



Call for Proposals: Final Evaluation of the Teacher Training Program in Rwanda

1. Introduction

African Institute for Mathematical Sciences (AIMS)

Established in 2003 in Cape Town, South Africa, AIMS is a pan-African network of centres of excellence offering postgraduate education, research, and public engagement for the advancement of Science, Technology, Engineering and Mathematics (STEM) in Africa. Building on the success of its first centre in South Africa, the AIMS model was rolled out across Africa with new centres of excellence established in Senegal (2011), Ghana (2012), Cameroon (2013), and Rwanda (2016). The AIMS Master's in Mathematical Sciences program is at the core of AIMS – the program trains hundreds of talented young Africans each year and prepares them for leadership positions in education, research, government and the private sector. AIMS is also working to build the pipeline of young scientists through its mathematics teacher training programs in South Africa, Cameroon and Rwanda.

Teacher Training Program in Rwanda

In partnership with the Mastercard Foundation's Leaders in Teaching initiative, the AIMS Teacher Training Program in Rwanda (TTP Rwanda) sought to improve the quality of education in mathematics and science at the secondary level by training teachers and ensuring the necessary resources are made available to *all* teachers. The program was implemented in partnership with the Government of Rwanda, including the Rwanda Basic Education Board (REB) and the University of Rwanda's College of Education.

TTP Rwanda was a five-year (2018-2023) blended (face-to-face and online) teacher training program designed to enhance the capacity of Rwandan secondary school teachers (in-service and pre-service) in mathematics, biology, chemistry, and physics. Participating teachers were provided with the tools and skills to implement the Competency Based Curriculum (CBC) in Rwanda to enhance teachers' knowledge and confidence while increasing students' motivation and uptake of mathematics and sciences.

Working within the current education system in Rwanda and following a two-tier, blended cascade training model for in-service teachers, the program provided participating teachers with peer-to-peer support within the REB School-Based In-service training framework and a mix of face-to-face and distance learning using online and offline digital resources and tools for content, pedagogy, and assessment.

The program was structured around six pillars with the following objectives:

Program Pillar	Objective
1. Teacher and master trainers' training	 To improve the performance of girls and boys in mathematics and sciences at the secondary school level. To increase teachers understanding of gender equality and inclusion and the application of gender-sensitive teaching methods for mathematics and sciences
2. Learning materials and resources	• To equip teachers with the resources and tools needed for improved delivery of CBC for mathematics and sciences in Rwanda.
3. ICT support	• To enhance the capacity of mathematics and science teachers to deliver the CBC at secondary schools using ICT.





4. Outreach and engagement	• To increase public support for pursuing an education in mathematics and sciences in Rwanda.
5. Policy engagement	• To increase interest among policy makers and the private sector on the importance of mathematics and sciences education in Rwanda.
6. Monitoring & evaluation	• To generate evidence on the achievement of program-wide results for use in policy dialogue.

The TTP Rwanda trained a total of 4,900 secondary school teachers (33% women) in mathematics and science and reached 276,323 students (60% girls). A total of 2,840 teachers were trained in relevant ICT skills and competencies for use in the classroom. The program established smart classrooms in 14 secondary schools across Rwanda and two multi-functional smart classrooms at the University of Rwanda's College of Education.

The TTP Rwanda is concluding on 30 June 2023 and AIMS is seeking the services of experienced consultants for a learning-focused final program evaluation.

2. Purpose of the Evaluation

The final evaluation is both an important learning and accountability exercise for AIMS and its partners to assess and document the evidence of impact of the program and provide insights into future programming at AIMS and Mastercard Foundation that improves the quality of secondary education in mathematics and science through teacher training and support.

The final evaluation will be guided by the OECD DAC Criteria for Evaluating Development Assistance¹ to meet the following objectives:

- Assess the results achieved by AIMS TTP Rwanda;
- Document the evidence of impact of AIMS TTP Rwanda;
- Produce success stories for communications and fundraising purposes;
- Make practical recommendations for future programming by AIMS and Mastercard Foundation to enhance the capacity of secondary teachers in mathematics and science in Rwanda and across Africa.

3. Evaluation Questions

The final evaluation of AIMS TTP Rwanda seeks to answer the following questions: Did the program deliver what it intended? How well did it do it? What impact did the program have on its target beneficiaries, e.g. girls and boys in Rwanda? What lessons can be drawn for future programming?

The insight and evidence generated through this evaluation is expected to inform the design and development of future programs in teaching training at AIMS, both in Rwanda and across Africa. The questions below have been developed to help guide the evaluation and will be further detailed and refined during the inception phase:

a) Relevance

• To what extent did the program respond to the needs of the teachers, students, school administrators? Did the program meet the needs of the Government of Rwanda?

