

# South Africa - Early Learning Outcomes Measure 2016

**Innovation Edge**

Report generated on: June 12, 2018

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# Sampling

No content available

# Questionnaires

No content available

## Data Collection

### Data Collection Dates

| Start      | End        | Cycle |
|------------|------------|-------|
| 2016-01-25 | 2016-03-03 | N/A   |

### Data Collection Mode

Computer Assisted Personal Interview [capi]

#### DATA COLLECTION NOTES

Data was collected using the Early Learning Outcomes Measure (ELOM) tool which includes the following components: ELOM Direct Assessment Kit, ELOM Direct Assessment Kit list, ELOM Direct Assessment Manual, ELOM Technical Manual, ELOM Scoring Sheet, Open source online protocol for tablet/phone-based scoring and data capture, ELOM Teacher Assessment of the Child.

### Data Collectors

| Name            | Abbreviation | Affiliation |
|-----------------|--------------|-------------|
| Innovation Edge |              |             |

#### SUPERVISION

Data collection for the project was granted ethics approval by the Ethics Review Committee of the Faculty of Humanities at the University of Cape Town on 11 November 2015. The ethics clearance document is provided with the data.

# Data Processing

No content available

# Data Appraisal

No content available

## File Description



## Variable List

**20171011-elom-2016-v1.1**

|              |                       |
|--------------|-----------------------|
| Content      | Individual level data |
| Cases        | 1331                  |
| Variable(s)  | 50                    |
| Structure    | Type:<br>Keys: ()     |
| Version      |                       |
| Producer     |                       |
| Missing Data |                       |

**Variables**

| ID  | Name                   | Label  | Type     | Format    | Question |
|-----|------------------------|--|----------|-----------|----------|
| V1  | csid                   | Child study ID                                 | discrete | character |          |
| V2  | Assessor               | Assessor                                       | contin   | numeric   |          |
| V3  | Province               | Province                                       | discrete | numeric   |          |
| V4  | School                 | School name                                    | discrete | numeric   |          |
| V5  | RuralOrUrban           | Rural or urban                                 | discrete | numeric   |          |
| V6  | Traditional            | Traditional or not traditional                 | discrete | numeric   |          |
| V7  | Quintile               | School quintile                                | discrete | numeric   |          |
| V8  | CompositeQuintileGroup | Three quintile groupings                       | discrete | numeric   |          |
| V9  | Gender                 | Gender of child                                | discrete | numeric   |          |
| V10 | Age                    | Age in months                                  | contin   | numeric   |          |
| V11 | AgeGroup               | Age group                                      | discrete | numeric   |          |
| V12 | HomeLanguage           | Home language                                  | discrete | numeric   |          |
| V13 | AssesLanguage          | Assessment language                            | discrete | numeric   |          |
| V14 | WHOScreen              | WHO screening score                            | discrete | numeric   |          |
| V15 | Height                 | Height in cm                                   | contin   | numeric   |          |
| V16 | hfa                    | Height for age z-score                         | contin   | numeric   |          |
| V17 | Item1                  | Standing on one leg for 10 seconds transformed | contin   | numeric   |          |
| V18 | Item2                  | Catch bean bag both hands transformed          | contin   | numeric   |          |
| V19 | Item3                  | Catch bean bag preferred hand transformed      | contin   | numeric   |          |
| V20 | Item4                  | Catch bean bag non-preferred hand transformed  | contin   | numeric   |          |
| V21 | gmd                    | Gross motor development                        | contin   | numeric   |          |
| V22 | Item5                  | Cross & square transformed                     | contin   | numeric   |          |
| V23 | Item6                  | Triangle transformed                           | contin   | numeric   |          |
| V24 | Item7                  | Draw person transformed                        | contin   | numeric   |          |
| V25 | Item8                  | String beads transformed                       | contin   | numeric   |          |
| V26 | fmcvmi                 | Fine motor control & visual motor integration  | contin   | numeric   |          |
| V27 | Item9                  | Counting transformed                           | contin   | numeric   |          |
| V28 | Item10                 | Add & sub transformed                          | contin   | numeric   |          |

