



Government of the Co-operative  
Republic of Guyana

Ministry of Education

Information and Communication Technology in Education  
**Policy and Master Plan**

An ICT empowered modern, equitable and responsive education system  
for the transformational development of Guyanese citizens

December 2021

*Developed with Assistance from UNESCO*



# Minister Foreword

**I**nformation Communication Technology (ICT) is an essential element of any education system today. The pace at which technology is transforming our lives is unprecedented, and education sectors need to keep pace with technological advancement. However, this is not the case.

This ambitious document is one of our many efforts to modernise and transform education in Guyana. It enables us to implement targeted, structured, and intentional strategies to leverage ICT for education transformation. The areas covered in this document are the essential building blocks to support this endeavour.

As a sector, we are serious about ensuring this education transformation by leveraging ICT so that all students are exposed and have 21<sup>st</sup>-century skills to be able to work and interact competently in their work and study.

The five areas outlined in this document will enable us to address professional development opportunities for school leaders and the Ministry of Education Officials so that ICT can be used as a tool to plan for and promote learning.

We intend to transform information into a tool for educational improvement through our Education Management Information System (EMIS) by digitising our processes to have real-time data to support school improvement.

The inclusion of technology-assisted learning at the primary and secondary levels is the beginning of our efforts to foster the infusion and enactment of digital competencies across subjects and grades. As a sector, we have to be the driving force behind the use of digital



**Honourable Priya Manickchand  
Minister of Education**

tools in the industry, commerce and service areas. To do this we must ensure that our students have the exposure to the use of these digital tools and resources before going into the world of work. This exposure will facilitate students' career exploration and the use of advanced digital tools in the delivery of Technical Vocational Education and Training (TVET).

I am optimistic about where we are going regarding the digital transformation in this sector, and I know that what we envision is certainly achievable through the implementation of this EMIS Policy and associated Master Plan.

# ACKNOWLEDGEMENTS

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## Abbreviations

● EMIS	Education Management Information System
● ESP	Education Sector Plan
● ICT	Information and Communications Technology
● LMS	Learning Management System
● MoE	Ministry of Education
● REdO	Regional Education Officer
● PEO	Principal Education Officer
● SDG	Sustainable Development Goal
● TVET	Technical and Vocational Education and Training
● UNESCO	United Nations Educational Scientific and Cultural Organization

# 1 Introduction

## 1.1 Country Background

**T**he Co-operative Republic of Guyana is a small country with abundant natural resources. It has a low population density, with 90 per cent of its 779,004 inhabitants living on a narrow coastal plain that constitutes 10 per cent of its land. A quarter of the population lives in urban areas, and it is mainly indigenous groups that populate the rural hinterland regions.

At an average age of twenty-five, Guyana's multi-ethnic population is dominated by youth of East Indian, African, Chinese, Portuguese, and European descent, the nine indigenous groups, and mixed races. Guyana is part of the Caribbean region, sharing strong socio-political and historical commonalities with the (Anglo) Caribbean Community.

Over the last few decades, Guyana has fared well in terms of economic growth, moving from a low-income country in the mid-1990s to an upper-middle-income country between 2015 and the present. Despite these economic changes, the country has instituted and sustained prudent monetary and fiscal policies to maintain price and exchange rates.

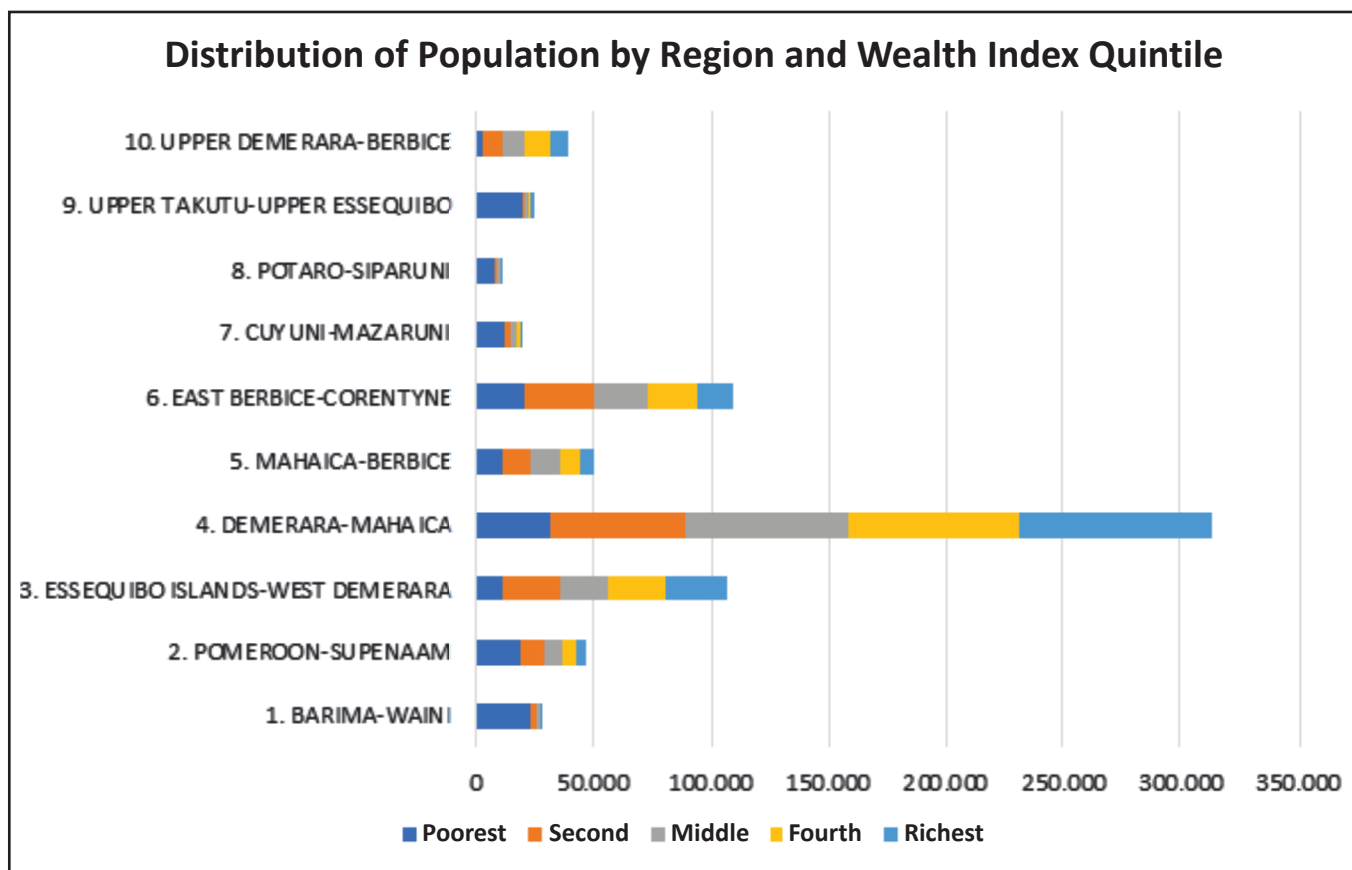
The country's economic base is expected to expand in the short, medium and long terms, with emerging sectors such as eco-tourism, construction, information and communication technology (ICT), and, more recently (2015)—the discovery and recovery of oil and gas.

Poverty in Guyana is concentrated in the rural areas of the country and is highest in rural-interior/hinterland areas. Before the COVID-19 pandemic, the overall poverty rate was estimated at 41.2 per cent.

The highest percentages of poor people are in Regions 1, 7, 8 and 9 (the hinterland areas) where the indigenous Amerindian population is concentrated. 78 per cent of Amerindians live in poverty.

