



TERMS OF REFERENCE

For

Qualitative Evaluation

Of

Scaling Base 10 Mathematics Project

1. Purpose

Zenex Foundation seeks to appoint an evaluator to evaluate the Base 10 Mathematics project (Base 10 Maths) currently being implemented in 77 schools in Gauteng and 40 schools in KwaZulu Natal. The total cost of this evaluation is R800 000.00.

2. Background and rationale

Research shows that learner's mathematical abilities are severely hindered by their use of inefficient counting strategies that don't transform into calculative strategies. Eric Scholar and Associates (2008) showed evidence that children's ongoing use of highly inefficient "counting-in-ones" strategies resulted in extremely poor learner performance and impeded their progress from grade to grade. This work was extended through research conducted by Venkat et al, (2019) which indicated that the approach of counting-in-ones persisted in the face of several rounds of curriculum reform, including the move to Curriculum Assessment Policy Statements (CAPS). This research resulted in the design and implementation of several projects intended to deal with this problem. The Base 10 project is one such project. The project was conceptualised and implemented by Wits Maths Connect – Primary (WMC-P) as a 10-year research and practise initiative as part of NRF-FRF Numeracy Chair Initiative (2009 - 2019). The project included the development and trialling of resources and teacher training and support for Foundation Phase teachers.

3. Project Description

The project is focussed on developing learner's mental maths capabilities which research suggests results in improvements in performance. The project aims to develop teacher's capacities of teaching mental mathematics in a structured manner. This is done through provision of teacher training, resource provision and coaching. The project (2022-2023) follows a cascade model, where Heads of Department (HoDs) and Subject Advisors (SAs) are trained by WMC-P. HoDs with the support of SAs are then expected to train all the Grade 2 teachers at their respective schools using Professional Learning Communities (PLCs).

The project is being implemented in all the districts in Gauteng and in four districts in Kwazulu-Natal (Harry Gwala, Umgungundlovu, Zululand and Umzinyathi districts). At the start of terms 1-3, the Wits Maths Connect team conducts a three half-day training session for clusters of FP SAs, and HODs on the use of materials. Both teachers and learners are provided with workbooks which are comprised of activities to be completed in the first 15 minutes at the start of each maths lesson.

Province	Number of Schools	Training Dosage	Coaching Dosage
Gauteng	77 schools	3 x (1/2 day) x 3 terms	Minimum of 3 (1hour) coaching sessions per term per school
KZN	40 schools	3 x (1/2 day) x 3 terms	Minimum of 3 (1hour) coaching sessions per term per school

4. Evaluation

The Wits team will administer pre and post learner tests. Which will be conducted by the teachers at their respective schools.

The evaluation partner will be responsible for undertaking an evaluation aimed at determining the efficacy of the Base 10 Maths project.

The key evaluation questions are:

- Is the project being implemented as planned in both provinces?
 - Training of HODs, SA, according to plan
 - HOD training and coaching of teachers according to plan
- Is the quality of training sufficient?
 - Wits training HoDs and SAs
 - HoD training of teachers?
- Has the project resulted in changes in classroom practices:
 - How are teachers and learners using the resources
 - How frequently are the resources being used?
 - What are the manifestations of teacher practices?
- What are the challenges of implementing this project in classrooms?
- What is the extent and nature of use of the learner activity?

The Evaluator is also expected to conduct analytical work on the relationship between teacher training and attendance, teacher practices, learner coverage and learner performance. The learner data will be collected and provided by the Wits Maths Connect team. The evaluators must use this secondary data.

The evaluation must also focus on activities such as in-depth case studies, observing the training of teachers and subject advisors, learner interviews, detailed document reviews etc.

5. Deliverables

Project Management Team, in collaboration with the relevant Provincial Education Departments, will be responsible for obtaining commitment from schools to be evaluated, ethical clearance and the requisite consent/ascent letters (should they be required). The proof will be provided in the form of an official letter.

The evaluation partner is required to produce a comprehensive qualitative evaluation report based on the findings from the in-depth document reviews and school case studies.

6. Proposal Submission and Selection Process

The applicant must submit a proposal to the Foundation that sets out how they will undertake this evaluation. Applicants can also collaborate with other individuals and organisations to ensure that the required capacity and expertise is available within their team.

The proposal must include:

- A brief outline of your understanding of the task
- An outline of the process and methodology that you propose.
- A plan with high-level activities, period and budget.
- Experience and expertise of the organisation and team that will undertake the study.
- List of team members. This includes brief CVs of the team leader and researchers/evaluators.

Following the submission of proposals, a shortlist of potential applicants may be required to attend an interview process. The proposal will be assessed against the following criteria:

- Understanding and interpretation of the task
- The approach to the task, including methodology and data collection and analysis
- Experience and expertise in the field
- Organisational capacity
- Cost

7. Deliverables and time frame

Deliverable	Date
Submission of proposal	26 April 2022
Letter of appointment	03 May 2022
Meeting to agree and finalise the scope of work, methodology, and plan	06 May 2022

8. Intellectual Property

The appointed evaluation partner will assign to Zenex Foundation its copyright to all data, instruments, documents, and reports emanating from this study.

Permission may be sought by the evaluation partner to use any data from the study. Permission will not be unreasonably withheld provided the data will make a positive

contribution to the sector and all reports; 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.

9. Submission

Submit your Proposals to:

Mr. Sam Rametse

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Tel: 011 481 7846