Addendum 1:
Correction to the ELOM 4&5 Score March 2023

In March 2023, the DataDrive2030 team discovered an error in the digital tablet scoring of the ELOM 4&5 Years Assessment Tool's Emergent Numeracy and Maths (ENM) domain. This addendum outlines the consequent adjustments made to the Thrive by Five Index data.

ENM Item 10 has two questions. The one was correctly coded and no changes were needed. The other is an addition question posed to children as follows: how many sweets would you have if you had four sweets and a friend gives you two more? The correct answer is '6'.

Tablets are used to capture children's scores on the ELOM. Unfortunately, the programme was coded to record '5' as the correct answer, and an answer of '6' was automatically marked incorrect.

Due to this programming error, ENM scores in the Thrive by Five Index were incorrectly calculated. The effect of the error is that some children, who were marked incorrect despite getting the correct answer, could be placed in a lower band than their true performance should indicate (e.g. Falling Behind rather than On Track).

Similarly, children who were incorrectly credited with passing the ENM addition trial could be placed above their true band for the domain. For example, they might be placed in the On Track band (achieving the standard) when their true score would have placed them in the Falling Behind band.

Children's ENM score contributes to the ELOM Total score, therefore the ELOM Total score was also impacted by this, although to a much lesser extent. It is important to note that only children whose scores were close to one of the ELOM standard score bands would be likely to be misclassified.

The error in the tablet form was corrected and no further errors have been detected. Datasets in the public domain housed on the DataFirst website have been corrected (See Thrive by Five dataset version 3) and the Thrive by Five website has been updated.

For the Thrive by Five reports, the corrected weighted scores are presented in the tables below **(N=5139 children).**

ELOM Total Score	Original Score	Corrected Score	Difference
Total score Mean	44.31	45.09	0.78
% Children Falling Far Behind	28.32%	27.98%	-0.34%
% Children Falling Behind	27.03%	26.31%	-0.72%
% Children On Track	44.65%	45.71%	1.06%
Early Numeracy and Math Score			
ENM Score Mean	7.92	8.39	0.47
% Children Falling Far Behind	35%	33.09%	-1.91%
% Children Falling Behind	31.1%	28.48%	-2.62%
% Children On Track	33.9%	38.43%	4.53%

Provincial summary

Eastern Cape (N=587 children)

ELOM Total Score	Original	Corrected Item 10	Difference
Total Score Mean	43.18	43.41	0.23
% Children Falling Far Behind	33.40%	34.01%	0.61%
% Children Falling Behind	28.53%	27.66%	-0.87%
% Children On Track	38.08%	38.33%	0.25%
Early Numeracy and Math Score			
ENM Score Mean	7.31	7.54	0.23
% Children Falling Far Behind	39.17%	37.97%	-1.20%
% Children Falling Behind	34.65%	34.12%	-0.53%
% Children On Track	26.18%	27.91%	1.73%

Free state (N=565 children)

ELOM Total Score	Original	Corrected Item 10	Difference
Total Score Mean	40.08	40.51	0.43
% Children Falling Far Behind	41.53%	41.65%	0.12%
% Children Falling Behind	26.68%	26.64%	-0.04%
% Children On Track	31.79%	31.71%	-0.08%
Early Numeracy and Math Score			
ENM Score Mean	7.15	7.58	0.43
% Children Falling Far Behind	41.16%	38.81%	-2.35%
% Children Falling Behind	31.38%	29.97%	-1.41%
% Children On Track	27.46%	31.22%	3.76%

Gauteng (N=571 children)

ELOM Total Score	Original	Corrected Item 10	Difference
Total Score Mean	45.61	46.03	0.42
% Children Falling Far Behind	26.75%	26.72%	-0.03%
% Children Falling Behind	22.66%	21.67%	-0.99%
% Children On Track	50.59%	51.61%	1.02%
Early Numeracy and Math Score			
ENM Score Mean	8.11	8.54	0.43
% Children Falling Far Behind	34.33%	32.61%	-1.72%
% Children Falling Behind	29.21%	27.93%	-1.28%
% Children On Track	36.46%	39.46%	3.00%