| ID  | Name          | Label                              | Type     | Format  | Question |
|-----|---------------|------------------------------------|----------|---------|----------|
| V29 | Item11        | Sort and class transformed         | contin   | numeric |          |
| V30 | Item12        | Spatial vocabulary transformed     | contin   | numeric |          |
| V31 | Item13        | Measurement vocabulary transformed | contin   | numeric |          |
| V32 | enm           | Emergent numeracy & mathematics    | contin   | numeric |          |
| V33 | Item14        | DCCS transformed                   | contin   | numeric |          |
| V34 | Item15        | Pencil tapping transformed         | contin   | numeric |          |
| V35 | Item16        | Digit span transformed             | contin   | numeric |          |
| V36 | Item17        | Picture puzzle transformed         | contin   | numeric |          |
| V37 | cef           | Cognition & executive functioning  | contin   | numeric |          |
| V38 | Item18        | Empathy transformed                | contin   | numeric |          |
| V39 | Item19        | Self-awareness transformed         | contin   | numeric |          |
| V40 | Item20        | Expressive language transformed    | contin   | numeric |          |
| V41 | Item21        | Expressive vocabulary transformed  | contin   | numeric |          |
| V42 | Item22        | Oral comprehension transformed     | contin   | numeric |          |
| V43 | Item23        | Sound discrimination transformed   | contin   | numeric |          |
| V44 | ell           | Emergent literacy & language       | contin   | numeric |          |
| V45 | Total         | ELOM total score                   | contin   | numeric |          |
| V46 | ChildObs1     | Paid attention                     | discrete | numeric |          |
| V47 | ChildObs2     | Stayed concentrated                | discrete | numeric |          |
| V48 | ChildObs3     | Careful and diligent               | discrete | numeric |          |
| V49 | ChildObs4     | Interested and curious             | discrete | numeric |          |
| V50 | ChildObsTotal | Child observation total            | discrete | numeric |          |



## Child study ID (csid)

File: 20171011-elom-2016-v1.1

**Overview**

Type: Discrete  
 Format: character  
 Width: 9

Valid cases: 1331  
 Invalid: 0

## Assessor (Assessor)

File: 20171011-elom-2016-v1.1

**Overview**

Type: Continuous  
 Format: numeric  
 Width: 2  
 Decimals: 0  
 Range: 3-29

Valid cases: 1331  
 Invalid: 0  
 Minimum: 3  
 Maximum: 29

## Province (Province)

File: 20171011-elom-2016-v1.1

**Overview**

Type: Discrete  
 Format: numeric  
 Width: 1  
 Decimals: 0  
 Range: 1-3

Valid cases: 1331  
 Invalid: 0

## School name (School)

File: 20171011-elom-2016-v1.1

**Overview**

Type: Discrete  
 Format: numeric  
 Width: 9  
 Decimals: 0  
 Range: 100000003-600102351

Valid cases: 1331  
 Invalid: 0

## Rural or urban (RuralOrUrban)

File: 20171011-elom-2016-v1.1

**Overview**

Type: Discrete  
 Format: numeric  
 Width: 1  
 Decimals: 0  
 Range: 0-1

Valid cases: 1331  
 Invalid: 0

## Traditional or not traditional (Traditional)

File: 20171011-elom-2016-v1.1

## Traditional or not traditional (Traditional)

File: 20171011-elom-2016-v1.1

### Overview

Type: Discrete  
Format: numeric  
Width: 1  
Decimals: 0  
Range: 0-1

Valid cases: 1331  
Invalid: 0

## School quintile (Quintile)

File: 20171011-elom-2016-v1.1

### Overview

Type: Discrete  
Format: numeric  
Width: 1  
Decimals: 0  
Range: 1-5

Valid cases: 1331  
Invalid: 0

## Three quintile groupings (CompositeQuintileGroup)

File: 20171011-elom-2016-v1.1

### Overview

Type: Discrete  
Format: numeric  
Width: 1  
Decimals: 0  
Range: 1-3

Valid cases: 1331  
Invalid: 0

## Gender of child (Gender)

File: 20171011-elom-2016-v1.1

### Overview

Type: Discrete  
Format: numeric  
Width: 1  
Decimals: 0  
Range: 0-1

Valid cases: 1331  
Invalid: 0

## Age in months (Age)

File: 20171011-elom-2016-v1.1

### Overview

Type: Continuous  
Format: numeric  
Width: 11  
Decimals: 0  
Range: 49.01639344-68.81967213