Only 37 per cent of the population in these regions has access to electricity by way of the interconnected grid, solar panel, generator or isolated system. 75 per cent of the households do not have access to the Internet; only 36 per cent have access to either radio, television, fixed line or mobile phone. Figure 1 shows the distribution of the population by region and the Wealth Index Quintile.

**Figure 1**  
*Distribution of Population by Region and Wealth Index Quintile*



Source. Guyana 2019–2020 Survey: Multiple Indicator Cluster Survey – MICS6

It is widely recognized that greater national development and a reduction in poverty are integrally associated with a sound education system. The priority in the Education Sector is to: **(a) improve access to education at every level from nursery to university; (b) raise the quality of education across all levels; and (c) to prepare students for the job market, especially at the technical and tertiary levels.**

Guyana provides free formal education from the pre-primary to secondary levels. The country is divided into eleven educational districts, comprising the ten administrative regions and the capital of Georgetown as a separate eleventh district. Education in each region is managed by a Regional Education Officer (REdO), while Georgetown is managed by the Principal Education Officer (PEO).

## 1.2 Education Sector Plan 2021–2025

The 2030 Vision for the sector is **"Providing opportunities for quality, equitable education and lifelong learning for all."** This vision is articulated in the Education Sector Plan (ESP) at a time when major growth in the economy is predicted because of the discovery of oil and gas.

It is expected that these extractive industries will be the key drivers of economic growth in the medium term. At the same time, Guyana's national development strategy ensures the alignment of the government's educational priorities with the United Nation's 2030 Agenda and its Sustainable Development Goals (SDGs).

The strategy not only aims to foster sustained economic growth that is low carbon and climate-resilient, but also to promote social cohesion, good governance and careful management of finite natural resources. Given these aligned

development aims, the ultimate goal of the ESP 2021–2025 is consistent with the goals of previous plans: **to contribute to employability and reduction of poverty by increasing performance at all levels and reducing the disparity between sub-groups.**

The main policy priorities in the Education Sector Plan 2021–2025 are:

**1. Improving governance and accountability (continued from 2014–2018 plan)**

- a. Strengthen resource development, management and accountability at central, regional and school levels to improve the day-to-day functioning of the sector
- b. Develop coherent national policies geared towards improving education service delivery

**2. Improving performance at all levels**

- a. Ensure children at Nursery demonstrate mastery of skills and competencies
- b. Ensure learners at Primary demonstrate functional numeracy and literacy skills
- c. Ensure Secondary School graduates matriculate and obtain a skill certificate

**3. Improving the efficiency of the Education System (continued from 2014–2018 plan)**

- a. Ensure students complete a full cycle of Primary Education
- b. Ensure students complete the Secondary programme in five to eight years

**4. Reducing inequities in Education (students living in the hinterland and those with a disability)**

- a. Ensure equitable distribution of education resources and delivery across education districts, with specific emphasis on hinterland and riverine areas

**5. Contributing to lifelong learning and employability (Adult Education programmes and TVET)**

- a. Ensure all youth/adults, especially women and disadvantaged groups, have access to quality literacy, post-literacy, life skills programmes and opportunities
- b. Ensure the quality and relevance of Post-Secondary and Non-Formal Education
- c. Ensure all learners are employable in their area of study at the end of a given education programme

The ICT in Education Policy will address these priorities by (a) contributing to the technology-assisted learning process at the Nursery, Primary and Secondary levels; (b) establishing SMART classroom initiatives that will facilitate the twinning of low-performing schools with high-performing schools; (c) infusing digital competencies in and across Primary, Secondary and TVET curricula and pedagogies; (d) developing ICT competencies for teachers, students and education officers; (e) providing Open Schooling<sup>1</sup> through distance and digital learning modalities and (f) ensuring access to, and effective use of, digital devices, Internet, learning platforms and resources.

<sup>1</sup> Open/ Innovative Schooling, as described by the Commonwealth of Learning, can be a parallel or complimentary facet of the education system, whereby open, distance, and online methods of education delivery and interaction are leveraged to reach learners who due to geographical, social, and/or economic hindrances, cannot attend regular physical school.

### 1.3 Opportunities and Challenges for ICT in Education

During the last decade, the use of Information and Communication Technologies (ICT) in education showed a rapid evolution and expansion across educational systems around the world. The "new normal" induced by the COVID-19 pandemic catalyzed an unprecedented acceleration in the access to and use of these technologies.

However, it also amplified equity gaps and the many dimensions of the digital divide, underscoring the importance of ICT in education policies that address these gaps when allocating the use of digital technologies in the educational system.

The role of ICT in Education is threefold: (a) as a medium of delivery to enable or expand access to educational opportunities; (b) as a tool used by teachers and students to improve the relevance and quality of teaching and learning processes; and (c) as a means to develop digital competencies needed to live, learn, and work in the increasingly technology-rich world (UNESCO, 2021).

**ICT as a medium.** Although the use of ICT to enable or expand access to educational opportunities has a long history, the COVID-19 pandemic restrictions on physical schooling placed online learning as a top priority worldwide.

Facing the need to continue delivering education remotely, many countries used a variety of technologies, including SMS, Radio, Television, and ICT. To effectively use these technologies to deliver education at a distance, new teaching and learning methods that strengthen teacher and student engagement in remote learning environments need to be developed.

#### **ICT as a tool.**

The effectiveness of ICT as a tool for teaching and learning is entirely dependent on how that tool is harnessed, understood, and employed. Therefore, strengthening teachers' capacity to meaningfully integrate ICT in their professional activities is crucial.

Many countries have recently established digital competence frameworks for teachers that define and guide teachers' use and adoption of digital technologies (see for example: Redecker & Punie,

2017; UNESCO, 2018).

A school-wide approach is strongly recommended to promote the effective integration of digital tools into learning environments. Incorporating ICT use directly into a school's vision and improvement plans is recognized as a key condition for the success and sustainability of ICT-based innovations in schools.

For this, some international organizations have developed digital technology adoption frameworks for schools that enumerate the school-level conditions and strategies that enable the digital transformation of schools.

#### **ICT as a lifelong asset.**

Many countries have incorporated the development of 21st century skills—and digital competencies in particular—into national curricula. However, to develop these competencies, it is necessary to infuse the use of ICT across curricula so that students can learn to use ICT while learning with ICT. Therefore, all teachers across all subject areas must be prepared to use ICT and teach about the use of ICT.

Defining a student digital competencies framework is a necessary step toward reaching a shared understanding of the use and potential of ICT. In general, these frameworks consider seven areas: devices and software operations, information and data literacy, communication and collaboration, digital content creation, safety, problem-solving, and career-related competencies .

In sum, lessons from the international community show that ICT can improve student learning and develop their digital competencies. However, to realize its potential, it is necessary to:

- Enable access to a variety of quality ICT devices, content and tools that are readily available and of standard quality.
- Cultivate the use of digital educational resources to support instruction.
- Define a comprehensive digital competency framework that goes beyond technical skills alone; and integrate these competencies into the curriculum.
- Establish strategies to promote the development of students' digital competencies and a mechanism to evaluate them.
- Promote pedagogical approaches that leverage computer-assisted learning models that are tailored to the particular skills of teachers and students in a given context.

- Provide continuous and well-designed teacher professional development opportunities and support teachers' appropriation and use of new technologies for pedagogical purposes.
- Associate the use of digital technology with teacher incentive and appraisal mechanisms. Guide and support school leadership to encourage and provide opportunities for teachers to use ICT.
- Guided by international experience, the present ICT in Education Policy adapts the recommendations to the particular characteristics and conditions of the Guyanese educational system, aiming at improving educational access, relevance and quality.

### 1.4 The Evolution of ICT in Education in Guyana: Needs and Challenges

The needs and challenges of the use of ICT in Education have been addressed in Guyana's previous Education Strategic Plans. The Education Strategic Plan 2003-2007 expanded the use of ICT in schools through the development of computer laboratories; however, such technology was mainly used to improve the quality of literacy and numeracy instruction. To support such initiatives, TVET institutions introduced Computer Studies to increase the human capacity in computer technology and maintenance.

