

BRIEF ON THE DEVELOPMENT OF THE EDUCATION DIGITAL AGENDA STRATEGY

1.0 Introduction

In May 2020, the PS/ES constituted a technical committee to spearhead and fast-track the development of the Education Digital Agenda (DA) and the ICT in Education Policy. The members of the Technical committee Include: Dr. Jane Egau Okou - D/HTVET (Chairperson); Dr. Cleophus Mugenyi - C/BE (Member) ; Dr. Frederick Kitoogo - Principal UICT (Member); Dr. Nora Mulira - Director ICT, Research and Innovation (Member); Prof. Paul Muyinda Birevu - Deputy Principal, College of Education and External Studies, MUK (Member); Dr. John Okuonzi - Director of ICT and services, KYU (Member); Mr. Muinda Patrick-Assistant Commissioner – CIM (Member); Mr. Boniface Mugisha - ICT Consultant , MOES (Member); and, Ms. Lubega Irene Namatovu - P. Statistician – (Secretariat).

2.0 Progress

To date the following have been achieved:

- (i) Technical Committee meetings – A total of sixteen (16) meetings have so far been held;
- (ii) Development of a concept note for the Digital Agenda. The concept note was approved by the M&E WG on M&E Working group on Thursday 23rd July 2020.
- (iii) Development of the Draft Digital Agenda Strategy. The committee embarked on this after securing approval of the Concept note by the M&E WG.
- (iv) Stakeholder consultations. A number of stakeholder consultations have been held as detailed below:
 - a. Vice Chancellors of Universities – virtual consultative meeting held on 16th September 2020.
 - b. Education Development Partners (EDPs) – Virtual meeting held on 22nd September 2020.
 - c. Permanent secretaries of Selected MDAs – Virtual meeting held on 24th September 2020.
 - d. Regulatory and Examination bodies – Virtual meeting held on 30th September 2020.

- e. MoES Heads of Department – Virtual meeting held on 21st October 2020.
 - f. Directorate of Education Standards – Virtual meeting held on 27th October 2020.
 - g. Directorate of Basic and secondary Education – Virtual meeting held on 29th October 2020 and 11th November 2020.
 - h. Directorate of Higher, technical vocational education and training – Virtual meeting held on 3rd November 2020.
 - i. MoES Departments of PES, F&A, UNATCOM, EPPAD – Virtual meeting held on 5th November 2020.
 - j. National Digital Transformation Program – Virtual meeting held on 10th December 2020.
 - k. Local Governments stakeholder consultations – A total of six regional stakeholder consultative workshops were held between 25th January and 4th February 2021.
- (v) Presentation of draft Digital Agenda Strategy to the Sector Policy Management (SPM) WG – meeting held on 16th December 2020.
 - (vi) Five day working retreat for members of the Digital Agenda Technical committee and Policy analysts. This retreat was held on 8th – 12th February 2021 with an objective of reviewing and refining the draft Education and Sports Sector Digital Agenda strategy and ICT in Education Policy.
 - (vii) Half day stakeholder validation workshop – this was held on 18th February 2021 with an objective of validating the contents of the Draft Final Digital Agenda strategy.
 - (viii) Development of terms of reference and budget for the e-readiness survey to inform the detailed work plan and budget for implementation of the strategies contained in the Digital Agenda Strategy

3.0 Next Steps

- i) Mobilization of funds for the E-readiness survey
- ii) Implementation of the E-readiness survey
- iii) Development of detailed budget for the implementation of the Education Digital Agenda
- iv) Implementation of the Education Digital Agenda

v) Monitoring and evaluation

Annex 1: Highlights of the Draft Education Digital Agenda strategy

1.0 Background

The Education Digital Agenda Strategy 2021 - 2025 provides a Rationale and Action Plan for integrating ICT into teaching, learning, assessment, sports and

administration five (5) years. This Strategy builds on other existing Strategies and plans developed by other complementary Sectors that include aspirations of ICT integration in education and sports. It takes cognizance of current education reforms that are underway in the education and sports system at all levels. The proposed interventions are designed to embed ICT more deeply across the system to enhance the overall quality of Uganda Education and Sports.

The Education Digital Agenda Strategy 2021 - 2025 is aligned to the National Development Plan (NDP) II and NDP III which advocate for human capital development in the Sector leveraging on the ICT use and penetration resulting into improved quality learning outcome.