Valid cases: 1331  
Invalid: 0  
Minimum: 49  
Maximum: 68.8

## Age group (AgeGroup)

File: 20171011-elom-2016-v1.1

### Overview

|                 |                   |
|-----------------|-------------------|
| Type: Discrete  | Valid cases: 1331 |
| Format: numeric | Invalid: 0        |
| Width: 1        |                   |
| Decimals: 0     |                   |
| Range: 0-1      |                   |

## Home language (HomeLanguage)

File: 20171011-elom-2016-v1.1

### Overview

|                 |                   |
|-----------------|-------------------|
| Type: Discrete  | Valid cases: 1331 |
| Format: numeric | Invalid: 0        |
| Width: 2        |                   |
| Decimals: 0     |                   |
| Range: -1-6     |                   |

## Assessment language (AssesLanguage)

File: 20171011-elom-2016-v1.1

### Overview

|                 |                   |
|-----------------|-------------------|
| Type: Discrete  | Valid cases: 1331 |
| Format: numeric | Invalid: 0        |
| Width: 1        |                   |
| Decimals: 0     |                   |
| Range: 0-5      |                   |

## WHO screening score (WHOScreen)

File: 20171011-elom-2016-v1.1

### Overview

|                 |                   |
|-----------------|-------------------|
| Type: Discrete  | Valid cases: 1331 |
| Format: numeric | Invalid: 0        |
| Width: 1        |                   |
| Decimals: 0     |                   |
| Range: 0-0      |                   |

## Height in cm (Height)

File: 20171011-elom-2016-v1.1

### Overview

|                  |                   |
|------------------|-------------------|
| Type: Continuous | Valid cases: 1331 |
| Format: numeric  | Invalid: 0        |
| Width: 4         | Minimum: 89.3     |
| Decimals: 0      | Maximum: 126      |
| Range: 89.3-126  |                   |

## Height for age z-score (hfa)

### File: 20171011-elom-2016-v1.1

#### Overview

|                   |                   |
|-------------------|-------------------|
| Type: Continuous  | Valid cases: 1331 |
| Format: numeric   | Invalid: 0        |
| Width: 5          | Minimum: -4.6     |
| Decimals: 0       | Maximum: 3.2      |
| Range: -4.57-3.24 |                   |

## Standing on one leg for 10 seconds transformed (Item1)

### File: 20171011-elom-2016-v1.1

#### Overview

|                  |                   |
|------------------|-------------------|
| Type: Continuous | Valid cases: 1331 |
| Format: numeric  | Invalid: 0        |
| Width: 4         | Minimum: 0        |
| Decimals: 0      | Maximum: 2.9      |
| Range: 0-2.91    |                   |

## Catch bean bag both hands transformed (Item2)

### File: 20171011-elom-2016-v1.1

#### Overview

|                  |                   |
|------------------|-------------------|
| Type: Continuous | Valid cases: 1331 |
| Format: numeric  | Invalid: 0        |
| Width: 4         | Minimum: 0        |
| Decimals: 0      | Maximum: 3.6      |
| Range: 0-3.59    |                   |

## Catch bean bag preferred hand transformed (Item3)

### File: 20171011-elom-2016-v1.1

#### Overview

|                  |                   |
|------------------|-------------------|
| Type: Continuous | Valid cases: 1331 |
| Format: numeric  | Invalid: 0        |
| Width: 3         | Minimum: 0        |
| Decimals: 0      | Maximum: 6.3      |
| Range: 0-6.3     |                   |

