CHILD OUTCOMES REPORT

CUSTODA TRUST | AUGUST 2024

DATADRIVE 2030

eloom
early learning measurement tools

CONTENTS

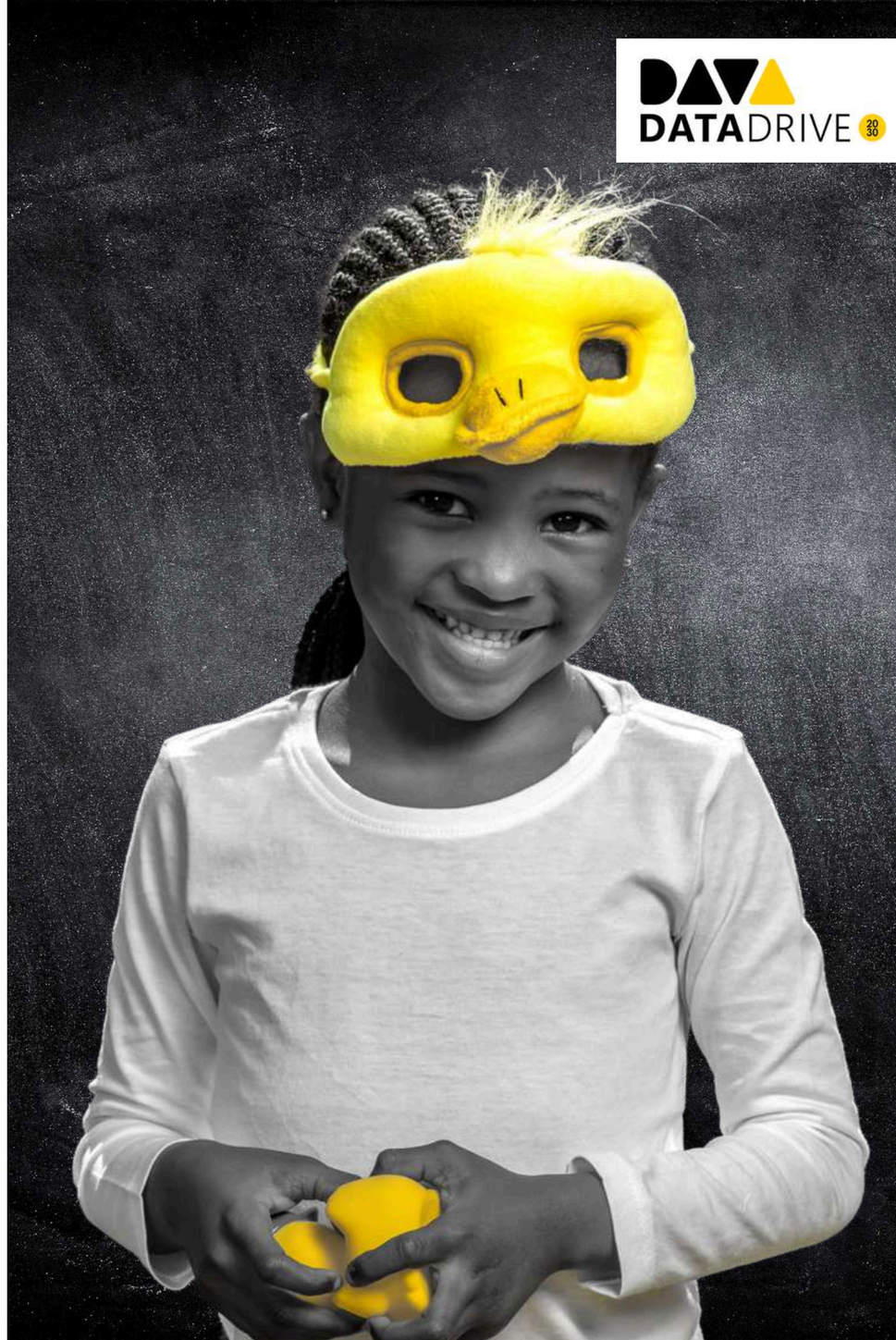
INTRODUCTION

This report summarises the performance of a sample of 27 children enrolled in 7 early learning programmes in the Northern Cape: Happy Little Ducklings, Ikhaya Labantwana, Imizamo Yethu, Karoo Druppels, Masifundisane, Phillipvale, and St. John's. Children were assessed on the ELOM 4&5 direct assessment tool. The report describes the sample's developmental performance on the ELOM.

Assessments were conducted in May and June 2024 by accredited ELOM assessors: Nanase Mittah Leboa, Susan Witbooi, Victoria Gous and Rhona-Lee Hanekom.

Assessors primarily conducted the ELOM 4 & 5 in Afrikaans, English and isiXhosa.

This report was prepared at the request of Huldah Barnard.



THE elom 4 & 5 YEARS ASSESSMENT

The ELOM 4 & 5 Years Assessment is a standardised child assessment tool that measures children's performance across five key developmental domains for children aged between 4 and 5 years old:

Gross Motor Development (GMD): Children's ability to control the large muscles of their body.

Fine Motor Coordination and Visual Motor Integration (FMC-VMI): Children's ability to control small muscles and coordinate small movements with visual information perceived by the eyes.

Emergent Numeracy and Mathematics (ENM): Children’s ability to understand number concepts, symbols, shapes, and size.

Cognition and Executive Functioning (CEF): Children's ability to stay focused, solve problems, form concepts, attend to instructions, and control impulses.

Emergent Literacy and Language (ELL): Children's ability to communicate effectively. This includes their ability to speak in full sentences, recognise the initial sounds of words, name common objects, relay events and listen to and understand stories told to them.

The ELOM 4&5 tool includes two developmental checks or screens which are described on the following page.

The ELOM suite of tools also include measures and/or tools that look at children's social-emotional functioning, height-for-age, home learning environment and classroom learning environment. You can see the full suite of ELOM tools here.

THE elom 4 & 5 YEARS ASSESSMENT [CONT.]

In addition to the developmental domains described on the previous page, the ELOM 4 & 5 includes two developmental checks, or screens:

Task Orientation: The ELOM assessor is asked yes/no questions about each child's ability to persist with attention and accomplish tasks during the ELOM 4 & 5 assessment. Four items ask about the child's level of attention, concentration, diligence and interest during the assessment tasks.
Children receive a score out of 4, and their task orientation (ability to stay on task) is deemed either satisfactory or poor.

World Health Organisation (WHO) Disability Screening: To determine whether a sampled child has a disability that might affect their performance on the assessment, they are screened using a modified version of the WHO Ten Question Screen. The assessor is asked four questions regarding each child's eyesight, hearing, ability to understand instruction, and movement abilities.

Your chosen ELOM 4 & 5 domains and focus areas are highlighted on the following page.

YOUR FOCUS AREAS

Your study included the measurement of the following developmental areas:

Domains / Areas of Assessment	Measured in your Study
Gross Motor Development	✓
Fine Motor Coordination & Visual-Motor Integration	✓
Emergent Numeracy & Mathematics	✓
Cognition & Executive Functioning	✓
Emergent Literacy & Language	✓
Social-Emotional Functioning	✗
Height-for-Age (Growth)	✗

What is the Social-Emotional Rating Scale?

This ELOM tool measures a child's emotional readiness for school, as well as social relations with their peers and adults. This scale is completed by an adult who knows the child well. You can read more about this tool here.

What is Height-for-Age?

This tool is a measure of a child's growth in relation to their age, indicating whether a child is exhibiting normal growth or is showing signs of malnutrition and stunting, Read more about how growth standards are calculated here.

THE ELOM 4 & 5 YEARS STANDARDS

Each of the ELOM 4&5 domains is scored out of 20 points, with the total assessment scored out of 100 points. For each of the learning domains that are assessed, and for learning overall (total score), children's scores are compared against the expected developmental standards for their age. Scores fall within one of three performance bands:

- **On track** for their age: These children meet the learning standards and are able to do the tasks expected of a child their age.
- **Falling behind** the expected standard for their age: These children will need support in order to catch up with other children of their age.
- **Falling far behind** the expected standard; These children need intensive intervention to reach the standard and are at risk of not catching up with their peers.

As children grow and develop, their overall ELOM scores tend to improve naturally with age. However, it's important to note that their position within the ELOM performance bands does not change solely due to their increasing age. Instead, enhanced learning opportunities, like participating in early learning programs and engaging with parents, other adults and peers, can help improve their overall ELOM scores.

The ELOM Standards

In setting the three performance bands for the ELOM, the development team followed accepted practices for standard-setting, including using empirical data and expert judgments. Through this process, the three bands were determined using the following percentiles based on the ELOM's 2016 age validation sample:
On track - 60th percentile (i.e. the top 40% of children); *falling behind* - between 32nd and 59th percentile (i.e. the middle 28% of children); *falling far behind* - below the 32nd percentile (i.e. the lowest 32% of children). Learn more about the standards in the ELOM Technical Manual.

