



TERMS OF REFERENCE

EVALUATION OF A SENIOR PHASE MATHEMATICS TEACHER-LED ICT PROJECT

1. Introduction

This is a call for the services of an agency/ consortium to conduct an evaluation for the ***Siyavula Senior Phase Mathematics Teachers Project***. This Project is a partnership between the Zenex Foundation, UNICEF, the Siyavula Foundation, and the Gauteng Department of Education (GDE).

This document sets out the details of the project and the evaluation services required from 2023 to 2024. The total budget for the evaluation should not exceed R1 million. Interested applicants must submit their proposals to the Zenex Foundation by 17h00 on 15 February 2023.

2. Project Description

The ***Siyavula Senior Phase Mathematics Project*** is an ICT-based pilot project aimed at addressing mathematics backlogs in 10 Gauteng high schools. The intervention includes all Grade 8 learners and teachers at the 10 participating schools. It supports teachers to implement a catch-up component within the teaching time allotted to mathematics in the timetable. Through this initiative, teachers use a technology-based programme/platform to support learners 'catch up' on a weekly basis. The project will be rolled out from 2022 to 2024.

The project offers a bespoke model focusing on backlogs and catchup, developed by Siyavula specifically for the Zenex project schools. The model is informed by learnings from research, monitoring, and evaluation of past Zenex work.

2.1 Project Overview

The aim of the project is to implement an effective ICT solution for in-class curriculum catch-up in Grade 8 mathematics.

Schools were selected based on their willingness and commitment to participate in the project, their commitment to delivering a weekly co-facilitated practice session during school hours, and the certainty of learner access to an internet-connected device. The project will be implemented amongst all Grade 8 learners in the 10 schools. These schools are spread across several districts (Johannesburg Central, Johannesburg North, Gauteng West, Tshwane South, Tshwane West, and Ekurhuleni South).

Siyavula will develop bespoke mathematics content for Grade 8 learners focussed on backlogs and foundational knowledge. This content will be uploaded onto the Siyavula's portal which will be accessed through any technology device. Schools will provide learners with the relevant devices to access the content. This could take different forms depending on the schools.

At the start of the project, all teachers will receive a dedicated training course delivered at each of the ten school. This training will cover pedagogy of the intervention, technical fluency on the platform, and how to use the data generated from the platform.

Teachers will start with the registration of learners on the electronic platform. This will be followed by teachers conducting a baseline diagnostic assessment for all learners. Learners will then work through the content, at their own pace. The content allows learners to work at their own pace and if learners are struggling with a concept, the system is geared to refer learners to some revision content from previous grades.

Teachers will then be required to deliver a weekly co-facilitated Ed-tech lesson of about 45 minutes each, focusing on backlogs, working closely with an ICT coach from Siyavula. The weekly lessons will be integrated into the teachers' weekly and annual plans. To supplement the lessons, learners will be given weekly homework assignments of about 30-60 minutes on Siyavula platform for them to practice.

In addition, the teachers are able to use the data to inform their lesson delivery. Performance tracking and monitoring reports will be generated from the Siyavula platform for teachers to monitor if learners are actively engaged on the platform and which areas/topics they are struggling with. Teachers will be supported by an ICT coach from Siyavula who will work with

them to plan lessons and support them to analyse the assessment data emerging from the portal.

3. Evaluation Scope of Work

3.1 Purpose of Evaluation

The purpose of the evaluation is to establish the feasibility of the ICT-based model implemented in the context of a tightly structured and extensive CAPS curriculum. In addition, it would be important to codify how this model can be implemented.

3.2 Evaluation Questions

This evaluation seeks to answer the following questions:

- **Is the project implemented as intended?**
 - Training, coaching, dosage, and attendance.
 - Did the ICT platforms work as intended?
 - Did the timetable work as intended?
 - Did the co-facilitated lessons work as intended?
 - What are the challenges and opportunities of implementation and fidelity? Were the dosages for training, coaching, and weekly lesson plans adequate?
- **Use:**
 - What were the usage rates of the platform in the lesson as well as outside of the weekly lesson?
 - What are the usage trends during different periods of the year and in relation to different content areas?
 - To what extent did teachers use the assessment data to inform their teaching?
 - What are the challenges and opportunities of use?
 - Is the project being embedded in teacher planning and curriculum delivery?
- **Did the project result in the specified outcomes?**
 - Learner improvements
- **Is this model feasible for scale?**

3.3 Evaluation Approach

It is proposed that the evaluation design is largely qualitative. However, learner performance data from the platform must be used to assess impact. The evaluation must focus on causal mechanisms and feasibility aspects. Because this is a pilot, a counterfactual evaluation design

is not required. Instead, the pilot calls for a detailed qualitative focus on the model and aims to establish the feasibility of implementing this project on a larger scale. This calls for a largely qualitative study but also includes an analysis of the quantitative performance data gathered from Siyavula.