¹ http://www.oecd.org/dac/evaluation/49756382.pdf





b) Coherence

• To what extent were the TTP goals and objectives consistent or aligned with the broader development strategies and policies of Rwanda?

c) Effectiveness

- In light of the program's objective to equip secondary school teachers with the necessary competencies, tools, and resources to enable them to adopt, utilize and contextualize the CBC for improved student learning outcomes in mathematics and science did the program achieve what it intended to do? To what extent were the expected outputs and immediate outcomes realised? There were delays in delivery of the program, to what extent did these challenges hinder the timely delivery of the program?
- How well did AIMS deliver the program? How effectively was the program managed? How adequate were the monitoring & evaluation mechanisms?

d) Efficiency

• How cost effective was the TTP? How appropriate was the program delivery model? Do the outcomes achieved reflect good value for money?

e) Impact

- What impact did the TTP Rwanda have on its target beneficiaries, e.g. girls and boys in Rwanda and secondary school teachers in mathematics and science? What was the impact of the TTP Rwanda on the participating teachers and their students? How did the program impact male and female students' interest and performance in maths and science? To what extent did the use of smart classrooms and maths and science kits improve teaching practices and student engagement and learning? To what extent did the program improve teachers' knowledge, attitudes, and practices? To what extent has the TTP Rwanda produced lasting change and what were the key contributing factors? To what extent can changes be attributed to the program?
- At the system level, what changes or impact did the program have, including institutional strengthening within AIMS?
- What unintended outcomes or changes were produced by the program? (both positive and negative)

f) Sustainability

• To what extent are the impacts from the program sustainable? To what extent will the benefits of the program continue after the program?

Considering the findings above, what lessons can be drawn from the program and what recommendations do you have for AIMS and Mastercard Foundation for the design and development of any future programs in teacher training – both in Rwanda and across Africa?

4. Scope of the Evaluation

The evaluation will focus exclusively on AIMS TTP Rwanda within the broader context of the AIMS network. Geographically, this will focus on the AIMS Secretariat and AIMS Rwanda in Kigali, Rwanda where the program is based and the 14 districts where the program was implemented to gather data from the teachers, students and other stakeholders. If deemed necessary and possible, the evaluation may look at comparative programs in Rwanda or across Africa to help in assessing the contribution of AIMS TTP Rwanda.

5. Approach and Methodology

It is expected that a variety of data collection and analysis tools and methodologies combining both qualitative and quantitative data for triangulation will be used in the final evaluation. This could include, but is not limited to, basic data collection tools such as





interviews, focus group discussions, surveys, and secondary data and information sources.

Applicants are invited to show innovation and creativity in their proposed approach, drawing from their own experience and expertise to ensure the evaluation questions are answered comprehensively.

6. Deliverables

The selected evaluators will be expected to produce the following deliverables, which will be further detailed and refined during the inception phase:

- a) **Inception Report** outlining the proposed approach to the final evaluation. The inception report will demonstrate the evaluators' understanding and interpretation of the purpose and objectives of the evaluation and include a work plan, proposed approach and methodology, data collection tools, and draft outline for the final evaluation report.
- b) **Draft Evaluation Report** presenting the evaluators' analysis, findings, and recommendations.
- c) **Learning Workshop** The evaluators will design and deliver a highly interactive and engaging workshop with AIMS staff and partners to present their analysis, findings, and recommendations from the evaluation and provide an opportunity for review, discussion, and validation.
- d) **Stories of Impact** Brief human interest stories that demonstrate the tangible impact of the TTP Rwanda.
- e) **Final Evaluation Report**, incorporating feedback from the Learning Workshop.

7. Timeframe

The evaluation will take place over approximately 12 weeks as shown in the table below, beginning by the end of March 2023 with the final report expected on or before 30 May 2023:

Phase	Activity	Timeframe
Inception	 Kick-off call. Desk review of relevant program documents. Inception Report. Any logistical or administrative arrangements for the evaluation. 	2 weeks
Data Collection	• This could include, but is not limited to, interviews, focus group sessions, and surveys with key stakeholders and program participants including: AIMS staff; participating teachers, trainers and mentors; secondary school students; school administrators; community leaders; and donor, government and program partners.	4 weeks
Data Analysis & Triangulation	• Synthesis and analysis of data and information collected.	2 weeks
Report Writing	• Draft report for review, consideration and feedback by AIMS.	2 weeks
Learning Workshop	As described above.	1 week





Submission of the Final	As described above.	1 week
Evaluation		
Report		

8. Management of the Evaluation

The AIMS Director of Monitoring & Evaluation will be responsible for overseeing and managing the evaluation including reviewing and approving all deliverables, with support from the Associate Director of Evaluation, Program Performance; MERL Officer for TTP Rwanda; and the Associate Director, Programs and Reporting. AIMS will compile all relevant reports and documents on AIMS and the TTP Rwanda for the selected evaluators; ensure access to program data and information; provide contact information for all key stakeholders; and undertake any necessary introductions of the evaluators to partners and program participants, as required.

9. Selection Criteria

AIMS invites applications from firms or teams of at least two consultants with an appropriate gender balance and relevant expertise, experience, and skills to successfully undertake the evaluation described above. The key selection criteria includes:

- Significant experience in undertaking program evaluations in the education sector of Africa (preferably related to teacher training and/or STEM programs).
- Highly skilled and competent in M&E tools, methodologies and approaches; data collection and analysis; communication (verbal and written); and report writing.
- Sound project management skills to stay organised and deliver high quality deliverables on time.
- Previous experience working together would be an asset.
- Fluent in English and ideally one team member fluent in Kinyarwanda.
- Preference will be given to African nationals

10. Submission of Proposals

Interested firms or teams of consultants meeting the above criteria are invited to submit a proposal to <u>mel@nexteinstein.org</u> with the subject line: **AIMS TTP Rwanda Final Evaluation - Proposal**. The proposal must include:

- Technical proposal: How you would approach and deliver on the assignment as described above *maximum 6 pages*
- Financial proposal: Breakdown of fees (person days and daily rates) and relevant expenses (note: AIMS will cover all travel-related costs, so please omit these from your financial proposal);
- CVs for all proposed team members;
- Sample reports of recently completed evaluations, in a comparable context to this one; and
- Names and contact information of two references.

Proposals are due by **04 April 2023**