



# CARICOM GIRLS IN ICT PARTNERSHIP ACTION PLAN

APPROVED BY THE 91<sup>ST</sup> COTED ICT ON 11 FEBRUARY 2022





## TABLE OF CONTENTS

EXECUTIVE SUMMARY .....	4
<b>INTRODUCTION</b> .....	4
<b>BACKGROUND</b> .....	5
<b>RATIONALE FOR THE PLAN</b> .....	7
<b>FOCUS AREAS</b> .....	7
<b>OBJECTIVES</b> .....	8
<b>HIGHLIGHTS OF THE PLAN</b> .....	8
<b>IMPLEMENTATION OF THE PLAN</b> .....	9
<b>SYNERGIES</b> .....	10
<b>TIMELINE</b> .....	11
<b>ACKNOWLEDGEMENTS</b> .....	11
ACTION PLAN .....	13
APPENDICES .....	37
<b>APPENDIX 1 - ACRONYMS AND EXPLANATORY NOTES</b> .....	37
<b>APPENDIX 2 - LIST OF OBSERVANCES</b> .....	40

## EXECUTIVE SUMMARY

### INTRODUCTION

The CARICOM Girls in ICT Partnership was endorsed in 2019 and worked on in 2020 – at the level of a Steering Committee- to begin the development of an Action Plan for attracting girls and young women to STEM/ICT careers.

The Action Plan is part of a comprehensive plan, cooperation, and joint action to address the challenges and opportunities for education and training in the digital age. It was designed to allow for both national and regional engagements/activities to bring more awareness of girls in ICT and to empower girls and young women to choose careers in ICT.

The activities in the Action Plan (will) focus on students (nursery, primary, secondary), academia, parents/teachers/employers, and policy makers. It is hoped that the activities are included in the education curricula of Member States.

In the process of completing the Action Plan, some regional activities in the form of (1) Digital Dialogues – held on Girls in ICT Day 2020 and May 2020, and (2) Girls in ICT 2021 workshop and web adventures, were successfully completed. These activities were led by the Steering Committee.

The Steering Committee comprises Ministries of ICT, Education and Youth {from Bahamas, Barbados, Dominica, Grenada, Guyana, Jamaica, St. Lucia, Suriname, and Bermuda}, GAN, CPCE, WGEC, UG, UWI, CXC, CYAP, CTU, OECS, ITU, UNESCO, UNICEF, UN Women, and the CARICOM Secretariat – HRD, Communications Unit, and ICT4D.

## BACKGROUND

International Girls in ICT Day is the annual observance of the ITU used to bring awareness to girls and young women to choose careers in ICT and STEM. It is celebrated on the fourth Thursday of April every year.

The CARICOM Secretariat, as well as several Member States, have been celebrating International Girls in ICT Day over the past years. However, in the spirit of regional integration and for the advancement of the Single ICT Space, it was thought that a combined effort of activities will allow Member States to be more involved with girls in ICT throughout the year, instead of only on Girls in ICT Day.

The mandate for the CARICOM Girls in ICT Partnership was given at the Seventy-Ninth COTED ICT (November 2021) which was chaired by the Prime Minister of Grenada -in his capacity as Lead Head with responsibility for Science & Technology (incl. ICT), as follows:

**At the Seventy-Ninth (79<sup>th</sup>) Special Meeting of the Council for Trade and Economic Development (COTED) – Information and Communication Technologies (ICT) on 8 November 2019, the Ministers:**

**Endorsed** the proposed CARICOM Girls in ICT partnership.

**Agreed** to promote the Girls in ICT partnership at Inter-Ministerial Meetings and all relevant meetings.

**Also agreed** to work on replicating the partnership model at the national level for increased synergy and outputs.

**Further agreed** to identify senior government officials who would work with the partnership;

**Mandated** that the draft work programme for 2020 should be finalised by 29 February 2020 to allow for national preparations for Girls in ICT Day 2020 and other related activities.

**Also mandated** that the draft work programme be circulated to the Chief Education Officers, Senior ICT Officials, Directors of Youth as soon as completed for their consideration and input by 31 January 2020.

**Further mandated** that the CARICOM Secretariat would provide regular reporting to the COTED and the COHSOD, on policy issues identified by the partnership and related to digital skills and the future of work.

**Supported** the opportunity to have a regional programme for Girls in ICT Day 2020 (Thursday, 23 April 2020) as a regional launch of the programme in CARICOM.

**Recommended** that information on the partnership be forwarded for the attention of CARICOM Heads of Government at the Thirty-First Inter-Sessional Meeting in February 2020, as part of the update report on the Single ICT Space.

## RATIONALE FOR THE PLAN

It is anticipated that the Action Plan will set out a framework for critical actions to foster and accelerate sustainable development by closing the digital gender gap and harness the transformative potential of ICTs for women's and girls' empowerment. Empowering girls to follow careers in information and communications technology (ICT) is not only a matter of gender equality, but also an urgent development imperative.

While girls tend to outperform boys in reading skills in most regions, they continue to be under-represented amongst top performers in STEM subjects. Women also continue to be under-represented in the STEM workforce. Transforming girls education through STEM - encourages girls to think as innovators, contribute to develop girls' literacy and numeracy, and increases opportunity for transferrable skills. (UNICEF 2020)

Transforming education and training systems is a key part of the vision for a Caribbean Community fit for the digital age. This transformation requires multi-pronged , strategic and concerted action, as well as the pooling of resources, investment and political will to move ahead at the regional and national level(s). The effective use of digital technologies will continue to be an integral part of the design and development of the CARICOM digital economy.