WHAT THIS REPORT CAN & CANNOT SAY ABOUT YOUR PROGRAMME

As a **dipstick assessment**, your ELOM study can give an indication of how the children in your programme are currently performing at this point in time.

This type of assessment can be used to:

- To describe the developmental status of children in early learning programmes.
- To identify potential developmental domains that require intervention.
- To establish a baseline performance level, which can be compared to future ELOM assessments of the same children.

This type of assessment cannot be used to:

- Provide a measurement of individual child performance. The ELOM 4 & 5 is designed to describe the average developmental status of groups of children. It should only be used as an individual assessment by registered professionals such as psychologists and occupational therapists to aid in the assessment of developmental difficulties.
- Establish the impact of the learning programme. For this, you need to compare a baseline to a follow-up assessment of the same children.
- Replace an outcomes or implementation evaluation. These types of assessments require additional data collection, such as a pre- and post-measurement using the ELOM 4 & 5, as well as other measurements (e.g., programme quality, staff interviews, etc.).

SAMPLE OVERVIEW

This ELOM study included a sample of children from the programme, who are believed to represent the whole programme cohort. The scores provided in this report represent the performance of sampled children only. An overview of your sample is presented below: Please note that a minimum sample size of 15 children is required to analyse the ELOM 4 & 5 domains. Only your younger sample (children aged 4 years, or 50 - 59 months) satisfied this criterion. The results of this group are provided later in the report, from p.12 onwards.

Number of children in the sample	**Children aged 4 years** (50 - 59 months)	**Children aged 5 years** (60 - 69 months)	**Total**
Final sample size *	19	8	27
% Boys	26%	62%	37%
% Girls	74%	38%	63%
Average age (months)	56	61	57.4

ELOM fieldwork considerations

Your ELOM sampling can be improved by aiming for a 50-50 split in gender representation.

*Please note: one child was excluded from the sample because they did not complete the assessment, while another was excluded because the assessor reported issues with the assessment environment.

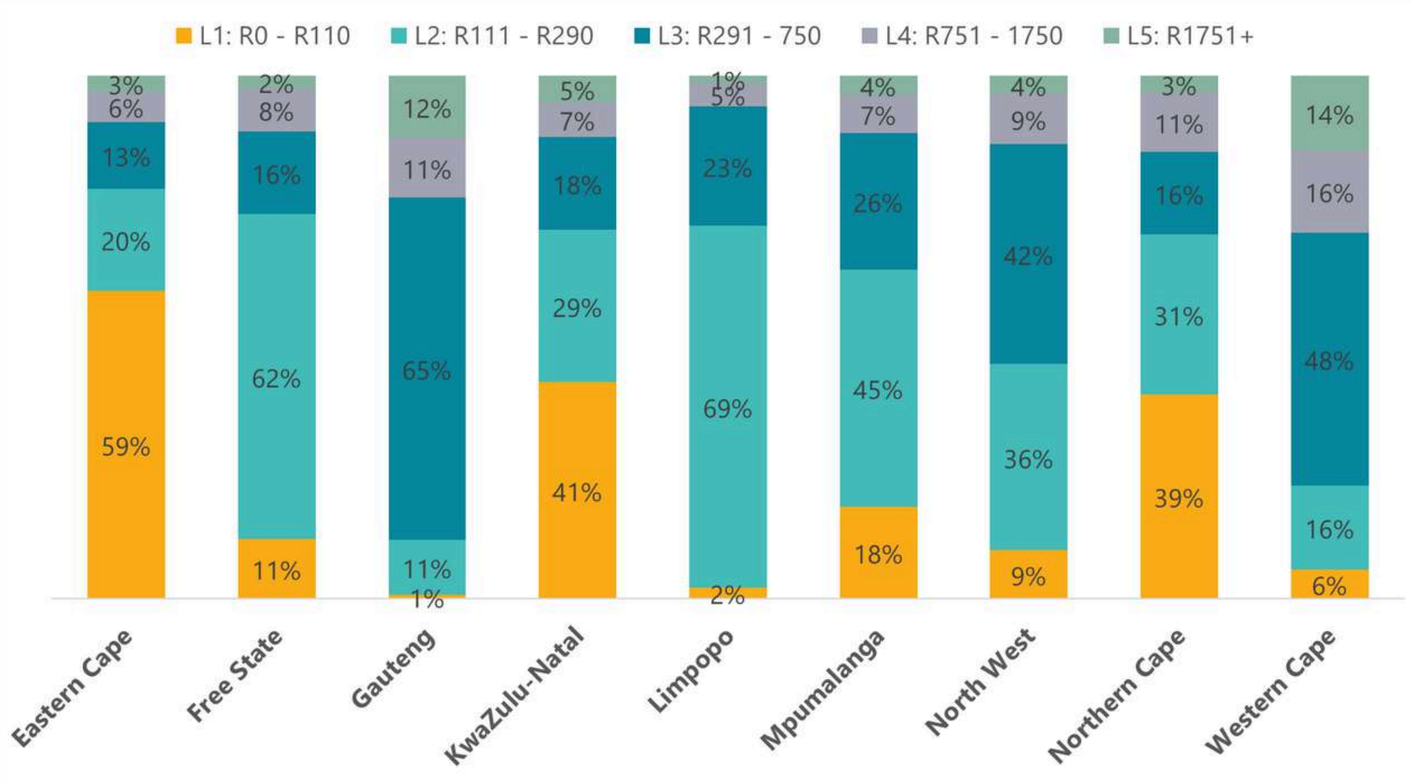
SOCIO-ECONOMIC STATUS OF THE SAMPLE

To determine the sample's socio-economic status of the 50-59 month cohort, we use the early learning programme's monthly fee charged as a proxy. Nationally, there are five distinct fee bands of between R0 – R1750+per month:

- Level 1: R0-R110
- Level 2: R111-R290
- Level 3: R291-R750
- Level 4: R751-R1750
- Level 5: R1751+

Using fee levels allows us to compare your sample's ELOM results to national datasets within the same socio-economic band as your sample.

In the graph on the right, we illustrate the percentage of programmes that fall within each fee band per province, based on data from the 2021 ECD Census. You can read more about the feel levels, and characteristics of early learning programmes at different fee levels, here. This comparison data is **only available for children in the younger age band (4 years)**, as this was the age of the Thrive by Five sample.



In your study, children in the 4-year old (50 - 59 months) sample fall within **Fee Level 1.**

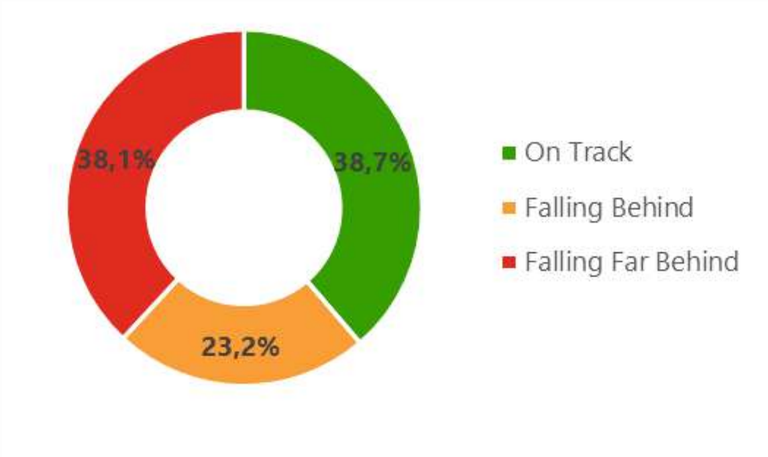
SAMPLE CONTEXT

The early learning programmes in the study sample are located in the Northern Cape. To understand the provincial context in which your early learning programmes are operating, we looked at various data sources that describe the situation of young children in this province.

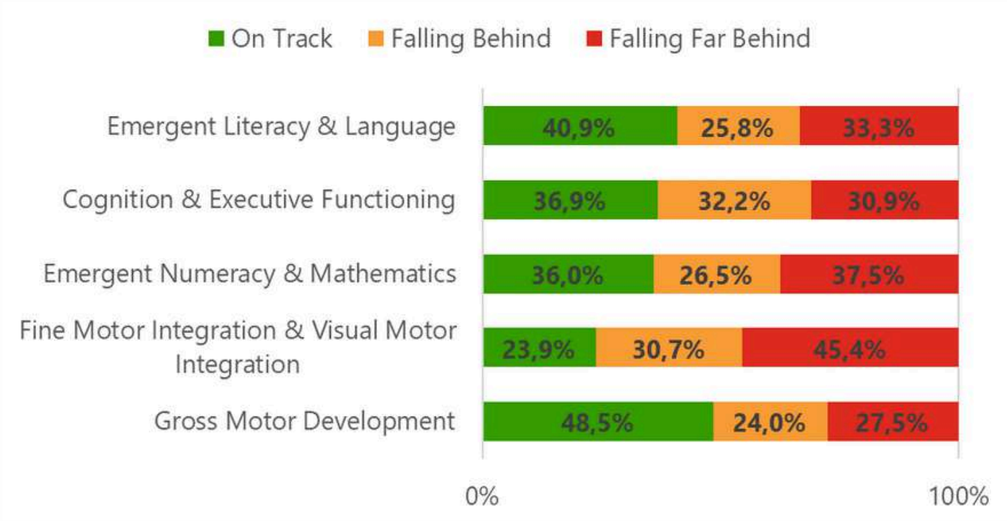
According to Statistics South Africa (2016), there are approximately 161 000 children between 0 and 6 years old in the Northern Cape.
According to the Children's Institute, 55% of children living in the Northern Cape are income-poor, meaning that they only have enough money for basic nutrition and other essentials such as clothing.
According to the General Household Survey (2023), 46% of 4-year old children in the Northern Cape attend some form of early learning programme.
Finally, according to the baseline Thrive by Five national index, **38.7%** of children* in the Northern Cape are **on track** for early learning (see the graphs below).

