
Consultancy Terms of Reference

**Review of Science, Technology Engineering and Mathematics (STEM) Implementation Approach of the
Wasichana Wetu Wafaulu Project**

1. Introduction

Education Development Trust, formerly CfBT Education Trust, is an education services company with over 50 years' experience in primary and secondary education. Our vision is to provide outstanding, sustainable education solutions that transform and improve education and life chances of children and young people worldwide. We have specialist experience in strengthening education systems and supporting school improvement in post-conflict, transition and early-recovery fragile states.

Education Development Trust programmes in Sub-Saharan Africa focus on improving efficiency, effectiveness and relevance of national education systems and school programmes to improve access, retention, and quality of learning. The organisation is currently implementing the Girls Education Challenge programme in Kenya.

Wasichana Wetu Wafaulu, 'Let Our Girls Succeed' is a six-year DFID funded project, under the Girls Education Challenge portfolio. The project is implemented in two contexts: Arid and Semi-Arid Lands (ASALs) in eight Counties namely: Turkana, Samburu, Marsabit, Tana River, Kwale and Kilifi, Nairobi and Mombasa. The project is supporting about 72,000 girls in 521 primary schools, 45 secondary schools and 25 TVETs to complete their current phase of education, achieve improved learning outcomes and transition successfully to a productive and positive next phase. Through this project, our girls will gain the skills, qualifications, and confidence to take control of their lives.

Education Development Trust is the lead implementer working with downstream partner - AMURT, Concern Worldwide, Pastoral Girls initiative, Kesho Kenya and WERK. The project adopts an integrated approach towards girl child education by putting in place strategies that address the girl herself, the girl at home, the girl at school and the girl in the community.

The project works in collaboration with key government agencies - Ministry of Education Science (MoEST) and the Teachers Service Commission (TSC), Kenya Institute of Curriculum Development (KICD) and CEMASTEAs as well as the County Governments.

2. Consultancy Objectives

The WWW project has recently rolled out its STEM interventions to 50 project secondary schools, in the 8 project Counties. This includes training teachers and heads of science subjects on improved STEM pedagogies and delivery. The project is committed towards ensuring quality interventions that results to improved learning outcomes of our girls. This consultancy aims at providing opportunities for learning, and improvement through adaptive programming. The broad consultancy objectives are:

- ✓ To establish whether the current STEM model for the WWW project is effective in increasing girls' uptake for STEM subjects and in improving STEM performance.
- ✓ To review the overall STEM implementation approach for WWW project and propose areas of improvement and value addition to the current model

3. Specific Tasks

The Consultant will:

1. Conduct a desk review of the global and local practice of STEM education and existing models on STEM; this include review of government initiatives on STEM including and not limited to Kenya Vision 2030, Third Medium Term Plan, National Education Sector Plan
2. Hold consultations and facilitate interviews with relevant stakeholders including but not limited to Ed Dev Trust, relevant government agencies such as MoEST, TSC, CEMASTEVA, Vision 2030 e.t.c
3. Review and conduct a SWOT analysis of the project STEM model, including
 - i. Review of STEM training materials to determine content and pedagogical appropriateness
 - ii. Suitability and relevance of competencies delivered to teachers; and the capacity of teachers and learners to adopt the model
4. Develop a monitoring and lesson observation tool for project use, aimed at determining the level of uptake/ knowledge utilisation by STEM teachers and quality of delivery in the classroom
5. Conduct monitoring visits to a sample of WWW project schools to observe the implementation of the STEM programs,
6. Write a report on the implementation of the WWW STEM program indicating areas of strength and improvements; the report should have actionable recommendations of 'what works', taking into consideration relevance, context and resourcing
7. Upon agreement of the recommendations; incorporate them into the current model or develop a new model for the project

4. Key Deliverables

- a. **Inception Report within 5 days:** Which will include
 - ✓ The understanding of the assignment
 - ✓ A comprehensive desk review of relevant documents
 - ✓ An elaboration of the assignment's methodology, sampling and delivery plan
 - ✓ First draft of the monitoring and observation tool
- b. **Monitoring visits** to a sample of the project schools, to determine the quality to STEM delivery in schools
- c. **First draft report** on key observations and areas of improvement on the quality and relevance of training, and opportunities for value addition on STEM approach
- d. **Final report** which includes stakeholders' input, elaborates key observations and areas of improvement on the quality of STEM implementation at school level

5. Consultancy Duration

This assignment will be for a total of 30 consultancy days spread between (March – June 2019)

6. Consultant's Obligations

The Consultant shall be responsible for the provision of all the personal and technical resources to carry out the services; and shall make own arrangements for transport, accommodation, insurance, utilities, and any other required personal resources and costs necessary for the fulfillment of obligations under the contract.

7. Education Development Trust Obligations

The Client shall be responsible for appropriate guidance and feedback on deliverables, the provision of venues for meetings as relevant, field support, desk review materials and any other necessary information to support the fulfilment of the assignment

8. Qualifications and Competencies

The following qualifications and competencies are essential

- ✓ A PhD or a master's degree in Education on the fields of education research & evaluation with a clear understanding of trends in STEM Education
- ✓ Solid experience in development of training modules for STEM and guided for secondary schools
- ✓ Demonstrated experience in implementing STEM activities in similar contexts including solid experience in classroom delivery of STEM in secondary and primary schools

- ✓ Strong research, evaluation and analytical skills; ability to validate information, draw inferences and recommend actionable steps
- ✓ Excellent understanding of Kenyan education sector priorities and concerns, policies and sustainable development issues
- ✓ Excellent communication and writing skills; flexibility and ability to meet deadlines

9. Application Procedures

Interested applicants are invited to submit their responses **by 17th March 2019**, in accordance to the following guidelines:

- ✓ Provide a technical proposal in response to the ToR (max 6 pages) indicating your approach to the assignment, methodology and work plan with timelines
- ✓ Summary capability statement; demonstrating your team's expertise and competences in development and review of STEM modules, training and monitoring of STEM initiatives in schools
- ✓ Indicate your professional fees inclusive of relevant taxes; and other itemised costs of undertaking the assignment
- ✓ Provide evidence of undertaking in similar assignments for credible institutions (e.g. recommendation letters, sample reports)
- ✓ Provide updated curriculum vitae for the lead technical person, max 4 page C.V; and summary profiles of other key consultants that will be involved in the assignment (max 1 page per consultant)

Mandatory documents for submission

- ✓ For individual consultants or a team of consultants, include for each team members - copies of PIN certificate, tax compliance certificate and national ID/passport copies
- ✓ For registered consultancy firms, include copies of Certificate of Incorporation, company tax compliance and VAT registration certificate

Email address:

Note: the submissions will be reviewed on a rolling basis; therefore applicants are advised to submit their proposals early.

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