



TERMS OF REFERENCE (ToR)

Appointment of Two Part-Time PhD Candidates: Assessment and Early Childhood Development (ECD)

1. Background

The Department of Basic Education (DBE) administers several large-scale national and international assessments that generate critical information about learning outcomes in the South African education system. These include national assessments such as the Early Learning National Assessment (ELNA) and systemic assessments, as well as international studies such as the Progress in International Reading Literacy Study (PIRLS) and the Trends in International Mathematics and Science Study (TIMSS).

These assessments provide valuable insights into learner performance and system-level challenges. The effective interpretation, integration and use of assessment data require specialised technical expertise in areas such as psychometrics, statistical analysis, item development, assessment reporting, early learning, and classroom-level application.

The DBE National Assessment Unit recognises the importance of strengthening South Africa's national assessment system. To support this goal, and in partnership with the Zenex Foundation, it seeks to strengthen its research, evaluation, and evidence-based policy development capacity through the appointment of two part-time PhD candidates with expertise in educational assessment and early childhood development.

The appointed PhD candidates will provide technical and research support to strengthen the Department's use of assessment and early learning data. Their work will include analysing existing national and international assessment datasets, identifying patterns in learner performance, examining links between assessment findings and classroom practice, and developing evidence-based recommendations that can inform policy, curriculum support, teacher development, and early learning interventions. The two candidates will include an assessment specialist and Early Childhood Development (ECD) specialist.

The focus will primarily be on large-scale assessment data, including psychometric analysis, item-level analysis, performance trends, and cross-study comparisons across assessments such as TIMSS, PIRLS, ELNA and other relevant national assessment datasets. A knowledge of psychometrics will be an advantage.

The ECD specialist will focus primarily on early learning and ECD-related evidence, including foundational literacy and numeracy, classroom-based interventions, early learning programme evaluation, and the translation of findings into practical guidance for early grade teaching and learning.

Together, the candidates will support the Department in generating actionable insights that bridge the gap between assessment evidence, policy development, and classroom implementation.

2. Purpose

The purpose of these appointments is to:

- Enhance the Department's capacity in data-driven decision-making.
- Strengthen the integration of assessment and early learning insights.
- Conduct cross-study analyses across national and international assessments, including TIMSS, PIRLS, ELNA and ECD-related studies.
- Strengthen the interpretation and use of assessment and early learning data.
- Translate research findings into practical recommendations for classroom implementation.
- Support the integration of assessment evidence, early learning insights, curriculum support and education policy development.
- Contribute to the Department's research agenda through high-quality analytical outputs, policy briefs, technical reports and academic publications.

3. Scope of Work

The PhD candidates will work on a part-time basis and will be expected to undertake the following areas of work:

3.1 Cross-Study Analysis

The candidates will conduct rigorous analysis across multiple datasets and studies, including large-scale assessments such as TIMSS, PIRLS and ELNA, as well as data derived from early learning and ECD programmes.

This analysis will aim to identify key trends, gaps, correlations and patterns that provide meaningful insights into learner performance, early learning outcomes, foundational literacy and numeracy, and system-level challenges.

The work may include:

- Comparing learner performance trends across relevant assessments.
- Identifying common areas of learning difficulty across grades, subjects or domains.
- Analysing performance patterns by province, district, school type, language, gender, socio-economic background or other relevant variables, where data permits.
- Examining the relationship between assessment findings and classroom-level teaching and learning practices.

- Identifying implications for curriculum support, teacher development, classroom assessment and early learning interventions.
- Supporting the Department to use evidence from assessment and ECD-related studies to inform policy and programme decisions.

3.2 Research and Knowledge Production

The candidates will be responsible for producing high-quality research outputs, including technical reports, policy briefs, and academic publications, that meet rigorous scholarly and professional standards. In addition, the candidates will contribute to strengthening the Department's knowledge base by generating evidence and insights on assessment practices, early learning outcomes, and psychometric analysis, thereby supporting informed decision-making and continuous improvement within the education system.

3.3 Classroom Impact

The candidates will translate research and assessment findings into practical strategies that can support improvements in classroom practice.

This will include developing recommendations to improve:

- Teaching methodologies.
- Classroom assessment practices.
- Foundational literacy and numeracy instruction.
- Early learning interventions.
- Use of assessment evidence by teachers, curriculum officials and support teams.
- Alignment between curriculum expectations, assessment evidence and classroom practice.

The candidates will also provide practical recommendations for curriculum and assessment alignment, particularly where assessment findings point to recurring gaps in learner understanding or instructional practice.

3.4 Technical Support

The candidates will provide technical support in:

- Psychometrics (test design, scaling, item analysis).
- Assessment frameworks.
- Early learning development frameworks.
- The interpretation and use of assessment data.