The MoE's Strategic Plan 2008-2012 renewed the emphasis on expanding ICT infrastructure and capacity, with a specific focus on teacher training and the creation of distance learning models. Also, complementary projects over the plan period 2014-2018, such as the ProFuturo Program, Guyana Secondary Education Improvement Project, Guyana Education Sector Program Project, and others, have contributed to the integration of ICT in schools.

As a result of these initiatives, there is currently a well-established ICT infrastructure in Secondary schools. However, the ICT infrastructure in Nursery and Primary schools is lagging behind, especially in hinterland regions (see Tables 1 and 2).

**Table 1**  
*Availability of ICT in Primary Schools*

Region	Total Schools	Computer Lab		Internet	
		Schools	%	Schools	%
1	53	7	13%		0%
2	40	9	23%	17	43%
3	58	17	29%	30	52%
4	55	27	49%	44	80%
5	30	13	43%	22	73%
6	52	29	55%	34	65%
7	33	2	6%		0%
8	25	0	0%		0%
9	50	2	4%	3	6%
10	30	12	40%	10	33%
11	27	24	88%	18	67%
<b>Total</b>	<b>453</b>	<b>142</b>	<b>31%</b>	<b>178</b>	<b>39%</b>

Source. Ministry of Education database

**Table 2**  
*Availability of ICT in Secondary Schools*

Region	Total Schools	Computer Lab		Internet	
		Schools	%	Schools	%
1	3	3	100%	3	100%
2	8	8	100%	8	100%
3	14	12	86%	13	92%
4	18	16	89%	16	89%
5	9	7	78%	7	78%
6	17	17	100%	17	100%
7	3	3	100%	3	100%
8	3	3	100%	3	100%
9	4	4	100%	4	100%
10	7	7	100%	8	100%
11	30	29	97%	30	100%
<b>Total</b>	<b>116</b>	<b>109</b>	<b>94%</b>	<b>112</b>	<b>97%</b>

Source. Ministry of Education database

Previous projects have targeted the expansion of the use of ICT in teaching and learning by training and supporting teachers to integrate ICT into their lessons. However, the extent to which technology is actively being used in the classrooms is unclear at present.

It is clear that despite the progress made from these previous initiatives, there remains a need to adopt a holistic approach to the use of ICT in the education system. The adoption of this approach is conditional on two factors that must be addressed in tandem: access and attitude.

System wide access to technologies—devices, internet, software systems, and digital education resources is a clear and compulsory condition for the adoption of this approach. However, access alone cannot bring about the behavioural shift that will create the modern, equitable, ICT-empowered education system that Guyana envisions.

To incite this shift, Guyana needs to cultivate a "digital culture" across the education system that promotes the meaningful use of ICT for the effective management and delivery of education. This holistic approach can only be achieved by a shift in attitude towards the use of ICT among all education stakeholders, from students and families to teachers, principals and Ministry officials.

Additionally, such a holistic approach calls for coherence among pedagogical practices, initial teacher training curriculum, teachers' professional competency standards and appraisals and incentive system, and digital competency standards, curriculum, learning assessments, and lifelong learning opportunities for students.

Presently, Guyana is positioned upon an ideal groundwork to capitalize on the potential affordances of the use of ICT in education. For example, several ongoing initiatives are already aiming to strengthen the availability and use of digital technologies in initial teacher training, teachers' professional development, and teaching and learning in Nursery, Primary and Secondary schools. The ICT in Education Policy provides a framework that will promote synergies and complementarities between these initiatives to achieve alignment towards a shared goal.

## **2** Vision for the ICT in Education Policy

The vision of the ICT in Education Policy considers the range of possibilities for the use of ICT in

education to support the successful implementation of the Education Sector Plan and to address the challenges facing Guyana's education system. This vision defines a frame of reference for the present and future integration of digital technologies into all dimensions of the education system in the country. It defines an ambitious but attainable scenario for a future **"ICT empowered modern, equitable and responsive education system for the transformational development of Guyanese citizens."**

To realize this vision, the policy defines five strategic goals:

1. Improve leadership and management procedures and practices across the system through the adoption of digital tools and the use of data and information in the professional culture.
2. Enable and promote transformational teaching and learning opportunities and practices.
3. Ensure that all educators have the capacity and opportunity to effectively use ICT tools and digital resources in their professional practices.
4. Contribute to lifelong learning by teaching with ICT and about ICT.
5. Enable school principals, teachers and students to have access to, and effective use of, digital devices, Internet, learning platforms and resources.

## **3**

### **Components and Goals**

To achieve the strategic goals, the policy considers six components with respective goals (see Figure 2 for visualization):

#### **1. Leadership and Management**

To improve leadership and management procedures and practices across the system through the adoption of digital tools and use of data and information in the professional culture, it is necessary to:

- Develop ICT leadership capacity across the education system
- Transform information into a tool for educational improvement

## 2. Pedagogy and Content

To enable and promote transformational teaching and learning opportunities and practices, it is necessary to:

- Infuse and enact digital competencies in and across the curriculum for teaching, learning and assessment
- Leverage digital tools to connect TVET and Secondary learners to relevant social and economic opportunities
- Ensure the availability of quality digital educational resources

## 3. Capacity Building

To ensure that all educators have the capacity and opportunity to effectively use ICT tools and resources in their professional practices, it is necessary to:

- Enhance initial and ongoing professional development that teaches educators how to use, teach with, and deliver lessons through ICT

## 4. Lifelong Learning

To contribute to lifelong learning by teaching with and about ICT, it is necessary to:

- Expand quality lifelong learning opportunities across the education system
- Ensure that all citizens can develop the digital competencies required to participate and contribute to the society and the economy

## 5. Digital Infrastructure

To enable school principals, teachers and students to have access to, and effective use of, digital devices, Internet, learning platforms and resources, it is necessary to:

