

REPUBLIC OF RWANDA



MINISTRY OF EDUCATION

ICT IN EDUCATION POLICY

APRIL 2016

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1 Introduction and Context

Rwanda Vision 2020 aims at moving Rwanda from “an agriculture based economy to a knowledge-based society “and middle-income country 2020. Education is a key sector to this social and economic transformation, tapping into the limitless potential of an empowered population. At the same time, the Vision 2020 places ICTs at the heart of the transformation across all sectors. The use of ICT in education is seen as a strategic lever for achieving this transformation. This policy complements the overall “SMART RWANDA” Strategy, it implements the SMART EDUCATION policy.

The Education Sector Strategic Plan (ESSP) calls for 3 strategic goals to be addressed for education to fulfill its potential in the development of Rwanda.

- To expand access to education at all levels:
- To improve the quality of education and training:
- To strengthen the relevance of education and training to the labor market including the insertion of 21st century skills

Technology in education can be used to achieve these goals and address the key challenges of access, quality, equity, relevance and management efficiency with tangible advantages that can be seen and measured in numerous ways.

At primary and secondary levels, gross enrolments ratios are growing and more children are in school. However, the number of trained teachers to sustain these enrolment ratios is still low. At higher education levels, the levels of enrolment are still very low. Here technology to support Open and Distance Learning (ODEL) can play a critical role train new teachers, up-skill existing unqualified teachers and increase access to tertiary education.

While more children are enrolled in basic education, the key challenge remains the quality of education they are getting. Here technology can be used to improve the quality of teaching and learning materials through the use of digital learning resources. Multimedia interactive digital content can be used to motivate students, improve conceptual understanding and retention of key topics. ICTs can help simplify the use of regular assessments to keep track of student performance. ICTs can help with real time data gathering of enrolment, assessments, performance to improve decision making and effective management of the education sector leading to informed prioritization and allocation of resources. ICTs can also be used to strengthen teacher professional development thereby contributing to the improvement of quality of education.

Lastly, students must be prepared for the 21st century and given abilities needed to succeed and thrive in today’s complex, technology-based global economy, and to be active 21st century global citizens. Some of these skills include Critical Thinking, Problem Solving, Communication, Collaboration and Visualization. Technology in education enables the development of these important skills.

Since 2008, MINEDUC has implemented the One Laptop per Child (OLPC) program at primary schools and computer labs for secondary schools.

250,000 OLPC devices were deployed in 764 schools thus reaching only 10% of primary students. The program faced challenges in capacity building of teachers due to a high learning curve, the cost of deployment was also high while it only reached a few students and lastly, the lack of integration of the program in the normal learning and teaching activities was the main challenge.

For Computer labs, only 5% of secondary schools benefited from the program and the labs were used only for ICT lessons.

This policy has now been revised to a “One Digital Identity Per Child” and “Smart Classrooms” in all primary and secondary schools. While a device for every child remains the end goal, MINEDUC is shifting from One Laptop Per Child (OLPC) to the concept of a “Smart Classroom” following changing technology, to reduce costs and increase access and equity. More importantly, the policy will ensure that technology is integrated in all education processes i.e. preparation, delivery of lessons, assessments and research.

2 Vision Statement

The Vision for ICT in Education is:

“To harness the innovative and cost-effective potential of world-class educational technology tools and resources, for knowledge creation and deepening, to push out the boundaries of education: improve quality, increase access, enhance diversity of learning methods and materials, include new categories of learners, foster both communication and collaboration skills, and build capacity of all those involved in providing education.”

Thus, ICT in education will contribute to achieving the Ministry of Education mission “to transform the Rwandan citizen into skilled human capital for the socio-economic development of the country by ensuring equitable access to quality education focusing on combating illiteracy, promotion of science and technology, critical thinking, and positive values” (ESSP, 2013).

3 Strategic Goals

ICT is an enabling tool and a cost effective solution to improve and increase access to education. ICT must therefore be incorporated in a systemic process, within the context of challenges to be met, strategic issues to be addressed and key result areas to promote with tangible indicators of success.