## FOCUS AREAS

**At the Fourth Meeting of the CARICOM Girls in ICT Partnership held on 23 June 2020**, the Steering Committee “agreed on the Policy Areas which would be addressed by the Partnership”.

These Policy Areas are as follows:

- 1. *Fostering the partnership as a leading platform for a single point of contact in CARICOM.***
- 2. *Raise awareness about the issues related to bringing the young people into ICT careers and supporting them as digital citizens.***
- 3. *Supporting more linking of ICT, STEM and the ARTS.***
- 4. *Integrating ICT and STEM into a broader Curriculum.***

## OBJECTIVES

The objectives of the Action Plan are:

1. Deconstructing gender-based stereotypes
2. Embedding digital learning objectives within education policy and curriculum
3. Improving girls and young women computer literacy and digital skills
4. Raising awareness about the digital economy and the associated careers/opportunities

## HIGHLIGHTS OF THE PLAN

- Build partnerships and platforms for cooperation with the private sector, secondary schools, vocational schools and public institutions.
- Raise awareness through online campaigns such as Webinars and online meetings/events to promote technology for development in and out of school children and/or girls and young women
- Support the collection /development of data to support roll-out of Programmes
- Mentorship programmes

- Implementation of non-formal ICT training courses in cooperation with local non- governmental organizations to enhance IT literacy particularly among girls and young women
- Support elements of a STEAM 'strategy'/approach
- Consultations (ICT, Computing, STEM) into curriculum
- Development of Policy / Guidelines / Strategy
- Establish Protocols to support STEM in the learning curriculum

## IMPLEMENTATION OF THE PLAN

The intent is to present the Caribbean Community (CARICOM) Member States and Associate Members with an integrated plan, outlining key activities (planned) to be implemented in Member States. It is anticipated that the plan will be supplemented with existing, complementary activities in Member States.

The plan will serve as a resource and supplement to help guide Member State policy makers and other stakeholders in approaching the complex issue of girls in ICT in a concerted manner and to have access to available technical and other resources (international, regional and national).

To date, the partnership has successfully conducted several girls in ICT activities, at the regional level, such as Digital Dialogues and regional celebrations of Girls in ICT Day 2020 and 2021.

In 2021 - as part of the ITU celebration of its 10<sup>th</sup> Anniversary, a series of virtual girls in ICT activities were created, called “**10 Moments of Girls in ICT**”. The objectives of the 10 Moments series are to:

1. Build momentum and awareness about the importance of encouraging girls in STEM

2. Engage key stakeholders and communities
3. Provide an inclusive platform to discuss the best ways to encourage girls to pursue STEM careers.

The 10 Moments in ICT series :



These 10 moments in ICT align with the work of the CARICOM Girls in ICT Partnership. This is clearly seen in the activities that have been conducted so far, and those that are included in the Plan.

## SYNERGIES

The Action Plan finds synergy with the following strategies, programmes and initiatives:

- ✓ **SDG 2030: In June 2021 – the United Nations approved the CARICOM Girls in ICT Partnership as a Sustainable Development Goal Good practice.**
- ✓ WSIS Plan of Action
- ✓ UNESCO Priority Gender Equality Action Plan: 2014-2021
- ✓ ITU & UNWOMEN - Global Partnership for Gender Equality in the Digital Age (EQUALS), Girls in ICT global programme
- ✓ UN Women – Generation Equality
- ✓ UNICEF – Generation Unlimited
- ✓ CARICOM HRD Strategy 2030
- ✓ CARICOM Regional Digital Development Strategy (RDDS)
- ✓ CARICOM Single ICT Space Roadmap and Action Plan
- ✓ CARICOM Digital Skills Taskforce

## TIMELINE

The Action Plan will be implemented in 2022-2023.

## ACKNOWLEDGEMENTS

The CARICOM Secretariat expresses gratitude to the Steering Committee Members of the CARICOM Girls in ICT Partnership for the leadership and support in developing this Action Plan. The Steering Committee members are as follows:

- Member States: Bahamas, Barbados, Dominica, Grenada, Guyana, Jamaica, St. Lucia, Suriname, and Bermuda
  - Ministries of ICT

- Ministries of Education
  - Ministries of Youth
- Guyana Animation Network (GAN)
- Cyril Potter College of Education (CPCE)
- Women and Gender Equality Commission (WGEC)
- University of Guyana (UG)
- University of the West Indies (UWI)
- Caribbean Examination Council (CXC)
- CARICOM Youth Ambassadors Programme (CYAP)
- Caribbean Telecommunications Union (CTU)
- Organisation of Eastern Caribbean States (OECS) Commission
- Caribbean Association of National Telecommunication Operators (CANTO)
- International Telecommunication Union (ITU)
- UN Women Caribbean Office
- United Nations Educational, Scientific and Cultural Organization (UNESCO)
- United Nations Children's Fund (UNICEF)
- CARICOM Secretariat

## ACTION PLAN

*The CARICOM Girls in ICT Partnership Steering Committee received endorsement and approval of the COTED ICT for this Action Plan - as part of a comprehensive plan, cooperation, and joint action to address the challenges and opportunities for education and training in the digital age.*

