



REIMAGINING SOCIAL CHANGE

BOSTON  
GENEVA  
MUMBAI  
SAN FRANCISCO  
SEATTLE  
WASHINGTON, DC

# Program to Improve Private Early Education (PIPE)

MAJOR FINDINGS FROM BASELINE ASSESSMENT OF CHILD  
DEVELOPMENT OUTCOMES (AY 2016/17)



#PreschoolMatters

# Agenda

---

## **1 Introduction to FSG Inclusive Markets**

## **2 Introduction to PIPE**

---

## **3 Assessment Findings**

---

# FSG is a mission driven non-profit (501 c3) focused on **Scale Social Impact**

---

FSG is well known for having pioneered **innovative approaches**



## Catalytic Philanthropy

*Philanthropy that considers the big picture*



## Inclusive Markets

*Creating markets that work for everyone*

---

We use these to **help global leaders create impact** and **promote their effective use**



**TOYOTA**



**COLLECTIVE  
IMPACT FORUM**



**Shared Value  
Initiative**

---

We leverage these approaches to **run initiatives that create scale sustainable impact**



**Low-income housing**

# About FSG Inclusive Markets

---

**We believe** that markets can and should benefit the poor and should be part of the portfolio of solutions for social change.

**Our strength** is in understanding how to make inclusive business models work, and how to get them to scale.

**We create impact in various program areas by:**

- **driving new thinking** for the field, and
- **making change happen** on the ground.

We are a “**mission driven**” and **non-profit** unit whose work is entirely public domain.

# We work on multi-year programs to develop new models and scale new industries...

## Ownership Housing



- **80,000+ affordable housing units** sold
- Established markets in **21+ cities**
- 10 housing finance companies serving low-income households with a **>INR 1000 crore loan portfolio**

## Safe Drinking Water



- **20,000 households** being served through decentralized community-based water plants
- Supported **30+ pilots** across India
- **First government tender** for this model from Delhi Jal (Water) Board

## Early Childhood Education



- **6 million low-income children** need early childhood education in urban India
- **Potential market opportunity of ~USD 950 million**

# Agenda

---

1 Introduction to FSG Inclusive Markets

**2 Introduction to PIPE**

3 Assessment Findings

---



# Low-income families aspire and are willing to pay for “quality education” for their children



Ganesh is an office peon in the Mumbai. He earns INR 15,000 (USD 225) every month and has two children, Vijay (5 years old) and Vidya (1 year old)

*“I want my child to learn English and get an office job (that I couldn’t get)”*

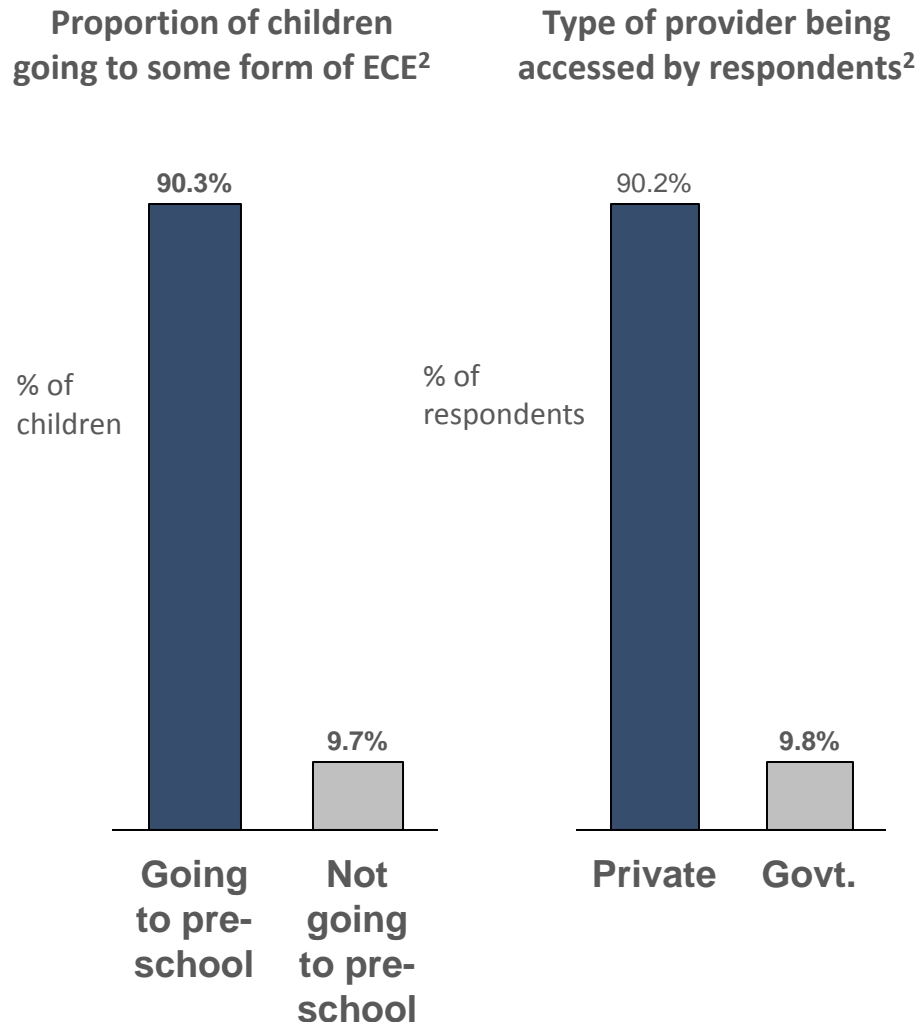
*“We pay INR 1000 (USD 15) every month to send each of our children to private school and tuitions”*

*“My wife ensures that our children are regular with school and homework”*

**27.5 million<sup>1</sup> low-income<sup>2</sup> households in urban India earning between INR 8,000- INR 25,000 (USD 120 to USD 370) a month, spend a disproportionate amount of their income on private sector education.**