The overall goal of this ICT in Education policy is to further access, equity, quality and relevance, as the key principles underpinning Rwanda’s ICT and education policies. Promoting ICT to provide access to education for all and quality education that is relevant with regard to the labour market is the foundation of this Policy and Strategic Plan at the core of ESSP and ICT in Education Policy.

This policy's strategic goal is to encourage programmes and projects that will maximize on the benefits of ICT in providing universal access and quality education for all. Proposed solutions are aligned with the strategic objectives in the following section.

4 Strategic Objectives

To achieve successful education transformation, the ICT in education policy calls for the implementation of four strategic objectives.

Strategic Objective 1: Develop a competent & relevant ICT professional base to meet industry needs

- **Policies:** Clear and effective policies that encourage and empower teachers and students to use ICT as an integral part of the education process.
- **Curriculum and Content:** Development and acquisition of digital content, aligned with the curriculum and that focuses on project and activity-based learning and is fully integrated with the use of ICT, along with the associated formative assessments. This will require the acquisition of a content distribution platform and eventual shift from print to digital content as infrastructure is deployed in schools. REB will brief publishers on the new curriculum to develop e-textbooks in line with the new curriculum and adapt local and international content to complement/ supplement the core e-textbooks. Digital content has advantages of reducing costs of printing, distribution, replacement due to wear and tear and enriching the learning experience.
- **Management and Information System:** Real time data gathering system with business intelligence to enable the report of various reports

Strategic Objective 2: Increase ICT penetration and usage at all educational levels

- **ICT Infrastructure:** is the scalable ICT infrastructure, broadband and user support required to transform our schools into “Smart Schools” (in line with the Smart Rwanda vision). Interactive White Boards, servers, local area networks, cloud services, broadband connectivity and power.
- **Devices:** student and teacher devices with appropriate education software

Strategic Objective 3: Develop Education leadership and teachers’ capacity and capability in and through ICT

- **Leadership Development:** Leadership development in the ministry and among school leaders that helps, leads, supports and encourages the regular use of ICT in schools and classrooms.
- **Teacher preparation and development:** Teachers remain key to the successful integration of ICT in education. As such, the ICT in Education Policy envisions a concerted teacher training effort to transform teaching methodology from teacher-centered method to learner-centered method. A policy change will be

made to require all teachers to complete a minimum number of training courses per year on the integration of ICT. To ensure adequate teacher preparation and motivation, all teachers will be provided with a laptop issued by MINEDUC (and with connectivity), through a purchase program over 2 to 3 years. Teacher training will also be included in Pre-Service Teacher training programs.

Strategic Objective 4: Enhance teaching, learning & research through ICT integration in HLIs

- **Higher education, research and innovation:** higher education is critical to spark an innovation economy to transform Rwanda and ICT are seen as a key ingredient and catalyst. Investments in higher education will be prioritized to increase access to higher education, improve quality and drive research and innovation.
- **Device:** All students in HLI will be encouraged to own a device through a student's purchase program. Students finance will be expanded to include the purchase of a device.
- **Online Services:** HLI institutions will be required to provide online services including the access of syllabus, registrations, grades, courses and other
- **Connectivity:** A broadband network will interconnect high-speed research and education institutions as well as connect them to the internet at a promotional education rate

5 SWOC analysis

This document has been developed in consultation with a wide range of stakeholders. Prior to developing this Policy an analysis of the strengths, weaknesses, opportunities and challenges (SWOC) concerning the ICT in Education environment was carried out at different planning and validation workshops with key stakeholders. The major challenges identified included: inadequate infrastructure; high power costs; equipment; and connectivity costs. The absence of a culture around the use of ICT also prevented the widespread adoption of such tools in education, as did the limited availability of digital content, expertise and project coordination. It was recognised that high-level support of ICT in Education initiatives shows promise of rapidly transforming the sector. New opportunities to expand infrastructure, integration of ICT for core / elective / subject learning, develop partnerships with the public and private sectors, and create new links with regional and international initiatives will be identified. Methodologies include: strong partnership with private sector and access to knowledge experts.