In developing a sector-wide Strategy, an evidence-based and participatory approach was used to ensure all aspirations and needs of key stakeholders in the education and sports sector were catered for. Stakeholder engagement meetings were conducted to provide input into the situation analysis and also into the aspirations, focus areas, development and implementation mechanism.

2.0 Goal

To improve Uganda's education service delivery through sustainable digital transformation

2.1 Objective of the Digital Agenda strategy

To establish a framework for the development, deployment, uptake and utilization of sustainable, ethically sound and harmonized ICT initiatives for teaching, learning and management of the education and sports sector

2.2 Specific Objectives

The specific objectives are:

- a) To increase coverage and access to the ICT infrastructural and connectivity in the Education sector
- b) To develop an integrated direction in which ICT shall facilitate teaching, learning and management of service delivery in education sector

- {streamline, review, rationalize and harmonize the fragmented ICT initiatives}
- c) To promote ICT in research and innovation, and commercialization of indigenous products
 - d) To increase the ICT human resource capacity {numbers, orientation, specialty and quality} in the education sector
 - e) Review the policy, legal and regulatory framework for ICT in Education
 - f) To effectively use and encourage adoption of mature and emerging technologies
 - g) To leverage utilization of ICT for continuous education in case of disruption (emergency, disaster) in the education sector

3.0 Key issues identified

- i. Inadequate Digital Equipment and Connectivity in the Formal Education Sector
- ii. Low Digital Skills Capacity in the formal education sub-sector to foster digital skills
- iii. Outdated Curriculum that cannot foster digital skills
- iv. Low levels of ICT awareness and practice for inclusion
- v. Low Levels of Digital Literacy and STEM training to drive the digital vision
- vi. Inadequate Governance and Institutional Legal, Policy and Regulatory Framework
- vii. Lack of Demand Data for Digital Skills
- viii. High levels of Illiteracy and Foundational skills due to early school dropouts

4.0 Thematic Areas for the Digital Agenda Strategy

- i. Expand Educational Opportunities.
- ii. Increase Efficiency.
- iii. Enhance Quality of Learning.
- iv. Enhance Quality of Research and Innovation.
- v. Enhance quality of Teaching, Assessment, and Teacher Professional Learning and Development.
- vi. Enhance ICT for Skills Development (TVET) and job-oriented areas of general education
- vii. Sustained Lifelong Learning.

- viii. Administration and Management of Educational Institutions using ICTs; and
- ix. Improving Policy Making and Implementation.

5.0 Pillars of the Education Digital Agenda

The Education and Sports Digital Agenda will promote the strategic use of ICT to realize the aspirations of the Education and Sports Sector through:

- i. Deployment of secure, integrated and cross sector ICT infrastructure;
- ii. Developing and promoting usage of quality e-education solutions and services,
- iii. Digital inclusion at all levels;
- iv. Standardization and interoperability of the entire education systems;
- v. Enhanced national cyber security programmes;
- vi. Promoting innovation and commercialization of ICT products;
- vii. Enhancing digital literacy and skills development;
- viii. Supporting development and uptake of emerging technologies such as Fourth Industrial Revolution (4IR) Technologies; and
- ix. Process re-engineering and automation for improved education and sports services delivery

6.0 Digital Education Agenda Transformational Interventions and Actors

Strategic Interventions	Actors
Objective 1: To increase coverage and access to the ICT infrastructural and connectivity in the Education sector	
1. Leverage Govt. ICT sector regulators and Service providers to extend broadband ICT infrastructure coverage across the Education and sports sector countrywide in partnership with the private sector and implement last mile connectivity to key areas (Districts, sub counties, Education institutions,)	MoICT & NG, NITAU, UCC, POSTA, UTL, MEMD, UETCL, UEDCL, UBC/SIGNET, Other Utility service providers
2. Identification and adoption of educational platforms that promote equitable access in education	(MoWE, MoWT), Communication service providers, Radio
3. Leverage Education consortium numbers for e-rates, tax exemptions, free digital transmission channels, capacity building and sustainability mechanisms	

