A national study of over-enrollment and repetition in Primary 1 grade in Uganda: What’s the role of pre-primary?

Tara Weatherholt, Rehema Nabacwa, Rachel Jordan, & Luis Crouch
Funded by DFID East Africa Research Fund (EARF)
Purpose of the Study

- Examine efficiency in primary one grade in Uganda through the collection of enrolment and repetition data, and pre-primary participation, in a nationally representative sample of pupils.
Overview

1. What is education efficiency?
2. Objectives of the National Study
3. Findings from the National Study
4. Recommendations
What is Education Efficiency?

- All learners move through years of schooling at an appropriate rate and exit the system with the skills needed to participate meaningfully in the job market or go on to higher education (Lockheed, 1988)

  - Internal efficiency → access to and flow through the education system
    - Gross and net enrolment
    - Promotion and repetition
    - Completion and dropout
Indicators of Education Inefficiency

1. Low primary school completion rates
2. Grade-specific enrolment rates well over 100%
3. Repetition rates that are much higher than officially reported
4. Limited or no access to pre-primary education
Uganda context

- Gross enrollment rate has consistently been around 120% for Grade 1 while completion rates have remained at 60%

- 2016 pilot study found repetition rates 30% to 40% higher than officially reported in Mbale and Kumi. (Brunette et al., 2016)

- Official reports suggest that the pre-primary enrolment rate in Uganda is low, at 13% (UNESCO Institute for Statistics, 2016)

- Pre-primary education is not provided by the government in Uganda.
National School Study 2017
Research Questions

1. Age of pupils in primary 1
2. Repetition rates in primary 1
3. Relationship between age and repetition
4. Pre-primary exposure and relationship to repetition
Sample

Sampling Framework

- Nationally representative covering all regions
- Stratified simple random technique with proportional to size sampling

Participants

- 1440 pupils randomly selected from 120 schools across 24 districts
- 1439 teacher interviews
- 1318 parent/guardian interviews

Sample Description

- Mean pupil age 7.6 years
- 50% girls; 50% boys
- 9% reported to have disability
- SES evenly distributed across low, mid-low, mid-high, and high wealth indices
Methodology

Pupil-level Data

• Parent/guardian interviews
• Teacher interviews

School/Classroom-level Data

• Classroom registers
• Head teacher registers
• EMIS forms
Research Questions

1. Age of pupils in primary 1
2. Repetition rates in primary 1
3. Relationship between age and repetition
4. Pre-primary exposure and relationship to repetition
Findings: Enrolment and Age

What is the enrolment pattern and age distribution of pupils enrolled in primary 1, according to school records, teachers, and parents/guardians?

- **Underage** = Under 6 years
- **Target age** = 6-7 years
- **Overage** = 8 years and up

(Education Act of 2008)
Findings: Enrolment and Age

Discrepancy between school records and parent/guardian report

School records show that most pupils are at the appropriate age for primary 1

Parent report shows almost equal percentages of pupils who are at target age and overage.

Low levels of children who are underage for grade.
Research Questions

1. Age of pupils in primary 1
2. Repetition rates in primary 1
3. Relationship between age and repetition
4. Pre-primary exposure and relationship to repetition
What is the repetition rate in primary 1, according to school records, teachers, and parents/caregivers?

<table>
<thead>
<tr>
<th>Source</th>
<th>Percentage of Repeaters</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parents*</td>
<td>51.5%</td>
</tr>
<tr>
<td>Teachers*</td>
<td>41.2%</td>
</tr>
<tr>
<td>Classroom Register</td>
<td>15.2%</td>
</tr>
<tr>
<td>Head Teacher Register</td>
<td>9.9%</td>
</tr>
<tr>
<td>EMIS Records</td>
<td>10.5%</td>
</tr>
</tbody>
</table>

* Responses regarding randomly selected pupils, not the whole class population
### Findings: Reasons for Repetition