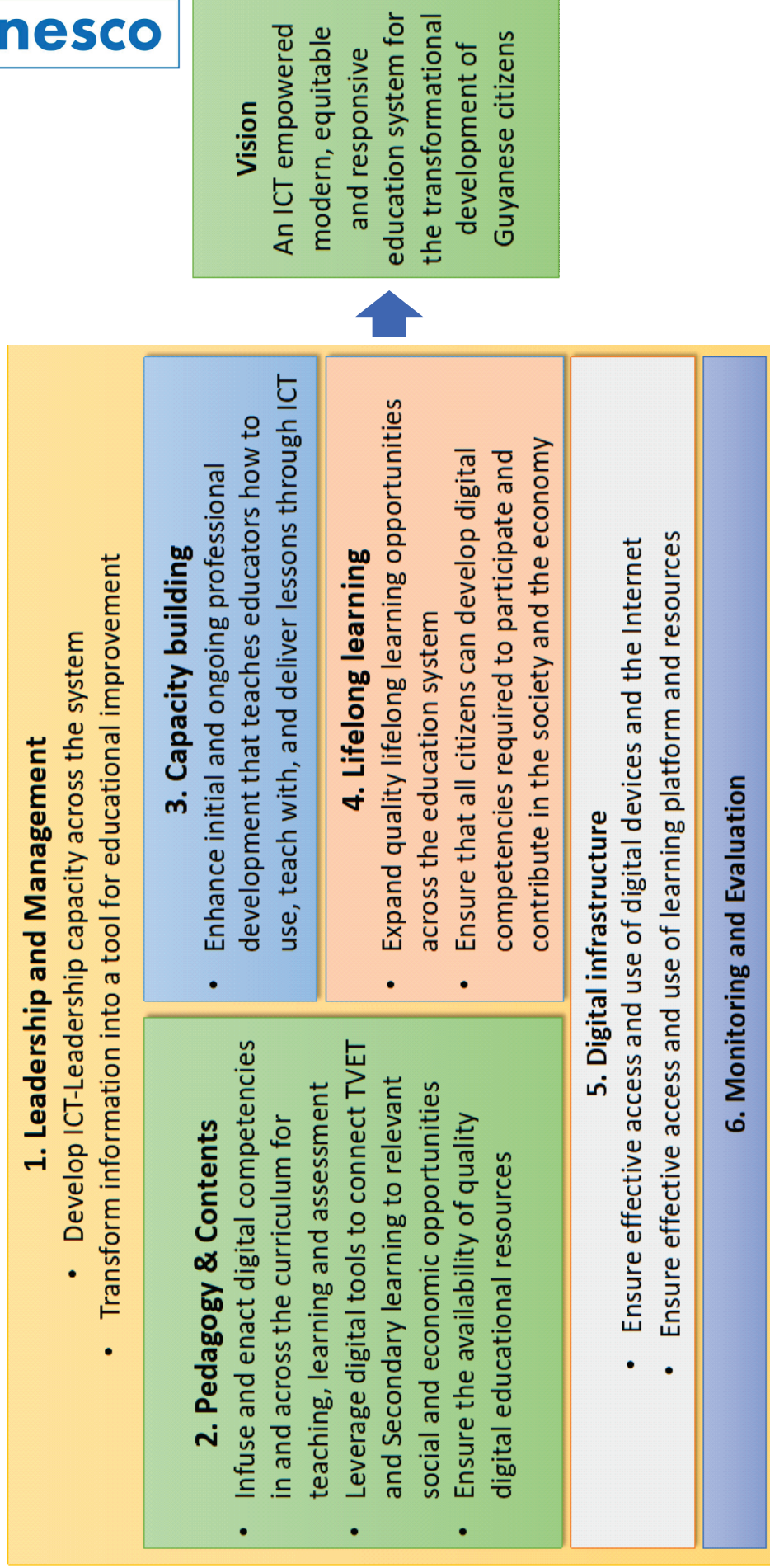
- Ensure effective access to and use of digital devices and the Internet
- Ensure effective access to and use of learning platforms and digital resources

## 6. Monitoring and Evaluation

To ensure the effective implementation and timely adaptation of the policy, it is necessary to:

- Design and implement a monitoring system
- Design and implement evaluation procedures

**Figure 2**  
Components of the ICT in Education Policy



## 4 Implementation Strategies

This section outlines the strategies to be implemented in each component goal.

### 4.1 Leadership and Management

#### 4.1.1 Develop ICT leadership capacity across the education system

The strategy to achieve this goal is to provide and disseminate an ICT adoption framework to guide education leaders through the considerations and component steps for a school-wide adoption of ICT, including the incorporation of this framework into school improvement plans.

To support the use of the frame of reference in the schools, it is necessary to designing and implement professional development opportunities for school leaders and MoE officials. MoE officials, and Inspectors in particular, should acquire the skills to assist schools in the adoption of the frame of reference.

##### The main activities are

- Definition and dissemination of an ICT adoption framework for schools.
- Designing and implementation of professional development opportunities for school leaders and MoE officials.
- Integration of ICT Leadership & Governance Practices into the standards for school leaders.
- Monitoring and supporting the adoption of the framework in schools.

#### 4.1.2 Transform information into a tool for educational improvement

To achieve this goal, as is described in Guyana's Education Management Information System (EMIS) Policy, it is necessary to develop the capacity, tools and appropriate incentives for the implementation of evidence-based decision-making practices among the different actors of the education system.

##### The main activities defined in the EMIS Policy and Master Plan are:

- Identify key decision-making practices at different levels: classroom, school, department, region and Central Ministry.
- Analyze and redesign decision-making practices based on a re-engineering process.
- Design and implement the software to support the decision-making process,

including data collection, use (aggregation and representation), and analysis.

- Design and implement professional development courses for the use and adoption of the systems.
- Design and implement incentive mechanisms for the actors to use the systems.

### 4.2 Pedagogy and Content

#### 4.2.1 Infuse and enact digital competencies in and across the curriculum for teaching, learning and assessment

The strategy to achieve this goal is to explicitly integrate the use of ICT as a complement of the new curriculum and include it in the new curriculum dissemination and training (adoption) strategy.

In particular, complement the new curriculum with guidelines and concrete examples of the use of ICT for teaching and assessment within each subject and grade, clearly identifying the cross-cutting digital competencies that are expected to be developed.

##### The main activities are:

- Definition of a framework for students' digital competencies.
- Map and integrate digital competencies across subject areas and grades.
- Designing and implementation of a dissemination strategy for the enriched curriculum.
- Designing and implementation of strategies to support the adoption of the enriched curriculum.

#### 4.2.2 Leverage digital tools to connect TVET and Secondary learners to relevant social and economic opportunities

The strategy to achieve this goal is to (a) foster interest in and awareness of the new opportunities and demands of the social and economic digital contexts among students; (b) build awareness and consciousness among key economic stakeholders of the importance of building connections with students and teachers; (c) implement digital resources and tools to facilitate career exploration; and (d) foster the integration of advanced digital tools in the delivery of TVET.

**The main activity is :**

- Integration of the use of new digital tools used in the industry, commerce and service areas in the TVET and secondary curriculum.

**4.2.3 Ensure the availability of quality digital educational resources**

The strategy to achieve this aim is to create a repository of digital educational resources (platforms) and to develop guidelines and examples for the selection and use of a variety of digital educational resources, linking them to the curriculum.

**The main activities are:**

- Designing of a strategy for the provision of digital/open educational resources
- Designing and implementation of a repository of digital educational resources
- Operationalising of the repository of digital educational resources
- Supporting of teachers and teacher educators in the use of the repository of digital educational resources

**4.3 Capacity Building**

**4.3.1 Enhance initial and ongoing professional development that teaches educators how to use, teach with, and deliver lessons through ICT**

The strategy is to develop and adapt courses for teachers based on an updated version of the ICT competency standards for teachers and deliver them using distance, blended or face-to-face strategies.

**The main activities are:**

- Updating of the ICT competency standards for teachers.
- Integration of the standards in the initial teacher training curricula.
- Integration of the standards in the professional development courses.
- Design and implementation of professional development opportunities based on online and blended education modalities.
- Empowerment of teachers to take responsibility and ownership of their professional development.

**4.4 Lifelong learning**

**4.4.1 Expand quality lifelong learning opportunities across the system**

This aim includes enabling access to distance education lifelong learning opportunities for Primary,

Secondary, TVET and Higher Education students as well as promoting and enabling lifelong learning opportunities for all through an Open School model.

**The main activities are:**

- Expanding of quality lifelong learning opportunities for primary, secondary and TVET levels.
- Expanding of quality lifelong learning opportunities in higher education
- Expanding of quality lifelong learning opportunities for all

**4.4.2 Ensure that all citizens can develop the digital competencies required to participate in and contribute to society and the economy**

The strategy is to design and implement a variety of digital skills courses tailored to the different needs, entry levels and the access conditions.

**The main activities are:**

- Definition of a digital citizenship competency framework.
- Designing and implementation of online/blended learning opportunities for parents and the community.

**4.5 Digital infrastructure**

**4.5.1 Ensure effective access and use of digital devices and the internet**

The strategy for Nursery education will focus on the provision of devices in classrooms and ensuring internet connectivity. For Primary education, the strategy will be to provide a combination of computer labs and Smart Classrooms and to continue the provision of internet. For Secondary education, the strategy will be to improve the existing digital infrastructure and enable classroom use of digital devices. Finally, in TVET, the strategy is to enable ubiquitous access to computers and internet, especially in laboratories and work areas.

**The main activities are:**

- Implementation of a national educational internet network
- Supporting of the provision of tablets and Smart Spaces/Rooms in nursery schools
- Designing and implementation of a strategy to enable the implementation of computer laboratories in Primary schools combining efforts of the regional and central ministry .