Strategic Interventions	Actors
<p>4. Leverage Government expansion of the Digital Terrestrial Television and Radio Broadcasting network to deliver ODEL</p> <p>5. Establish and enhance national common ICT core infrastructure (data centers, high power computing centers, specialized labs)</p>	<p>and TV service providers, private service providers</p>
<p>Objective 2: To develop an integrated direction in which ICT shall facilitate teaching, learning and management of service delivery in education sector {streamline, review, rationalize and harmonize the fragmented ICT initiatives}</p>	
<p>1. Mainstream ICT at all levels of the education and sports sector and digitize service delivery. (include Education policies for acceptable use, DRP, equipment maintenance, e-waste, equity)</p> <p>2. Develop digital learning platforms and MIS that are adaptable to the Uganda's education context</p> <p>3. Develop an ICT in Education change management framework</p> <p>4. Develop Blended e-learning or recreation solutions to enhance and increase access to the physical education and sports.</p> <p>5. Develop and implement Data Protection and Privacy Programme</p> <p>6. Digitize and archive digital content for E pedagogy</p> <p>7. Review the existing assessment's framework to incorporate e-assessment</p> <p>8. Develop capacity (human, infrastructures etc.) for e-assessment</p> <p>9. Undertake the review of curricula for e-readiness</p> <p>10. Use ICT to facilitate education administration and management</p>	<p>ALL MDAs MoICT&NG, NITAU, UCC, Private Sector players, Security agencies, MoLG, KCCA, All LGs</p>
<p>Objective 3: To promote ICT in research and innovation, and commercialization of indigenous products</p>	

Strategic Interventions	Actors
<ol style="list-style-type: none"> 1. Develop and implement ICT in education Research and Innovation ecosystem 2. Develop Innovation and incubation Centers 3. Support local innovation and promote export of ICT knowledge products and services 4. Utilize ICT to tap into continental and global education market 5. Use ICT to facilitate engagement with other industries for knowledge transfer, partnerships and collaboration 	MoICT & NG, UICT, MSTI, UCC, NITAU, ACADEMIA, PRIVATE SECTOR, CIVIL Society, Academia, Private sector
Objective 4: To increase the ICT human resource capacity {numbers, orientation, specialty and quality} in the education sector	
<ol style="list-style-type: none"> 1. Develop Digital skills that support use of ICT for learners, researchers and teachers 2. Develop a national digital skills framework for professional's quality assurance 3. Develop ICT centres of excellence and vocational institutions 4. Establish the Open University of Uganda 5. Implement targeted capacity building for e-pedagogy for teachers and learners to incorporate ICT in teaching and learning 	MoICT & NG, UICT, MoES, NCDC, NCHE, ACADEMIA, UCC, NITA(U)
Objective 5: Review the policy, legal and regulatory framework for ICT in Education	
<ol style="list-style-type: none"> 1. Regulate, coordinate and harmonize ICT infrastructure planning, sharing and deployment within the education and sports sector public and private sector 2. Review and develop appropriate policies, strategies, norms and standards and regulations that will guide adoption and use of ICTs for education and sports service delivery 3. Develop and implement advocacy and awareness programmes for targeted stakeholder categories to promote the digital agenda 4. Review accreditation and registration standards of institutions and programs to provide for ICT based Education and trainings 	MoICT & NG, UCC, NITAU, NCS
Objective 6: To leverage utilization of ICT for continuous education in case of disruption (emergency, disaster) in the education sector	
<ol style="list-style-type: none"> 1. Develop a comprehensive change management and adoption strategy for the utilization of ICT in emergency situations 2. Develop rapid response capacity building initiatives for the sector for adoption of ICT in emergency situations 	

Strategic Interventions	Actors
3. Harness the affordance of ICT in the rapid distribution of teaching and learning resources during emergency 4. Facilitate assessment of teaching and learning in education sector (M&E feedback)	
Objective 7: To effectively use and encourage adoption of mature and emerging technologies	
1. Develop ICT in education incubation center 2. Develop ICT in Education center of excellence 3. Create partnership for the development and uptake of mature and emerging technology	

7.0 Expected Results and Beneficiaries

The expected results and beneficiaries of the Digital Agenda include:

No.	Beneficiary	Expected Results
1	Students	(a) Using ICT to open up new forms of learning and collaboration to support different styles of learning. (b) Student centered learning and acquisition of 21st Century Skills. (c) Leveraging existing knowledgebase to solve day-to-day challenges/problems, to support research and innovations. (d) Experiencing joy, satisfaction, passion and success in their education and lifelong learning. (e) Actively engaged in learning – both in and out of school. (f) Accepting ownership of their learning –involving the ability to be self-directed, a decision-maker, and a manager of priorities in and out of school. (g) Using technology to achieve personal learning goals and to succeed in various learning activities (h) Use technology to monitor and ensure student attendance. (i) Using ICTs critically and ethically. (j) Critical thinking that arises out of utilization of ICTs by students.