#### Parent/guardian- and teacher-report of reasons for child repeating

<table>
<thead>
<tr>
<th>Parent/guardian report</th>
<th>Percentage</th>
<th>n</th>
</tr>
</thead>
<tbody>
<tr>
<td>Child did not learn enough</td>
<td>18.8%</td>
<td>218</td>
</tr>
<tr>
<td>Child failed class</td>
<td>11.1%</td>
<td>133</td>
</tr>
<tr>
<td>Child is too young</td>
<td>4.4%</td>
<td>57</td>
</tr>
<tr>
<td>Child missed exams due to illness</td>
<td>3.0%</td>
<td>36</td>
</tr>
<tr>
<td>Child missed too much school</td>
<td>2.5%</td>
<td>32</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Teacher report</th>
<th>Percentage</th>
<th>n</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teacher or school didn’t think child learned enough</td>
<td>22.8%</td>
<td>284</td>
</tr>
<tr>
<td>Child was sick or absent too often</td>
<td>6.9%</td>
<td>118</td>
</tr>
<tr>
<td>Child started too young</td>
<td>6.2%</td>
<td>92</td>
</tr>
<tr>
<td>Parent/guardian did not think child learned enough</td>
<td>4.4%</td>
<td>61</td>
</tr>
</tbody>
</table>

*Does not include pupils in hidden pre-primary.

*a The reasons listed do not constitute all reasons given by parents/guardians and teachers; therefore, the percentages do not sum to 100%.
### Table 6. Parent/guardian-report of expectation of next year

<table>
<thead>
<tr>
<th>Reason</th>
<th>Percentage</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary 1 (child is expected to repeat primary 1)</td>
<td>19.4%</td>
<td>216</td>
</tr>
<tr>
<td>Primary 2 (child will progress to next grade)</td>
<td>77.1%</td>
<td>1059</td>
</tr>
</tbody>
</table>

### Table 7. Teacher-report of expectation of next year

<table>
<thead>
<tr>
<th>Reason</th>
<th>Percentage</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary 1 (pupil is expected to repeat primary 1)</td>
<td>40.9%</td>
<td>568</td>
</tr>
<tr>
<td>Another primary 1 stream/classroom</td>
<td>14.7%</td>
<td>181</td>
</tr>
<tr>
<td>Same primary 1 stream/classroom</td>
<td>26.2%</td>
<td>387</td>
</tr>
<tr>
<td>Primary 2 (pupil will progress to primary 2)</td>
<td>57.1%</td>
<td>844</td>
</tr>
</tbody>
</table>
Research Questions

1. Age of pupils in primary 1
2. Repetition rates in primary 1
3. Relationship between age and repetition
4. Pre-primary exposure and relationship to repetition
Findings: Age Group and Repetition

Percentage of Repeaters in Each Age Group

Parent-Report
- 54.5% Overall
  - Underage: 5.4%
  - Target Age: 40.1%
  - Overage: 8.4%

Teacher Report
- 50.6% Overall
  - Underage: 8.4%
  - Target Age: 41%
  - Overage: 5.4%
26% of parents/guardians enrolled their child in primary 1 before the age of 6 years.

56% of those parents/guardians reported that they knew the child would repeat primary 1.
Research Questions

1. Age of pupils in primary 1
2. Repetition rates in primary 1
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### Pre-primary participation rates

<table>
<thead>
<tr>
<th>Attendance status</th>
<th>Percentage</th>
<th>n</th>
</tr>
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<tbody>
<tr>
<td>Attended pre-primary</td>
<td>33.9%</td>
<td>464</td>
</tr>
<tr>
<td>Registered</td>
<td>38.6%</td>
<td>168</td>
</tr>
<tr>
<td>Unregistered</td>
<td>33.2%</td>
<td>157</td>
</tr>
<tr>
<td>Don’t know</td>
<td>27.4%</td>
<td>136</td>
</tr>
<tr>
<td>Did not attend pre-primary</td>
<td>59.4%</td>
<td>781</td>
</tr>
<tr>
<td>Attended hidden pre-primary</td>
<td>6.4%</td>
<td>70</td>
</tr>
<tr>
<td>Don’t know</td>
<td>0.2%</td>
<td>3</td>
</tr>
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## Determinants of repetition