KEY ACTIONS / FOCUS ACTIVITY AREAS	IDENTIFIED ACTIONS/ INITIATIVES			STEERING COMMITTEE MEMBER ACTIVITY OR RESPONSIBILITY	EXISTING ACTIVITIES /SUPPORTING (information/comments/ follow-up)
	<b>PLANNED</b>				
		<b>2022</b>	<b>2023</b>		
<b>POLICY AREA 1: FOSTERING THE PARTNERSHIP AS A LEADING PLATFORM AND MAIN POINT OF CONTACT IN CARICOM (FOR GIRLS IN ICT ACTIVITIES)</b>					
<b>Build Partnerships and Platforms for Cooperation</b>	Develop Draft Action Plan for Ministerial approval	✓		<b>CARICOM Secretariat</b>	Broader cooperation framework and policy, which can also support ICT trade and investment (offshore ICT etc.)
	Develop an annual calendar for Girls in ICT Day observance in CARICOM	✓		<b>CARICOM Secretariat</b>	
	Use of key international and regional observances to highlight issues (e.g., Girls in	✓	✓	<b>Steering Committee</b>	

KEY ACTIONS / FOCUS ACTIVITY AREAS	IDENTIFIED ACTIONS/ INITIATIVES			STEERING COMMITTEE MEMBER ACTIVITY OR RESPONSIBILITY	EXISTING ACTIVITIES /SUPPORTING (information/comments/ follow-up)
	<b>PLANNED</b>				
		<b>2022</b>	<b>2023</b>		
	ICT day, Day of the Girl Child, International Teachers Day)				
<b>Build innovative partnerships with the private sector, secondary schools, vocational schools, and public institutions</b>	Identify strategic partners and determine methodology for 'attracting/engaging'	✓		<b>Steering Committee</b>	Industry Groups, and Voluntary Initiatives
	Promote public, private, people collaboration to design and jointly deliver initiatives to address the skills that are needed	✓		<b>Steering Committee</b>	
	Strengthen cooperation and exchange - Linking to regional and global partnerships and initiatives (for knowledge exchange +)	✓		<b>Steering Committee</b>	UN Agencies (e.g., EQUALS Skills coalition)
	Develop a Compendium/register of partners and practitioners	✓	✓	<b>Steering Committee</b>	

KEY ACTIONS / FOCUS ACTIVITY AREAS	IDENTIFIED ACTIONS/ INITIATIVES	STEERING COMMITTEE MEMBER ACTIVITY OR RESPONSIBILITY	EXISTING ACTIVITIES /SUPPORTING (information/comments/ follow-up)
	<b>PLANNED</b>		
		<b>2022</b>	<b>2023</b>
	active in STEM/STEAM ICT training		
	Convene Regional consultation(s) with Ministers and high-level policy makers to engender 'buy-in' for the plan and related issues	✓	
	Build a calendar that collects event data from different entities and allows search, subscription services	✓	✓
	Support the development of on-line spaces and platforms (including partner websites) for sharing of information relevant to STEM/STEAM and ICT	✓	✓
		<b>UNESCO</b>	
		<b>Steering Committee</b>	
		<b>Steering Committee</b>	

KEY ACTIONS / FOCUS ACTIVITY AREAS	IDENTIFIED ACTIONS/ INITIATIVES	STEERING COMMITTEE MEMBER ACTIVITY OR RESPONSIBILITY	EXISTING ACTIVITIES /SUPPORTING (information/comments/ follow-up)
	<b>PLANNED</b>		
		<b>2022</b>	<b>2023</b>
	Develop Project Proposal to support activities and resources identified in plan (regional)	✓	✓
	Development of a Communication Plan for CARICOM Girls in ICT		✓
	Produce quality assured exemplars of effective and highly effective practice and case studies		✓
<b>Monitoring and Evaluation of the Action Plan</b>	Scope a set of actions for the review of progress and publish a review of progress on the implementation of the Action Plan		✓
<b>POLICY AREA 2: RAISING AWARENESS ABOUT THE ISSUES RELATED TO BRINGING YOUNG PEOPLE INTO ICT CAREERS AND SUPPORTING THEM AS DIGITAL CITIZENS</b>			

KEY ACTIONS / FOCUS ACTIVITY AREAS	IDENTIFIED ACTIONS/ INITIATIVES			STEERING COMMITTEE MEMBER ACTIVITY OR RESPONSIBILITY	EXISTING ACTIVITIES /SUPPORTING (information/comments/ follow-up)
	<b>PLANNED</b>				
		<b>2022</b>	<b>2023</b>		
<b>Regional consultation(s) to brainstorm, highlight and document the issues:</b> <ul style="list-style-type: none"> <li>- Specific age groups and relevant interventions</li> </ul>	Foster a Girls in ICT interschool's initiative		✓	<b>Steering Committee</b>	
<b>Raising Awareness: Webinars and online meetings/events</b>	Awareness raising events for nursery, primary and post primary schools' leaders on key messages	✓	✓	<b>Steering Committee</b>	
	Host regional ICT competitions (essays, speech competitions and projects)		✓	<b>Steering Committee</b>	<b>Bahamas (FEMSTEM)</b> Competitions can focus on development areas such the climate change / environment, ending violence against women and girls, economic empowerment
	Competitions (video contest, digital art poster	✓	✓	<b>Steering Committee</b>	

