Insights and learnings from the National Student Assessment (NSA), 2022
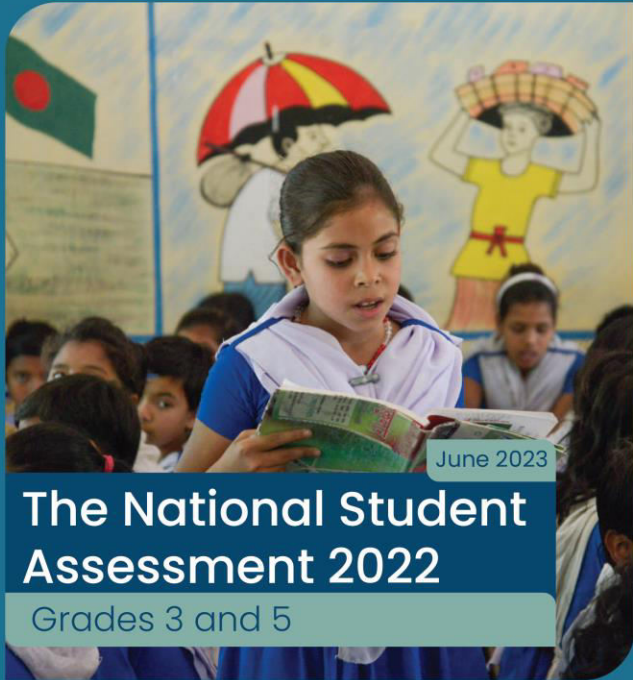
Acknowledgements

- Directorate of Primary Education (DPE), Ministry of Primary and Mass Education (MoPME), Government of Bangladesh

- United Nations Children's Fund (UNICEF)

Summary

The National Student Assessment (NSA) is a system-level assessment of **literacy (Bangla) and numeracy (Mathematics) outcomes** for primary-grade students in **Bangladesh**

- On 6 December 2022, **54,232** students in grades 3 and 5 participated in NSA 2022
- The **national report** was released on 19 August 2023

Key finding: Learning levels were slightly higher than the 2017 cycle

NSA 2022: Context

About NSA 2022

- Conducted in the context of global concerns about **learning loss**
- **7th cycle of NSA** conducted after 5 years of the 2017 cycle
- The **first NSA since** the **COVID-19 school closures** and school reopening in early 2022
- ACER was the technical partner in the 2011, 2013, and 2022 cycles

ACER's role in the project

- Technical support to UNICEF in:
  - ☐ Design
  - ☐ Implementation/administration support
  - ☐ Data management
  - ☐ Analytics
  - ☐ Reporting
  - ☐ Capacity building
  - ☐ Communication plan

NSA 2022 tells us…

- **What students in grades 3 and 5 know and can do**
- How learning achievements differ across population sub-groups
- What are a few of the factors associated with learning