Thrive by Five Provincial Results: Northern Cape

Percentage of Children in each Performance Band:
ELOM 4 & 5 Total Score



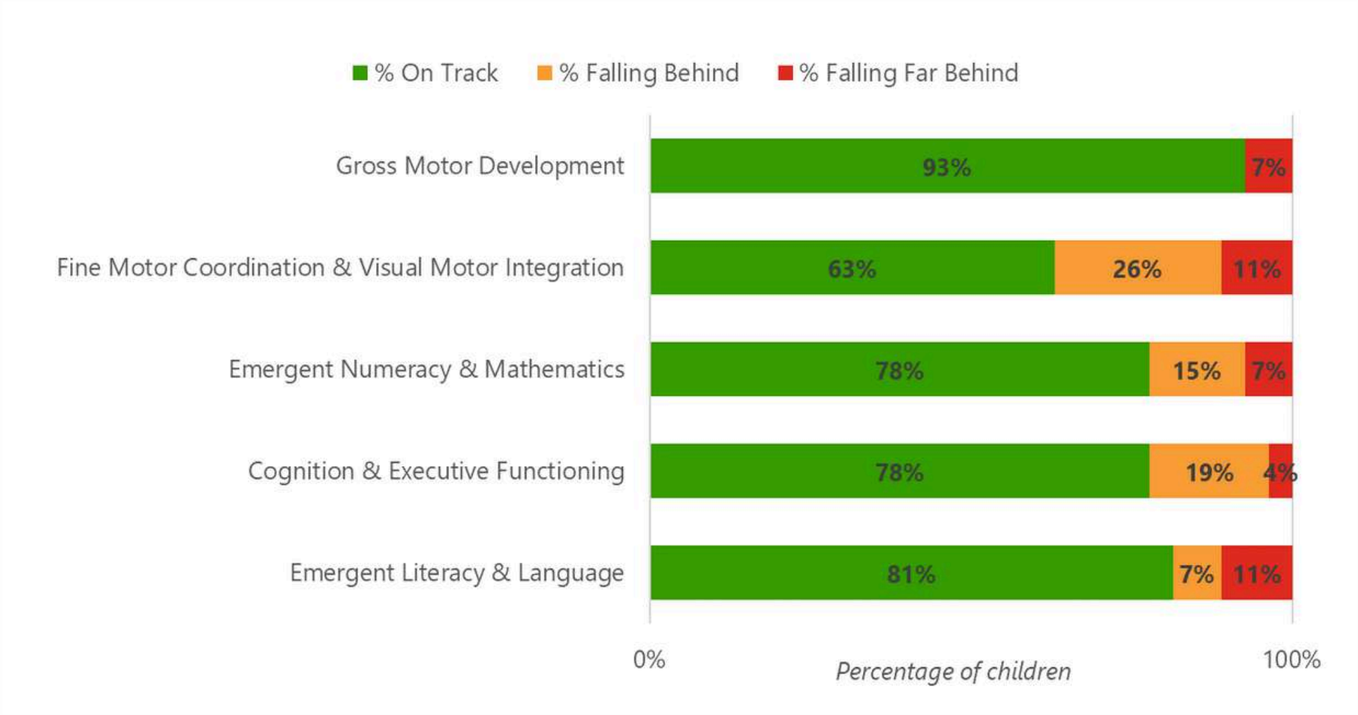
Percentage of Children in each Performance Band:
ELOM 4 & 5 Domains



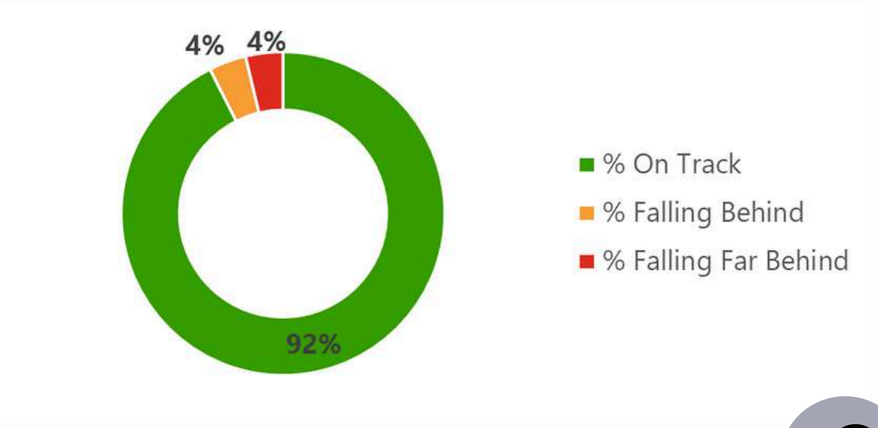
ELOM 4 & 5 RESULTS: WHAT PERCENTAGE OF YOUR CHILDREN ARE ON TRACK?

Your children were assessed on all five ELOM domains. The graphs below shows the percentage of children who are on track, falling behind, or falling far behind on each of the domains assessed, and for learning overall.

ELOM Domains



Learning Overall (ELOM Total score)



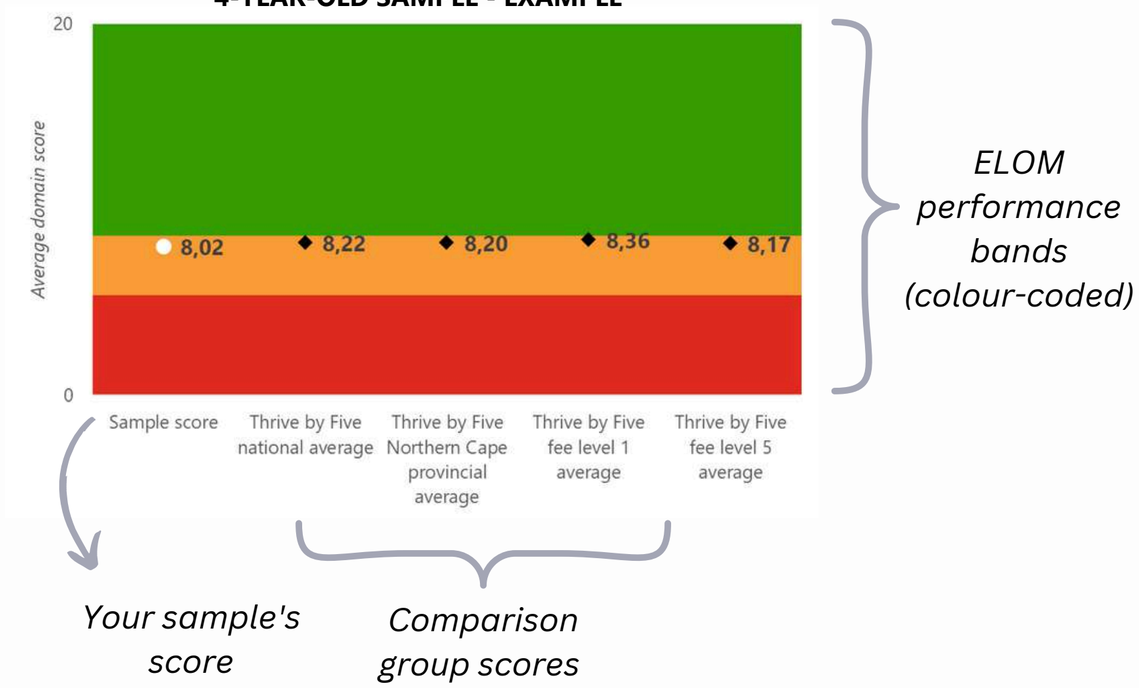
Notable Findings

Almost all of your sample are on track in Gross Motor Development. The weakest domain among this sample appears to be Fine Motor Coordination and Visual Motor Integration.