Among the information gaps, revealed by a mapping exercise, included: insufficient monitoring and evaluation of ICT in Education projects at school level; a lack of analysis of the outcomes of partnerships; and unclear standards in the sector. This policy will structure, catalyse, regulate and monitor initiatives on ICT in Education, in response to national development requirements, challenges and opportunities.

Analysis revealed the many challenges to be overcome in order to disseminate the use of ICT throughout the nation generally and in education specifically. With a poor

infrastructure – 16% of electricity coverage in households by 2012¹, 47% in public schools², low connectivity rates³, lack of equipment and high costs – access to ICT in the education system is very limited (computer to students ratio in secondary schools 40:1; 16% of primary schools use XO laptops)⁴. In addition, due to a lack of ICT culture and of understanding of its possible applications and benefits in education, communities and educational institutions are often reluctant to adopt ICT and adapt their teaching methods. Even when such material and cultural barriers are overcome and ICT in Education initiatives are taken up, other challenges arise, such as, limited availability of digital learning material, lack of expertise in project management skills and poor coordination of initiatives, systematic road map for ICT Teachers Professional Development, e-readiness survey, analysis and ICT infrastructure plan and technical support.

However, one of the major strengths of ICT in Education is that it is already strongly supported by the Government and well taken into account in national policy documents, and various projects are already implemented or underway. New opportunities must now be seized in order to further the dissemination of ICT in the education sector, through the development of infrastructure, partnership building with private and public institutions and the creation of new links with regional and international initiatives. This policy supports open access education resources to mitigate against identified lack of digital learning content.

Strengths	Opportunities
<ul style="list-style-type: none"> Existing ICT in Education projects and programmes within MINEDUC and learning institutions Existing draft ICT in Education Policy as a guiding document Existing ICT in Education pillar within the NICI Plan Establishment of the REB/ICT in Education Department 	<ul style="list-style-type: none"> Huge Potential local and international development partnership with the private sector, non-governmental and inter-governmental actors Existing linkage with regional and international initiatives Benefit from an economy of scale for learning institutions and MINEDUC implementing agencies Existing national, cross-border, and submarine communication network Commitment from the Government to support ICT in Education
Weaknesses	Challenges
<ul style="list-style-type: none"> Poor infrastructure: 47% only of electricity coverage in public schools 6% primary and 18% secondary schools only connected to Internet 	<ul style="list-style-type: none"> Limited ICT in Education resources Expertise turnover in learning institutions

1 Rwanda Ministry of Infrastructure (MININFRA), 2013: <http://mininfra.gov.rw/25/>

2 ICT Total Cost of Ownership report 2013.

3 MYICT 2012, Rwanda ICT Sector Profile – 2012: 6% primary school and 18% secondary schools with Internet connection; ITU ICT Eye, 2012: households with Internet access at home: 2.4%...

4 Draft ESSP, 2013.

<ul style="list-style-type: none"> • Computer to students ratio in secondary 40:1 • 16% of primary schools only use XO laptops • High cost of access and usage of digital content • Poor coordination mechanisms among ICT-related initiatives 	<ul style="list-style-type: none"> • Lack of awareness about the benefits and limitations of ICT in Education • Resistance to change mindset • Limited infrastructure such as power, connectivity, and equipment • Limited ongoing technical and pedagogical support to schools • Limited participation of local institutions (private, public and civil society) in ICT in Education • High recurring cost
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6 The Purpose of the Policy Document

The ICT in education policy is designed to guide the process of harnessing, deployment and exploitation of ICTs within the Education Sector to support its organizational activities and operations within the framework of the national ICT-led development vision. The ultimate purpose of this policy document is summarized in the followings points:

- Building a common shared understanding and synergy for what ICT in education means among all stakeholders.
- Creating an enabling environment, mechanisms and priorities for ICT in education.
- Development of modern, relevant content fulfilling the needs and expectations of citizens, industry, and society in general.
- Harmonization between centralized and decentralized levels of the education system.
- Leveraging Public Private Partnerships and support of Development Partners.
- Strengthening Rwanda's effort to export ICT in education models to Africa in general and to the EAC and COMESA in particular.