Student performance was similar to or slightly better than NSA 2017
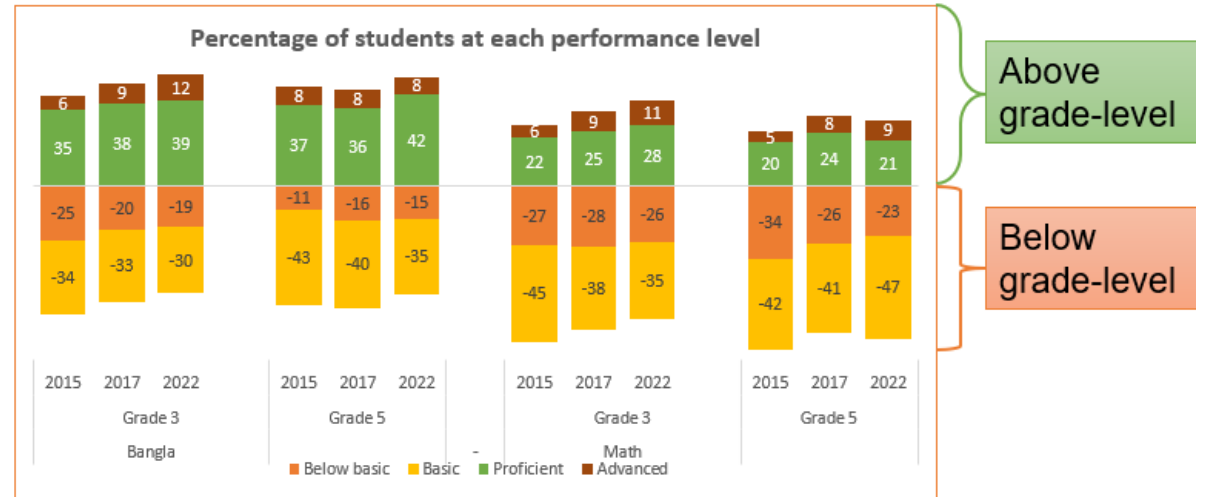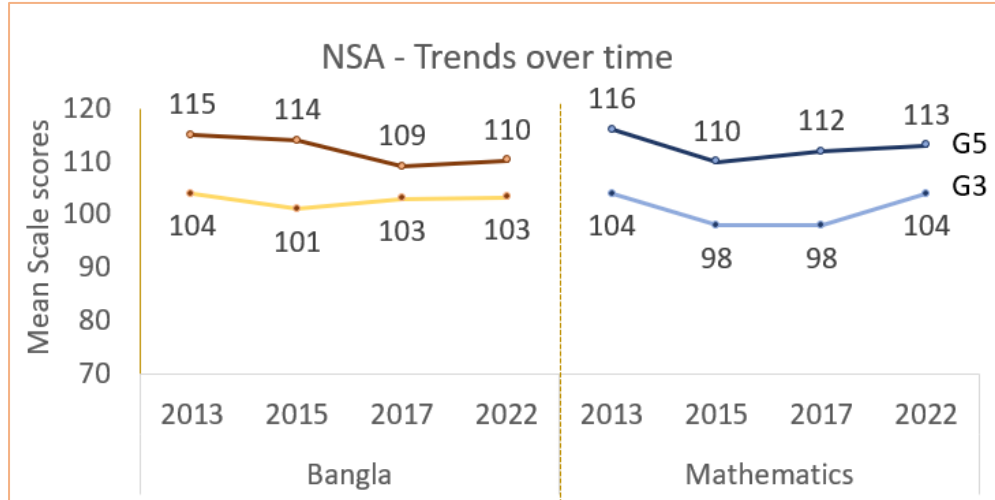
Grade 3 students showed relatively higher growth in mathematics

- About 50% students in grades 3 and 5 demonstrated grade-level proficiencies in Bangla
- 39% grade 3 students and 30% grade 5 students demonstrated grade-level proficiencies in mathematics

Students are moving upward on the learning scale as they move through grades

The ability of grade 5 students is higher than grade 3 students
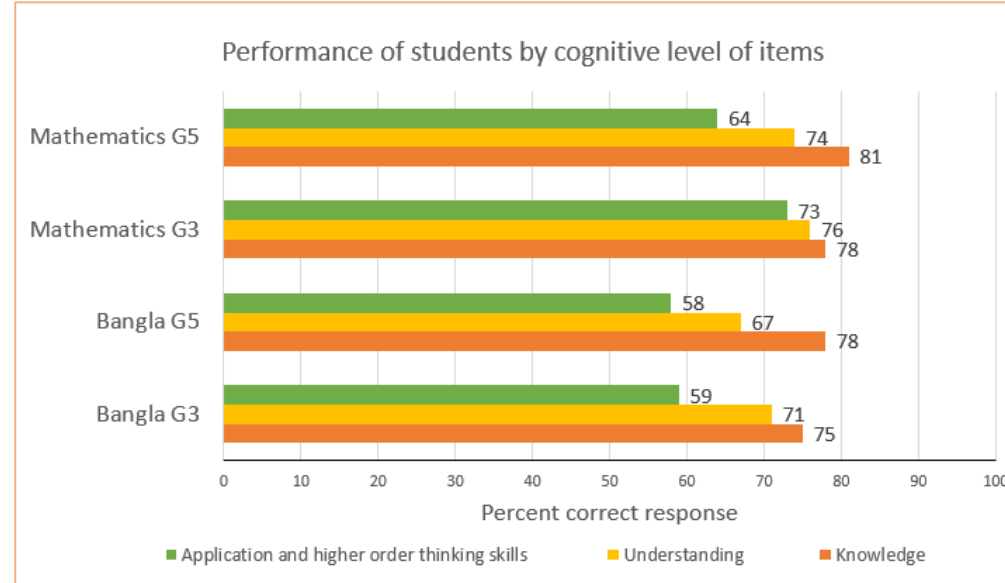
The performance on items assessing higher order thinking skills is lower across grades and subjects