KEY ACTIONS / FOCUS ACTIVITY AREAS	IDENTIFIED ACTIONS/ INITIATIVES			STEERING COMMITTEE MEMBER ACTIVITY OR RESPONSIBILITY	EXISTING ACTIVITIES /SUPPORTING (information/comments/ follow-up)
	<b>PLANNED</b>				
		<b>2022</b>	<b>2023</b>		
	competition, logo competition)				
	Host Strategic Digital dialogue with (1) Teachers/parents, (2) Academia and (3) Employers, Private sector, labour officials	✓	✓	Steering Committee	
	Open public consultations	✓	✓	Steering Committee	
	Hearing from CARICOM Youth: Girls Speak Tech; Boys speak Tech2; Digital citizenship issues; Cybersecurity	✓	✓	Steering Committee	Youth Development Programme of the CARICOM Secretariat (contribution and participation of the CYAs)
	Use opportunity of observances (key international and regional) to highlight issues:	✓	✓	Steering Committee; Member States	List of observances are at <b>Appendix 2</b>
	- Focus on Youth and Careers; preparing		✓	CYAs	

KEY ACTIONS / FOCUS ACTIVITY AREAS	IDENTIFIED ACTIONS/ INITIATIVES			STEERING COMMITTEE MEMBER ACTIVITY OR RESPONSIBILITY	EXISTING ACTIVITIES /SUPPORTING (information/comments/ follow-up)
	<b>PLANNED</b>				
		<b>2022</b>	<b>2023</b>		
	for a STEAM centred workplace				
	- Regional Hackathon	✓		<b>CANTO</b>	
	- Focus on Teachers	✓		<b>CPCE</b>	International Teachers day – 5 October)
	- Focus on Academia		✓ <b>1<sup>st</sup> Quarter</b>	<b>UG, UWI</b>	
	- Participation of regional teams in CS50x Puzzle day (Harvard University activity)	✓	✓	<b>UG, UWI</b>	UG's TechEd Revolution club has participated in CS50x Puzzle day from 2018-2020
<b>Career Identification</b>	Development of a Career Alphabet (colouring books, online games, printed alphabet, videos); career wheel, career paths		✓	<b>UNICEF/UNESCO (TBC)</b>	EXAMPLES: Social media manager, Airbnb host, influencer, app developer, Uber driver, driverless car engineer, podcast producer and drone operator
	Identification of a core list of ICT careers (existing/new) and career paths	✓		<b>Steering Committee</b>	

KEY ACTIONS / FOCUS ACTIVITY AREAS	IDENTIFIED ACTIONS/ INITIATIVES			STEERING COMMITTEE MEMBER ACTIVITY OR RESPONSIBILITY	EXISTING ACTIVITIES /SUPPORTING (information/comments/ follow-up)
	<b>PLANNED</b>				
		<b>2022</b>	<b>2023</b>		
	Regional Study on appetite for new careers in ICT, STEM, STEAM; socio-economic and gender disparities in ICT and STEM across the region		✓	<b>UN WOMEN; UNICEF</b>	
	Competitions to encourage girls to choose careers in ICT		✓	<b>GAN</b>	
	Linking and supporting campaigns to recognize women's work in STEM fields	✓	✓	<b>Steering Committee</b>	
	Partner with local businesses to host ICT career day		✓	<b>Bahamas</b> (Department of Transformation and Digitization)	
<b>Online campaign to promote technology for</b>	Develop an online campaign (as part of the Communications Plan) and	✓	✓	<b>UNICEF</b>	Generation Unlimited Initiative; Rights of the Child youth ambassadors

KEY ACTIONS / FOCUS ACTIVITY AREAS	IDENTIFIED ACTIONS/ INITIATIVES	STEERING COMMITTEE MEMBER ACTIVITY OR RESPONSIBILITY	EXISTING ACTIVITIES /SUPPORTING (information/comments/ follow-up)
	<b>PLANNED</b>		
		<b>2022</b>	<b>2023</b>
<b>development in and out of school children</b>	which will involve youth from other programmes and initiatives in the development of the career alphabet		
<b>Development of Fact Sheets</b>	Develop 1-2-page fact sheets related to the activities and policy areas in this Plan	✓	✓
<b>Supporting collection /development of data to support roll-out of Programmes</b>	Conduct a Regional study; Information from tertiary institutions; Information from Ministries of Education, ICT, Youth		✓
	Develop a Contact Database of regional role models, mentors, facilitators:	✓	✓
<b>Positive role modeling and Mentoring</b>	Source or commission profiles on women or young	✓	✓

KEY ACTIONS / FOCUS ACTIVITY AREAS	IDENTIFIED ACTIONS/ INITIATIVES			STEERING COMMITTEE MEMBER ACTIVITY OR RESPONSIBILITY	EXISTING ACTIVITIES /SUPPORTING (information/comments/ follow-up)
	<b>PLANNED</b>				
		<b>2022</b>	<b>2023</b>		
	female students in STEM, STEAM, in different formats				
	Identify possible role models/mentors and form the following initiatives: Women in STEM/STEAM/ICT Series; Technology Enabled Girl Ambassadors	✓	✓	<b>Steering Committee</b>	Silicon caribe Top 50 women in Tech
<b>Promoting Sustainability</b>	Support the re-engagement of retired teachers as Mentors; and promote the use of libraries;	✓	✓	<b>Steering Committee</b>	
	Promote online communities of practice; and access to and use of open/free educational resources	✓	✓	<b>Steering Committee</b>	
	Policy development		✓	<b>Steering Committee</b>	