Short-Term	Medium-Term to Long-Term
<ul style="list-style-type: none"> • Policy development and review of strategy • ICT competencies for teachers • Acquisition of existing e-content • Affordable connectivity 	<ul style="list-style-type: none"> • Infrastructure for schools and teacher training • Procurement support and maintenance of infrastructure • New e-content for Rwanda • Evaluation of classroom Performance • Pre-service and in-service training for teachers • Contextualization of content

7. Implementation of the Policy in four phases

Phase 1 (FY 2015-2016)	Phase 2(FY 2016-2017)	Phase 3(FY 2017-2018)	Phase 4(FY 2018-2019)
ICT in Education policy approved	Smart Classrooms and new curriculum integrated for P1, P2 P4, P5, S1, S2, S4 and S5	Smart Classrooms and new curriculum integrated for all grades.	
Student purchase programs initiated	30% of schools equipped with Smart Classrooms and power (grid, solar or petro generator).	70% of schools equipped with Smart Classrooms and power (grid, solar or petro generator).	100% of schools equipped with Smart Classrooms.
Awareness campaigns to students, schools, parents, teachers about	HLI will deliver 50% of the teaching using digital courses and online resources.	HLI will deliver 80% of the teaching using digital courses and online resources.	HLI will deliver 100% of the teaching using digital courses and online resources.
	Open Distance Education University will be up and running.		
	Teacher professional development and online community established.	Online teachers' community scaled nationally.	Most teachers actively participate in online teachers' community.

880,000,000 Rwf	12,004,000,000 Rwf	14,874,000,000Rwf	8,139,000,000 Rwf
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8 ICT in Education Policy Areas

The policy has eleven main policy statements as follows.

8.1 ICT in Formal Education

Improve preparation of the current generation of students for a workplace where ICT tools such as computers, Internet and other related technologies, are becoming ever more present. This will include technological literacy and the ability to use ICTs effectively and efficiently to provide a competitive edge in an increasingly globalized job market. The focus in formal education is:

- Ensuring primary, secondary, TVET and Higher Education educators use ICTs in their teaching and learning practices.
- Promoting the use of Open Distance and e-Learning (ODEL).
- Promoting the use of Open Education Resources.
- Promoting the teaching of ICT as subject matter.
- Raising awareness among students, teachers, and parents of the value of ICTs.
- Making ICTs available to all formal education levels, and enable students, at all educational levels, to use ICTs in their learning as a tool and as a methodology.
- Enabling all teachers and administrators to use ICTs as a management tool to support the educational process.
- Using ICTs to support the emergence of teaching and pedagogical student-centred approaches and encouraging research and collaborative learning.
- Facilitating access to a wider range of knowledge for students and teachers to support the teaching and learning process.
- Using ICTs as a tool to improve quality of education in all subjects at all levels and supporting the effort of the Education Quality Assurance Department in improving the quality of education.
- Ensuring the availability of infrastructure that is critical to successfully integrate ICTs at all levels of education.
- Establishment of the Rwanda Education and Research Network (RwEdNet) to ensure that scientists and researchers in higher learning institutions in Rwanda are connected to the regional and international body of research.

8.2 ICT in Non-Formal Education

ICT provides opportunities for self-learning and distance-learning independently of time or place. Enable citizens to have learning and development opportunities throughout their lives, anywhere—irrespective of age, gender or geographic location—thus supporting the country’s aspiration to build a knowledge-based economy. The focus in non-formal education is:

- Promoting the use of community learning and information centres and libraries, and open and distance learning centres to support literacy and learning opportunities to all Rwandans. Expand activities to include the use of video, radio and TV.
- Promoting the use of ODeL.
- Creating and leveraging partnerships with private and community-based organizations to provide learning opportunities and improve ICT literacy for all Rwandans.
- Leveraging ICT infrastructure in schools to encourage and support afterschool programmes to target students, out-of-school leavers, and local communities to develop life and ICT skills, and provide other lifelong learning opportunities.