NSA 2022 tells us…

- What students in grades 3 and 5 know and can do
- **How learning achievements differ across population sub-groups**
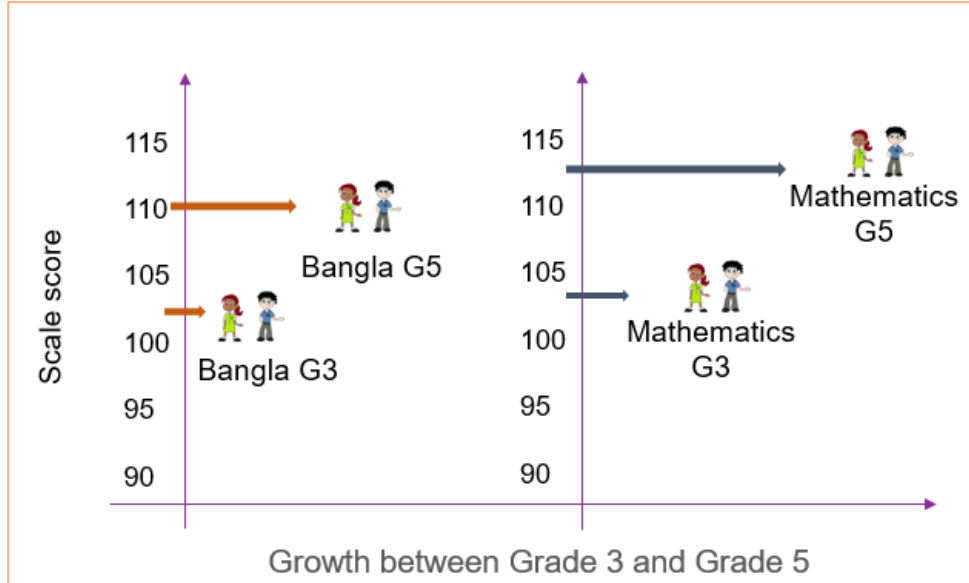- What are a few of the factors associated with learning

Performance parity between boys and girls, but not across school types

Percent students at grade level performance in 2022

Odds ratio: of girls performance over boys in achieving grade level proficiencies in 2022

Odds ratio of students reaching grade level proficiencies (base comparison: Madrasah schools)
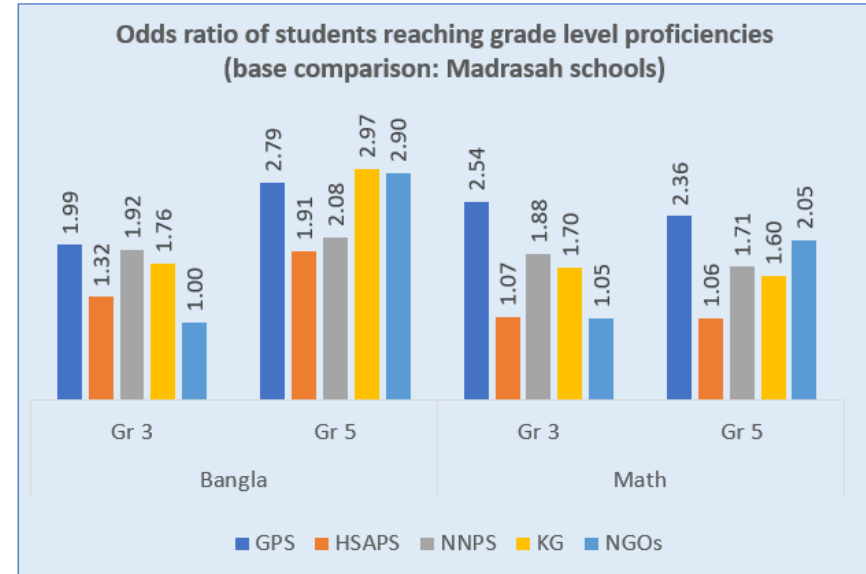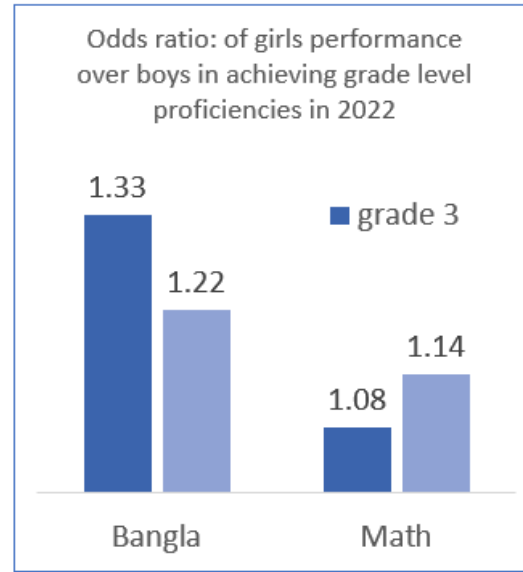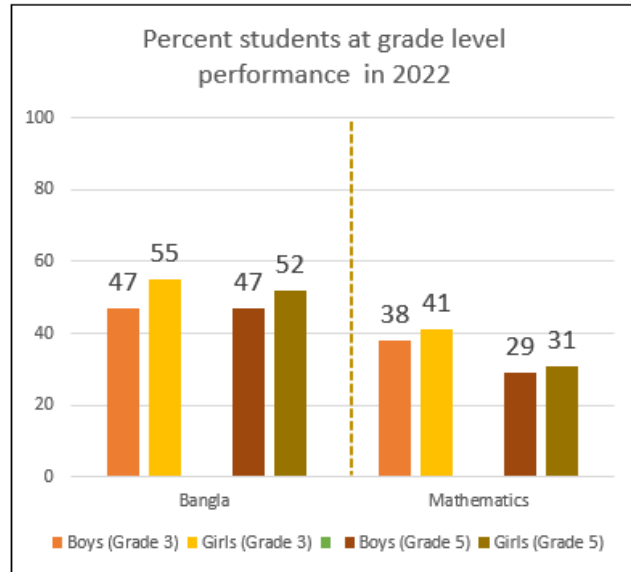
Girls performed better than boys across the grades and subjects

