



HOW-TO: Understand the ELOM Standards

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The ELOM suite of early learning measurement tools has been carefully developed to provide a fair and accurate way to understand children's early learning progress. Our direct child assessment tools, the [ELOM 4&5 Years](#) and [ELOM-R Mathematics and Language \(v1\)](#), went through a process called **standardisation** to make sure they work well for children across South Africa. This process ensured that the assessment tools measure what they are supposed to, providing reliable and meaningful results.

What is standardisation?

Standardisation involves the production of a test that is administered in the same way to all children. In a country such as ours with children from different socio-economic and language backgrounds, it is essential to investigate whether the test assesses children fairly and reliably regardless of their background.

Standardisation of the ELOM direct assessment tools involved carefully selecting large groups containing thousands of children, called the standardisation samples, who represented different backgrounds and language groups across South Africa, including:

- Children from urban, rural, and informal settlement areas.
- Children from different school quintiles (low-, middle-, and high-income areas).
- Children from a variety of language groups (see box below).

The ELOM 4&5 standardisation sample included 1,140 children from all quintiles in three provinces. Almost all of South Africa's official languages were included, with the exception of isiNdebele, siSwati, Xitsonga, Venda, SeSotho, or Tsonga due to low child numbers in these groups. The ELOM-R Mathematics (v1) standardisation sample included approximately 2,400 children from all quintiles in all of South Africa's provinces. The ELOM-R Language (v1) standardisation sample included all South African languages except isiNdebele, siSwati, and Xitsonga. The ELOM-R (v1) has not yet been adapted for use with deaf children who use South African Sign Language, while the ELOM 4&5 has.

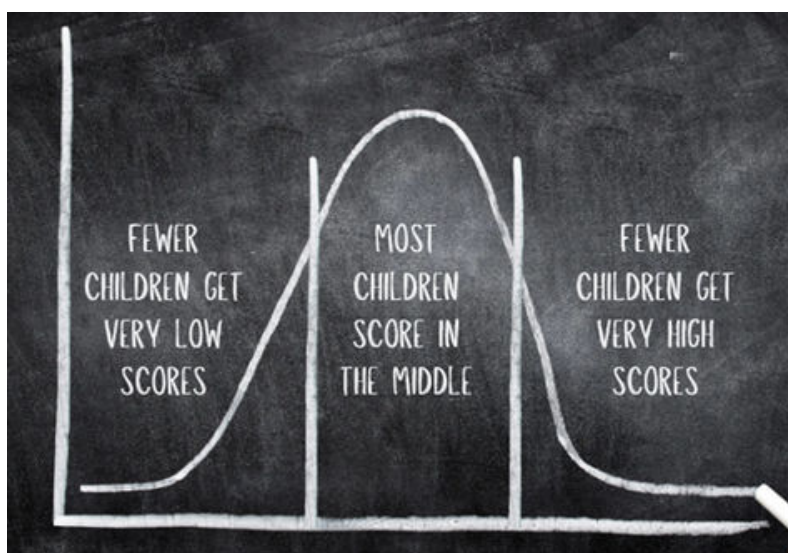


What are the ELOM norms?

As part of the standardisation process, ELOM assessments were conducted. Researchers then analysed the results to understand the spread of scores across the standardisation samples, (i.e. how much these children's performance varied from each other). This was done to create norms for the ELOM tools, meaning that children's results are interpreted in relation to how other children performed in the standardisation samples.

Researchers analyse the spread of scores by looking at two things: the normal distribution of scores and related percentiles.

Imagine that we tested a very large group of children (which we did in the standardisation process). If we plotted all their scores on a graph, they would follow a normal distribution, which looks like a bell curve:



This pattern is seen in many natural, measurable or quantifiable things – like height, weight, and test performance.

To make it easier to interpret scores, we divide this distribution into **percentiles**. A percentile is a measure used to understand how a specific value

compares to a group of values. In other words, a percentile tells us how a child's score compares to everyone else's in the sample.

