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#### **Uganda Early Years Enrolment and Repetition Study**

Funded by DFID East Africa Research Fund (EARF)

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### Purpose of the Study

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

 Explore, at a macro-level, education sector spending in Uganda



#### Overview

What is education efficiency?



Objectives of the National Study



Findings from the National Study

### 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 <u>enrolment</u>
  - Promotion and repetition
  - Completion and dropout

### Indicators of Education Inefficiency



Low primary school completion rates

Grade-specific enrolment rates well over 100%

Repetition rates that are much higher than officially reported

Limited or no access to pre-primary education

#### Low Primary School Completion Rates in Uganda

UPE was adopted by the Government of Uganda in 1997

- Enrolment = 2.5 million (1996)
- Enrolment 8.2 million (2015)

#### Gross Enrollment Ratio and Completion Rate



### 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 (<u>http://datatopics.worldbank.org/education/wDataQuery/QFull.aspx</u>.)

### **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)
- Under-reported repetition is not new. (Amadio, 1996, Cuadra & Ewer, 1987; Gargiulo & Crouch, 1994; Gimeno, 1984; Klein & Roberio, 1991; Schiefelbein & Wolff, 1993)

 A policy of automatic promotion does not address poor learning outcomes. (Glick & Sahn, 2010)

#### Limited Access to Pre-primary



 Pre-primary education is not provided by the government in Uganda.

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

#### **RTI Evidence-Based Conceptual Framework**



#### National Study: 2017

### **Objectives of the National Study 2017**

#### School Study: Examination of Internal Efficiency

- Over-enrolment Who are the pupils in primary 1?
- Repetition Is there under-reported repetition?
- Pre-primary What is the role of pre-primary education?

#### **Education Sector: Cost of Internal Inefficiency**

- Macro-level regional comparisons
- Policy reviews and interviews
- Cost-projection model



#### National School Study 2017

#### **Research Questions**



### 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

#### **Pupil-level Data**

- Parent/guardian interviews
- Teacher interviews

#### School/Classroom-level Data

- Classroom registers
- Head teacher registers
- EMIS forms



#### 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?



# 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**



#### Findings: Repetition Rate

## What is the repetition rate in primary 1, according to school records, teachers, and parents/caregivers?



\* Responses regarding randomly selected pupils, not the whole class population

Parent/guardian- and	teacher-report of reaso	ns for child repeating

Parent/guardian report	Percentage <sup>a</sup>	n
Child did not learn enough	18.8%	218
Child failed class	11.1%	133
Child is too young	4.4%	57
Child missed exams due to illness	3.0%	36
Child missed too much school	2.5%	32
Teacher report	Percentage <sup>a</sup>	n
Teacher or school didn't think child learned enough	22.8%	284
Child was sick or absent too often	6.9%	118
Child started too young	6.2%	92
Parent/guardian did not think child learned enough	4.4%	61

\*Does not include pupils in hidden pre-primary.

<sup>a</sup>The reasons listed do not constitute all reasons given by parents/guardians and teachers; therefore, the percentages do not sum to 100%.

### Mean Repetition Rate by District



### Findings: Expectations of Progression to Primary 2

Table 6. Parent/guardian-report of expectation of next year			
Reason	Percentage	Ν	
Primary 1 (child is expected to repeat primary 1)	19.4%	216	
Primary 2 (child will progress to next grade)	77.1%	1059	

Table 7. Teacher-report of expectation of next year			
Reason	Percentage	Ν	
Primary 1 (pupil is expected to repeat primary 1)	40.9%	568	
Another primary 1 stream/classroom	14.7%	181	
Same primary 1 stream/classroom	26.2%	387	
Primary 2 (pupil will progress to primary 2)	57.1%	844	

#### **Research Questions**



#### Findings: Age Group and Repetition



#### Percentage of Repeaters in Each Age Group

#### Findings: Underage at Time of Enrolment

26% of parents/guardians enrolled their child in primary 1 before the age of 6 years.

41% of those parents/guardians sent their child to school early so that their child could learn.

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

61% of those parents/guardians expected that their child would learn less in the first year.

#### **Research Questions**



#### Findings: Pre-primary Exposure and Repetition

What is the enrolment rate in pre-primary education and its relationship with primary 1 repetition?

Percentage of pupils who attended preprimary = 34%

No significant differences by gender or age

Pre-primary exposure was significant by SES

#### Findings: Determinants of Repetition and Pre-primary

Pupils who did not go to pre-primary school were 3.8 times more likely to repeat than those who did.

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

Pupils reported having a disability were 2.11 times more likely to repeat than pupils who were not reported as having a disability.

Pupils from low SES households were less likely to have attended pre-primary than pupils from high SES households.