## Catch bean bag non-preferred hand transformed (Item4)

### File: 20171011-elom-2016-v1.1

#### Overview

|                  |                   |
|------------------|-------------------|
| Type: Continuous | Valid cases: 1331 |
| Format: numeric  | Invalid: 0        |
| Width: 3         | Minimum: 0        |
| Decimals: 0      | Maximum: 7.2      |
| Range: 0-7.2     |                   |



## Gross motor development (gmd)

File: 20171011-elom-2016-v1.1

### Overview

|                  |                   |
|------------------|-------------------|
| Type: Continuous | Valid cases: 1331 |
| Format: numeric  | Invalid: 0        |
| Width: 2         | Minimum: 0        |
| Decimals: 0      | Maximum: 20       |
| Range: 0-20      |                   |

## Cross & square transformed (Item5)

File: 20171011-elom-2016-v1.1

### Overview

|                  |                   |
|------------------|-------------------|
| Type: Continuous | Valid cases: 1331 |
| Format: numeric  | Invalid: 0        |
| Width: 3         | Minimum: 0        |
| Decimals: 0      | Maximum: 4.2      |
| Range: 0-4.2     |                   |

## Triangle transformed (Item6)

File: 20171011-elom-2016-v1.1

### Overview

|                  |                   |
|------------------|-------------------|
| Type: Continuous | Valid cases: 1331 |
| Format: numeric  | Invalid: 0        |
| Width: 4         | Minimum: 0        |
| Decimals: 0      | Maximum: 4.6      |
| Range: 0-4.58    |                   |

## Draw person transformed (Item7)

File: 20171011-elom-2016-v1.1

### Overview

|                  |                   |
|------------------|-------------------|
| Type: Continuous | Valid cases: 1331 |
| Format: numeric  | Invalid: 0        |
| Width: 4         | Minimum: 0        |
| Decimals: 0      | Maximum: 4.7      |
| Range: 0-4.74    |                   |

## String beads transformed (Item8)

File: 20171011-elom-2016-v1.1

### Overview

|                  |                   |
|------------------|-------------------|
| Type: Continuous | Valid cases: 1331 |
| Format: numeric  | Invalid: 0        |
| Width: 4         | Minimum: 0        |
| Decimals: 0      | Maximum: 6.5      |
| Range: 0-6.48    |                   |

## Fine motor control & visual motor integration (fmcvmi)

File: 20171011-elom-2016-v1.1

### Overview

|                  |                   |
|------------------|-------------------|
| Type: Continuous | Valid cases: 1331 |
| Format: numeric  | Invalid: 0        |
| Width: 4         | Minimum: 2        |
| Decimals: 0      | Maximum: 20       |
| Range: 2.03-20   |                   |

## Counting transformed (Item9)

File: 20171011-elom-2016-v1.1

### Overview

|                  |                   |
|------------------|-------------------|
| Type: Continuous | Valid cases: 1331 |
| Format: numeric  | Invalid: 0        |
| Width: 4         | Minimum: 0        |
| Decimals: 0      | Maximum: 6        |
| Range: 0-6.03    |                   |

## Add & sub transformed (Item10)

File: 20171011-elom-2016-v1.1

### Overview

|                  |                   |
|------------------|-------------------|
| Type: Continuous | Valid cases: 1331 |
| Format: numeric  | Invalid: 0        |
| Width: 4         | Minimum: 0        |
| Decimals: 0      | Maximum: 4.5      |
| Range: 0-4.51    |                   |

## Sort and class transformed (Item11)

File: 20171011-elom-2016-v1.1

### Overview

|                  |                   |
|------------------|-------------------|
| Type: Continuous | Valid cases: 1331 |
| Format: numeric  | Invalid: 0        |
| Width: 4         | Minimum: 0        |
| Decimals: 0      | Maximum: 4        |
| Range: 0-4.01    |                   |

## Spatial vocabulary transformed (Item12)

File: 20171011-elom-2016-v1.1

### Overview

|                  |                   |
|------------------|-------------------|
| Type: Continuous | Valid cases: 1331 |
| Format: numeric  | Invalid: 0        |
| Width: 3         | Minimum: 0        |
| Decimals: 0      | Maximum: 2.8      |
| Range: 0-2.8     |                   |