1. 27.5 million households, constituting the middle 70% of urban Indian cities with 1 million + population, with 4.6 million children between the ages of 3-6 in the target segment
2. Families with a monthly household income of INR 8,000 -25,000 (USD 120-400). In World Bank parlance, this is the segment that earns USD 2 – 5 per day, and not the poor that earn below USD 2 per day;

# Unfortunately most children in APS<sup>1</sup> are not school-ready due to developmentally inappropriate and rote learning pedagogy



## For children entering grade 1<sup>3</sup> ..

- ~35% cannot identify numbers till 20
- ~6 out of 10 kids cannot count 14 sticks
- ~30% cannot add single-digit numbers
- ~49% cannot read simple 3 letter words
- Only 5% can frame simple 3-word sentences in English
- ~80% cannot reverse a sequence of three numbers (an indicator of poor working memory)

1. Affordable private school

2. Data has been weighted by age to account for different number of children from each age group in the sample .FSG primary customer research of 4,179 listing interviews

3. FSG research through 480 independent assessments using modified IDELA tool



PIPE aims to give every low-income child a strong foundation they deserve and an equal opportunity to succeed in life

**200,000+**

children annually, sustainably  
with improved learning outcomes



*A system on its way to transformation*

**5-7 Companies**  
providing high  
quality products



Ecosystem barriers addressed  
or being addressed



**3200** Affordable Private  
Schools w/ developmentally  
appropriate pedagogy

**1.2 million**  
parents  
demanding good  
preschooling



**500,000** children annually

# Agenda

---

1 Introduction to FSG Inclusive Markets

---

2 Introduction to PIPE

**3 Assessment Findings**

# PIPE assessed children entering Grade 1 and Upper Kindergarten (UKG) with two major objectives

---

- 1 Assess **baseline learning outcomes** for children **entering UKG and Grade 1** in PIPE-partner APSs
- 2 Understand **level of learning outcomes** for children entering **UKG and Grade 1** in **Government-run** and **higher-priced private schools**

# The research is based on assessment of 480 children entering Upper Kindergarten (UKG) and Grade 1 in 4 Indian cities

School type	UKG					Grade 1					Grand Total
	Bangalore	Delhi	Hyderabad	Mumbai	Total	Bangalore	Delhi	Hyderabad	Mumbai	Total	
<b>APS</b>	59	24	55	57	<b>195</b>	63	22	56	66	<b>207</b>	402
<b>Government-run schools</b>	-	-	13	-	<b>13</b>	11	4	19	7	<b>41</b>	54
<b>Higher-priced private schools</b>	12	-	-	6	<b>18</b>	1	-	-	5	<b>6</b>	24
<b>Grand Total</b>	71	24	68	63	<b>226</b>	75	26	75	78	<b>254</b>	<b>480</b>

School type	UKG			Grade 1			Grand Total
	Male	Female	Total	Male	Female	Total	
<b>APS</b>	91	104	<b>195</b>	102	105	<b>207</b>	402
<b>Government-run schools</b>	-	13	<b>13</b>	17	24	<b>41</b>	54
<b>Higher-priced private schools</b>	14	4	<b>18</b>	4	2	<b>6</b>	24
<b>Grand Total</b>	105	121	<b>226</b>	123	131	<b>254</b>	<b>480</b>

**Mean age (APS sample):** UKG: 5.07 years | Grade 1: 5.83 years (Age data for most government school children was not available)

1. To highlight the gap in school readiness for Indian students entering grade 1, findings from UKG have not been included in this document
2. Due to the small sample size of higher-priced private schools, their findings have not been included in this document.

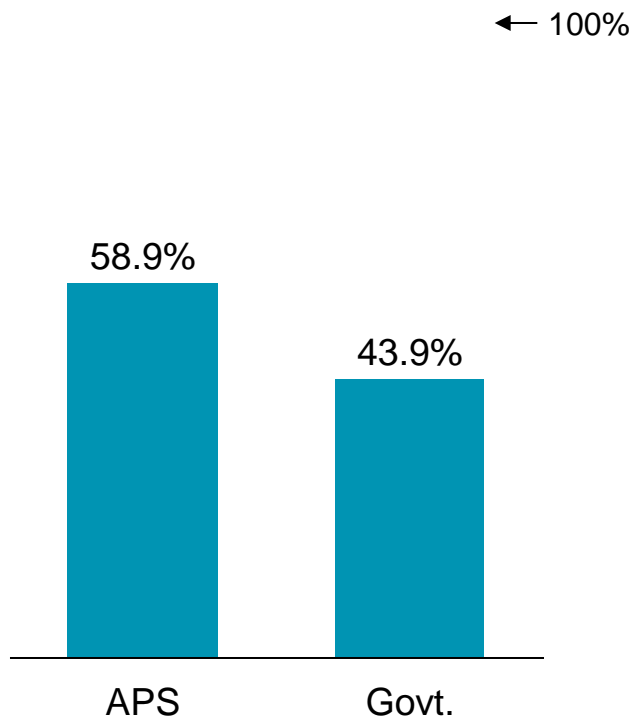
Data from the assessments indicates that a large proportion of children entering Grade 1 in APSs are not school-ready

