- Data Management
- QGIS – GIS Modeling
- Species sampling Techniques
- Teaching , planning, coordinating
- Project/ event management
- Technical Report Writing

Collaborative  
Critical thinking  
Problem solving  
Innovation  
Communication  
Leadership

- Gender bias
- Unequal Pay
- Lack of Opportunities
- Lack of Representation/ Female role models
- Sexual Harassment/ Assault

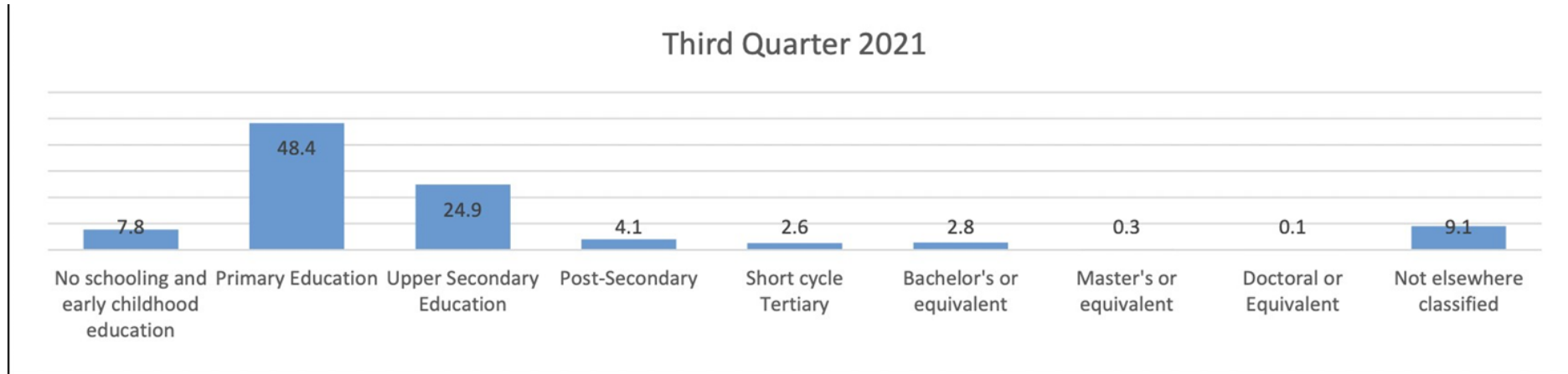
# CHALLENGES FOR WOMEN & GIRLS IN STEM



- Breaking stereotypes
- Overcoming gender bias
- Representation
- Encouraging curiosity
- Building generation with technological competence – can innovate & create solutions for social issues.
- Benefit from opportunities in STEM fields- considering Oil & Gas industry and the demand for jobs in years to come.

WHY IS IT  
IMPORTANT TO  
HAVE MORE  
WOMEN &  
GIRLS IN STEM

# WHY STEM GUYANA IS IMPORTANT



<sup>5</sup> Note that Category 7 and Category 8 are not statistically different than 0.

## % of working age population by level of education completed

# STEM Guyana – Preparing the Next Generation of Innovators

- Strengthen: literacy, coding ,robotics, math, English & science
- + Problem solving
- + Critical thinking
- + Intellectually curious
- + Confident
- + Collaboration
- + Innovators
- + Excellent communication
- + Technology skills
- + Globally competitive
- + Strengthen core academic skills







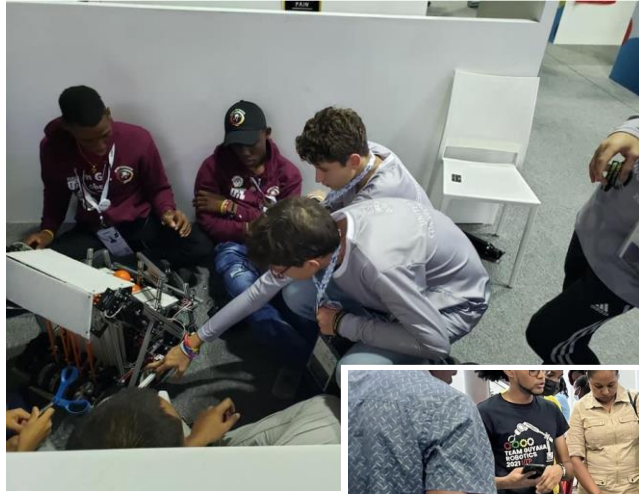
**West Canje**

- We're in every region because genius is in every region
- At least ½ girls everywhere
- International teams (girls)
- 40 Learning Pods & 15 stem clubs



**Lake Mainstay**





# Critical Outcomes – Student Success

- Learners able to compete globally, regionally & nationally
- Learners strengthen literacy skills
- Learners improve Math scores
- Motivated to research for themselves
- Learners improve communications skills
- Curious about what is behind technologies they consume



# HOW TO GET INVOLVE IN OUR WORK?

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- + Become a volunteer and help young learners.
- + Join a STEM club near you.
- + Open a STEM Club in your community or school.
- *For more info on how to support, follow us on FB or IG-STEMGuyana.*
- *Email-[stemguyana@gmail.com](mailto:stemguyana@gmail.com)*
- *Contact Operations Manager -6432609*