KEY ACTIONS / FOCUS ACTIVITY AREAS	IDENTIFIED ACTIONS/ INITIATIVES			STEERING COMMITTEE MEMBER ACTIVITY OR RESPONSIBILITY	EXISTING ACTIVITIES /SUPPORTING (information/comments/ follow-up)
	PLANNED				
		2022	2023		
	Make recommendations for online/distance learning in primary & secondary education	✓	✓	Steering Committee; Member States	
	Support schools in their engagement with parents/guardians with regard to the use of digital technologies to support teaching, learning and assessment and responsible use of the internet	✓	✓	Steering Committee;  Member States	
	Continued collaboration with the University of Guyana Institute of Gender Studies in the development of sustainable Projects (Jan – Dec)	✓		WGEC	Private Sector, Ministries, Embassies, UG
	Support related research & innovation activities	✓	✓	Steering Committee	

KEY ACTIONS / FOCUS ACTIVITY AREAS	IDENTIFIED ACTIONS/ INITIATIVES	STEERING COMMITTEE MEMBER ACTIVITY OR RESPONSIBILITY	EXISTING ACTIVITIES /SUPPORTING (information/comments/ follow-up)
	<b>PLANNED</b>		
		<b>2022</b>	<b>2023</b>
	Support Digital Education Content Framework ( <i>to be developed by the Digital skills taskforce</i> )	✓	✓
<b>Implementation of non-formal ICT training courses in cooperation with local non-governmental organizations to enhance IT literacy particularly among girls and young women</b>	Internship programs for students and teachers especially females		
<b>Promoting ICT among girls (Ages 11-18 - Concentration in Secondary Schools)</b>	Cross- curriculum integration of ICT in all subjects; Use ICT in all subject areas not just for learning but also in learning	✓	
<b>Building competences &amp; mindsets; educating on</b>	Career day where women in ICT are featured	✓	
		<b>Steering Committee</b>	
		<b>Steering Committee</b>	Students already do job shadowing so more emphasis can be placed on giving opportunities to gain hands-on knowledge and experience through training in work environments that focus on ICT
		<b>Ministry of Education-Grenada</b>	E.g., Creating social media promotions for a F&N project, creating podcasts for English B lessons, Creating a virtual display for visual arts, etc.
		<b>Ministry of Education-Grenada</b>	Girls can be assigned to an organisation or person that is engaged in an aspect of ICT that they

KEY ACTIONS / FOCUS ACTIVITY AREAS	IDENTIFIED ACTIONS/ INITIATIVES			STEERING COMMITTEE MEMBER ACTIVITY OR RESPONSIBILITY	EXISTING ACTIVITIES /SUPPORTING (information/comments/ follow-up)
	<b>PLANNED</b>				
		<b>2022</b>	<b>2023</b>		
<b>careers</b> Collaborative/competitive projects that involves girls using ICT					are interested in (Coding, Gaming, AI, Robotics, etc.)
	Organise and participate in events that promote girls' usage of ICT	✓	✓	<b>Ministry of Education-Grenada</b>	Girls Hack is an example. However, to eliminate gender bias a general hack can be organised but ensure that boys and girls are equitably represented
	Formation of Tech Clubs	✓	✓	<b>Ministry of Education-Grenada</b>	Emphasis on the involvement of girls in those Tech clubs
	BE-STREAMING project	✓	✓	<b>Ministry of Education, Suriname</b>	Each BE-STREAMING School kit will consist of activities, lesson materials, manuals, and guides with complete instruction on an integrated STREAM curriculum that will incorporate research-based and project-based learning to enhance pedagogical practices of teachers and improve student learning. All the activities will

KEY ACTIONS / FOCUS ACTIVITY AREAS	IDENTIFIED ACTIONS/ INITIATIVES			STEERING COMMITTEE MEMBER ACTIVITY OR RESPONSIBILITY	EXISTING ACTIVITIES /SUPPORTING (information/comments/ follow-up)
	<b>PLANNED</b>				
		<b>2022</b>	<b>2023</b>		
					<p>be aligned to the Suriname learning outcomes with enhancements. The learning materials that will be developed as a part of this work will be used in the after-school activities along with suitable pre-assessment and post-assessments. Specific learning resources will include:</p> <ul style="list-style-type: none"> <li>• Hands-on teaching and learning activities in each of the strands S (Science), T (Technology), R (Reading), E (Engineering), A (Arts), M (Mathematics)</li> <li>• A project-based learning activity tool</li> <li>• Online E-learning modules Access</li> <li>• Learning by doing activities</li> <li>• Postcards and Quizlet cards with lessons</li> </ul>