---



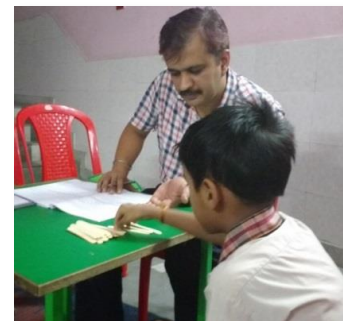
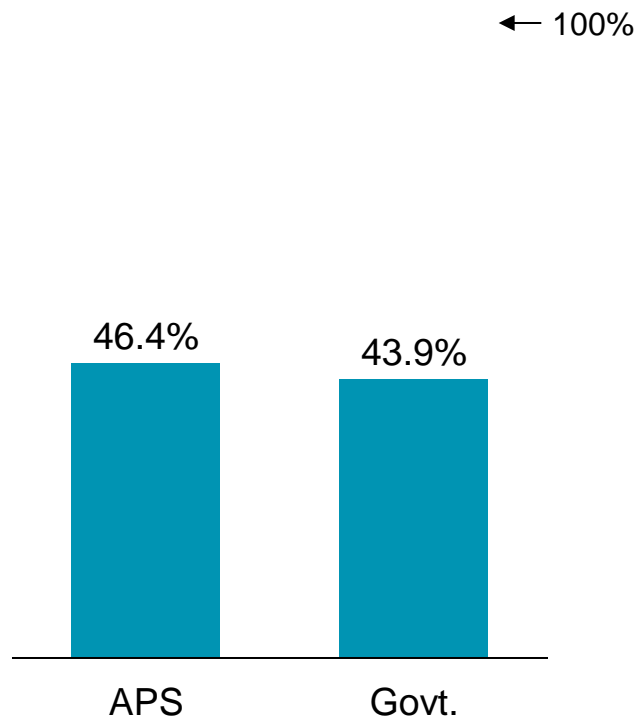
# More than 40% children entering Grade 1 in APSs cannot identify numbers till 20 and many do not understand the underlying concepts

% of children entering Grade 1 that identified all two-digit numbers (10-20)



APS n= 207    Government n= 41

% of children entering Grade 1 that could count upto 20 objects<sup>2</sup>



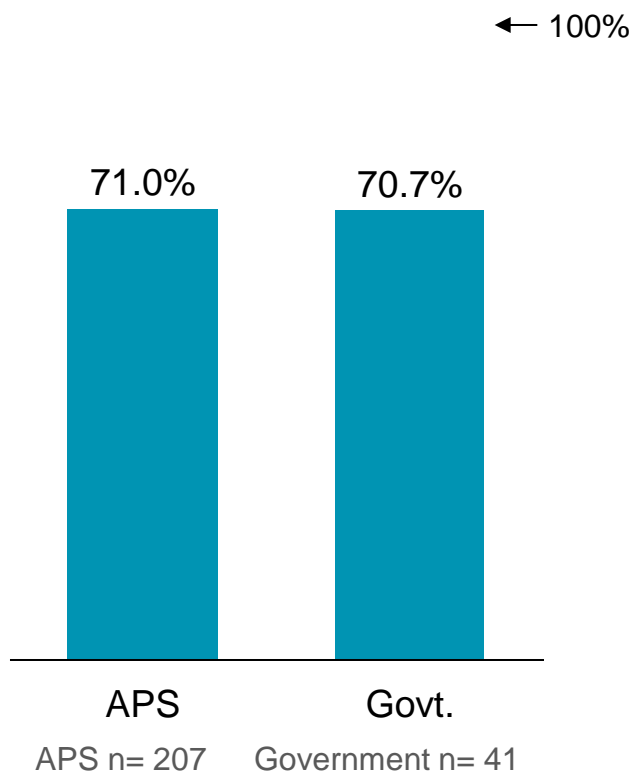
Children being administered questions on understanding of numerical concepts

1. Mean age for APS Grade 1 sample: 5.83 years. Age data for many govt. school children was not available
2. The counting exercises involved children being asked to count a certain number of objects (e.g., “could you give me 7 sticks?” )
3. Photos: FSG

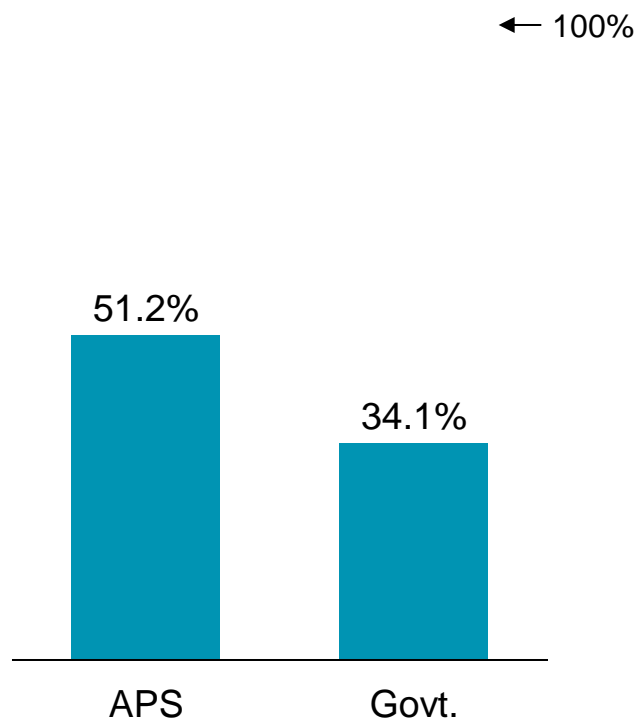


# Almost 30% children entering Grade 1 cannot add single-digit numbers using visual cues

% of children entering Grade 1 that could add two single digit numbers<sup>2</sup> using manipulatives



% of children entering Grade 1 that could add two single digit numbers using visualization<sup>3</sup>



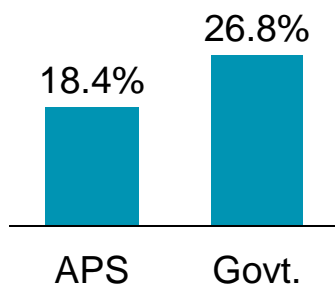
Children being administered questions on addition

1. Mean age for APS Grade 1 sample: 5.83 years. Age data for many govt. school children was not available
2. Children were shown objects and asked to total them. The addition did not involve any carry
3. Children were shown some objects and asked what the total would be, if a similar number of objects were to be added (to the ones they were shown). The addition did not involve any carry
4. Photos: FSG