#### **Research Questions**



#### Findings: Parents' Perceptions of Education

#### What are parents/guardians' attitudes and expectations about preprimary 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.



#### **Education Sector Review**

### **Regional Comparisons of Inefficiency**

- Common characteristics
  - Low official repetition, but higher hidden repetition in primary 1
  - Higher than 100% official gross intake ratio
  - Low primary school completion rates
  - Low gross enrolment ratio to pre-primary

Efficiency Parameters				
	Uganda	Madagascar	Ethiopia	
Estimated official repetition in primary 1	4%	23%	29%	
Alternative estimation of primary 1 repetition*	34%	48%	40.2%	
Official gross intake ratio*^	138%	184%	124%	
Primary school completion rate	56%	70%	55%	
Gross enrolment ratio pre-primary	11%	15%	19%	

\*EMIS data on enrolment by age and grade, sourced directly from countries;

\*/combination of courses;

no symbol is World Bank data

### **Regional Comparisons of Efficiency**

#### **Regional Differences**

- Higher primary school completion rates
- Higher pre-primary gross enrolment rates
- Lower ratio of primary 1 pupils to the appropriate population
- Lower estimates of excess cost of primary school
- Lower expenses on primary school as a percentage of total education expenses

#### Contrast of education efficiency estimates in regional countries

Country	Primary School Completion Rate	Pre-primary Gross Enrolment Rate	Gross Enrolment Ratio for Primary 1	Excess Cost of Primary School	Expenditure on Primary as % of Ed Expenditure
Uganda	56%	11.1%	1.6	114%	58%
Tanzania	76%	32.0%	1.0	29%	49%
Kenya	104%	75.0%	1.1	9%	36%

Average of last 5 years of World Bank education data.

#### Figure of Regional Comparisons



### **Demographically-driven Cost Projection Model**

- The cost of the inefficiency in education to the GOU in 2015 is estimated to be \$177.1M, which is 43% of the total estimated GOU expenditure on primary education that year. Over 12 years, the cost adds up to almost \$3B.
- The cost of investments to pre-primary and primary education adds up to approximately \$941M
  - GOU subsidies to private pre-primary providers for the expansion of quality pre-primary,
  - Improved book provision,
  - In-service teacher education,
  - Teacher support or coaching,
  - Improved school management and governance, and
  - Systems improvements
- These investments have the potential to pay for themselves in 12 years through the reduction of repetition and increase in completion rates.

### Costing Model



#### Themes from policy documents and interviews

1 Options for provision of pre-primary education continue to be under discussion.

There is a tendency to underestimate the possible financial benefits of improved foundation years policy affecting learning and performance.

Policies could benefit from quantitative goals for state subsidization, or the precise mix and type of public-private partnerships that are desired.



#### Policy Recommendations

#### Prioritize support for vulnerable children.

- Pupils with the lowest SES had a higher likelihood of not attending preprimary and that pupils with disabilities had a higher likelihood of repetition.
- Parents/guardians reported that financial reasons and access were drivers of lack of enrolment, and other studies have found that poorer areas have fewer pre-primary services.

#### Revisit current policy around automatic promotion.

- School leaders, as well as teachers and parents/guardians, were not adhering to the policy of automatic promotion.
- It is likely that schools are reporting inaccurate enrolment and repetition data to MoES in order to be seen as compliant with the policy.
- Investments in quality pre-primary and early primary would likely lead to the working of automatic promotion as it was intended.

## Consider remedial support to struggling learners as a short-term measure.

- Investments made in quality pre-primary and early primary education will take time to achieve the desired efficiency outcomes, as shown in our cost projection model.
- Meanwhile, remedial services could be used to increase learning achievement of pupils who are struggling.
- Remediation services would naturally be needed less and less as the improvements in pre-primary and primary manifest over time.

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

- Stated another way, investing in pre-primary education may not make a difference if attention is not paid to the quality of the education that children receive in the early primary years.
- Investments might encompass the following ways:
  - subsidies to private pre-primary providers,
  - more and better books for primary schools,
  - in-service teacher education,
  - teacher support or coaching,
  - improved school management and governance, and
  - systems improvements.

#### Set minimum standards of quality and strengthen quality assurance.

- Defining a clear vision and a strong mandate for pre-primary education would create an incentive for quality and intensify the appetite for reform
- It is important to creating an environment which supports various approaches to high-quality pre-primary education, provided by multiple partners, as noted by Cambridge Education (2017).
- The GOU could define minimum standards of quality and enhance regulation.

#### Improve school management and leadership of the early grades.

- Guide head teachers to prioritize support to teachers of early primary grades.
- School leadership should be concerned with classrooms with high pupil to teacher ratios and the use of appropriate school assignment processes for teachers.
- Head teachers and school staff should recognize the importance of the foundational years in children's later academic achievement.

### **Special Thanks**

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