- Expansion of the provision of smart classrooms in primary schools.
- Upgrading of the computer laboratories in secondary schools.
- Provision of class sets trolley with tablets for students in Secondary schools.
- Provision of sector-specific digital infrastructure for TVET classrooms, laboratories, and workshops.

#### 4.5.2 Ensure effective access to and use of learning platforms and resources

To achieve this aim, it is necessary to progressively enable and support the access to and use of the learning management system (LMS) and to define and implement a plan to further evolve the provision and use of increased functionalities and services as they become available.

##### The main activities are:

- Definition and implementation of a plan to provide access to the LMS based on the availability of devices and internet.
- Designing and implementation of a plan for the delivery of increasing functionalities and services to be implemented in the LMS.
- Designing and implementation of a technical support strategy for the use of the LMS.

#### 4.6 Monitoring and evaluation

Monitoring and evaluation of the integration of ICT into schools and the education system is integral to its

successful implementation. The monitoring and evaluation of the policy and master plan will follow the processes articulated in the 2021–2025 Education Sector Plan. Through these processes all results indicators will be established and adopted to assess progress, identify best practices and facilitate learning.

##### 4.6.1 Design and implement a monitoring system

**In close coordination with the implementation of the EMIS policy, the main activities for the implementation of the monitoring system are:**

- Development of the policy results framework.
- Alignment of the ICT masterplan results with the Policy results framework.
- Integration the results framework with EMIS.

##### 4.6.2 Design and implement evaluation procedures

**The main activities for the evaluation of the ICT in Education Policy are:**

- Conducting of mid-term review of the ICT Policy and Masterplan implementation. Conducting of evaluations for all ICT initiatives inclusive of capacity building.

Five Years Master Plan

Strategic objectives/ Programmes	Results Indicator(s)	Responsible Person/Unit	Overall Cost for 5-years (GYD,000)	Targets				
				Y1 2021	Y2 2022	Y3 2023	Y4 2024	Y5 2025

Component 1: Leadership and Management

Strategic Objective: 1.1 Develop ICT-Leadership capacity across the education system

1.1.1	Definition and dissemination of an ICT adoption framework for schools	DCEO-D	3,000	Review international examples of ICT adoption frameworks for schools Select and adapt a framework	Define and implement a dissemination strategy	Review and update the framework if necessary	
1.1.2	Designing and implementation of professional development opportunities for school leaders and MoE officials.	NCERD/MISU	17,000	Define thematic priorities (based on the standards) Design 2 programmes (MoE officials & School leaders)	Deliver the 2 programmes		
1.1.3	Integration of ICT leadership & governance practices in the standards for school leaders.	DCEO- D/ACEO -Lit	3,000		Review and identify opportunities to integrate roles and responsibilities included in the ICT adoption framework in the standards for school leaders Include new roles and responsibilities in the appraisal and incentive strategies	Implement the standards	



### Five Years Master Plan

Strategic objectives/ Programmes		Results Indicator(s)	Responsible Person/Unit	Overall Cost for 5-years (GYD,000)	Targets				
					Y1 2021	Y2 2022	Y3 2023	Y4 2024	Y5 2025
1.1.4	Monitoring and supporting the adoption of the framework in schools	% of schools utilizing the ICT adoption framework	Inspectorate/ ACEO-S	20,000			Conduct monitoring visits to ensure and support the use of the Framework	Conduct monitoring visits to ensure and support the use of the Framework	
<b>Component 2: Pedagogy &amp; Contents</b>									
Strategic Objective.2.1 Infuse and enact digital competencies in and across the curriculum for teaching, learning and assessment									
2.1.1	Definition of a framework for students' digital competencies.	Student digital competencies framework defined and mapped	NCERD / Consultancy (25 days)	3,000	Review international standards for students' digital competencies  Create national standards for students' digital competencies				
2.1.2	Map and integrate digital competencies across subject areas and grades		NCERD / Consultancy (100 days)	13,000	Secondary level integration complete  Primary and Nursery level integration complete				
2.1.3	Designing and implementation of a dissemination strategy for the renewed curriculum	Dissemination Strategy for the integration of ICT is developed.	MoE PR	2,000		Produce and disseminate materials to describe digital competencies framework	Produce and disseminate materials to describe the integration of ICT in the curriculum	Produce and disseminate materials to describe the integration of ICT in the curriculum	





Strategic objectives/ Programmes	Results Indicator(s)	Responsible Person/Unit	Overall Cost for 5-years (GYD,000)	Targets				
				Y1 2021	Y2 2022	Y3 2023	Y4 2024	Y5 2025
2.1.4	Designing and implementation of strategies to support the adoption of the renewed curriculum	NCERD / Inspectorate	70,000		Develop guidelines for Inspectors, Regional Education Officers and District Education Officers to integrate the use of ICT in the teaching and learning focus areas of the monitoring, supervision and reporting.  Define roadmap for the monitoring of the adoption of ICT in subject areas and grades.	Monitor the adoption of the use of ICT in the classroom (Inspectors)  Analyse the results and implement focused strategies to improve and support schools in developing teachers' capacity and the provision of educational resources (focus on low performing schools).	Monitor the adoption of the use of ICT in the classroom (Inspectors)  Analyse the results and implement focused strategies to improve and support schools in developing teachers' capacity and the provision of educational resources (focus on low performing schools).	Monitor the adoption of the use of ICT in the classroom (Inspectors)  Analyse the results and implement focused strategies to improve and support schools in developing teachers' capacity and the provision of educational resources (focus on low performing schools).
<b>Strategic Objective.2.2 Leverage digital tools to connect TVET and Secondary learners to relevant social and economic opportunities</b>								
2.2.1	Integration of the use of new digital tools used in the industry, commerce and service areas in the TVET and secondary curriculum.	DCEO-T	2,000,000	Review and complement the TVET and secondary curriculum to identify opportunities to integrate the use of new digital tools	Design and implement a strategy to infuse the use of the new digital tools in the delivery of	Implement the strategy to infuse the digital tools in the delivery of TVET	Implement the strategy to infuse the use of the new digital tools in the delivery of TVET	Implement the strategy to infuse the use of the new digital tools in the delivery of TVET



Strategic objectives/ Programmes	Results Indicator(s)	Responsible Person/Unit	Overall Cost for 5-years (GYD,000)	Targets				
				Y1 2021	Y2 2022	Y3 2023	Y4 2024	Y5 2025
	adopting the use of digital tools			used in the industry, commerce and service areas.	TVET	implementation	Monitor and evaluate the implementation	Monitor and evaluate the implementation
<b>Strategic Objective.2.3 Ensure the availability of quality digital educational resources</b>								
2.3.1	Designing of a strategy for the provision of digital/open educational resources	NCERD / Consultancy (25 days)	3,000	Review international policies and trends for the provision of Digital/Open Educational Resources  Design a strategy for the provision of Digital/Open Educational Resources for the system  Review and adapt international standards for the quality of Digital/Open Educational Resources	Define a framework for the development, collection and use of Digital/Open Educational Resources			
2.3.2	Designing and implementation of a repository of digital educational resources	MISU / Consultancy	13,000	Review existing digital educational resources repositories  Design and develop/adapt the digital educational resources repository	Deliver the repository of Digital/Open Educational Resources	Administer and update the repository of Digital/Open Educational Resources	Administer and update the repository of Digital/Open Educational Resources	Administer and update the repository of Digital/Open Educational Resources
2.3.3	Operation of the	NCERD /	15,000	Develop quality	Review and	Review and select	Review and	Review and