# More than 75% children cannot complete a 4 piece puzzle

% of children entering  
Grade 1 that  
completed a four-  
piece puzzle

← 100%



APS n= 207    Government n= 41

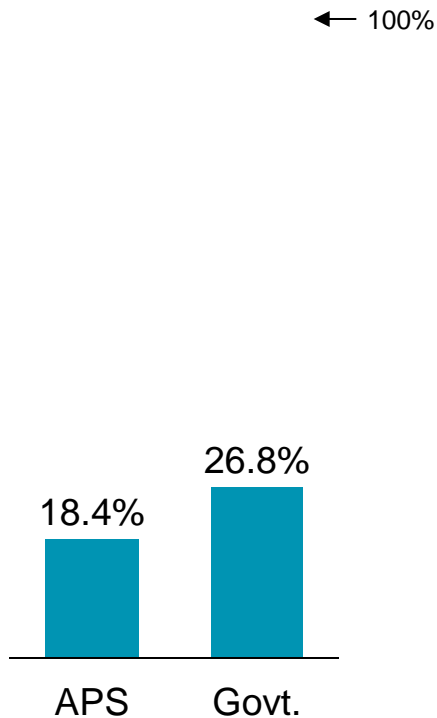
1. Mean age for APS Grade 1 sample: 5.83 years. Age data for many govt. school children was not available
2. Children were given a pattern made up of simple shapes and asked to create the same pattern using cutouts of the shapes
3. Children were shown an incomplete pattern with a set of repeating shapes and asked to complete it using cutouts of the shapes
4. Photos: FSG



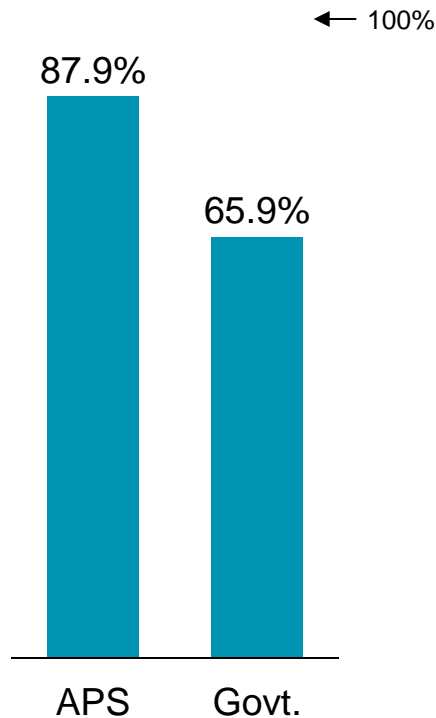
Children being administered  
questions on patterns and  
puzzles

# More than 75% children cannot complete a 4 piece puzzle

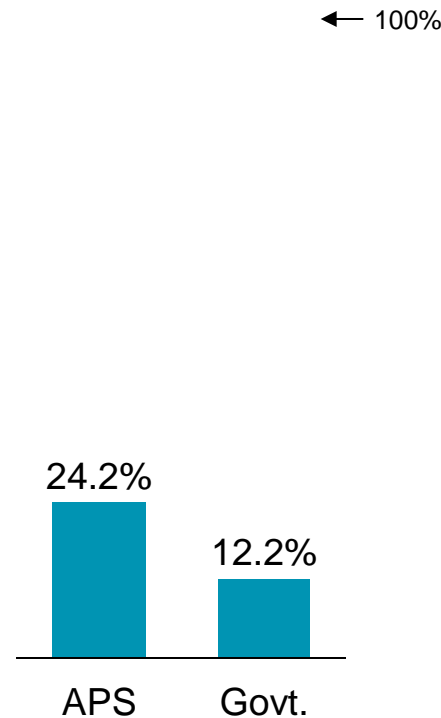
% of children entering Grade 1 that completed a four-piece puzzle