8.3 Access and Equity

This policy recognizes ICTs to be a cross-cutting area aimed at equality and equity to all Rwandan citizens. The focus is on:

- Using ICTs to provide educational opportunities to all Rwandan citizens regardless of gender, age, geographical location, or special educational need.
- Providing a basic ICT model to all schools and community centres regardless of gender, age, geographical location, or special educational need.
- Providing access to ICT in learning centres for people in very remote, rural, and economically disadvantaged areas.
- Promoting a “Bring Your Own Device” (BYOD) programme for teachers and students in order to increase ICT penetration at all levels.

8.4 Infrastructure

Efforts will be made, to provide the needed infrastructure to the remote and underserved areas using technological solutions that are suited to local needs and conditions. The focus is on:

- Providing all formal and non-formal education institutions with the essential infrastructure to facilitate the adoption of ICTs within the education system.
- Developing infrastructure in close collaboration and coordination with relevant ICT stakeholders and partners, to optimize synergy and cost-effectiveness.
- Explore alternative energy solutions where necessary.
- Ensuring that well-trained and capable human resources are available to maintain ICT in Education infrastructure.
- Defining a replicable, scalable, reliable and sustainable technology model to be introduced in schools.
- Developing and adopting assistive technologies for people living with disabilities.

8.5 Curriculum design, delivery and assessment

For successfully integrating ICTs in education, curriculum revisions must be continually conducted, along with training on ICTs and ICT-enabled teaching and learning taught as

both a subject and pedagogy using learner-centered and interactive methods. The focus is on:

- Providing curriculum at all levels of education.
- Promoting a blended learning approach and establishing appropriate mechanisms and guidelines for regulating the development and use of electronic content.
- Exploring options for obtaining copyrights of existing electronic material in the medium term.
- Creating and developing Rwanda-specific national electronic content, in all subjects, on the long term to be used as supplementary material, aligning it with the national curriculum, and revising the curriculum accordingly.
- Enabling teachers to use open educational resources, Massive Open Online Courses, create electronic content, and share knowledge experiences and practices using technology.
- Creating a centralized digital library/repository (Rwanda Educational Portal) of digital learning material to be accessed by all schools.
- Developing content and training manuals for pre-service teachers on using ICT in teaching and learning.
- Ensuring that learners and educators are empowered to encounter internet-related risks to privacy and content quality.
- Using ICTs as a tool to design tests and testing tools incorporating ICT based student assessment tools.
- Mandating and empowering the Curriculum developers to be the focal point of coordination for the development of electronic content

8.6 Training and Capacity Building

ICT-enabled training methods will be fully explored, including distance education, e-learning, and blended learning. Pre-service and in-service training will be offered on a continuous basis to enable staff and other stakeholders to keep up to date with technological and pedagogical developments. The focus is on:

- Providing pre-service training of teachers on the effective utilization of technology (software and hardware) in their teaching and learning.
- Ensuring that teachers are able to:
 - ✓ access a wider range of high quality tools and resources to create innovative, challenging and engaging learning opportunities;
 - ✓ plan, schedule and deliver more personalized and effective teaching and learning;
 - ✓ communicate and collaborate more extensively and effectively with their students and parents;
 - ✓ efficiently access and exploit a greater range of student performance data to analyze progress and act on it;
 - ✓ Improve practice through greater professional collaboration in their own school, across the Rwanda and internationally.
- Providing effective ICT literacy training programmes for all teachers at all levels that promotes change and ensures quality.

- Supporting head teachers to establish their schools ICT vision, leveraging available technological infrastructure to better manage the school and foster modern teaching.
- Training curricula developers on creating and developing digital learning material.
- Developing general standards, guidelines, and certification requirements for trainers and training centres.
- Developing a cadre of technical expertise to manage and maintain ICT facilities at all levels and to optimize uptime.
- Ensuring that students are able to:
 - ✓ access and exploit world-class educational tools and resources to improve the quality of engagement and learning outcomes;
 - ✓ explore and develop their knowledge, skills and understanding through a more personalized learning experience;
 - ✓ communicate and collaborate more extensively and effectively with their peers, teachers and community;
 - ✓ experience a greater range of formative assessment to support their educational progress;
 - ✓ Monitor, reflect on and manage their own learning.