KwaZulu-Natal (N=575 children)

ELOM Total Score	Original	Corrected Item 10	Difference
Total Score Mean	39.67	39.87	0.20
% Children Falling Far Behind	36.89%	37.30%	0.41%
% Children Falling Behind	33.62%	32.07%	-1.55%
% Children On Track	29.49%	30.64%	1.15%
Early Numeracy and Math Score			
ENM Score Mean	6.49	6.69	0.20
% Children Falling Far Behind	53.48%	51.27%	-2.21%
% Children Falling Behind	24.73%	25.72%	0.99%
% Children On Track	21.79%	23.01%	1.22%

Limpopo (N=578 children)

ELOM Total Score	Original	Corrected Item 10	Difference
Total Score Mean	44.69	45.37	0.68
% Children Falling Far Behind	26.77%	24.64%	-2.13%
% Children Falling Behind	28.55%	29.65%	1.10%
% Children On Track	44.68%	45.71%	1.03%
Early Numeracy and Math Score			
ENM Score Mean	8.80	9.49	0.69
% Children Falling Far Behind	24.13%	22.21%	-1.92%
% Children Falling Behind	31.47%	25.10%	-6.37%
% Children On Track	44.40%	52.68%	8.28%

Mpumalanga (N=540 children)

ELOM Total Score	Original	Corrected Item 10	Difference
Total Score Mean	50.81	51.56	0.75
% Children Falling Far Behind	12.16%	10.75%	-1.41%
% Children Falling Behind	24.49%	24.05%	-0.44%
% Children On Track	63.35%	65.20%	1.85%
Early Numeracy and Math Score			
ENM Score Mean	9.76	10.51	0.75
% Children Falling Far Behind	15.63%	13.28%	-2.35%
% Children Falling Behind	30.37%	28.34%	-2.03%
% Children On Track	54.00%	58.38%	4.38%

Northern Cape (N=600 children)

ELOM Total Score	Original	Corrected Item 10	Difference
Total Score Mean	41.51	41.95	0.44
% Children Falling Far Behind	37.61%	38.09%	0.48%
% Children Falling Behind	25.22%	23.24%	-1.98%
% Children On Track	37.17%	38.67%	1.50%
Early Numeracy and Math Score			
ENM Score Mean	7.59	8.04	0.45
% Children Falling Far Behind	38.84%	37.52%	-1.32%
% Children Falling Behind	30.60%	26.48%	-4.12%
% Children On Track	30.56%	36.00%	5.44%

North West (N=564 children)

ELOM Total Score	Original	Corrected Item 10	Difference
Total Score Mean	44.84	45.41	0.57
% Children Falling Far Behind	25.50%	24.87%	-0.63%
% Children Falling Behind	29.96%	28.98%	-0.98%
% Children On Track	44.54%	46.15%	1.61%
Early Numeracy and Math Score			
ENM Score Mean	7.98	8.55	0.57
% Children Falling Far Behind	27.17%	26.28%	-0.89%
% Children Falling Behind	41.30%	33.26%	-8.04%
% Children On Track	31.53%	40.46%	8.93%

Western Cape (N=559 children)

ELOM Total Score	Original	Corrected Item 10	Difference
Total Score Mean	52.40	53.25	0.85
% Children Falling Far Behind	15.99%	15.37%	-0.62%
% Children Falling Behind	19.17%	18.35%	-0.82%
% Children On Track	64.84%	66.28%	1.44%
Early Numeracy and Math Score			
ENM Score Mean	8.75	9.61	0.86
% Children Falling Far Behind	27.92%	25.01%	-2.91%
% Children Falling Behind	36.05%	28.27%	-7.78%
% Children On Track	36.03%	46.73%	10.70%

Please direct any questions on this matter to info@datadrive2030.co.za