% of children entering Grade 1 that copied a pattern correctly<sup>2</sup>



% of children entering Grade 1 that completed a pattern correctly<sup>3</sup>

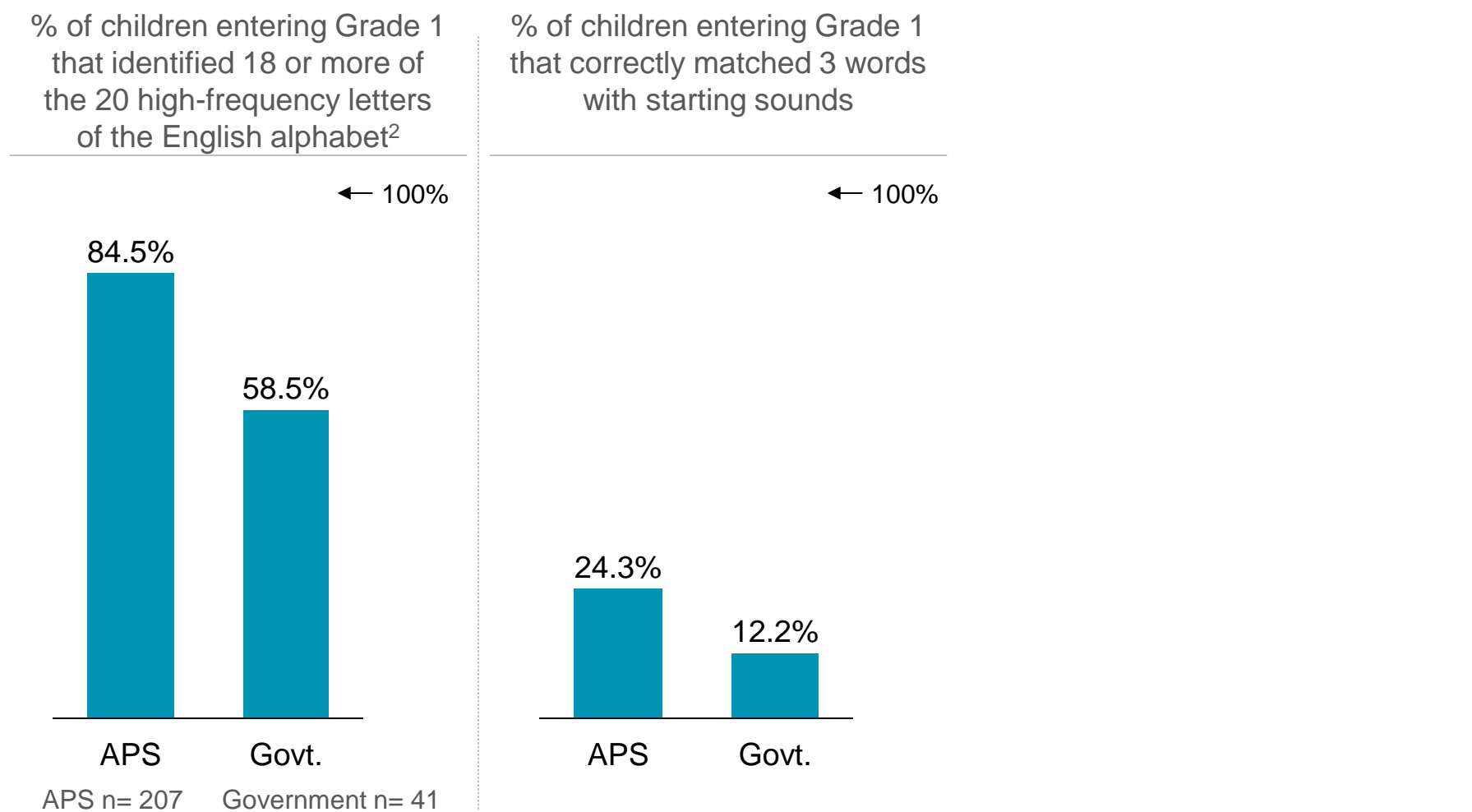


Children being administered questions on patterns and puzzles

APS n= 207    Government n= 41

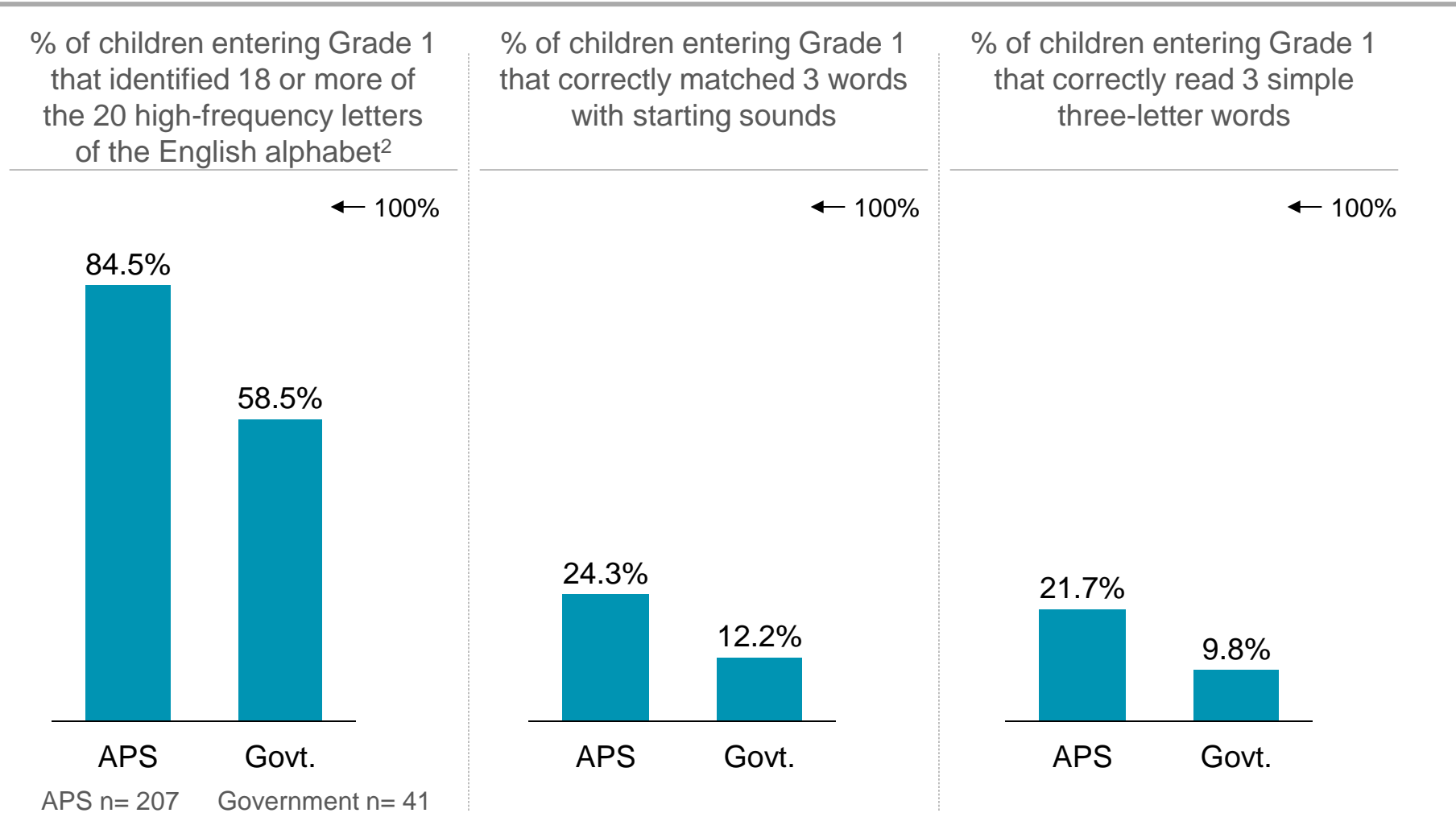
1. Mean age for APS Grade 1 sample: 5.83 years. Age data for many govt. school children was not available
2. Children were given a pattern made up of simple shapes and asked to create the same pattern using cutouts of the shapes
3. Children were shown an incomplete pattern with a set of repeating shapes and asked to complete it using cutouts of the shapes
4. Photos: FSG