ELOM 4 & 5 RESULTS: UNDERSTANDING THE COMPARISON GROUPS

In the following pages, we report on the average ELOM 4 & 5 domain scores for your younger sample (aged 4 years, or 50 to 59 months). We present your sample's average scores using graphs (example shown below). Your sample's scores are represented by the white dot. On the left, we compare your sample of 4-year old children (50-59 months) to the Thrive by Five data at the national and provincial levels, as well as at the fee level for children of the same age as your sample. The shaded areas of each graph refer to the ELOM performance bands: ***on track*** - green; ***falling behind*** - orange; and ***falling far behind*** - red. In the second graph, we show the percentage of your sample in each performance band compared to the Thrive by Five provincial sample results.

4-YEAR-OLD SAMPLE - EXAMPLE

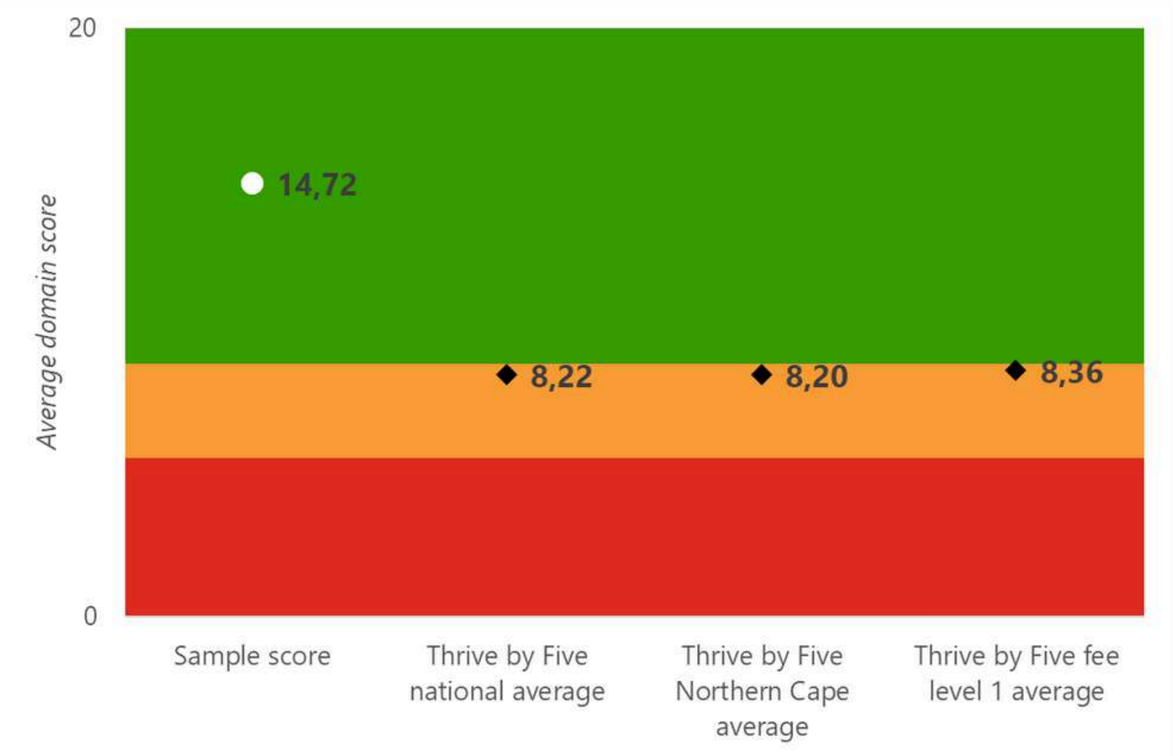


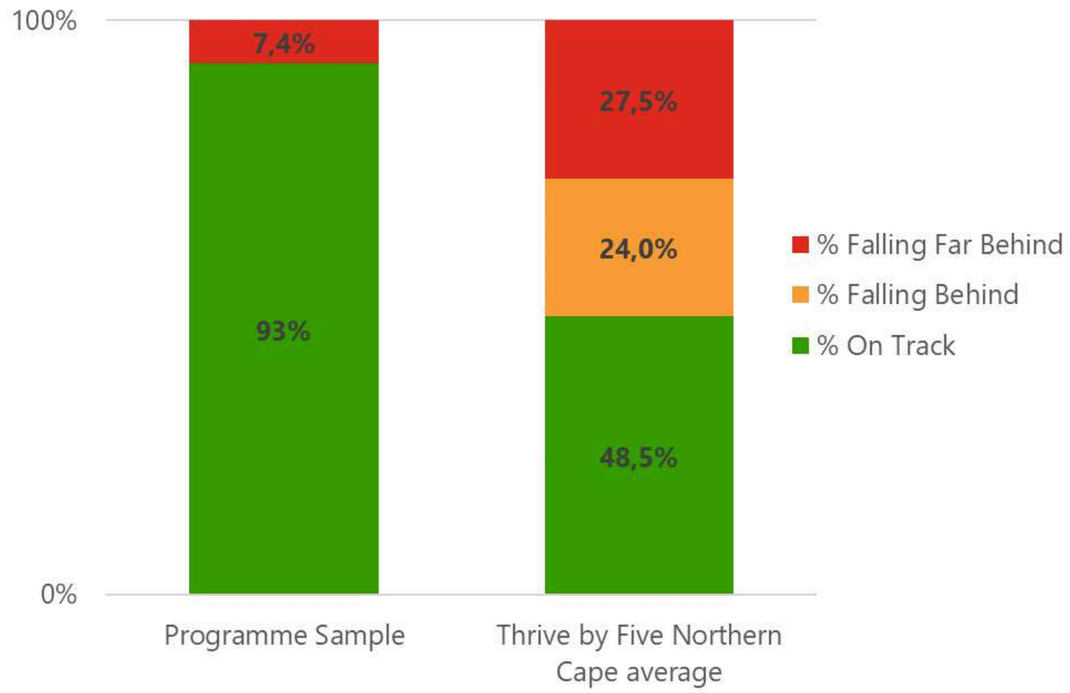
What is the Thrive by Five Index?

The 2021 Thrive by Five Index is the largest representative survey of preschool child development ever undertaken in South Africa. It is the first in a series of surveys that will be repeated every three years to monitor whether children attending early learning programmes are developmentally on track for their age. The Index sample included over 5,000 children in 1,247 early learning programmes across all provinces

ELOM 4 & 5 RESULTS: HOW DO YOUR GROSS MOTOR DEVELOPMENT SCORES COMPARE TO OTHERS?

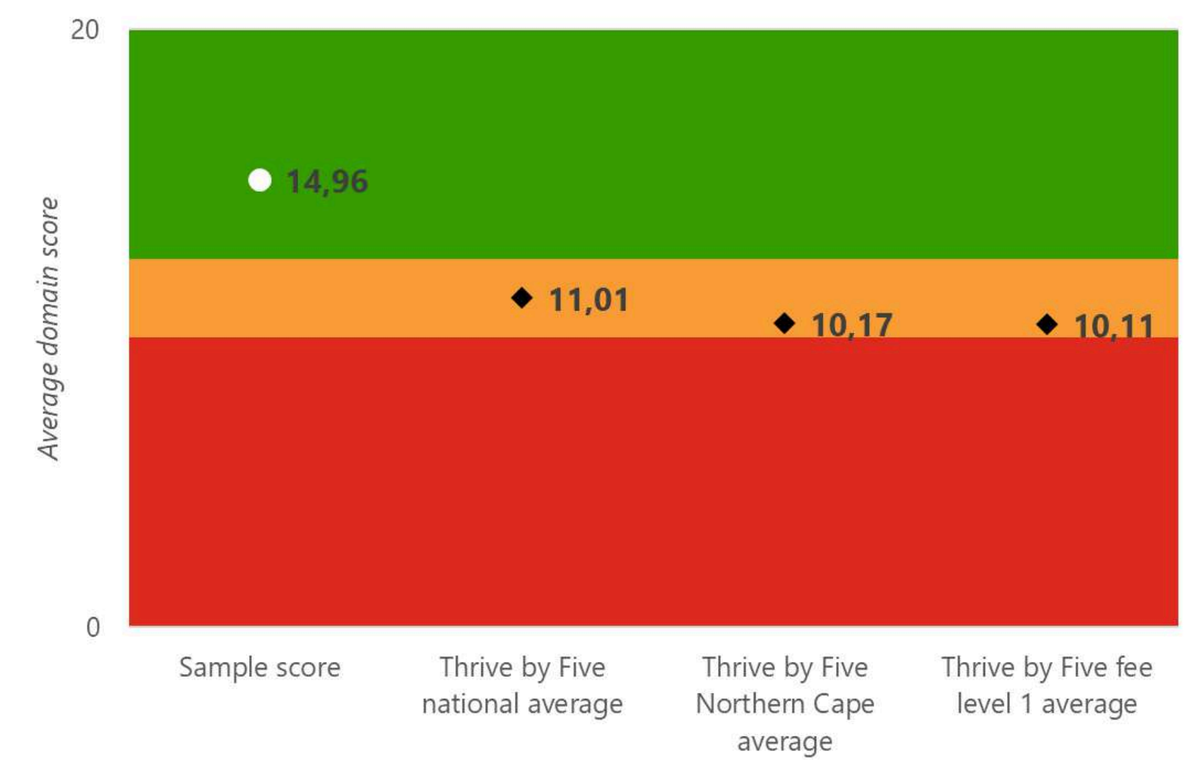
Almost all children in your sample are on track in this domain and performing, on average, substantially higher than the Thrive by Five comparisons..

