

Strategic Document Validation workshop to establish the African STEAM Center of Excellence (ASTEAM CoE) Kigali, Rwanda

Date of Workshop: May 31-June 1/2023

Place of Workshop: xxxxxx hotel, Kigali

Background

The Africa Regional Science, Technology and Innovation Forum 2022 was held from 1st to 2nd March 2022, organized by UNECA and hosted by the Government of Rwanda through the Ministry of Education. The Forum was preceded by the virtual Youth Innovation Bootcamp and a physical bootcamp that ran parallel to the Science, Technology and Innovation (STI) Forum. One of the Outcomes from the Forum was a commitment from the UNECA to support the establishment of a Centre of Excellence in Foundational Skills in STEM Basic Education in Kigali. The Honorable Minister of Education holds the position of chair of the Regional STI Forum until the next Forum which will be held in March 2023 and the Centre should be established before this time.

The promotion of STEAM education aligns with the worldwide trend of equipping students for the rapid economic, scientific and technological developments, as well as the changes and challenges in society and around the world. In the context of the Rwandan school curriculum, STEAM education is important to strengthening effective implementation of the Competence Based Curriculum (CBC).

Objectives of the validation workshop

The overall objective of the Validation Workshop which is going to be held in Kigali is for the approval of the strategic document produced to establish the African STEAM center of excellence (STEAM CoE) in Kigali with the support of UNECA and other partner organizations. During the three days validation workshop, the strategic document will be reviewed by experts from the field, the technical and steering committees formed and other key stakeholders in the area hence enriching the strategic document.

The anticipated missions, visions and objectives of the center, the proposed laboratories, the engagement areas of the center, the proposed organizational structure of the center, the possible collaboration and partnership schemes, the short term and long term plans of the center, the needed equipment, Hardware and software materials to equip the center and other related issues will be discussed during the three days workshop that will be held at xxxxxxxx hotel from May 31 to June 1/2023

Expected outcomes of the workshop

- Enriched and finalized center establishment strategic document
- Commented partnership and collaboration strategic direction
- Approved list of laboratories under the STEAM CoE
- Commented and approved organizational structure of the CoE
- Approved plan of actions to inaugurate the center and to operationalize the center with the prioritized laboratories
- Commented and approved short- and long-term plans of the center
- Clear direction and procedures for the renovation of the building of the STEAM center

Participants

1. Rwanda Government Officials
2. UNECA Experts
3. UNECA partner organizations
4. International organizations
5. University Representatives
6. Private Organizations
7. STEAM centers, start-ups and incubation centers
8. Local Experts
9. Local Civil Society representatives
10. NGOs
11. Media representatives
12. Other Key stake holders

The African STEAM center of excellence

For a developing country like Rwanda, that has sought science as one of the critical tools of enhancing its growth, increased STEAM activities not only enhance meaningful learning but also provide the opportunity for the preparation of graduates who can contribute to solving societal problems and speed up national economic growth and development.

To this end, ECA is planning to support the establishment of the African Innovation and STEAM Center of Excellence which is going to be located in the premises of the Rwanda Education board. The African STEAM Center of Excellence (ASTEAM CoE) will strengthen Science, Technology, Arts and Mathematics education by introducing hands-on enrichment programs in Science, Technology, Engineering, Mathematics and Arts disciplines for pre-University youth. The African STEAM Center of Excellence aims to develop students to become lifelong learners of science, technology, Arts and mathematics, enabling them to meet the challenges in the 21st century, and from a wider perspective, nurturing versatile talents with different levels of knowledge and skills for enhancing the international competitiveness to contribute to social economic growth of Rwanda, and Africa in General.

The Strategic Document

The strategic document enumerates: The anticipated mission, vision, Objectives, rational and expected outcomes of the STEAM Center of Excellence. The proposed laboratories, the core and fundamental engagement areas, the organizational structure, the office facilities and human resource needed to run the STEAM center are also stipulated in the document. Proposed office and laboratory facilities, different partnership and collaboration schemes, the short and long term plans of the center and the overall estimated cost to establish the center are also some of the main ingredients which are emphasized in the strategic document. All the needed equipment, software, hardware and office facilities and all equipment important to furnish all the labs and offices are also presented in the strategic document with their detail specification.

Program of Work

Day One

No.	Hour	Events/Programs	Facilitator
1	8:30 - 9:00 am	Registration of participants	MoE/UNECA
2	9:00 – 9:30 am	Arrival of guest of honors	MoE/REB
3	9:30 – 9:40 am	Welcoming speech by Program coordinator (Mr. Mike)	UNECA/MoE
	9:40 – 9:50 am	Opening Ceremony (UNECA/MoE/REB)	UNECA/MoE/REB
4	9:50 – 4:00 am	Opening Remark by the guest of honor (Rwanda Official, TBC)	MoE
5	10:00– 10:30 am	Presentation of the strategic document (Dr. Dereje Yohannes, UNECA lead consultant)	UNECA
6	10:30– 11:00 am	Tea Break and Group photo	Hotel
7	11:00–12:30 pm	General discussion on the strategic document emphasizing on the mission, vision and objectives of the center (All participants)	MoE
8	12:30 – 2:00 pm	Lunch Break	Hotel
9	2:00 – 3:30 pm	Separate group discussions (All Participants) <ul style="list-style-type: none">• Group 1: Center Objectives, mission, vision, outcomes and Organizational structure• Group 2: Identified laboratories and list of office and lab equipment• Group 3: Strategic partnership and collaboration• Group 4: short, medium- and long-term plans and monitoring and evaluation of the center	MoE/UNECA
10	3:30 – 4:00 pm	Tea break	Hotel
11	4:00 – 5:30 pm	Presenting the outcomes of the separate groups (Group leaders)	MoE/UNECA
12	5:30 – 6:00 pm	Closing remark of the day (MoE/UNECA)	MoE/UNECA

Day Two

No.	Hour	Events/Programs	Facilitator
1	9:00 – 9:30 am	Setting the scene (Dr. Dereje and Mr. Mike)	MoE/UNECA
2	9:30 – 10:00 am	Presenting the proposed design of the building renovation work and the detail plan of actions (Architectural design consultant)	MoE/UNECA
3	10:00 – 10:30 am	General discussion on the design of the building work and the way forward (All participants)	MoE/UNECA
4	10:30 – 11:00 am	Tea Break	Hotel
5	11:00 – 12:30 pm	Implementation plan by the MoE/REB	MoE/UNECA/REB
6	12:30 – 1:30 pm	Lunch Break	Hotel
7	1:30 – 2:00 pm	Bus ride to the STEAM Center building	MoE/REB
8	2:00 – 3:00 pm	Site visit (Visiting the building reserved for the STEAM center and discussing the design issues with the design consultant for practical guide and strategies for the way forward.)	All participants, MoE, REB, UNECA
9	3:00 – 3:30 pm	Bus ride back to the hotel	MoE/REB
10	3:30 – 4:00 pm	Validating the document and the way forward (Dr. Mactar Seck and MoE official (TBC))	MoE/UNECA
11	4:30 – 5:00 pm	Tea break	Hotel
12	5:00 – 5:30 pm	Closing remark by guest of honor (TBC)	MoE/UNECA
13	5:30 – 6:00 pm	End of the validation workshop	MoE/UNECA