# More than three fourths of the children entering Grade 1 did not have the necessary literacy skills



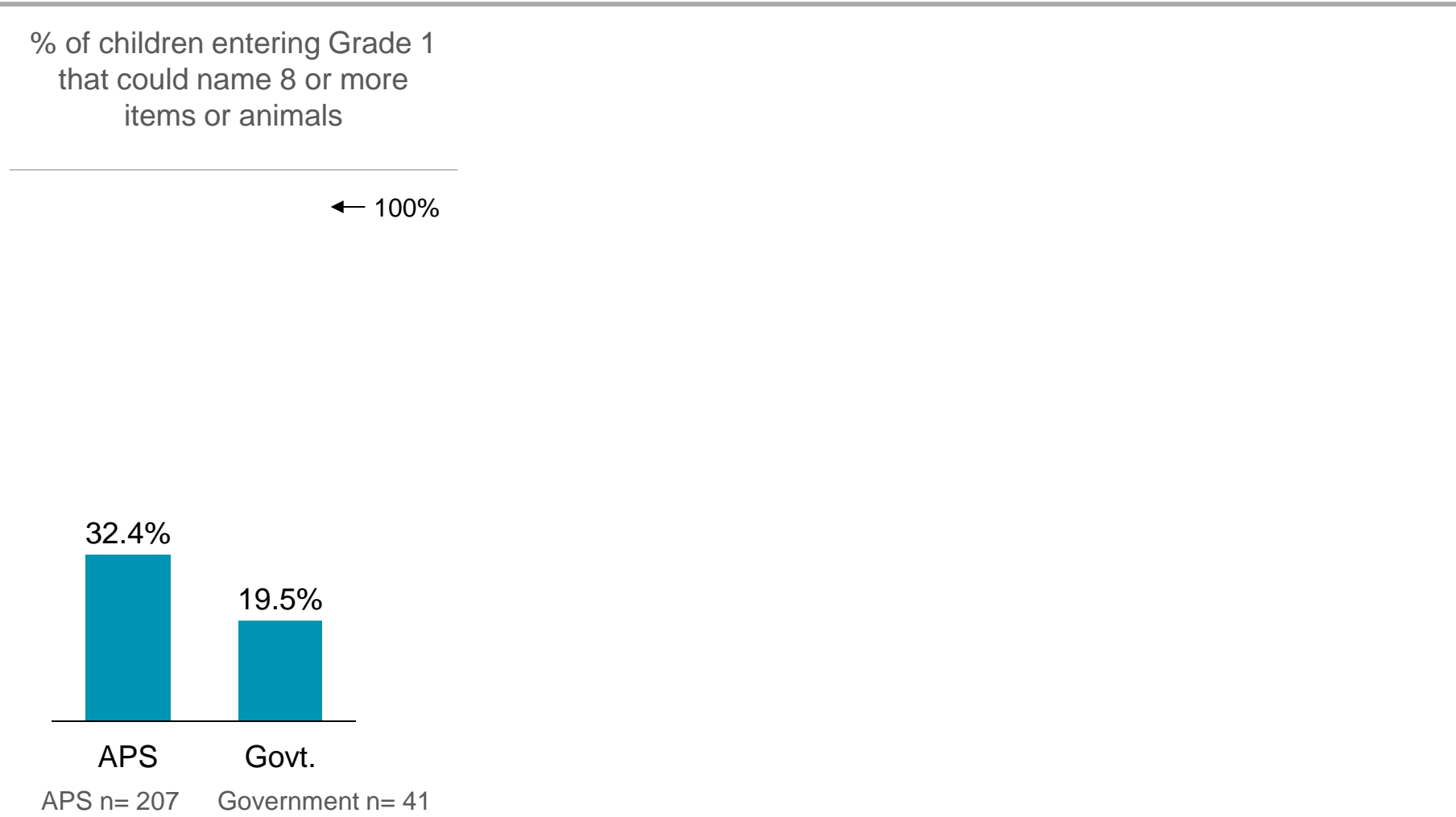
1. Mean age for APS Grade 1 sample: 5.83 years. Age data for many govt. school children was not available  
2. The 20 most commonly occurring letters in English words

# More than three fourths of the children entering Grade 1 did not have the necessary literacy skills



1. Mean age for APS Grade 1 sample: 5.83 years. Age data for many govt. school children was not available  
2. The 20 most commonly occurring letters in English words