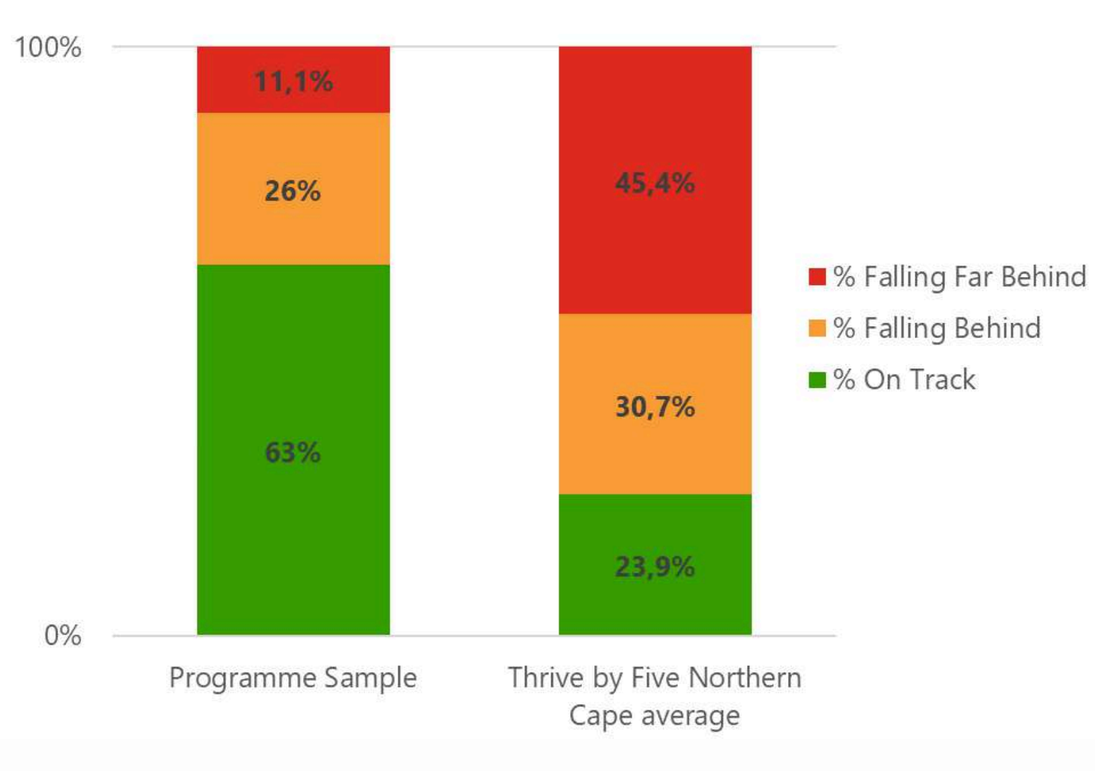




ELOM 4 & 5 RESULTS: HOW DO YOUR FINE MOTOR COORDINATION & VISUAL MOTOR INTEGRATION SCORES COMPARE TO OTHERS?

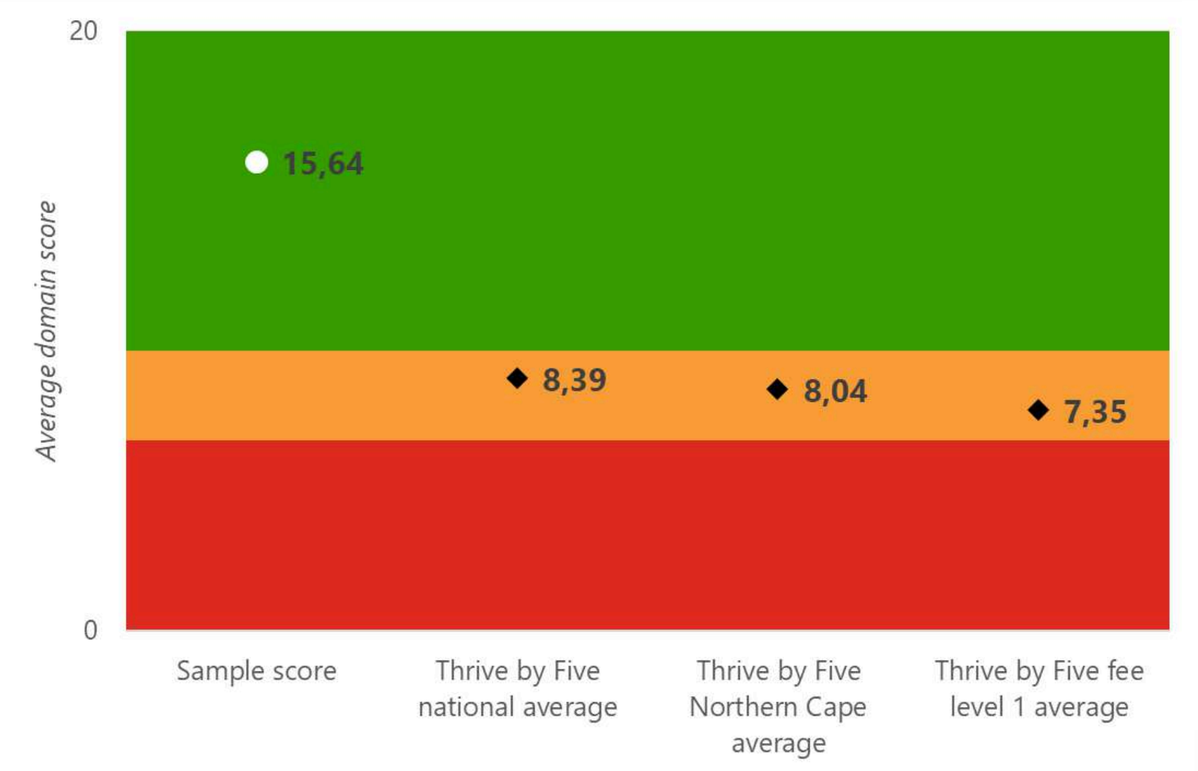
On average, your sample is scoring above the Thrive by Five comparisons. However, almost a third of your sample is falling behind in this domain.

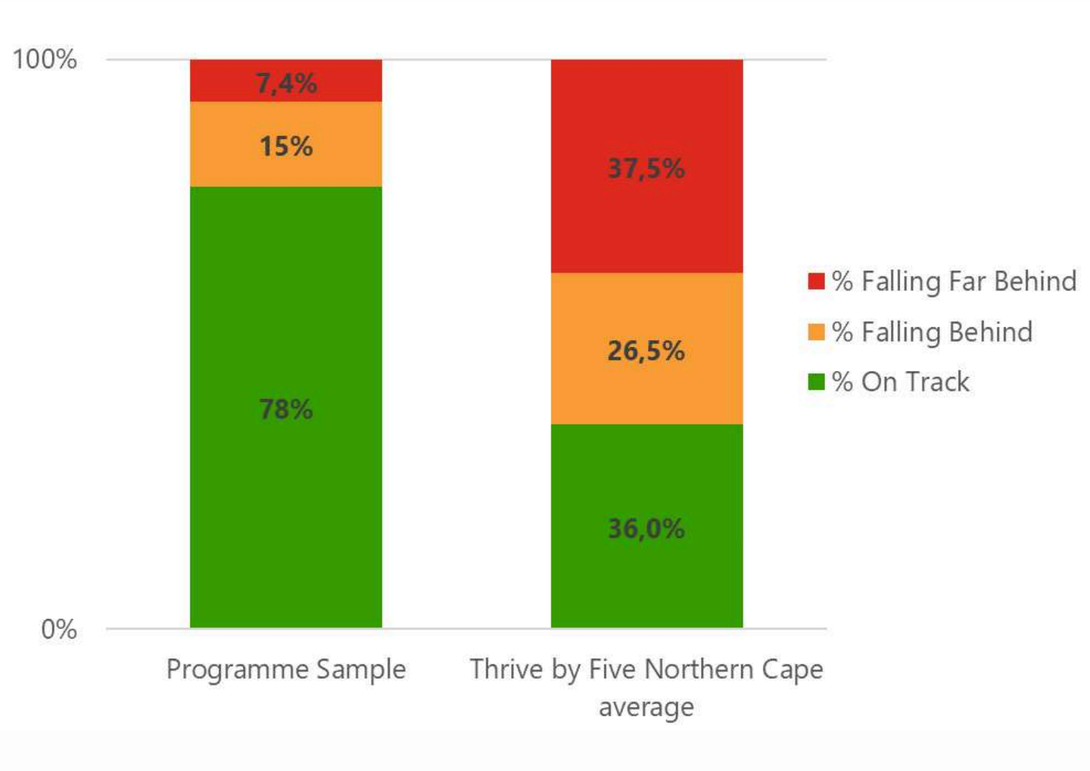




ELOM 4 & 5 RESULTS: HOW DO YOUR EMERGENT NUMERACY & MATHEMATICS SCORES COMPARE TO OTHERS?

