ZENEX FOUNDATION

Leading | Connecting | Learning

Request for Proposals

Addressing mathematics learning backlogs in Grade 4

Issue date: 5 August 2022

Closing date: 25 August 2022

1. Introduction

This Request for Proposal (RFP) is directed at organisations and/or individuals who are suitably qualified to design and implement a learning backlogs project targeting Grade 4 mathematics teachers and learners. The project will be implemented from November 2022 – March 2025.

For purposes of this project, learning backlogs can be defined as follows:

Backlogs are an accumulation of gaps in learners' foundational mathematical knowledge. This foundational knowledge is essential for building a network of mathematical concepts into which new learning can be integrated[1]*.*

Thus, improving learning outcomes requires a simultaneous focus on addressing learning backlogs as well as the grade-level curriculum content.

Please find attached a detailed Zenex Foundation publication on learning backlogs.

2. Problem Statement

Grade 4 is one of the critical grades in South Africa's schooling curriculum. It represents the transition from Foundation Phase to Intermediate Phase and learners are expected to start engaging with mathematics more independently from the teacher. It is also the grade wherein a majority of schools transition from teaching in African Home Language to English, meaning that learners transition to learning mathematics in their second or even third language.

Research[2] points to learning backlogs starting early in the Foundation Phase and worsening as learners progress through to the higher grades. The hierarchical nature of mathematics presents particular challenges as it relates to the acquisition of new and complex knowledge in this subject. Thus, the focus of this RFP is on addressing mathematics learning backlogs in Grade 4.

The causes of learning backlogs are complex, systemic, multi-faceted, and extend beyond the education system. These include poorly resourced schools, the density of the Curriculum Assessment Policy Statements (CAPS) curriculum creating implementation challenges, and teachers' own mathematical pedagogical and content knowledge. Given this, it is extremely challenging for teachers to address learning backlogs and provide differentiated support to learners. Furthermore, the COVID-19 pandemic has exacerbated the already existing gaps in foundational knowledge across the system. Evidence coming out of the Western Cape[3]

[1] https://www.zenexfoundation.org.za/wp-content/uploads/2022/04/Learning-backlogs-in-Senior-Phase-maths.pdf

[2] https://www.researchgate.net/publication/271225114_Starting_behind_and_staying_behind_in_South_Africa

[3] https://resep.sun.ac.za/wp-content/uploads/2022/05/RESEP-WCED-Systemic-Tests-%E2%80%93-Report_WEB.pdf

systematic tests says that between 2019 and 2021, learners failing to reach the low benchmark of 30% doubled from 13% to 25%.

3. Zenex Foundation Strategic Focus

The Zenex Foundation Strategy 2025 identifies addressing learning backlogs in the early grades as a key lever to improve learner achievement in the schooling system. The Foundation seeks to:

1. Intervene early within the schooling system as learning backlogs are cumulative.
2. Pilot possible solutions. While we have reviewed several interventions in the early grade aimed at strengthening the teaching of mathematics and the delivery of the curriculum, this intervention has a specific focus on a targeted intervention to address learning backlogs in Grade 4. Focus on the foundation of mathematics knowledge and skills to enable learners to access more complex mathematics.
3. Build Evidence: The DBE is more focused on learning backlogs and learning losses since COVID-19. The Zenex Foundation aims to build a rigorous evidence base drawing on proven interventions to inform system take up and delivery at scale.

4. Details of the Intervention

This project is envisioned as a pilot and iterative. It will be implemented in 10 schools (quintile 1 – 3) in Gauteng.

4.1 Components of the Intervention

4.1.1 The scope of the project will be guided by the following considerations:

1. Design Considerations *(see page 18 of the Zenex publication, Perspectives on learning backlogs in South African schooling)*
2. Number sense incorporation in the model
3. Provision of differentiated support

4.1.2 Target groups for the project can include one or a combination of the following

1. Grade 4 mathematics Learners only
2. Grade 4 mathematics Teachers only
3. Grade 4 mathematics Teachers and Learners only

4.1.3 Mode of Delivery

- The delivery can include one or a combination of the following:
  - Integrate or utilise Teaching Assistants to support teachers to address backlogs
  - Implemented within the school (curriculum time) or after-school
  - Paper-based
  - Technology
  - Implemented by the teacher in class, taking into account the above design elements.

4.2 Expected outcomes

Target Group	Outcomes
Learners	• Reduced mathematics learning backlogs • Increased opportunities for learners to engage with mathematics
Teachers	• Improved ability to diagnose backlogs in the classroom and provide requisite learner support

4.3 Duration

The project is to be implemented over two years (2023-2024) working with two cohorts of the target group/s (one cohort in 2023 and another cohort in 2024).

4.4 Products

Project materials, resources and instruments developed under this agreement will be Open Education Resources and the conditions will be agreed upon between the selected organisation/s and the Zenex Foundation.

5. Task Interpretation: Service Provider Proposal

Kindly submit a proposal outlining how you understand the task and how you will undertake it. Please include information on the team that will be involved and the precise expertise they will bring to the team. Kindly ensure that the following information is included:

5.1 Rationale

- Describe how you propose to approach the Project.

5.2 Work plan

- Prepare and describe a detailed work plan that includes the activities, milestones, outputs, timeframes, and design processes.

5.3 The Project Team

- Describe the team roles and lines of responsibilities
- Provide supporting documentation to demonstrate experience of early grade mathematics knowledge and knowledge of the CAPS curriculum
- Identify risks and how you would manage and mitigate these risks
- Provide supporting references

5.4 Detailed Budget

- Stipulate the details and cost breakdown of line items. This should, where applicable, include cost per unit, number of units, frequency, sub-total, and total.
- Zenex allows 10% to cover organisational overheads such as administration and management costs.

6. Selection Process

Interviews will be scheduled with shortlisted candidates. A clarificatory meeting will then be held with the successful candidate/s. This meeting will clarify and finalise the brief and agree

on the design and methods, activities, and the nature and timing of the reports. As an outcome of this clarificatory meeting, you will be required to submit a final proposal that documents the decisions of this meeting including a Project Plan, activities, deliverables, and deadlines.

7. Submission Deadline

The deadline for the submission of responses to this RFP is no later than 17h00 on 25 August 2022. Late proposals will not be considered. Please email queries and proposals to Sam Rametse at sam@zenexfoundation.org.za

We thank all applicants in advance for taking the time to submit a proposal.