A clarificatory workshop is proposed to ensure that the theory of change and logic models are sufficiently detailed to allow for explicit and clear measurements of the causal mechanisms underpinning the change theory. Thus, the causal links between the outcomes, outputs, activities, and inputs must be clear in order to measure the different components and draw conclusions with greater reliability.

For the process and outcomes evaluations should develop a detailed description of the implementation model as well as measure whether the project achieved its intended outcome.

3.4 Scope

- The evaluation will be conducted from 2023 to 2024.
- All ten Gauteng High Schools.
- Grade 8 teachers and learners in participating schools, and ICT coaches
- Utilisation of monitoring data derived from the Siyavula platform.
- Maximum indicative budget of R 1 000 000

4. Proposal Submission Process

Interested evaluators and evaluation agencies must submit appropriate design and methodology approaches to answer the questions stated above. However, it is recommended that the following be included in the evaluation scoping:

- A brief outline of how you understand the task
- An outline of the evaluation design and evaluation logic. This includes outlining a process, methodology, data collection strategy, instruments and data analysis.
- Specifying ethical requirements
- A detailed plan and budget.
- Times line with key deliverables
- Experience and expertise of the organisation and team that will undertake the evaluation.
- List of team members. This includes CVS of the team leader and researchers/evaluators
- BEEE status

5. Proposal Submission Timelines

Activity	Date
Submission of proposals	15 February 2023
Shortlisted applicants to participate in the interview process	22 February 2023
Preliminary appointment of the service provider (Final appointment will be subject to approval by the Zenex Board)	28 February 2023
Revised proposal for submission to Zenex Board	10 March 2023
Contracting	7 April 2023
Clarificatory Workshop	TBD

6. Competencies

An appropriate mix of expertise is required in a team that comprises:

- High-level capability in strategy and education programme design
- Strategic and technical capability in evaluation design and implementation
- Knowledge and experience of the South African schooling sector
- Experience in leading large-scale reviews/evaluations
- Demonstrated Project Management capacity
- Demonstrated research and evaluation skills in undertaking project research and evaluation involving donors, government, NGOs
- A diverse team in terms of race and gender. A senior black African researcher is required.

7. Criteria Weighting on submission of the proposal

1. Profile and experience of the team: 25%
2. Approach to the task: 35%
3. Organisational capacity: 20%
4. Budget: 20%

8. Deliverables

The final evaluation design and plan will inform the nature and timing of reports. This is to be negotiated as part of contracting process. Budget schedules will also be negotiated before signing the contract. However, you will be required to provide the following:

- Final evaluation design
- A project plan
- Baseline report
- Progress reports
- Final report
- 20-30-page summary of final report
- Dissemination to key stakeholders

9. Project Management and Governance

The Zenex Foundation will be the contractual body for this evaluation. An advisory committee comprising of our partner organisations, Zenex, and evaluation experts will advise on key aspects of the evaluation.

10. Intellectual Property

The appointed service provider will assign to Zenex Foundation its copyright to all data, instruments, documents, and reports emanating out of this study.

Permission may be sought by the service provider to use any data from the research, such permission will not be unreasonably withheld provided the data will make a positive contribution to the sector and all reports and presentations emanating from such acknowledge the Foundation's role and copies are shared with both parties.

The results of the findings will be shared with the broader sector and other participating stakeholders such as schools, other funding agencies, and key identified role players in education including the Department of Basic Education.

11. Contact Person for Queries and Submission

Queries and Proposals must be emailed to:

Ms Thabisile Zuma: thabisile@zenexfoundation.org.za , tel: +27 11 481 7844

About the Zenex Foundation

The Zenex Foundation is an independent education grant-maker established in 1995 to strengthen the public schooling system in South Africa, with a specific focus on the Foundation and Senior Phases. The Foundation's entire budget is committed to the fields of language and mathematics education. This strategic focus is informed by evidence of a proven relationship between language proficiency and success in mathematics, as critical for overall learner achievement. The Foundation's work is driven by the vision of creating an equitable and just education system that empowers young people to participate in the growth, development, and transformation of South Africa.

Please visit our website at www.zenexfoundation.org.za for detailed information on our work.