8.7 Management, Support, and Sustainability

Necessary actions will be taken to plan and budget for ICT in Education projects, including innovative means to secure and optimizing requirements through public private partnerships. Additionally, income generating activities will be explored and conducted in order to minimize the Government expenditure on ICT in education initiatives. The policy will focus on:

- Making necessary budgetary provisions associated with the capital and operational costs of ICT facilities.
- Developing an income generating strategy in line with ICT in education programmes.
- Promoting Public-Private-Partnership through “Adopt-and-Sponsor a School” programme for ICT penetration in schools and higher education in terms of infrastructure, content development and delivery, and capacity building.
- Adopting a strategy for technical support and maintenance with adequate staff and budgets to service the needs of the centralized and decentralized levels of education.
- Providing in-service professional development opportunities for teachers to enable the use and creation of digital content and pedagogic integration.
- Providing professional development opportunities for school inspectors on the integration of ICTs in the teaching and learning process.
- Training educational administrators on ICT projects, including planning, managing, budgeting, resource management, and Monitoring & Evaluation.

8.8 Open Distance and e-Learning

The main purpose of ODeL is to increase the provision of educational opportunities, at all levels of education and training to improve access to, quality and effectiveness of the education system, and improve the efficiency of the educational sub-sector. The ICT in Education focus is on:

- Setting up an effective ICT support to ODeL
- Building capacity and competency in ODeL delivery including development of content, training of instructors and delivery of content.
- Enable a blended face-to-face and e-learning approaches as required for developing appropriate, effective and efficient means of meeting both national educational objectives and the needs of students.

8.9 Multi-Stakeholder Partnerships

Recognizing the value of multi-stakeholder partnerships, and valuing the opportunity that lies from the possible support from global corporations and development partners, the Government of Rwanda will engage in various modes of collaboration and partnerships. The focus is on:

- Engaging local, regional and global partners in efforts to integrate ICTs in education and to avail research and innovations to improve the education system.
- Creating an enabling environment conducive to global and local partners' investments and support to the education system including:
 - Peer to peer research and collaboration.
 - Twinning between public and private educational institutions to transfer and exchange best practices and share available resources.
 - Support the integration of ICTs in education.
 - Financing of ICTs in education.
 - Encouraging the private sector companies to adopt schools to bring about school improvement.

8.10 Research and Development

Recognising experiences and lessons learned from educators and learners, the Government of Rwanda will facilitate participatory involvement of stakeholders at all levels and develop means of disseminating and analysing the feedback to improve learning outcomes. The focus is on:

- Conducting a needs assessment and establishing a mechanism for continually identifying best practices and gaps and researching innovative solutions to improve the education system.
- Creating a venue to facilitate a participatory approach enabling grass-root research and quality improvements, especially through showcases, seminars, workshops and conferences.
- Enhancing higher education institutions research and development capabilities.
- Supporting publication of publicly funded research under open access licences.

8.11 Monitoring and Evaluation

Monitoring and evaluation will be used to research and develop ICT integration, to learn from past experiences, to improve implementation and service delivery, to assess and allocate resources, and to assess results. The focus is on:

- Working in close collaboration with key stakeholders to establish criteria, indicators and benchmarks for assessment of implementation and impact of ICT in education.
- Creating processes and systems that promote information sharing, equity, transparency, and accountability for all stakeholders in the implementation of this policy.
- Using ICTs to support the efforts of different stakeholders in monitoring the performance of education process and institutions.
- Integrating EMIS in all stakeholders' activities for monitoring and evaluation.
- Conducting regular reviews and assessments of the value added and impact of the multi-stakeholder partnerships on the education system at all levels.

9 Institutional Framework

The **Ministry of Education** shall have jurisdiction in primary, secondary, professional, technical education, and higher education. It shall also have oversight responsibility for policy development, and monitoring and evaluation. It shall have the power to delegate responsibility, review roles and responsibilities of supporting institutions or organizations that have a stake in ICT in education in Rwanda.

The Ministry of Education shall establish an institutional framework with responsibility for policy implementation and overall management of ICT in Education initiatives at all levels of the educational system, namely pre-primary, primary and secondary, technical and vocational education and training (TVET) and higher education. ICT in Education shall be overseen by an **“ICT in Education Steering Committee”** with members from the Ministry of Education, the Ministry of Youth and ICT, Rwanda Education Board, Workforce Development Agency and the University of Rwanda. This committee will be chaired by the Ministry of Education through the Permanent Secretary and it shall make strategic recommendations and establish guidelines suitable to ICT in education needs across all levels of the education sector.