- GPS, HSAPS, and private school students performed better than the national average across both grades in both subjects
- Students in Madrasahs performed significantly below all other school types across the grades and subjects

Regional disparity in performance across the grades and subjects

Bangla

National mean 103

102.9 Rangpur
102.3 Rajshahi
109.3 Mymensingh
98.4 Sylhet
105.9 Dhaka
100.8 Khulna
102.4 Chittagong
101.2 Barisal

Grade 3

National mean 110

111.2 Rangpur
109.0 Rajshahi
114.3 Mymensingh
104.5 Sylhet
112.6 Dhaka
109.0 Khulna
108.2 Barisal
109.9 Chittagong

Grade 5

Bangla

Dhaka and Mymensingh divisions performed better than other divisions while Sylhet's performance was lower, similar to previous rounds of NSA

Regional disparity in performance across the grades and subjects

Proportion of students reaching grade-level proficiencies: By geo-location, NSA 2022

Grade 3 — Bangla:
- Remote / Island: 52.9%
- Char area: 55.7%
- Costal area: 50.8%
- Plain land: 50.5%
- Urban slums: 49.3%
- Hill Tracts: 46.5%
- Hoar area: 38.9%

Grade 3 — Math:
- Remote / Island: 40.0%
- Char area: 42.4%
- Costal area: 38.6%
- Plain land: 39.1%
- Urban slums: 31.1%
- Hill Tracts: 31.1%
- Hoar area: 27.1%

Grade 5 — Bangla:
- Remote / Island: 46.0%
- Char area: 48.1%
- Costal area: 49.3%
- Plain land: 49.6%
- Urban slums: 48.8%
- Hill Tracts: 35.0%
- Hoar area: 36.3%

Grade 5 — Math:
- Remote / Island: 17.6%
- Char area: 20.7%
- Costal area: 29.4%
- Plain land: 31.7%
- Urban slums: 19.3%
- Hill Tracts: 25.5%
- Hoar area: 15.7%

Legend:
- Remote / Island
- Char area
- Costal area
- Plain land
- Urban slums
- Hill Tracts
- Hoar area

Students from plains, coastal, and remote regions showed better performance, while students from wetlands, remote areas and island regions performed low