KEY ACTIONS / FOCUS ACTIVITY AREAS	IDENTIFIED ACTIONS/ INITIATIVES			STEERING COMMITTEE MEMBER ACTIVITY OR RESPONSIBILITY	EXISTING ACTIVITIES /SUPPORTING (information/comments/ follow-up)
	<b>PLANNED</b>				
		<b>2022</b>	<b>2023</b>		
					<ul style="list-style-type: none"> <li>• Project-based integrated lesson plans and lesson overview for teachers</li> <li>• Critical Thinking and Creativity building activities</li> </ul>
<b>POLICY AREA 3: SUPPORTING MORE LINKING OF ICT, STEM AND ARTS (STEAM) REGIONALLY</b>					
<b>Support elements of a STEAM 'strategy'/approach</b>	Support the conduct of teacher professional development courses in training college and as a graduate teacher (STEM and STEAM)		✓	<b>CPCE; Member States</b>	Increased teachers' recognition of the initiative; Increased teacher confidence
	Engage or identify arts integration specialists to support the STEAM approach in schools	✓	✓	<b>Steering Committee</b>	
	Support the inclusion of learning activities which	✓	✓	<b>Steering Committee</b>	Focus on collaboration, creativity, communication

KEY ACTIONS / FOCUS ACTIVITY AREAS	IDENTIFIED ACTIONS/ INITIATIVES			STEERING COMMITTEE MEMBER ACTIVITY OR RESPONSIBILITY	EXISTING ACTIVITIES /SUPPORTING (information/comments/ follow-up)
	<b>PLANNED</b>				
		<b>2022</b>	<b>2023</b>		
	integrate knowledge and skills into the curriculum				
	Linking STEAM and special Education		✓	<b>Steering Committee</b>	
	Provide teacher and student incentives for collaborative/competitive projects which involves girls using STEAM		✓	<b>Steering Committee</b>	
	Promote and encourage STEAM in and outside of the classroom (e.g. in after-school initiatives)		✓	<b>Steering Committee; Member States</b>	(e.g. translate some of these STEAM career fields into actual jobs students can do in the classroom)
	Link with research components for school-based examinations and SBA (CXC)		✓	<b>CXC</b>	
<b>Competitions or invited submissions – writing, art, spoken words on “Why Girls must Connect</b>	Support the implementation of awareness and image campaigns such as Digital		✓	<b>Steering Committee</b>	Coding competitions are performance related (skill demonstration, measurable outcomes);

KEY ACTIONS / FOCUS ACTIVITY AREAS	IDENTIFIED ACTIONS/ INITIATIVES			STEERING COMMITTEE MEMBER ACTIVITY OR RESPONSIBILITY	EXISTING ACTIVITIES /SUPPORTING (information/comments/ follow-up)
	<b>PLANNED</b>				
		<b>2022</b>	<b>2023</b>		
<i>with Digital Opportunities"</i>	Skills, Mobile Storytelling and Citizen Journalism, Data Privacy, and Cyber Security				Awareness competitions are more reflective (writing, illustrations, active speaking)
	Hackathons (T&T)	✓ May		<b>UWI</b>	<b>Digicel Girls Power Tech</b> (in May 2021) Main goals: inspire young girls (secondary school) to pursue careers in STEM through hands-on exposure to the latest technology and engagement with industry professionals. Two-day event with presentations, team competition, panel, industry booths;  This is being done by Digicel Trinidad and Tobago Foundation, Digicel Business Solutions, CISCO

KEY ACTIONS / FOCUS ACTIVITY AREAS	IDENTIFIED ACTIONS/ INITIATIVES			STEERING COMMITTEE MEMBER ACTIVITY OR RESPONSIBILITY	EXISTING ACTIVITIES /SUPPORTING (information/comments/ follow-up)
	PLANNED				
		2022	2023		
	Hackathons (Guyana)	✓	✓	Guyana	Office of Prime Minister Yearly National Hackathons;  Nexus Hub Inc. Partnership with IDB
Multidisciplinary Awareness	Digital Influencers in STEAM		✓	Steering Committee	
	Digital influencers in Fashion, Beauty Shops		✓	Steering Committee	
	Short Training/ Workshops/ Programs/ Courses (Teacher Opportunities)		✓	Steering Committee	
Improve the employability of young women, at-risk youth, and persons with disabilities	Short Training/ Workshops/Programs/ Courses (At-risk Youth Opportunities, Disabled youth)	✓	✓	UG	UG and Avasant Foundation partnership: 1) To offer Avasant's Digital Skills training programme to young adults between the ages of 18- 28, whereby 50% will be female candidates. The

KEY ACTIONS / FOCUS ACTIVITY AREAS	IDENTIFIED ACTIONS/ INITIATIVES			STEERING COMMITTEE MEMBER ACTIVITY OR RESPONSIBILITY	EXISTING ACTIVITIES /SUPPORTING (information/comments/ follow-up)
	<b>PLANNED</b>				
		<b>2022</b>	<b>2023</b>		
					<p>MOU will expire by <b>July 30, 2023</b>. The total number of students shall be 150-200.</p> <p>2) The agreement stipulates that UG should train about 150 at-risk students, 18 – 30 years old, in the areas of Digital/Data Literacy, Data Management, Data Visualization, Data Integration and Big Data Analytics. Other spin-off benefits include mentorship of all participants and job placement for at least 20% of the participants. Training of the first two groups (80 in total) commenced in March 2021.</p>
<b>Digital Opportunity traineeships:</b>	Develop an apprenticeship and internship programme for girls according to their areas of interest in STEM/ICT;		✓	<b>UWI</b>	<b>UWI, St. Augustine</b> Department of Computing and Information Technology Internship Course

