

TERMS OF REFERENCE (TOR)

RESEARCH STUDY ON THE STATUS OF SCHOOL INFRASTRUCTURE TO SUPPORT STEM EDUCATION UNDER THE CBC SYSTEM IN KENYA

1. Background

Echo Network Africa Foundation (ENAF) is a Pan African philanthropic institution that works with like-minded stakeholders to empower, position and advocate for girls and women in Africa. Founded in 1982 as Kenya Women Holdings (KWH) and later re-branded in 2018 to Echo Network Africa (ENA), the vision of ENAF is an inclusive society where girls and women enjoy full rights and participate in the life of the society. ENAF intentionally focuses interventions on girls and women with special attention to young women, women with disabilities and women from marginalized communities. The Government of Kenya has been implementing the Competency-Based Curriculum (CBC) to better equip learners with relevant skills and competencies for the 21st century. A central pillar of CBC is the emphasis on Science, Technology, Engineering, and Mathematics (STEM) education. However, the success of CBC implementation, particularly in STEM subjects, hinges significantly on the availability and adequacy of school infrastructure, resources, and trained personnel.

With the transition of Grade 6 learners into Junior Secondary School and the anticipated rollout of Senior Secondary School pathways by 2026, it is critical to assess the readiness of existing school infrastructure to support effective STEM education. This study aims to provide a comprehensive picture of the current infrastructure landscape and guide future investments and policy directions.

ENAF is implementing the "Girls Excel Initiative" program that focuses on eradicating harmful cultural practices such as Female Genital Mutilation (FGM) and promoting girls' education in STEM fields. As part of its efforts to promote girls' education in STEM fields, ENAF aims to conduct a study on the status of school infrastructure supporting STEM education under the CBC system in Kenya. In addition to contributing to evidence to inform policy and equitable resourcing, the study will also serve as a baseline to guide ENAF's investment in mobile laboratories to be procured through the School Equipment Production Unit (SEPU) and distributed to girls' schools under the Girls Excel Initiative.

2. Objective of the Assignment

To assess the status, adequacy, and gaps in school infrastructure for effective STEM education delivery in Kenya's CBC system, and to provide evidence-based recommendations aligned with national policy goals, equity considerations, and international best practices.

The study will also contribute to planning for the transition into Senior Secondary School by identifying infrastructure needs to support STEM pathways and informing national and county-level policy and investment decisions.

3. Scope of Work

The consultant/firm will be expected to:

- I. Conduct a comprehensive literature and desk review, including:
 - Government policy documents (Ministry of Education, KICD, TSC, SEPU, etc.)
 - Reports and studies by development partners, NGOs, and think tanks
 - National data sources (EMIS, KNBS, NEMIS, Vision 2030, MTP IV, etc.)
- II. Map and assess the current availability and condition of:
 - Science laboratories, ICT labs, technical workshops, and libraries
 - Utilities and enablers (electricity, water, internet connectivity)
 - Equipment and consumables for STEM practicals
 - Distribution and qualifications of STEM subject teachers
- III. Identify disparities in infrastructure based on:
 - Region (urban vs. rural), county, and type of school (public vs. private)
 - Socio-economic status, gender, and disability inclusion
- IV. Analyse alignment with CBC reform milestones, especially:
 - Domiciling of Grades 7, 8, and 9 in Junior Secondary
 - Implementation of Senior Secondary STEM pathways in 2026
 - Infrastructure and human resource requirements for CBC transitions
- V. Conduct Key Informant Interviews (KIIs) with:
 - Ministry of Education (including Infrastructure and Basic Education directorates)
 - Kenya Institute of Curriculum Development (KICD)
 - Teachers Service Commission (TSC)
 - School Equipment Production Unit (SEPU)
 - Secondary school heads (To establish a baseline for current STEM infrastructure in girls' schools targeted under the Girls Excel Initiative, in order to guide ENAF's strategic investment in mobile laboratories and future programming.)
 - County Directors of Education and Quality Assurance and Standards Officers (QASOs)
 - Development partners and education CSOs
- VI. Provide actionable recommendations on:
 - School selection for hosting STEM pathways and tracks
 - Equity-driven and cost-effective infrastructure investments
 - Policy and legal frameworks to support infrastructure readiness
 - Monitoring and evaluation strategies for STEM infrastructure development

4. Key Deliverables

- I. Inception Report detailing the methodology, work plan, and data sources
- II. Literature Review Report summarizing key findings and international practices
- III. Infrastructure Readiness Matrix for Junior and Senior Secondary levels: A structured analytical tool to assess the preparedness of schools to deliver STEM education under CBC. The matrix will evaluate key dimensions including: 1) Availability and condition of science, ICT, and technical facilities; 2) Access to utilities such as electricity, internet, and water; 3) Availability of STEM equipment and digital learning tools; 4) Qualification and availability of STEM teaching personnel; 5) Inclusion and equity considerations (e.g., for girls, learners with disabilities); 6) Alignment with CBC milestones (e.g., readiness for Senior Secondary pathways by 2026). The matrix will serve as a baseline tool for investment decisions (e.g., mobile lab deployment under ENAF's Girls Excel Initiative) and policy planning by education stakeholders.
- IV. Draft Research Report with analysis, findings, and initial recommendations
- V. Validation Workshop with key stakeholders
- VI. Final Research Report incorporating feedback and final recommendations
- VII. Executive Summary and Policy Brief for policymakers and donors

5. Timeline

The study is expected to be completed within 15 days.

No	Activity	Duration
1	Inception and Literature Review	5
2	Draft report development and submission	5
3	Validation workshop and revisions	4
4	Final report submission	
	TOTAL	15

6. Consultant/Team Qualifications

- I. Advanced degree in Education, Public Policy, Social Sciences, or a related field
- II. Minimum 7 years of experience in education sector research, with a focus on infrastructure, STEM, or CBC
- III. Demonstrated expertise in comparative education systems and international best practices
- IV. Familiarity with Kenya's education policy, CBC reforms, and stakeholder landscape
- V. Strong analytical, writing, and stakeholder engagement skills

7. Budget and Payment Terms

A detailed budget must be submitted with the technical proposal. Payments will be disbursed upon satisfactory delivery of key milestones as outlined in the deliverables section.

8. Reporting and Coordination

The consultant will report to the Programs Lead and coordinate closely with designated focal persons from the Ministry of Education, KICD, SEPU, and other relevant stakeholders.

Assignment duration:

The consultant will be engaged for a period of 15 days in June of 2025.

Expression of Interest:

The consultants meeting the above requirements should submit an Expression of Interest which should include the following:

- A capability statement, including commitment for availability for the assignment.
- A financial proposal indicating a modest budget available.
- Evidence of similar previous work undertaken.

Kindly send your CV (s) to procurement@enafrika.org on or before **Thursday June 12th, 2025**.