NSA 2022 tells us…

- What students in grades 3 and 5 know and can do
- How learning achievements differ across population sub-groups
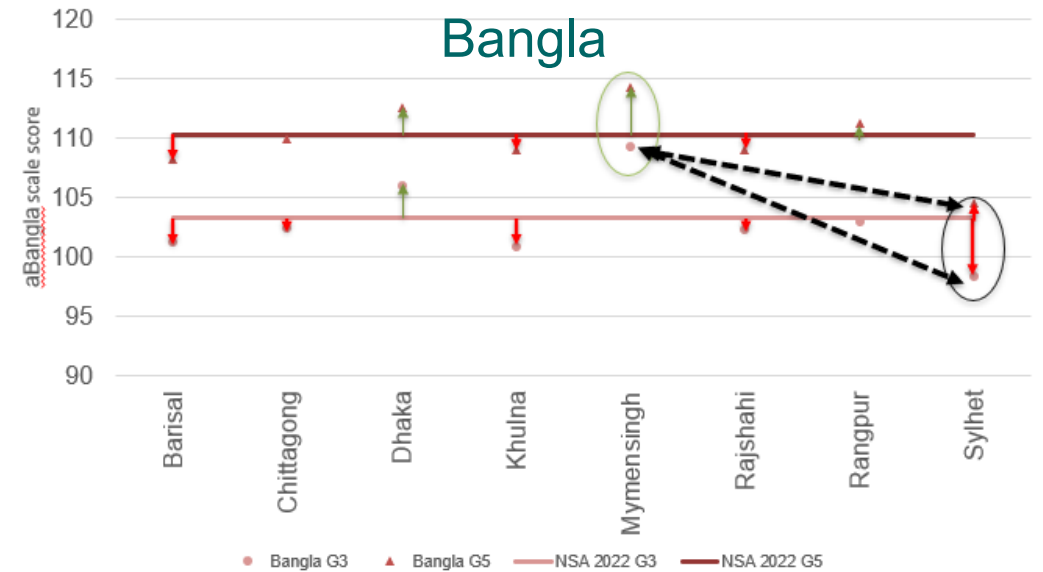