## Measurement vocabulary transformed (Item13)

File: 20171011-elom-2016-v1.1

### Overview

|                  |                   |
|------------------|-------------------|
| Type: Continuous | Valid cases: 1331 |
| Format: numeric  | Invalid: 0        |
| Width: 4         | Minimum: 0        |
| Decimals: 0      | Maximum: 2.7      |
| Range: 0-2.65    |                   |

## Emergent numeracy & mathematics (enm)

File: 20171011-elom-2016-v1.1

### Overview

|                  |                   |
|------------------|-------------------|
| Type: Continuous | Valid cases: 1331 |
| Format: numeric  | Invalid: 0        |
| Width: 2         | Minimum: 0        |
| Decimals: 0      | Maximum: 20       |
| Range: 0-20      |                   |

## DCCS transformed (Item14)

File: 20171011-elom-2016-v1.1

### Overview

|                  |                   |
|------------------|-------------------|
| Type: Continuous | Valid cases: 1331 |
| Format: numeric  | Invalid: 0        |
| Width: 4         | Minimum: 0        |
| Decimals: 0      | Maximum: 3.1      |
| Range: 0-3.11    |                   |

## Pencil tapping transformed (Item15)

File: 20171011-elom-2016-v1.1

### Overview

|                  |                   |
|------------------|-------------------|
| Type: Continuous | Valid cases: 1331 |
| Format: numeric  | Invalid: 0        |
| Width: 4         | Minimum: 0        |
| Decimals: 0      | Maximum: 6.7      |
| Range: 0-6.72    |                   |

## Digit span transformed (Item16)

File: 20171011-elom-2016-v1.1

### Overview

|                  |                   |
|------------------|-------------------|
| Type: Continuous | Valid cases: 1331 |
| Format: numeric  | Invalid: 0        |
| Width: 4         | Minimum: 0        |
| Decimals: 0      | Maximum: 4        |
| Range: 0-4.03    |                   |

## Picture puzzle transformed (Item17)

File: 20171011-elom-2016-v1.1

### Overview

|                  |                   |
|------------------|-------------------|
| Type: Continuous | Valid cases: 1331 |
| Format: numeric  | Invalid: 0        |
| Width: 4         | Minimum: 0        |
| Decimals: 0      | Maximum: 6.1      |
| Range: 0-6.14    |                   |

## Cognition & executive functioning (cef)

File: 20171011-elom-2016-v1.1

### Overview

|                  |                   |
|------------------|-------------------|
| Type: Continuous | Valid cases: 1331 |
| Format: numeric  | Invalid: 0        |
| Width: 2         | Minimum: 0        |
| Decimals: 0      | Maximum: 20       |
| Range: 0-20      |                   |

## Empathy transformed (Item18)

File: 20171011-elom-2016-v1.1

### Overview

|                  |                   |
|------------------|-------------------|
| Type: Continuous | Valid cases: 1331 |
| Format: numeric  | Invalid: 0        |
| Width: 4         | Minimum: 0        |
| Decimals: 0      | Maximum: 3.2      |
| Range: 0-3.21    |                   |

## Self-awareness transformed (Item19)

File: 20171011-elom-2016-v1.1

### Overview

|                  |                   |
|------------------|-------------------|
| Type: Continuous | Valid cases: 1331 |
| Format: numeric  | Invalid: 0        |
| Width: 4         | Minimum: 0        |
| Decimals: 0      | Maximum: 3.4      |
| Range: 0-3.42    |                   |

## Expressive language transformed (Item20)

File: 20171011-elom-2016-v1.1

### Overview

|                  |                   |
|------------------|-------------------|
| Type: Continuous | Valid cases: 1331 |
| Format: numeric  | Invalid: 0        |
| Width: 4         | Minimum: 0        |
| Decimals: 0      | Maximum: 3.4      |
| Range: 0-3.41    |                   |