Strategic objectives/ Programmes	Results Indicator(s)	Responsible Person/Unit	Overall Cost for 5-years (GYD,000)	Targets				
				Y1 2021	Y2 2022	Y3 2023	Y4 2024	Y5 2025
repository of digital educational resources	digital educational resources that cover 80 % of the curriculum	consultancy (25 days)		assurance criteria for the resources (curation process)  Identify, select and publish educational resources  Design and implement operation standards and norms.  Train NCERD Staff in Digital/Open Educational Resources curation	select new resources (curation)  Monitor the access and use of the resources  Identify and implement required changes	new resources (curation)  Monitor the access and use of the resources  Identify and implement required changes	select new resources (curation)  Monitor the access and use of the resources  Identify and implement required changes	select new resources (curation)  Monitor the access and use of the resources  Identify and implement required changes
2.3.4 Support teachers and teacher educators in the use of the repository of digital educational resources	% teachers who regularly access the repository  % teacher educators regularly who access the repository	NCERD / Inspectorate	3,600	Design and implement a strategy to support the use of the repository of Digital/Open Educational Resources  Integrate the use of Digital/Open Educational Resources into the inspection dimensions	Develop guidelines and examples for the selection and use of digital educational resources.  Design and deliver short courses for the use of Digital/Open Educational Resources  Monitor the use of resources by	Deliver short courses for the use of Digital/Open Educational Resources  Monitor the use of resources by teachers (Inspectorate)	Deliver short courses for the use of Digital/Open Educational Resources  Monitor the use of resources by teachers (Inspectorate)	Deliver short courses for the use of Digital/Open Educational Resources  Monitor the use of resources by teachers (Inspectorate)



Strategic objectives/ Programmes	Results Indicator(s)	Responsible Person/Unit	Overall Cost for 5-years (GYD,000)	Targets					
				Y1 2021	Y2 2022	Y3 2023	Y4 2024	Y5 2025	
<b>Component 3: Capacity building</b>									
<b>Strategic Objective 3.1 Enhance initial and ongoing professional development that teaches educators how to use, teach with, and deliver lessons through ICT</b>									
3.1.1	Update the ICT competency standards for teachers	NCERD / Consultancy (25 days)	3,000	Review international ICT competency standards for teachers Review and adapt national ICT competency standards for teachers	Integrate ICT competency standards into the teaching profession standards				
3.1.2	Integration of the ICT competency standards in the initial teacher training curricula	CPCE / Consultancy (35 days)	18,760	% of teacher-educators trained in the use of digital tools ICT competency standards identified & embedded into initial teacher training	Review and update the curriculum of the Teacher Upgrading Programme (TUP), Associate Degree (ADE) and Trained Teacher's Certificate (TTC) programmes to integrate ICT competency standards	Train CPCE teacher educators in the use of digital tools for teaching and learning Design and implement new courses based on the new curriculum Monitor and evaluate the delivery of the new curriculum	Design and implement new courses based on the new curriculum Monitor and evaluate the delivery of the new curriculum	Design and implement new courses based on the new curriculum Monitor and evaluate the delivery of the new curriculum	
3.1.3	Integration of the standards in the professional development courses	NCERD / CPCE / Consultancy	24,300	% of initial teacher-educators trained in the use of digital	Train NCERD Curriculum specialists in the use of digital tools for teaching and	Design, develop and deliver new professional development	Monitor and evaluate the delivery of new courses	Design, develop and deliver new professional development	Monitor and evaluate the delivery of new courses



Strategic objectives/ Programmes	Results Indicator(s)	Responsible Person/Unit	Overall Cost for 5-years (GYD,000)	Targets				
				Y1 2021	Y2 2022	Y3 2023	Y4 2024	Y5 2025
3.1.4	Designing and implementation of professional development opportunities based on online and blended education modalities	NCERD / Consultancy (25 days)  Information System Unit (MISU) - Moodle Platform	42,080	learning.  Analyse the existing professional development courses and incorporate the use of ICT	courses based on the ICT competency standards.  Incorporate the standards in new versions of the CPD courses.	Design, develop and deliver new professional development courses based on the standards.	courses based on the standards.	
3.1.5	Empowerment of teachers to take	NCERD / Inspectorate	2,000	Define/update instructional models for the distance and blended learning courses.  Develop/adapt the distance learning platform according to the model (Moodle and/or Microsoft Teams)  Build the human infrastructure to deliver the courses (content developers, technical developers, facilitators, tutors etc.)  Deliver 12 distance education courses.	Deliver 15 distance education courses  Review and update courses	Monitor and evaluate the delivery of the distance education courses  Review and update instructional model and platform  Deliver 15 distance education courses	Deliver 15 distance education courses  Review and update courses	Monitor and evaluate the delivery of the distance education courses  Review and update courses, instructional model and platform  Deliver 15 distance education courses
				Implement a strategy	Implement the strategy	Monitor the impact and	Monitor the impact and	Monitor the impact and



Strategic objectives/ Programmes	Results Indicator(s)	Responsible Person/Unit	Overall Cost for 5-years (GYD,000)	Targets					
				Y1 2021	Y2 2022	Y3 2023	Y4 2024	Y5 2025	
responsibility and ownership of their professional development	progressed in their professional development path (basic, intermediate, and advanced level CPD courses)	Unit (MoE)		to monitor the impact of the training courses aligned with teacher professional development policy	to monitor the impact of the training courses aligned with teacher professional development policy	to monitor the impact of the training courses aligned with teacher professional development policy	to monitor the impact of the training courses aligned with teacher professional development policy	to monitor the impact of the training courses aligned with teacher professional development policy	to monitor the impact of the training courses aligned with teacher professional development policy
<b>Component 4: Lifelong learning</b> <b>Strategic Objective.4.1 Expand quality lifelong learning opportunities across the system</b>									
4.1.1 Expand quality lifelong learning opportunities for primary, secondary and TVET levels	Number of courses/programmes available  % of students participating in online programmes.	ACEO - N DCEO - T  Consultancy (25 days)	13,000	Implement a diagnostic of the accessibility conditions (mapping) in which students of different levels and regions can access distance education opportunities	Develop contents and materials to be delivered (e.g. online lessons to prepare CSEC exams, demonstrations and lessons for TVET subjects).  Deliver the courses and learning opportunities	Deliver the courses and learning opportunities  Adapt and renew the materials and resources  Monitor the access and use of the platforms	Deliver the courses and learning opportunities  Adapt and renew the materials and resources  Monitor the access and use of the platforms	Deliver the courses and learning opportunities  Adapt and renew the materials and resources  Monitor the access and use of the platforms	Deliver the courses and learning opportunities  Adapt and renew the materials and resources  Monitor the access and use of the platforms
4.1.2 Expand quality lifelong learning opportunities in	Number of courses/programmes	DCEO-D DCEO-T	50,000	Expand access to online education opportunities in	Deliver the courses using the national opportunities	Deliver the courses using the national opportunities	Deliver the courses using the national opportunities	Deliver the courses using the national opportunities	Deliver the courses using the national opportunities



Strategic objectives/ Programmes	Results Indicator(s)	Responsible Person/Unit	Overall Cost for 5-years (GYD,000)	Targets				
				Y1 2021	Y2 2022	Y3 2023	Y4 2024	Y5 2025
higher education	available  % of higher education students participating			higher education across the eleven education districts  Promote access to online education at the regional and international levels  Design and implement a national online education platform	online education platform	education platform  Adapt and renew the materials and resources  Monitor the access and use of the platforms	online education platform  Adapt and renew the materials and resources  Monitor the access and use of the platforms	online education platform  Adapt and renew the materials and resources  Monitor the access and use of the platforms
4.1.3 Expand quality lifelong learning opportunities for all	Number of courses/progr ammes available  % of the target population participating in the programme	ACEO - LIT DCEO - T	25,000	Design and implement a structure to provide lifelong learning opportunities based on an open education model enabled/supported by ICT  Design and develop contents and resources to deliver online to address the curriculum  Design and implement dissemination and implementation strategies.	Implement and monitor courses designed.  Compile a database on the users and the levels of courses completed.  Design software applications specific to literacy for adult population with low literacy levels to foster self-directed learning.	Update and modify available resources, courses offered.  Implement and monitor courses across all regions.  Keep track of the number of out-of-school youth and adults who are accessing the courses.	Update and modify available resources, courses offered.  Implement and monitor courses across all regions.  Keep track of the number of out-of-school youth and adults who are accessing the courses.	Update and modify available resources, courses offered.  Implement and monitor courses across all regions.  Keep track of the number of out-of-school youth and adults who are accessing the courses.