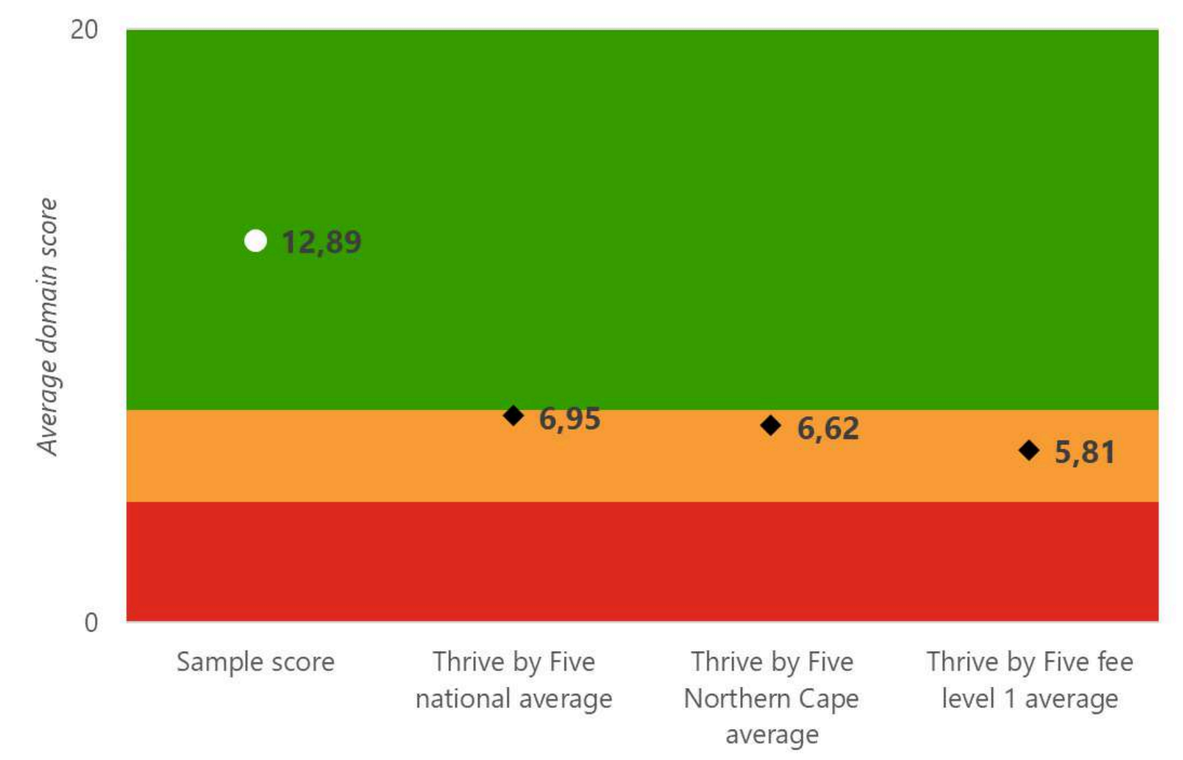
On average, your sample's domain score is notably higher than the average Thrive by Five scores. Most children are on track in this domain.

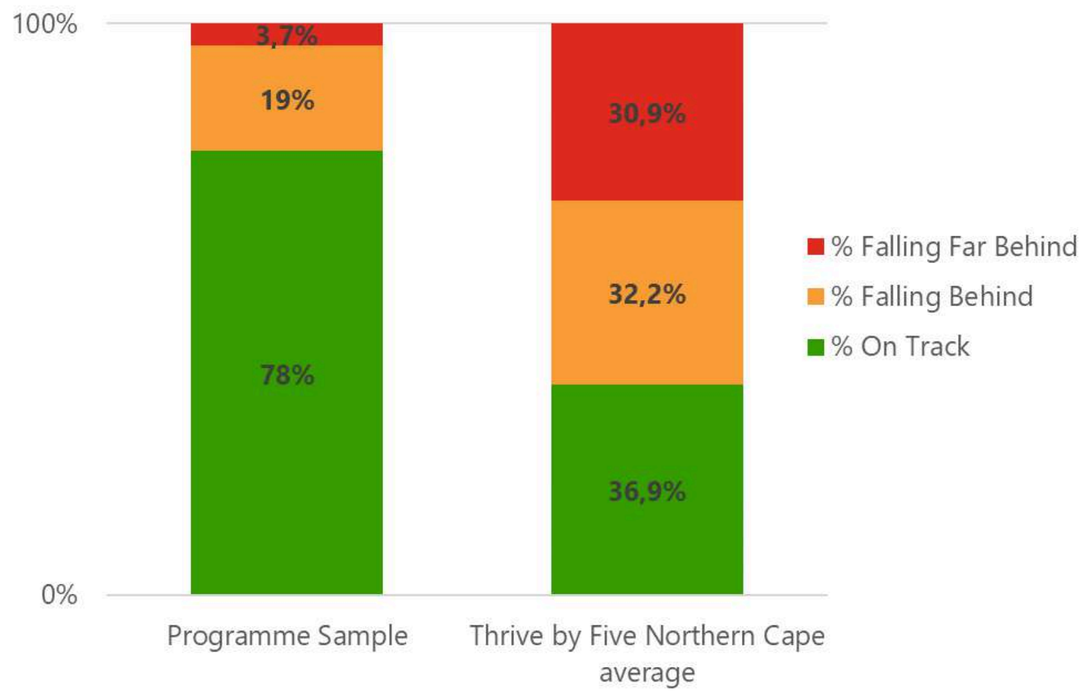




ELOM 4 & 5 RESULTS: HOW DO YOUR COGNITION & EXECUTIVE FUNCTIONING SCORES COMPARE TO OTHERS?

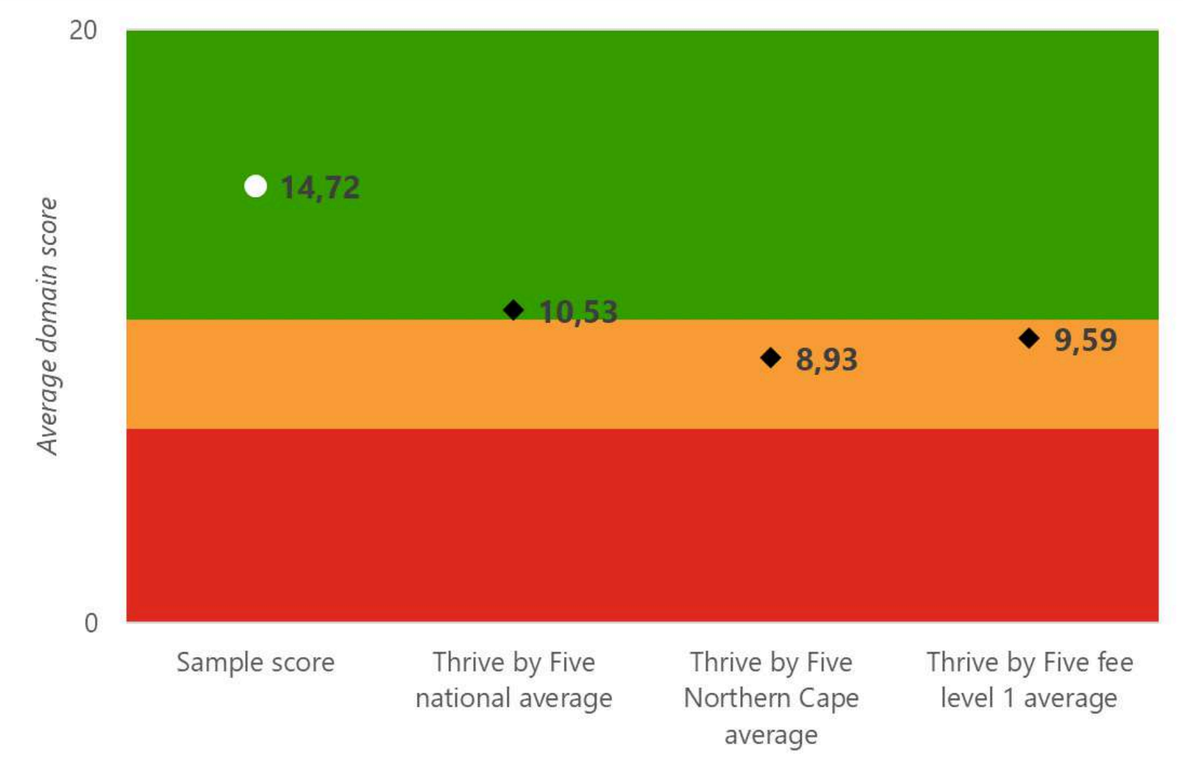
On average, your sample's domain score is notably higher than the average Thrive by Five scores. Most children are on track in this domain, although 19% are falling behind.