KEY ACTIONS / FOCUS ACTIVITY AREAS	IDENTIFIED ACTIONS/ INITIATIVES			STEERING COMMITTEE MEMBER ACTIVITY OR RESPONSIBILITY	EXISTING ACTIVITIES /SUPPORTING (information/comments/ follow-up)
	<b>PLANNED</b>				
		<b>2022</b>	<b>2023</b>		
	Programmes for Partners to Offer Services (as Employers)				
<b>To enhance ICT capacity and awareness in the education link system in partnership with industry</b>	Implement innovative Professional orientation formats with the private sector to encourage secondary school girls to choose a career in ICT		✓	<b>Steering Committee</b>	
<b>POLICY AREA 4: INTEGRATING ICT AND STEM INTO A BROADER CURRICULUM</b>					
<b>Consultations (ICT, Computing, STEM) into curriculum</b>	Partner with local ICT/STEM Training Institutions, programmes and nonprofit organizations to incorporate ICT curriculum in activities;		✓	<b>Bahamas</b> (Department of Transformation and Digitization);	Suriname Basic Education Improvement Program II (BEIP II, InterAmerican Development Bank funding) project;

KEY ACTIONS / FOCUS ACTIVITY AREAS	IDENTIFIED ACTIONS/ INITIATIVES			STEERING COMMITTEE MEMBER ACTIVITY OR RESPONSIBILITY	EXISTING ACTIVITIES /SUPPORTING (information/comments/ follow-up)
	<b>PLANNED</b>				
		<b>2022</b>	<b>2023</b>		
				<b>Suriname</b> (Ministry of Education, Science and Culture)	Suriname (Ministry of Labor, Employment and Youth Affairs) Coach training will be provided to young people – age group 16-24 years
	Promotion of ICT and STEM into other sectors such as energy, and agriculture at learning institutions		✓	<b>Steering Committee</b>	
<b>Development of Policy / Guidelines / Strategy</b>	Develop common guidelines for teachers and educational staff to foster digital literacy and tackle disinformation through education and training;  Ethical guidelines on artificial intelligence (AI) and data usage in teaching and learning	✓	✓	<b>UNICEF</b>	

KEY ACTIONS / FOCUS ACTIVITY AREAS	IDENTIFIED ACTIONS/ INITIATIVES			STEERING COMMITTEE MEMBER ACTIVITY OR RESPONSIBILITY	EXISTING ACTIVITIES /SUPPORTING (information/comments/ follow-up)
	PLANNED				
		2022	2023		
	Develop Curriculum planning toolkit		✓	Steering Committee	
	Develop policies/guidelines for <ul style="list-style-type: none"><li>digital citizenship</li><li>netiquette</li><li>child online protection</li><li>gender equality in the workforce</li></ul>		✓	Steering Committee	
Produce reports on data collected that analyse, uncover trends, support claims	Data to support the activities: <ul style="list-style-type: none"><li>Representation at primary level</li><li>Representation at secondary level</li><li>Representation at University level</li><li>Representation in Workforce</li></ul>	✓	✓	CARICOM Secretariat;  Universities (UWI, UG);  CXC;  Member States (Ministries of Education)	Important findings on pass/fail rates, attrition, enrolment, graduation, methodologies, state of computing;  UG and Slash Roots Foundation partnership - Caribbean School of Data

KEY ACTIONS / FOCUS ACTIVITY AREAS	IDENTIFIED ACTIONS/ INITIATIVES			STEERING COMMITTEE MEMBER ACTIVITY OR RESPONSIBILITY	EXISTING ACTIVITIES /SUPPORTING (information/comments/ follow-up)
	<b>PLANNED</b>				
		<b>2022</b>	<b>2023</b>		
	Collect data on: 1) Pass/fail rates (by subject), enrolment (by year, country) 2) Enrolment, attrition, graduation (by faculty, by department) 3) Primary school data (literacy rates, girls/boys, number of schools, resources, environment); 4) Job placements				
	Publication and presentation of research activities		✓	<b>Universities</b>	<i>Examples of studies:</i> multidisciplinary research (on the established infrastructures, structures, systems, and processes that inadvertently lead to systematic or systemic oppression of women in STEM/ICT/STEAM)

KEY ACTIONS / FOCUS ACTIVITY AREAS	IDENTIFIED ACTIONS/ INITIATIVES			STEERING COMMITTEE MEMBER ACTIVITY OR RESPONSIBILITY	EXISTING ACTIVITIES /SUPPORTING (information/comments/ follow-up)
	<b>PLANNED</b>				
		<b>2022</b>	<b>2023</b>		
<b>Establish Protocols to support STEM in the learning curriculum</b>	Establish Protocols to support STEM in the learning curriculum: - development of protocols and guidelines for green and resilient school designs that increase learning spaces	✓	✓	<b>UNICEF, UG</b>	Data collected on trends in Primary School regions can inform observations of resource deficiencies. This policy may then be applied to those schools; Safe Schools Initiative standards; <b>(Sep 2021 – Sep 2022;</b> University of Guyana -The MST-Tree Model (Motivation, Support, Teaching) was created in <b>2018</b>  Application of this model to the Guyanese Girls Code Initiative;  University of Guyana STEM-Robotics curriculum to teach Special Needs Students; Application of the curriculum to Special Needs Schools <ul style="list-style-type: none"> <li>Pilot study was conducted in 2020</li> </ul>