Strategic objectives/ Programmes	Results Indicator(s)	Responsible Person/Unit	Overall Cost for 5-years (GYD,000)	Targets				
				Y1 2021	Y2 2022	Y3 2023	Y4 2024	Y5 2025
<b>Strategic Objective 4.2 Ensure that all citizens can develop digital competencies required to participate and contribute to the society and the economy</b>								
4.2.1	Definition of a digital citizenship competency framework	DCEO-D / ACEO - LIT / Consultancy (20 days)	2,400	Review of international digital citizenship competency frameworks  Select and adapt a digital citizenship competency framework				
4.2.2	Designing and implementation of online/blended learning opportunities for parents and the community	DCEO-D / ACEO - LIT	35,000		Define the different access conditions.  Design a set of courses for basic, medium and advanced digital citizenship competencies for participation in the digital society, distance work and productivity	Implement courses for basic, medium and advanced digital citizenship	Implement courses for basic, medium and advanced digital citizenship	Implement courses for basic, medium and advanced digital citizenship
<b>Component 5: Digital Infrastructure</b>								
<b>Strategic Objective 5.1 Ensure effective access and use of digital devices and the Internet</b>								
5.1.1.1	Implementation of a national educational internet network	MISU	Internet Installation: 665,800 Bandwidth:	Coordinate with the National Data Management Authority (NDMA)	Provide High Quality (fiber)Internet connectivity	Provide High Quality (fiber)Internet connectivity to	Provide High Quality (fiber)Internet connectivity	Provide High Quality (fiber)Internet connectivity



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Strategic objectives/ Programmes	Results Indicator(s)	Responsible Person/Unit	Overall Cost for 5-years (GYD,000)	Targets				
				Y1 2021	Y2 2022	Y3 2023	Y4 2024	Y5 2025
	<p>schools with high quality Internet</p> <p>30% of secondary, primary and nursery schools with medium quality Internet</p> <p>Note: Of 1081 schools, only 766 can be connected via fiber (high quality internet), whilst 315 can be connected with medium quality internet.</p>		<p>2,291,200 Additional Infrastructure</p> <p>Installation: \$386,300 (whole School Network)</p>	<p>and Ministry of Public Telecommunications</p> <p>Provide High Quality (fiber)Internet connectivity to 20% or 153 of Nursery(73), Primary(58) and Secondary Schools(22) across various Regions</p> <p>Provide Medium Quality (LTE, VSAT, Wireless, etc)Internet connectivity to 20% or 63 of Nursery(30), Primary(30) and Secondary Schools(3) across various Regions</p> <p>Provide Medium Quality (LTE, VSAT, Wireless, etc)Internet connectivity to 20% or 63 of Nursery(30), Primary(30) and Secondary Schools(3) across various Regions</p> <p>Install the school based infrastructure to enable access to Internet in 20% of Nursery, 20% Primary and 20% Secondary Schools</p> <p>Provide adequate Human Resources needed for provision of Support, Security,</p>	<p>to 20% or 153 of Nursery(73), Primary(58) and Secondary Schools(22) across various Regions</p> <p>Provide Medium Quality (LTE, VSAT, Wireless, etc)Internet connectivity to 20% or 63 of Nursery(30), Primary(30) and Secondary Schools(3) across various Regions</p> <p>Provide Medium Quality (LTE, VSAT, Wireless, etc)Internet connectivity to 20% or 63 of Nursery(30), Primary(30) and Secondary Schools(3) across various Regions</p> <p>Install the school based infrastructure to enable access to Internet in 20% of Nursery, 20% Primary and 20% Secondary Schools</p> <p>Review and renew outdated/failed equipment</p>	<p>to 20% or 153 of Nursery(73), Primary(58) and Secondary Schools(22) across various Regions</p> <p>Provide Medium Quality (LTE, VSAT, Wireless, etc)Internet connectivity to 20% or 63 of Nursery(30), Primary(30) and Secondary Schools(3) across various Regions</p> <p>Install the school based infrastructure to enable access to Internet in 20% of Nursery, 20% Primary and 20% Secondary Schools</p> <p>Review and renew outdated/failed equipment</p>	<p>to 20% or 153 of Nursery(73), Primary(58) and Secondary Schools(22) across various Regions</p> <p>Provide Medium Quality (LTE, VSAT, Wireless, etc)Internet connectivity to 20% or 63 of Nursery(30), Primary(30) and Secondary Schools(3) across various Regions</p> <p>Install the school based infrastructure to enable access to Internet in 20% of Nursery, 20% Primary and 20% Secondary Schools</p> <p>Review and renew outdated/failed equipment</p>	<p>to 20% or 153 of Nursery(73), Primary(58) and Secondary Schools(22) across various Regions</p> <p>Provide Medium Quality (LTE, VSAT, Wireless, etc)Internet connectivity to 20% or 63 of Nursery(30), Primary(30) and Secondary Schools(3) across various Regions</p> <p>Install the school based infrastructure to enable access to Internet in 20% of Nursery, 20% Primary and 20% Secondary Schools</p> <p>Review and renew outdated/failed equipment</p>





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Strategic objectives/ Programmes	Results Indicator(s)	Responsible Person/Unit	Overall Cost for 5-years (GYD,000)	Targets					
				Y1 2021	Y2 2022	Y3 2023	Y4 2024	Y5 2025	
5.1.2	Support the provision of tablets and Smart Spaces/Rooms in nursery schools  100% of nursery schools with digital infrastructure available  Note: Approx 9% of nursery students have already received computing devices which would necessitate 91% of remaining students be provided with devices.	MISU / ACEO - N	2,207,450	Redundancy systems and training to manage/maintain network. Craft policies and guidelines for management of network.	Primary and 20% Secondary Schools  Review and renew outdated/failed equipment	Primary and 20% Secondary Schools  Review and renew outdated/failed equipment	Primary and 20% Secondary Schools  Review and renew outdated/failed equipment	Primary and 20% Secondary Schools  Review and renew outdated/failed equipment	Primary and 20% Secondary Schools  Review and renew outdated/failed equipment
5.1.3	Designing and establishment of a strategy to enable the implementation of computer labs in	MISU / ACEO - P	3,577,000	Review and coordinate with the "One tablet per learner" project  Provide tablets to 19% of Nursery students  Provide Smart Rooms/Spaces to 20% (77) Nursery Schools on the Coast  Define a strategy to ensure the availability of technical support	Primary and 20% Secondary Schools  Review and renew outdated/failed equipment	Primary and 20% Secondary Schools  Review and renew outdated/failed equipment	Primary and 20% Secondary Schools  Review and renew outdated/failed equipment	Primary and 20% Secondary Schools  Review and renew outdated/failed equipment	Primary and 20% Secondary Schools  Review and renew outdated/failed equipment



Strategic objectives/ Programmes	Results Indicator(s)	Responsible Person/Unit	Overall Cost for 5-years (GYD,000)	Targets				
				Y1 2021	Y2 2022	Y3 2023	Y4 2024	Y5 2025
primary schools combining regional and central efforts.				primary schools committees. Ensure Regions budget 10% to support ICT Implementation. Ensure Regions create HR Structure for ICT Project Implementation/Support. Design the strategy to combine efforts to implement computer labs in primary schools in each region including the implementation/adjustment of the physical infrastructure (region) and the provision of the ICT equipment (MoE). Define computer labs infrastructure standards Define an implementation plan Design and implement technical support	Committees provide oversight, standards, monitoring and evaluation and support during Implementation. Establish laboratories in 25% of Primary schools	outdated/failed equipment	Review and renew outdated/failed equipment	Review and renew outdated/failed equipment