## Expressive vocabulary transformed (Item21)

File: 20171011-elom-2016-v1.1

**Overview**

|                  |                   |
|------------------|-------------------|
| Type: Continuous | Valid cases: 1331 |
| Format: numeric  | Invalid: 0        |
| Width: 4         | Minimum: 0        |
| Decimals: 0      | Maximum: 3.2      |
| Range: 0-3.17    |                   |

## Oral comprehension transformed (Item22)

File: 20171011-elom-2016-v1.1

**Overview**

|                  |                   |
|------------------|-------------------|
| Type: Continuous | Valid cases: 1331 |
| Format: numeric  | Invalid: 0        |
| Width: 4         | Minimum: 0        |
| Decimals: 0      | Maximum: 3.1      |
| Range: 0-3.09    |                   |

## Sound discrimination transformed (Item23)

File: 20171011-elom-2016-v1.1

**Overview**

|                  |                   |
|------------------|-------------------|
| Type: Continuous | Valid cases: 1331 |
| Format: numeric  | Invalid: 0        |
| Width: 3         | Minimum: 0        |
| Decimals: 0      | Maximum: 3.7      |
| Range: 0-3.7     |                   |

## Emergent literacy &amp; language (ell)

File: 20171011-elom-2016-v1.1

**Overview**

|                  |                   |
|------------------|-------------------|
| Type: Continuous | Valid cases: 1331 |
| Format: numeric  | Invalid: 0        |
| Width: 2         | Minimum: 0        |
| Decimals: 0      | Maximum: 20       |
| Range: 0-20      |                   |

## ELOM total score (Total)

File: 20171011-elom-2016-v1.1

**Overview**

|                  |                   |
|------------------|-------------------|
| Type: Continuous | Valid cases: 1331 |
| Format: numeric  | Invalid: 0        |
| Width: 5         | Minimum: 9.9      |
| Decimals: 0      | Maximum: 94.3     |
| Range: 9.9-94.29 |                   |

## Paid attention (ChildObs1)

File: 20171011-elom-2016-v1.1

### Overview

Type: Discrete  
Format: numeric  
Width: 1  
Decimals: 0  
Range: 0-3

Valid cases: 1331  
Invalid: 0

## Stayed concentrated (ChildObs2)

File: 20171011-elom-2016-v1.1

### Overview

Type: Discrete  
Format: numeric  
Width: 1  
Decimals: 0  
Range: 0-3

Valid cases: 1331  
Invalid: 0

## Careful and diligent (ChildObs3)

File: 20171011-elom-2016-v1.1

### Overview

Type: Discrete  
Format: numeric  
Width: 1  
Decimals: 0  
Range: 0-3

Valid cases: 1331  
Invalid: 0

## Interested and curious (ChildObs4)

File: 20171011-elom-2016-v1.1

### Overview

Type: Discrete  
Format: numeric  
Width: 1  
Decimals: 0  
Range: 0-3

Valid cases: 1331  
Invalid: 0

## Child observation total (ChildObsTotal)

File: 20171011-elom-2016-v1.1

### Overview

Type: Discrete  
Format: numeric  
Width: 2  
Decimals: 0  
Range: 0-12

Valid cases: 1331  
Invalid: 0

## Related Materials

### Technical documents

#### Early Learning Outcomes Measure (ELOM): Technical Manual

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|                |  |
|----------------|--|
| Title          | Early Learning Outcomes Measure (ELOM): Technical Manual                               |
| Author(s)      | Andrew Dawes, Linda Biersteker, Elizabeth Girdwood, Matthew Snelling and Colin Tredoux |
| Date           | 2016-01-01   |
| Country        | South Africa   |
| Language       | English  |
| Contributor(s) | This is the technical manual for the ELOM tool.  |
| Filename       | 2016-elom-technical-manual.pdf   |

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### Other materials

#### UCT ethics approval

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|                |   |
|----------------|---|
| Title          | UCT ethics approval   |
| Date           | 2015-11-23  |
| Country        | South Africa  |
| Contributor(s) | This is a letter from the Ethics Review Committee of the Faculty of Humanities at the University of Cape Town, confirming ethics approval for data collection by the project. |
| Filename       | 20151123-elom-ethics-approval.pdf   |

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