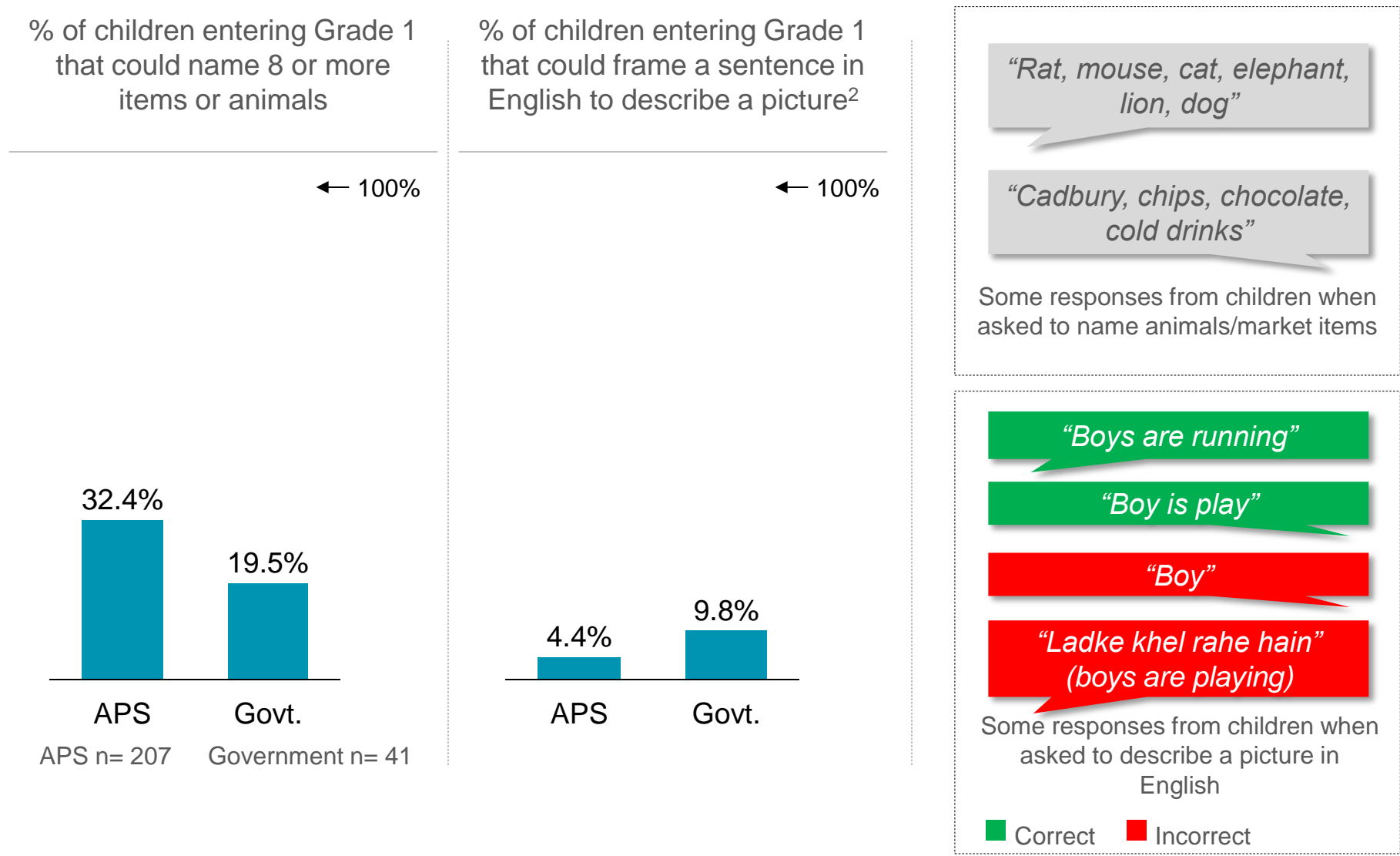
# Less than a third of the children entering Grade 1 can list 8 or more items or animals



1. Mean age for APS Grade 1 sample: 5.83 years. Age data for many govt. school children was not available  
2. The sentence need not be grammatically correct, but must be made of only English words and be coherent



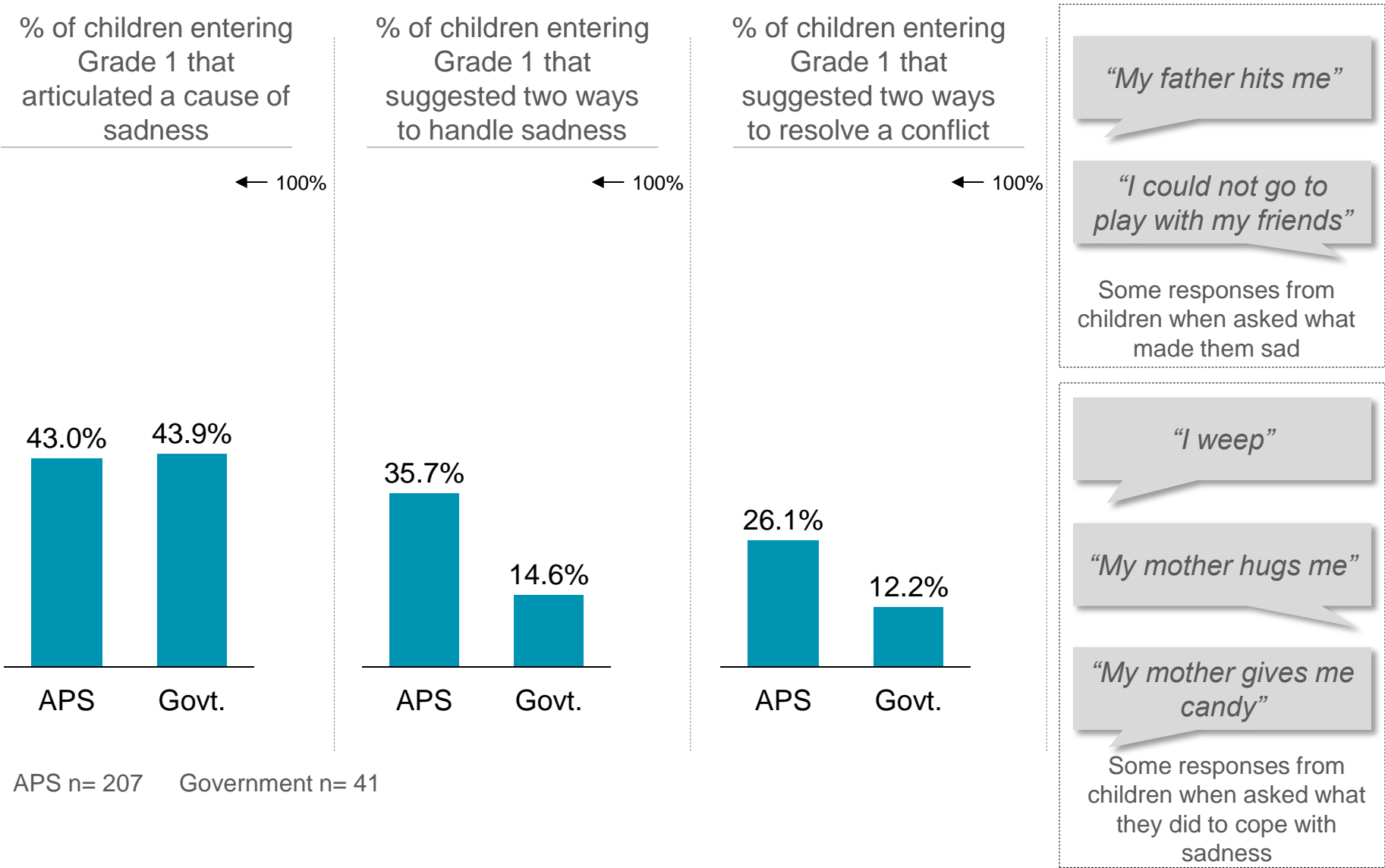
# Few children entering Grade 1 can list 8 or more items or animals