## APPENDICES

### APPENDIX 1 - ACRONYMS AND EXPLANATORY NOTES

ACRONYMS	EXPLANATORY NOTES
<b>CWIC</b>	<b>CARIBBEAN WOMEN IN ICT</b>
❖ <b>EQUALS Skills Coalition</b>	<ul style="list-style-type: none"> <li>○ Empowering women and girls to acquire skills to become both ICT users and creators in the digital world and STEM fields;</li> <li>○ Contributes to the UN Sustainable Development Agenda through actions and evidence-based research aimed at closing the global gender digital divide</li> </ul>
<b>HRD STRATEGY – HUMAN RESOURCE DEVELOPMENT STRATEGY 2030</b>	is intended to address general deficiencies and shortfalls in the education system by reforming/redesigning the three inter-connected sectors (basic education – early childhood development – primary and secondary; lifelong skills learning; and tertiary education) within a single unified seamless HRD system in the areas of access, relevance, equity and quality.
<b>SDG</b>	<b>SUSTAINABLE DEVELOPMENT GOALS</b> <ol style="list-style-type: none"> <li><b>1. No Poverty:</b> End poverty in all its forms everywhere</li> <li><b>2. Zero Hunger:</b> End hunger, achieve food security and improved nutrition and promote sustainable agriculture</li> <li><b>3. Good Health and Well-Being:</b> Ensure healthy lives and promote well-being for all at all ages</li> <li><b>4. Quality Education:</b> Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all</li> <li><b>5. Gender Equality:</b> Achieve gender equality and empower all women and girls</li> <li><b>6. Clean Water and Sanitation:</b> Ensure availability and sustainable management of water and sanitization for all</li> <li><b>7. Affordable and Clean Energy:</b> Ensure access to affordable, reliable, sustainable and modern energy for all</li> </ol>

ACRONYMS	EXPLANATORY NOTES
	<p><b>8. Decent Work and Economic Growth:</b> Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all</p> <p><b>9. Industry, Innovation and Infrastructure:</b> Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation</p> <p><b>10. Reduced Inequalities:</b> Reduce inequality in and among countries</p> <p><b>11. Sustainable Cities and Communities:</b> Make cities and human settlements inclusive, safe, resilient and sustainable</p> <p><b>12. Responsible Consumption and Production:</b> Ensure sustainable consumption and production patterns</p> <p><b>13. Climate Action:</b> Take urgent action to combat climate change and its impact</p> <p><b>14. Life Below Water:</b> Conserve and sustainably use the oceans, seas and marine resources for sustainable development</p> <p><b>15. Life on Land:</b> Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss</p> <p><b>16. Peace, Justice and Strong Institutions:</b> Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels</p> <p><b>17. Partnerships for the Goals:</b> Strengthen the means of implementation and revitalize the global partnership for sustainable development</p>
<b>SINGLE ICT SPACE OBJECTIVE</b>	<p>to provide the ICT-enabled foundation for enhancing both CARICOM's functional cooperation and fulfilling the social, cultural and economic imperatives of the region.</p> <p><b><i>The Roadmap and Action Plan were approved by CARICOM Heads of Government in 2017.</i></b></p>
<b>WSIS</b>	<b>WORLD SUMMIT ON INFORMATION SOCIETY PLAN OF ACTION</b>

ACRONYMS	EXPLANATORY NOTES
	<p>The objectives of the WSIS were to develop and foster a clear statement of political will and take concrete steps to establish the foundations for an Information Society for all, reflecting all the different interests at stake; and to put Geneva's Plan of Action into motion as well as to find solutions and reach agreements in the fields of Internet governance, financing mechanisms, and follow-up and implementation of the Geneva and Tunis documents (<a href="https://www.itu.int/net/wsis/basic/about.html">https://www.itu.int/net/wsis/basic/about.html</a>)</p>
<b>WSIS PLAN OF ACTION – ACTION LINES</b>	<ol style="list-style-type: none"> <li>1. The role of public governance authorities and all stakeholders in the promotion of ICTs for development</li> <li>2. Information and communication infrastructure</li> <li>3. Access to information and knowledge</li> <li>4. Capacity building</li> <li>5. Building confidence and security in the use of ICTs</li> <li>6. Enabling environment</li> <li>7. ICT applications</li> <li>8. Cultural diversity and identity, linguistic diversity and local content</li> <li>9. Media</li> <li>10. Ethical dimensions of the Information Society</li> <li>11. International and regional cooperation</li> </ol>

## APPENDIX 2 - LIST OF OBSERVANCES

Date	Observance
<b>24 Jan</b>	International Day of Education
<b>Feb (2<sup>nd</sup> Tuesday)</b>	Safer Internet Day
<b>11 Feb</b>	International Day of Women & Girls in Science
<b>8 Mar</b>	International Women's Day
<b>Apr (4<sup>th</sup> Thursday)</b>	International Girls in ICT Day
<b>17 May</b>	World Telecommunication and Information Society Day
<b>15 Jul</b>	World Youth Skills Day
<b>12 Aug</b>	International Youth Day
<b>28 Sep</b>	International Day for Universal Access to Information
<b>1-31 Oct</b>	Cyber Security Awareness month
<b>5 Oct</b>	World Teachers' Day
<b>11 Oct</b>	International Day of the Girl Child

Date	Observance
15 Oct	CARICOM Statistics Day
20 Nov	Universal/world Children's Day
3 Dec	International Day of Persons with Disabilities