### Odds ratio for factors of repetition and pre-primary attendance

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<th>Odds ratio for repetition</th>
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<td>3.8***</td>
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<tr>
<td>Being a girl</td>
<td>0.74</td>
</tr>
<tr>
<td>Under-age at enrolment compared to target age</td>
<td>1.65**</td>
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<td>Over-age at enrolment compared to target age</td>
<td>0.79</td>
</tr>
<tr>
<td>Lowest quartile SES compared to highest quartile SES</td>
<td>1.2</td>
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<tr>
<td>Mid-Low SES</td>
<td>1.01</td>
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<td>Mid-High SES</td>
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Pupils who did not go to pre-primary school were 3.8 times more likely to repeat than those who did.
### Determinants of repetition

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Pupils who were underage at time of enrolment were 1.65 times more likely to repeat than pupils who were at target age.
Determinants of repetition

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Pupils reported having a disability were 2.11 times more likely to repeat than pupils who were not reported as having a disability.
Policy Recommendations
Prioritize support for vulnerable children.

Revisit current policy around automatic promotion.

Invest to expand high-quality pre-primary as well as to improve the quality of primary education.

Improve school management and leadership of the early grades.
Special Thanks

-GOU
-Participating schools
-DRASPAC
-DFID

This presentation references the following report & peer-reviewed article:


UPE was adopted by the Government of Uganda in 1997
- Enrolment = 2.5 million (1996)
- Enrolment - 8.2 million (2015)

(UNESCO, 2015)
Grade-Specific Enrolment Rates Higher than 100%

Enrolment with Population Overlay

Source: Graphed by RTI from enrollment data sourced from the EMIS 2013 (Ministry of Education 2014) and, for population, World Bank’s EdStats system data (http://datatopics.worldbank.org/education/wDataQuery/QFull.aspx.)
High Repetition Rates

- In Uganda, 2016 pilot study found repetition rates 30% to 40% higher than officially reported in Mbale and Kumi. (Brunette et al., 2016)


- A policy of automatic promotion does not address poor learning outcomes. (Glick & Sahn, 2010)
What are parents/guardians’ attitudes and expectations about pre-primary education and repetition in primary 1?

- Parents/guardians’ expectations of learning in pre-primary school are primarily academic in nature although other types of learning are also expected.
- 75% of parents/guardians reported that the reason for sending their child to pre-primary school is to learn, followed by the child is ready and the child was the right age.
- 60% of parents/guardians did not send their child to pre-primary school due to financial reasons.
- Most parents/guardians reported that a child should start pre-primary school at 3 or 4 years of age.
- 38% of parents/guardians reported that a child should start primary 1 at 6 years of age, and 23% reported at 7 years.
Mean Repetition Rate by District

- Arua: 71.9%
- Kabale: 63.2%
- Pallisa: 61.1%
- Gomba: 60.8%
- Ibanda: 58.7%
- Kasese: 58.3%
- Amuria: 56.9%
- Kibaale: 54.2%
- Mukono: 52.9%
- Luwero: 49.1%
- Koboko: 48%
- Isingiro: 47.4%
- Mubende: 47.2%
- Bulambuli: 46.3%
- Kayunga: 45.1%
- Jinja: 42.4%
- Ngora: 42.2%
- Kitgum: 42.2%
- Kotido: 41.4%
- Amolatar: 32.8%
- Masindi: 32.2%
- Dokolo: 26.3%
- Mbale: 25.4%
- Kamuli: 23.6%

Mean = 51.5%