<p>2</p>	<p>Teachers</p>	<ul style="list-style-type: none"> (a) Taking a more facilitative role, providing student-centered guidance and feedback, and engaging more frequently in exploratory and team-building activities with students. (b) Using ICT to “support an enquiry process and enable their students to work on solving complex real-world problems” by engaging in “collaborative project-based learning activities that go beyond the classroom”. (c) facilitating formative and summative assessments. (d) Enabling personal growth through increased networking and interaction with their peers. (e) Facilitating increased interaction with students. (f) Providing for differentiation of learners according to their strengths and weaknesses so that they are targeted better. (g) Supporting students to create and innovate so that they are engaged in managing their own learning goals and activities. (h) Use of technology to monitor and ensure teacher attendance results under students and teachers respectively. (i) Accepting ownership of their own professional learning and, where appropriate, designing and participating in learning communities that make extensive use of technology.
<p>3</p>	<p>Educational Institutions</p>	<ul style="list-style-type: none"> (a) Taking a guided and lead role in planning how they will effectively embed safe and ethical use of ICT in teaching, learning, assessment, monitoring & evaluation and policy & decision-making practices based on a deliberate strategy (b) Improved data management and record keeping; (c) Creation of a knowledgebase, better information sharing and security; (d) Better learning and teaching methods; (e) Reduced unit cost of teaching and learning in the long run; (f) Better monitoring of curriculum coverage and improved teachers and student attendance (since they

		<p>will not be required to be in specific places like schools at a particular time;</p> <p>(g) Strengthening relationships and stakeholder engagement through the use of ICT.</p>
4	Parents and Guardians	<p>(a) Improved engagement with their children's learning through the use of ICT;</p> <p>(b) Improved collaboration with and participation in school activities and programmes using ICT;</p> <p>(c) Cost saving in the long run and;</p> <p>(d) Easing student management and monitoring.</p>
5	Government including Ministry of Education & Sports and other MDAs/LGs	<p>(a) Enhanced strategic direction of the education and Sports sector through adoption of efficient mechanisms for monitoring and evaluating the implementation and Utilization of ICT in education; A better mechanism to monitor and evaluate the implementation and utilization of ICT in education.</p> <p>(b) Improved support supervision and performance management as well as improved data management and record keeping</p> <p>(c) Better planning, financing and policy making as expected results for Government, MoES and other MDAs</p> <p>(d) All Current and Future curricula will include clear statements that focus on the development of digital learning</p> <p>(e) improved awareness of the use of ICT in education;</p>
6	Industry	<p>(a) Improved ICT and general skills aligned to market needs</p>
7	Development Partners	<p>(a) Improved co-funding of initiatives of ICT in education based on a clear strategic direction</p> <p>(b) Strengthened Awareness and Sensitization for the ICT in Education Vision, Priorities and Serialization.</p> <p>(c) Improved coordination and rationalization of support from Development Partners</p>

8.0 Implementation of the Education Digital Agenda

The Digital Education Agenda is a five (5) year Strategy for how ICT is going to facilitate the improvement of digital literacy for the country. The commencement and duration shall align with the Digital Uganda Vision and NDP III

The implementation of the Digital Agenda is projected to start in 2022 after conclusion of the preliminary activity of undertaking the E-readiness survey. The findings of the E - readiness survey inform the development of a detailed work plan and budget for the implementation of the Strategy. The digital Education Agenda will take on the project based implementation Approach for maximum results.

The Ministry of Education and Sports (MoES) will take the lead in the implementation of the DA strategy in collaboration and with key stakeholders including EDPS, Education institutions, Government Ministries Departments Agencies (MDAs) and the Private sector.