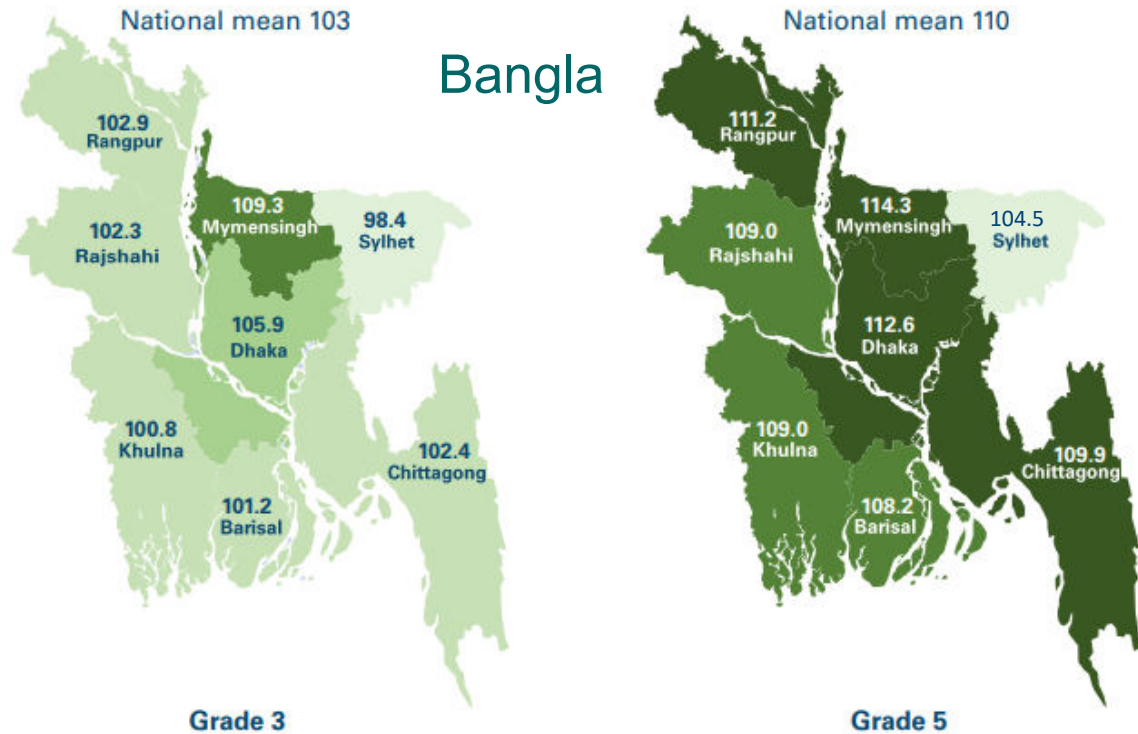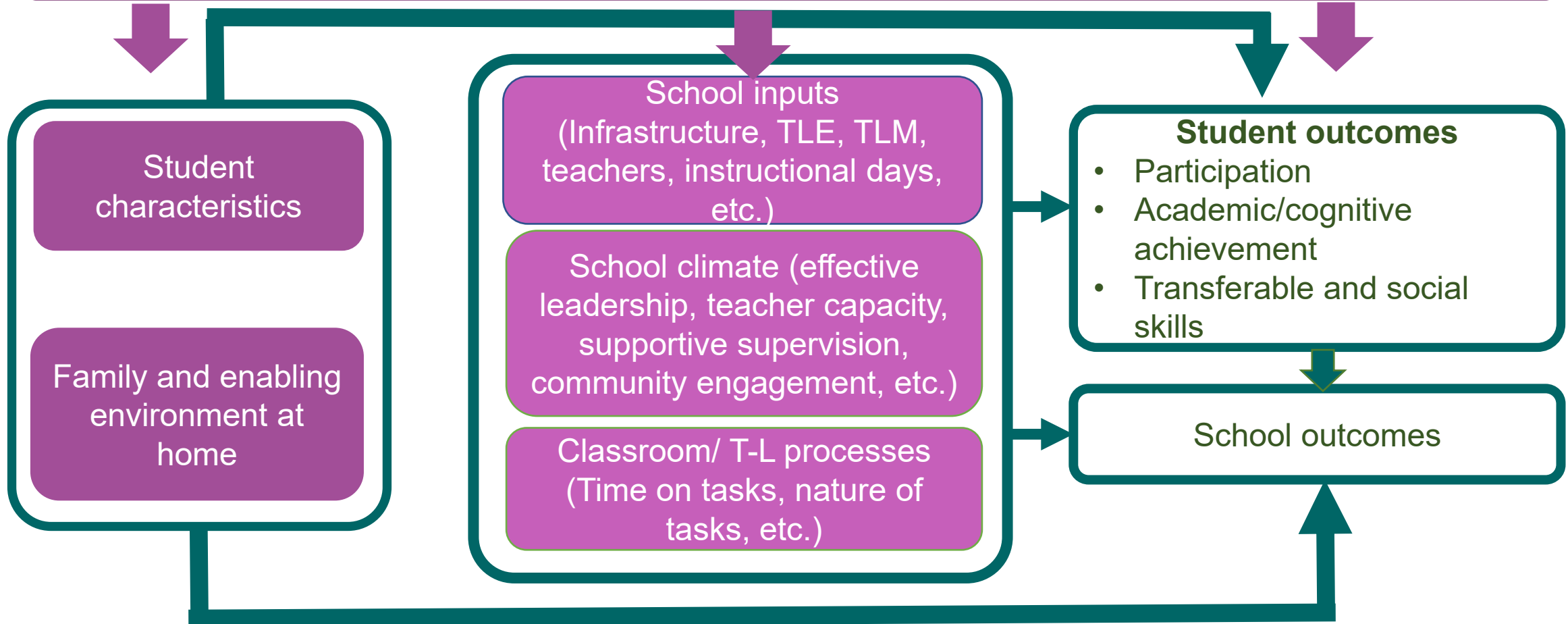- **What are a few of the factors associated with learning**