Strategic objectives/ Programmes	Results Indicator(s)	Responsible Person/Unit	Overall Cost for 5-years (GYD,000)	Targets				
				Y1 2021	Y2 2022	Y3 2023	Y4 2024	Y5 2025
5.1.4	Expansion of the provision of smart classrooms in primary schools.	MISU / ACEO - P	4,343,500	Identify and coordinate with current initiatives Review and map the status of the projects Define an implementation plan Establish one (1) Smartroom in 20% of List A and B Primary schools on the Coast and Populous Hinterland Schools	Establish one (1) Smartroom in 20% of List A and B Primary schools on the Coast and Populous Hinterland Schools	Establish one (1) Smartroom in 20% of List A and B Primary schools on the Coast and Populous Hinterland Schools	Establish one (1) Smartroom in 20% of List A and B Primary schools on the Coast and Populous Hinterland Schools	Establish one (1) Smartroom in 20% of List A and B Primary schools on the Coast and Populous Hinterland Schools
5.1.5	Upgrade the computer labs in secondary schools	MISU / ACEO - S	150,000	Map the implementation status to reach a standard of at least one computer lab with 30 stations Upgrade labs in 20% of Secondary Schools Review and renew outdated/failed equipment	Upgrade labs in 20% of Secondary Schools Review and renew outdated/failed equipment	Upgrade labs in 20% of Secondary Schools Review and renew outdated/failed equipment	Upgrade labs in 20% of Secondary Schools Review and renew outdated/failed equipment	Upgrade labs in 20% of Secondary Schools Review and renew outdated/failed equipment
5.1.6	Provision of class sets trolleys with tablets for students in secondary schools	MISU / ACEO - S	630,000	Define the standards for class sets trolleys with tablets Defining number of class sets per schools based on school population	Implement class sets in 20% of schools	Implement class sets in 20% of schools Review and renew out of date / failed equipment	Implement class sets in 20% of schools Review and renew out of date / failed equipment	Implement class sets in 20% of schools Review and renew out of date / failed equipment



Strategic objectives/ Programmes	Results Indicator(s)	Responsible Person/Unit	Overall Cost for 5-years (GYD,000)	Targets				
				Y1 2021	Y2 2022	Y3 2023	Y4 2024	Y5 2025
5.1.7	Provision of sector specific digital infrastructure for TVET classrooms/labs/workshops	MISU / ACEO - T	450,000	Implement class sets in 20% of schools Define sector priorities and define sector specific digital infrastructure Integration of ICT processes in the TVET realm. Implement required digital (AutoCAD, TD Lab) infrastructure in A List Secondary Schools	Expand implementation of required digital (AutoCAD, TD Lab) infrastructure in 30% of Secondary Schools	Expand implementation of required digital (AutoCAD, TD Lab) infrastructure in 20% of Secondary Schools	Expand implementation of required digital (AutoCAD, TD Lab) infrastructure in 30% of Secondary Schools	Expand implementation of required digital (AutoCAD, TD Lab) infrastructure in 30% of Secondary Schools
<b>Strategic Objective.5.2 Ensure effective access and use of learning platforms and resources</b>								
5.2.1	Definition and implementation of a plan to provide access to the LMS based on the availability of devices and internet	MISU	1,233,200	Procure additional licenses for new Intake at Grade 8 Level. Procure computing and connectivity devices for Grade 8 teachers. Provide Training to Grade 8 Teachers and MOE/Regional Officers Provide access to Microsoft 365 to all Grade 8 secondary students and	Procure additional licenses for new Intake at Grade 9 Level. Procure computing and connectivity devices for Grade 9 Teachers. Provide Training to Grade 9 teachers.	Any gaps in the implementation will be catered for in this year.	Procure licenses for Grade 5 students. Procure computing and connectivity devices for Grade 5 teachers. Provide Training to Grade 5 teachers. Provide	Procure licenses for Grade 6 students. Procure computing and connectivity devices for Grade 6 teachers. Provide Training to Grade 6 teachers. Provide



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Strategic objectives/ Programmes	Results Indicator(s)	Responsible Person/Unit	Overall Cost for 5-years (GYD,000)	Targets				
				Y1 2021	Y2 2022	Y3 2023	Y4 2024	Y5 2025
				teachers.	Provide access to Microsoft 365 to all Grade 9 secondary students and teachers.		access to Microsoft 365 to all Grade 5 Primary students and teachers.	access to Microsoft 365 to all Grade 6 Primary students and teachers.
				Procure licenses for Grade 3 students. Procure computing and connectivity devices for Grade 3 teachers. Provide Training to Grade 3 Teachers. Provide access to Microsoft 365 to all Grade 3 Primary students and teachers.	Procure licenses for Grade 4 students. Procure computing and connectivity devices for Grade 4 teachers. Provide Training to Grade 4 Teachers. Provide access to Microsoft 365 to all Grade 4 Primary students and teachers.	Any gaps in the implementation will be catered for in this year.	Procure licenses for Grade 5 students. Procure computing and connectivity devices for Grade 5 teachers. Provide training to Grade 5 teachers. Provide access to Microsoft 365 to all Grade 5 Primary students and teachers.	Procure licenses for Grade 6 students. Procure computing and connectivity devices for Grade 6 teachers. Provide training to Grade 6 teachers. Provide access to Microsoft 365 to all Grade 6 Primary students and teachers.
5.2.2	Designing and implementation of a	MISU / NCERD	30,000	Assess roles of each user (Teacher,	Assess roles of each user	Assess roles of each user	Assess roles of each user	Assess roles of each user
	% of users that access the							





Strategic objectives/ Programmes	Results Indicator(s)	Responsible Person/Unit	Overall Cost for 5-years (GYD,000)	Targets				
				Y1 2021	Y2 2022	Y3 2023	Y4 2024	Y5 2025
plan for the delivery of increasing functionalities and services to be implemented in the LMS	new functionalities implemented			Student, MOE/Regional Officers) to determine targeted approach to implementation of new functionalities (SharePoint, OneNotebook, etc).  Explore the Integration of a management dash board/interface for monitoring and evaluation purposes.	(Teacher, Student, MOE/Regional Officers) to determine targeted approach to implementation of new functionalities.	(Teacher, Student, MOE/Regional Officers) to determine targeted approach to implementation of new functionalities.	(Teacher, Student, MOE/Regional Officers) to determine targeted approach to implementation of new functionalities.	(Teacher, Student, MOE/Regional Officers) to determine targeted approach to implementation of new functionalities.
5.2.3 Designing and implementation a technical support strategy for the use of the LMS	% of users satisfied or very satisfied	MISU	16,000	SLA with suppliers/vendors and develop support escalation Policy for end users.  Outline policy of use of platform. Provide FAQ, support materials portals, training in basic trouble shooting and security protocols including mac address/device	Monitor, evaluate and strengthen to ensure efficacy and sustainability.	Monitor, evaluate and strengthen to ensure efficacy and sustainability.	Monitor, evaluate and strengthen to ensure efficacy and sustainability.	Monitor, evaluate and strengthen to ensure efficacy and sustainability.



Strategic objectives/ Programmes	Results Indicator(s)	Responsible Person/Unit	Overall Cost for 5-years (GYD,000)	Targets					
				Y1 2021	Y2 2022	Y3 2023	Y4 2024	Y5 2025	
				isolation and user identification ensure 5% budgetary allocation					
Grand total ICT - 5 years			GYD'000	16,217,354					
			USD	74,392					



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