A percentile indicates the relative position of a value within a dataset, showing what percentage of the scores falls below that particular value. For example, a child at the 80th percentile scored higher than 80% of children in the standardisation sample.

A child at the 50th percentile scored exactly in the middle - half of the children scored higher, and half scored lower. A child at the 20th percentile scored higher than only 20% of children, meaning 80% of children scored better than them.

What are the ELOM performance bands?

To create the ELOM 4&5 Years and ELOM-R (v1) performance bands, we chose percentile cut-offs, or thresholds, that define each band. A **cut-off** is a specific score or percentile that separates one category from another. In this case, it determines which performance band children's scores fall into. These cut-offs follow international best practices and were finalised through consultations with education and psychometric experts. Both tools use the same cut-offs, described below:

On Track (above the 60th percentile)

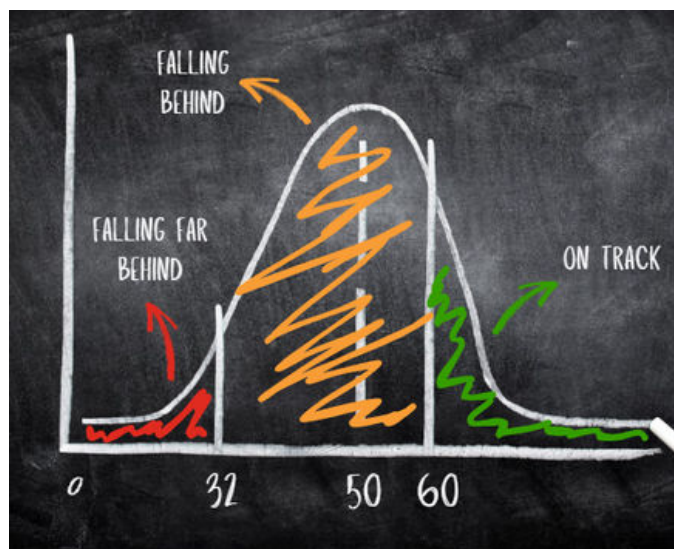
- These children performed as well as, or better than, 60% of the children in the standardisation samples.
- This is the standard that we would wish children to achieve by the time they enter Grade R (in the case of children measured on the ELOM 4&5) or Grade 1 (in the case of children measured on the ELOM-R (v1) tools).

Falling Behind (between the 32nd and 59th percentiles)

- These children scored higher than at least 32% of children in the standardisation samples but lower than 60%.
- They show some gaps in their learning but are not too far behind their peers. With some additional, targeted support, they could catch up.

Falling Far Behind (below the 32nd percentile)

- These children scored lower than 68% of children in the standardisation samples.
- Their learning skills are significantly behind their peers and require targeted intervention to catch up. Without support, they may struggle in their school transition and beyond.



What do the performance bands mean for you?

By understanding where children fall within the ELOM performance bands, you can make informed decisions about the type and level of intervention that the children in your study population requires. Consider these results as a starting point for targeted action, and use them to monitor progress over time, adjusting support strategies as needed.

Children who are On Track

While these children may not require immediate intervention, it is important to continue providing opportunities for them to thrive. Focus on enriching their learning environment to further challenge and engage them, ensuring they continue to progress.

Children who are Falling Behind

Children in this range are showing some gaps in their learning. This may be due to gaps in their learning experiences, their learning environment (e.g., curriculum delivery or learning materials), or their home environment. Understanding where these challenges exist allows for the design of targeted interventions or additional resources that support these children to catch up.

Children who are Falling Far Behind

These children are substantially behind their peers and require immediate, intensive intervention. These children are likely to struggle with their school transition. It is crucial to identify the underlying factors contributing to their struggles and create a targeted intervention plan to provide the necessary support for their development. Early intervention is key to ensuring they do not fall further behind.

We hope that by communicating ELOM results using child performance bands, users of the ELOM direct child assessments are equipped to create a more tailored and effective approach to improving learning outcomes, ensuring that every child receives the support they need to thrive and reach their full potential.

Acknowledgements

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