1. Mean age for APS Grade 1 sample: 5.83 years. Age data for many govt. school children was not available

2. The sentence need not be grammatically correct, but must be made of only English words and be coherent

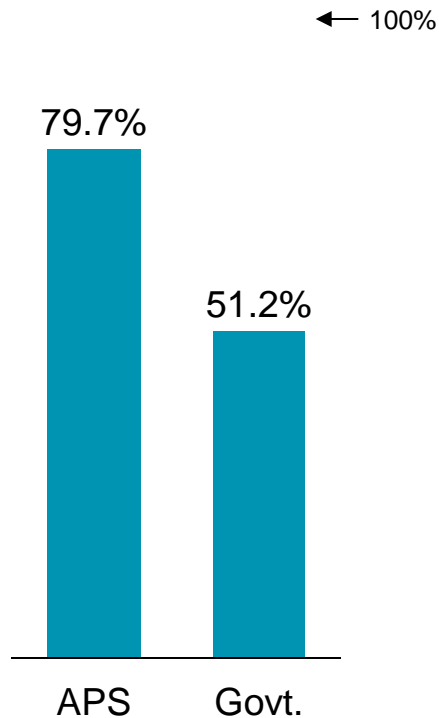
# Less than half of the children can identify a cause of sadness and even fewer can suggest approaches to dealing with it



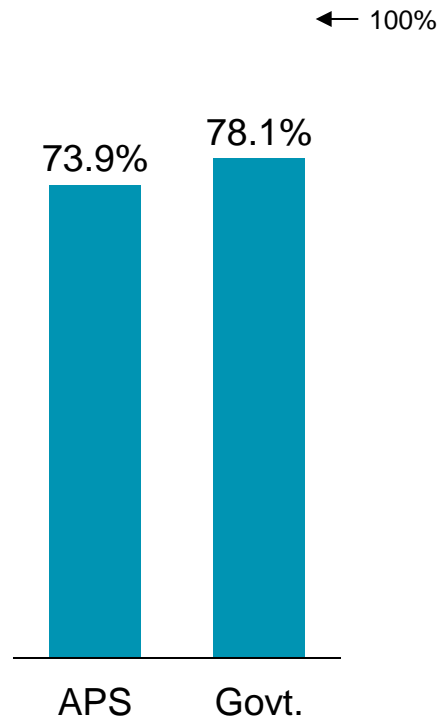
1. Mean age for APS Grade 1 sample: 5.83 years. Age data for many govt. school children was not available

# Motor development is not a problem area for most children

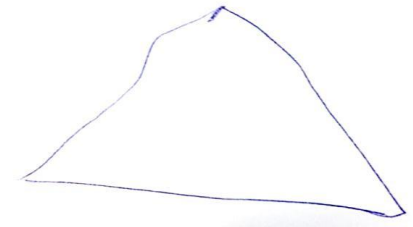
% of children entering Grade 1 that could write their names



% of children entering Grade 1 that hopped 8 or more times on a single leg



% of children entering Grade 1 that correctly copied a shape shown to them



Shapes drawn by children when asked to copy a triangle

APS n= 207    Government n= 41

# Experts consulted for selecting and adapting assessment tool

Name	Designation and Organization
Abbie Raikes	Assistant Professor and Director of Global Early Childhood Development, University of Nebraska; Former Lead, Measuring Early Learning Quality & Outcomes project, UNICEF
Venita Kaul	Former Director, Centre for Early Childhood Education and Development (CECED), Ambedkar University, Delhi
Nandita Jhaveri	Independent education consultant (former Principal, Saifee School, Mumbai)
Aisha Yousafzai	Associate Professor of Global Health, Harvard T. H. Chan School of Public Health, Harvard University
Nirmala Rao	Professor, Early Childhood Education and Development, Hong Kong University
Amanda Devercelli	Acting Global Lead, ECE, World Bank
Amber Gove	Director, Research, RTI International
Jayanti Tambe	Executive Director, Early Care and Education, University of California, Los Angeles
MS Tara	Former Regional Director, National Institute of Public Cooperation and Child Development
Vibha Krishnamurthy	Developmental Pediatrician and Founder, Ummeed Child Development Center

# FSG's Program to Improve Private Early Education (PIPE) aims to improve the quality of ECE for Low Income Households in urban India

- Central Square Foundation
- Children's Investment Fund Foundation (CIFF)
- Marshall Foundation
- Omidyar Network (ON)
- UBS Optimus

# How can you engage with FSG?

---

- Please feel free to download and share our research [www.fsg.org/pipe](http://www.fsg.org/pipe)
- Please write to [pipe@fsg.org](mailto:pipe@fsg.org)
  - For volunteering or joining our small group knowledge sharing sessions
  - For connecting us to companies offering early learning products to APSs







REIMAGINING SOCIAL CHANGE