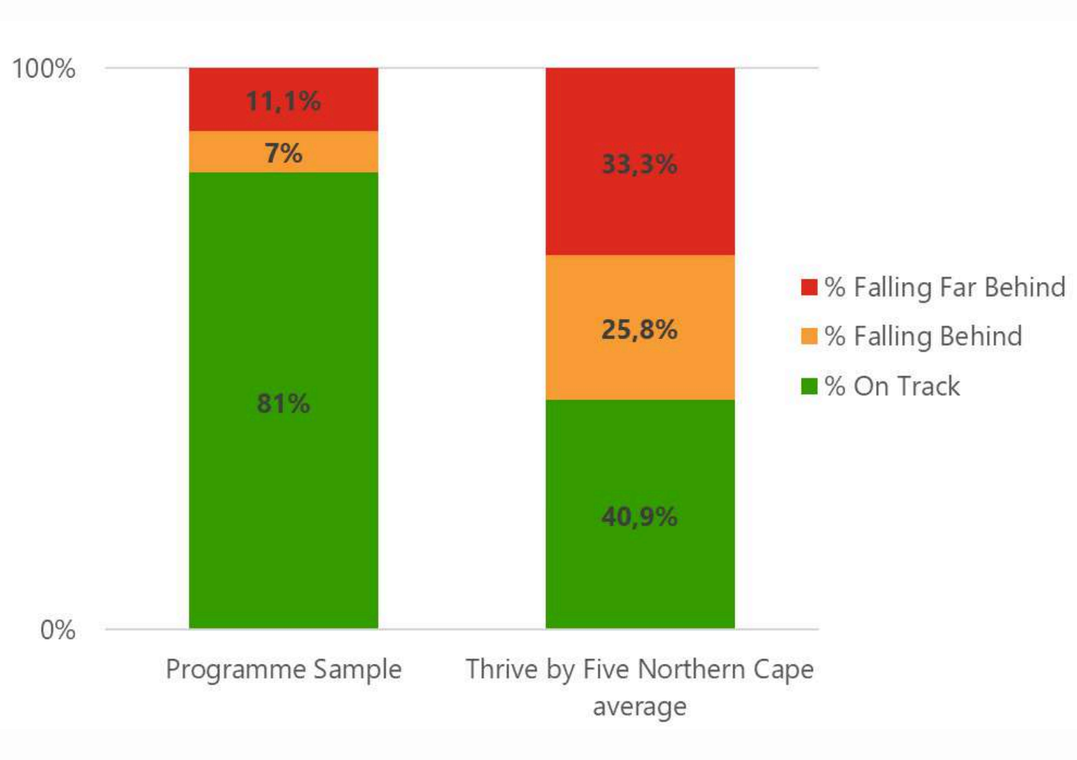




ELOM 4 & 5 RESULTS: HOW DO YOUR EMERGENT LITERACY & LANGUAGE SCORES COMPARE TO OTHERS?

A notable proportion of children are on track in this domain, although 11% are falling far behind.

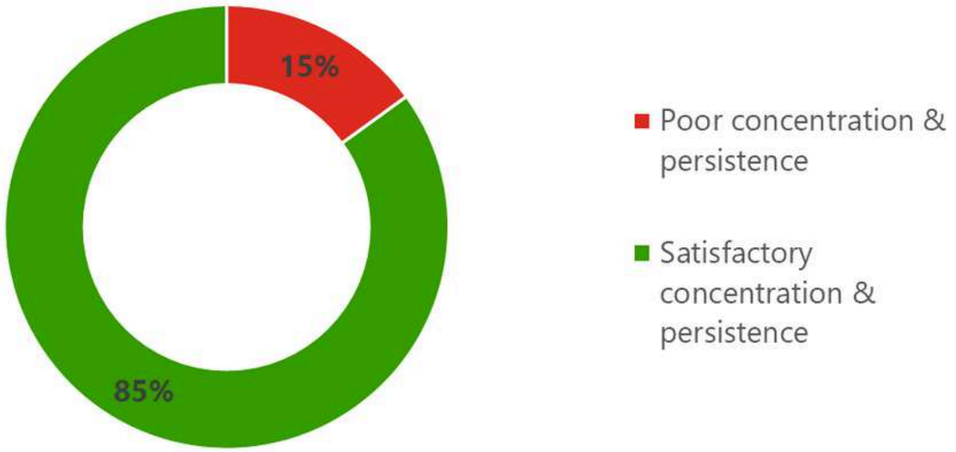




TASK ORIENTATION: HOW WELL DID YOUR SAMPLE CONCENTRATE DURING THE ASSESSMENT?

Task orientation measures how well children concentrate and persist on tasks during an ELOM assessment - important attributes for entering school. The ELOM assessors assigned your sample's task orientation scores after completing each child's assessment. Note that the scores are subjective and may be affected by factors such as the assessor’s own ability to hold the child’s attention.

The graph below shows the proportion of your sample that demonstrated satisfactory versus poor levels of concentration and persistence.



Notable Findings

Most of your sample demonstrated satisfactory concentration and persistence during ELOM assessments, meaning that they were able to stay on task.

CONCLUSIONS & RECOMMENDATIONS

This report presents an overview of how your sample of children performed on average on the ELOM 4 & 5 assessment. Its purpose is to help you identify areas of strengths and weaknesses among your children relative to specific benchmarks, enabling you to make data-driven decisions about your programming and track your children's developmental progress.

As noted earlier, a dipstick assessment such as this one cannot identify specific areas in your programme delivery or curriculum that need attention. If you would like to take data-driven action to improve your programme delivery, we recommend that you conduct a quality assessment of your programme. This can be done using the ELOM Learning Programme Quality Assessment tool.

This report also cannot attribute the sample's developmental performance reported here to your programme alone. If you would like to understand the effect that your programme is having on children, we recommend planning a pre-post study in which the same sample of children is followed up with at the end of the year.

Finally, this report does not look at the influence of other environmental factors over children's development. For example, other ELOM studies have found the home learning environment to be an important influence over child outcomes. If you would like to understand a more comprehensive picture of child development, we recommend an in-depth evaluation or research study that investigates predictors of child outcomes. You can see an example of such a study here.

KEY FINDINGS

The table below summarises your study results. These results are unusually high for fee level 1 ELPs. This can be an indicator of non-random sampling and/or assessor bias, particularly when using internal assessors assessing their own programmes. We caution against using internal assessors when evaluating your programme outcomes to ensure that any potential bias is removed. Follow-up ELOM assessments of the same children will help you obtain a more in-depth understanding of change over time, and whether your programme is having an observable effect on child outcomes. We also recommend that you increase your sample size to be more representative of your programme cohort.

	ELOM 4 & 5 domains	The performance band that the majority of your sample is in per domain
	Gross Motor Development	93% are on track
	Fine Motor Coordination & Visual Motor Integration	63% are on track
	Emergent Numeracy & Mathematics	78% are on track
	Cognition & Executive Functioning	78% are on track
	Emergent Literacy & Language	81% are on track

WHAT ACTIONS CAN BE TAKEN BASED ON THE DATA?

Our hope is that the ELOM reports help organisations use data to drive change. As a next step, organisations have found reviewing the report with their colleagues helpful in determining their priorities for the coming year. Based on the literature on what works, we have provided some generic examples of interventions and programmatic changes below. We hope that these examples are helpful to you and your team. To identify areas within your specific curriculum or programme delivery that require targeted support, consider planning a programme quality assessment.

Gross Motor Development

1. Support safe play spaces: Support programmes in establishing safe and accessible areas for children to play, both indoors and outdoors, that are free of hazards.
2. Encourage outdoor play: Outdoor play promotes physical activity and the development of gross motor skills. If possible, children should be encouraged to run, jump, climb, swing, and explore in outdoor settings.
3. Provide age-appropriate toys & materials: A variety of materials can promote gross motor skills, such as balls, hula hoops, jump ropes, and climbing structures.
4. Structured physical activities: Provide structured activities like group games, sports, and dancing. These activities not only develop gross motor skills but also provide opportunities for social engagement and teamwork.

Fine Motor Coordination & Visual-Motor Integration

1. Encourage writing, arts & crafts: Encourage children to engage in activities that involve writing, drawing, cutting, colouring, and using small tools like paintbrushes, scissors, and glue sticks.
2. Provide age-appropriate toys & materials: Puzzles, building blocks and beads with string require fine motor manipulation and hand-eye coordination.
3. Train teachers to provide encouragement and praise: Fine motor skills can be frustrating for children to develop. Patience and positive reinforcement can help children to persist with these tasks.