10 Financial Implications

The financial implications of the ICT education policy will be 35, 897,000,000 Rwf until end of Fiscal year 2019. The implementation will be carried out in 4 different phases as indicated below:

- Phase I: 2015- 2016 --- 880,000,000 Rwf, this includes the purchase of the devices and Microsoft licenses already budgeted in the current fiscal year.
- Phase II: 2016-2017 --- 12,004,000,000 Rwf
- Phase III: 2017-2018 – 14,874,000,000Rwf
- Phase IV: 2018-2019 – 8,139,00,000,000 Rwf

The next three phases will see the implementation of the framework with device distribution, teacher training, digital content development and High learning change to digital learning

In 2018/2019, the implementation framework will undergo review to determine the continuation of the program or if there will be a need to changing the strategy in place.

11 Handling Plan / Communication Strategy

- The policy will be made public to all stakeholders.
- ICT in Education Coordination and Implementation Units shall undertake:
 - Implementation, revision and proper incorporation of the policy.
 - Oversee detailed costed strategic implementation plan.
 - Monitoring and evaluation.
 - Harmonizing and streamlining implementation efforts among all stakeholders and implementers.
 - Developing and executing communications plans that target stakeholders, implementers and beneficiaries at all levels.
- The Units shall be adequately staffed with qualified individuals in the areas of technology, education, educational technology, project management, and research as appropriate to the specific unit's responsibilities. The Units shall be directed by senior qualified individuals who are capable of driving the implementation and strategies under their Unit's responsibilities.
- The units shall be empowered with the authority to follow up and coordinate efforts among all implementers.
- The development and global partners will support the structure of the Units.
- The implementation of this policy shall be conducted via a partnership approach involving the community, private and public organizations, and development partners.

The implementation of this policy shall be aligned with all relevant national, sector and sub-sector ICT programmes in Rwanda, as well as related regional and International initiatives.

12 Stakeholders view

1. 15th January 2015: Review of the current ICT in education policy and implementation and design of a new strategic plan with MINEDUC, MYICT, REB, WDA, UR, Intel Corporation
2. 11th February 2015: Validation of the ICT in education Policy and Strategic Plan, MINEDUC, MYICT, REB, WDA, UR, telecom operators, ISPs, Private sector and development partners.
3. 19th March 2015: consultation on better learning and teaching using technology, technology based classroom orchestration and successful ICT in education workgroup with Microsoft, Intel, WDA, RDB, REB, UR, Mwalimu Sacco and development partners.

4. 15th -23rd June 2015: consultation with Microsoft, Intel, WDA, RDB, REB on the Implementation of part of the ICT in Education Content Policy including One digital ID per student, deployment of Windows and Microsoft office for Education.
5. 24th September 2015: consultation with MYICT, private sector federation (ICT chamber) and ICT companies
6. 16th November 2015: Meeting with MINFRA on electrification of schools for the ICT in Education policy and Strategic plan
7. 17th – 20th November 2015: consultation on implementation strategy with MINEDUC, MYICT REB, HEC, WDA, Tumba College (IPRC North), University of Rwanda, Mwalimu Sacco, Microsoft, Intel Corporation and Positivo BGH.
8. 2nd December 2015: Meeting with MINECOFIN for ICT in education policy and Strategic plan.

13 Conclusions

ICT in education is targeted to achieve the following:

- Increase access to basic education for all, for both formal and non-formal education, using ICT as one of the major tools for learning, teaching, searching and information sharing.
- Improve the quality of basic education and promote independent and lifelong learning, especially from primary to tertiary education.
- Contribute to the development of a workforce equipped with the ICT skills needed for employment and use in a knowledge-based economy.
- Ensure that Rwanda has in place an ICT-driven process that supports evidence-based decision making with respect to resource allocation, strategic planning, and monitoring and evaluation of the educational policy implementation