Analytical framework

Contextual factors (system level factors, school location, etc.)

Student characteristics

Family and enabling environment at home

School inputs (Infrastructure, TLE, TLM, teachers, instructional days, etc.)

School climate (effective leadership, teacher capacity, supportive supervision, community engagement, etc.)

Classroom/ T-L processes (Time on tasks, nature of tasks, etc.)

Student outcomes
- Participation
- Academic/cognitive achievement
- Transferable and social skills

School outcomes

Enablers - factors positively associated with learning

Head Teacher
- Supportive supervision
- Constructive feedback provided to teachers

Home
- Parents' education and job stability
- Parents' engagement in learning support
- Facilities and resources at home (for example, story books)
- Duration of study at home
- Reading texts other than textbooks
- Access to remote learning opportunities
- Homework done by students themselves

Assistant Teacher
- Teachers' friendliness
- The use of variety of resources in lessons
- Conducting group work
- Allowing students to ask questions in class
- Understanding the purpose of assessment
- Teachers' motivation and job satisfaction

School
- Physical facilities (library, playground, WASH, etc.)
- Availability of and access to TLM
- Students feeling safe at schools
- Teachers' and students' positive perception about school environment

Inhibitors – factors negatively associated with learning

GRADE REPETITION

STUDENTS TAKING PRIVATE TUITION

A TEACHER DOING WORK OTHER THAN TEACHING

TEACHER VACANCIES AT SCHOOLS

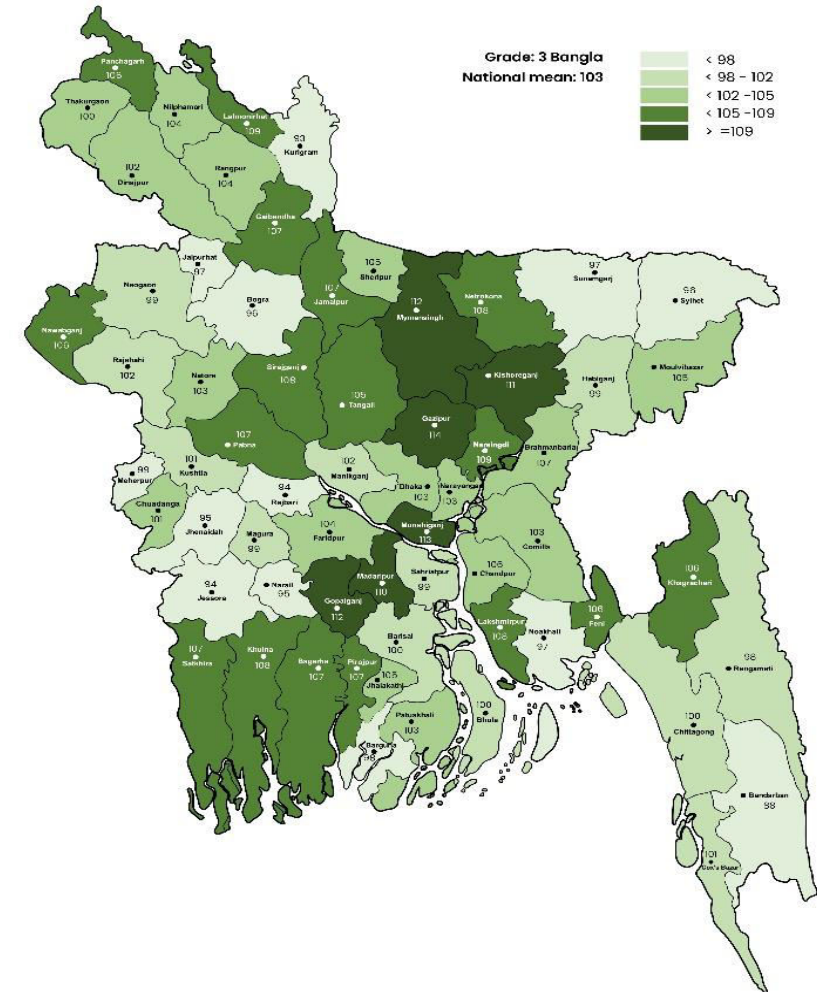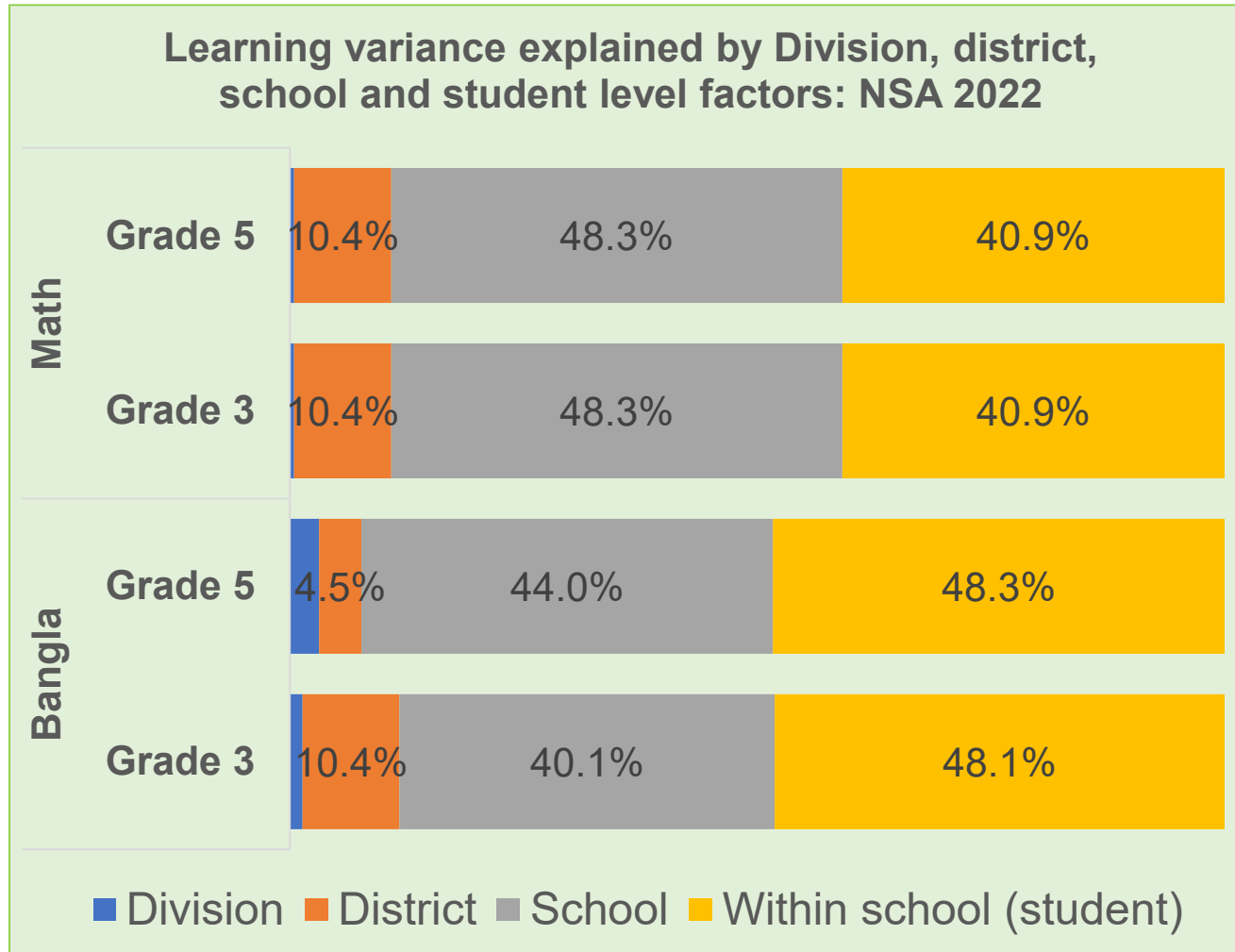**DISTANCE FROM A STUDENT'S HOME TO THE SCHOOL**