Emergent Numeracy & Mathematics

1. Include number talk in everyday routines: Encourage children to talk about numbers and mathematical concepts in their daily lives. Discuss the time, money, measurements, and quantities encountered during daily routines.
2. Teach children counting songs: Incorporate counting songs and finger counting into daily activities. These help children become familiar with numbers and counting in a fun way.
3. Provide age-appropriate toys & materials: Hands-on materials like counting blocks, beads, and puzzles help children visualise and understand mathematical concepts.
4. Provide structured games and activities: Sorting games (colour, size, object), hopscotch, counting, and matching will help to engage children in numeracy and mathematical concepts.

WHAT ACTIONS CAN BE TAKEN BASED ON THE DATA? [CONT.]

Cognition & Executive Functioning

1. Encourage pretend play & storytelling: Pretend play and storytelling helps children develop their imagination, creativity, memory, and language skills.
2. Incorporate music & rhythm: Playing music, singing, dancing, and playing musical instruments can enhance memory and pattern recognition.
3. Train teachers to create a supportive learning environment: A supportive and nurturing environment can ensure that children feel safe to make mistakes and learn from them.
4. Encourage outdoor exploration: Spending time outdoors exploring nature and encouraging children to be curious. Discuss observations, identify plants and animals, and encourage questions about the world to stimulate their critical thinking.
5. Incorporate problem-solving games: Age-appropriate challenges and puzzles can encourage children to think critically and find solutions. Start with simple tasks and gradually increase complexity.

Emergent Literacy & Language

1. Incorporate daily reading aloud: Provide a variety of books to expose children to different concepts, vocabulary, and ideas. Encourage children to ask questions and discuss the stories.
2. Encourage teachers to actively talk & listen: Engaging in conversations with children encourages them to express themselves, ask questions, and share their thoughts.
3. Incorporate vocabulary into daily activities: Introduce new words and concepts during everyday activities. Describe objects, actions, and feelings using descriptive language.
4. Provide age-appropriate materials: Introduce words and letters through games, flashcards, and alphabet books. Encourage teachers to make learning letters and their sounds enjoyable and interactive.
5. Provide a literacy-rich environment: Provide classrooms with written materials such as books, magazines, newspapers, and educational posters, make reading materials readily accessible and familiar.

Social & Emotional Functioning

1. Train teachers to model positive social behaviour: Teachers can be positive role models by demonstrating good social skills, such as active listening, empathy, politeness, and co-operation with both children and colleagues.
2. Encourage sharing & teamwork: Children should be taught to share toys and take turns. Collaborative games that require teamwork can teach children to work together.
3. Foster the development of empathy: Feelings and emotions can be discussed regularly with children, encouraging them to identify and validate others' emotions . Books that explore emotions can also help to explore characters' feelings.

WHAT ARE BEST PRACTICES TO SUPPORT TEACHERS?

Research has demonstrated that providing teachers with ongoing professional development and support is key to enhancing child outcomes. Based on the findings regarding effective practices, we have outlined a few that can assist in supporting and developing teachers.

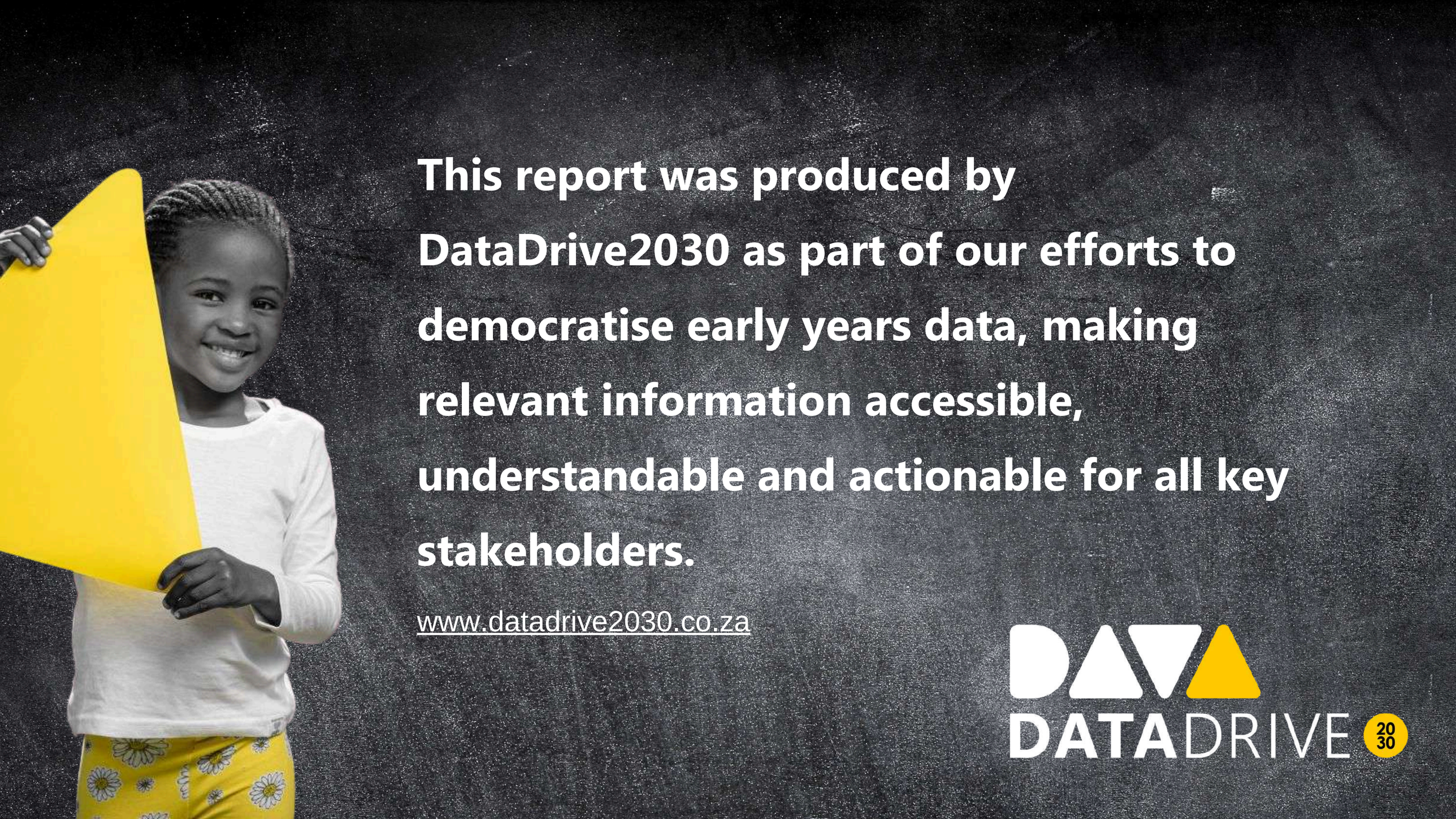
Management Best Practices	Peer Support Best Practices	Training Best Practices	Tailoring Support
• **Provide individual mentoring** by pairing more experienced staff members, or someone from another programme, with less experienced teachers. • **Ensure supervision** that includes actual time observing in the classroom, joint planning, monitoring, regular feedback and discussions around goal-setting. • **Create an enabling environment** that is supportive and developmental, ensuring leadership provides practical assistance and opportunities for on-the-job learning.	• **Create time for group reflection** among practitioners who work together or in similar spaces, so they can share successes, challenges and troubleshoot together. • **Create time for critical individual reflection** in which practitioners consider their strengths and what is working well in their contexts, as well as to identify the areas in which they need to develop. This should also include a critical reflection on teachers' own beliefs about how children best learn and develop.	• **Explain the reasons** behind certain classroom practices to ensure practitioners understand how activities work to achieve outcomes. • **Provide concrete examples** of good practice, such as video clips or observing a skilled teacher at work. • **Include role plays** and other practice-oriented activities that enable practitioners to practice engaging in different activities and interacting with children.	• **Gathering input from teachers** on what types of support they may find helpful can also be useful in deciding whether and how to update your current activities, and ensuring that teachers get the targeted support that they need.

PLANNING YOUR NEXT STEPS

Once you have an idea of the actions that you need to take using your data insights, we recommend developing a list of priorities and an action plan to ensure that your data is put to use.

1. Collectively identify 5 key priorities	2. Determine the actions needed to turn those priorities into reality	3. Agree on the people responsible for taking action	4. Agree on deadlines
• What changes need to be made based on the ELOM results? Or what do you need to investigate further? • What key issues require your immediate attention?	• What particular actions, tasks or deliverables are needed to turn these five priorities into reality? • What do you need to do, or who do we need to consult?	• Which team members are responsible for each action item? • What support do they require?	• By when should these action items be completed?

A planning worksheet to work through with your team is available here.



This report was produced by DataDrive2030 as part of our efforts to democratise early years data, making relevant information accessible, understandable and actionable for all key stakeholders.

www.datadrive2030.co.za

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