4. Required Expertise and Competencies

4.1 Assessment Specialist (PhD Candidate 1)

The candidate must be currently registered for a PhD in Educational Assessment, Psychometrics, Measurement and Evaluation, Education, Psychology, Statistics, Quantitative Research Methods, or a closely related field.

The candidate should have a strong academic and applied background in one or more of the following areas:

- Educational assessment.
- Psychometrics and quantitative analysis.
- Large-scale assessment studies.
- Data modelling and statistical analysis.
- Interpretation of assessment results.

4.2 ECD Specialist (PhD Candidate 2)

The candidate must be currently registered for a PhD in Early Childhood Development, Early Childhood Education, Foundation Phase Education, Educational Psychology, Education, Child Development, or a closely related field.

The candidate should have a strong academic and applied background in one or more of the following areas:

- Early Childhood Development and early learning.
- Foundational literacy and numeracy.
- Early learning programme evaluation.
- Classroom-based interventions.

4.3 Shared Competencies

Both PhD candidates should demonstrate the following competencies:

- Strong research and analytical skills.
- Ability to work with large datasets.
- Strong academic writing and reporting skills.
- Ability to interpret and communicate research findings clearly.
- Ability to link research findings to policy and practice.
- Knowledge of the South African education context is advantageous.

5. Deliverables

The candidates will be expected to deliver:

- Cross-study analytical reports.
- Policy briefs and recommendations.
- Presentations to departmental stakeholders.

- Contributions to academic publications.
- Practical guidelines for improving classroom practice.

6. Duration and Work Arrangements

The appointments will be on a part-time contractual basis for a duration of ten (10) months with a possibility of renewal.

Each candidate will receive a monthly remuneration of R20,000.

The candidates will be expected to work remotely and/or on-site as required by the DBE, subject to agreement with the designated supervisor. They will be required to attend scheduled meetings, submit agreed deliverables within specified timelines, and participate in relevant departmental engagements, presentations and review processes.

The candidates will be responsible for producing high-quality research outputs, including technical reports, policy briefs and academic publications that meet rigorous scholarly and professional standards.

7. Reporting and Supervision

The candidates will report to the Director responsible for National Assessment, or another designated senior official within the Department's assessment line function.

They will work closely with relevant DBE officials and technical teams, including:

- Assessment specialists, particularly in relation to large-scale assessment data, assessment frameworks, psychometric analysis, item analysis and the interpretation of learner performance results.
- ECD and Foundation Phase specialists, particularly in relation to early learning outcomes, foundational literacy and numeracy, classroom-based interventions and early learning programme evaluation.
- Data management and research teams, particularly in relation to dataset access, data cleaning, data analysis, responsible data use and quality assurance of analytical outputs.
- Curriculum and teacher development officials, where findings have implications for classroom practice, curriculum support, teacher training or learning improvement strategies.

Regular progress meetings will be held to review workplans, emerging findings, draft outputs and final deliverables.

8. Ethical Considerations

All data usage must comply with:

- Departmental data governance policies.
- Ethical research standards.
- Applicable confidentiality requirements.
- Responsible data handling procedures.

The candidates will be required to maintain confidentiality in relation to all datasets, departmental documents, research findings and internal discussions. They may not share data, reports or findings externally without prior written approval from the Department.

All research and analytical work must be conducted in a manner that protects the privacy of learners, schools, teachers and other stakeholders. The candidates must ensure that data is analysed, stored, reported and disseminated responsibly and ethically.

9. Application Process

Interested candidates are required to submit a written application for consideration. The application must include the following documents:

- A detailed curriculum vitae.
- Proof of current registration for a PhD.
- A brief motivation letter outlining the candidate's suitability for the role.
- A short summary of relevant research, assessment, ECD, data analysis or evaluation experience.
- At least one example of academic or technical writing, where available.

Applications must clearly indicate the position being applied for: **Assessment Specialist: PhD Candidate 1** or **ECD Specialist: PhD Candidate 2**.

The closing date for applications is **17h00 on Friday, 3 July 2026**.

Applications must be submitted electronically to **Dr Nonhlanhla Shozi**, Chief Education Specialist: National Assessments, Department of Basic Education. Email Shozi.N@dbe.gov.za

Applicants should copy/CC **Ms Thabisile Zuma**, Programme Manager, Zenex Foundation. Email Thabisile@zenexfoundation.org.za

Shortlisted candidates will be interviewed in July. Successful candidates are expected to commence their appointments on **1 August 2026**.

Shortlisted candidates may be required to provide additional information, references, or examples of relevant research work.

Only shortlisted candidates will be contacted.