More information…

Factsheet

Full report

Learning variance by division, district, and schools

Learning variance explained by Division, district, school and student level factors: NSA 2022

		Division	District	School	Within school (student)
Math	Grade 5		10.4%	48.3%	40.9%
	Grade 3		10.4%	48.3%	40.9%
Bangla	Grade 5	4.5%		44.0%	48.3%
	Grade 3	10.4%		40.1%	48.1%

■ Division ■ District ■ School ■ Within school (student)

Key recommendations

- **Targeted interventions** for low-performing regions and school types
- Emphasise on **numeracy skills**
- Prioritise **supportive academic supervision**
- Focus on **remediation, not repetition**
- Fill in **teacher vacancies**
- Communication and social mobilisation for **greater parental engagement** at school and home
- Ensure proper **facilities and resources** at school (story books, playground, and WASH facilities)

Way forward

- **Deep dive for further study**
  - ❏ No learning loss despite COVID-19 disruptions
  - ❏ No growth in some school types despite 2 years of schooling

- **Assessment design**
  - ❏ Matrix design to be explored to enable larger content coverage

- **Linking NSA with international assessments**
  - ❏ Explore the possibility to link NSA with other similar assessments such as TIMSS or MPL to compare student performance with international standards

Questions and queries

Email: priyanka.sharma@acer.org

Thank you