



DATA MUST SPEAK

The importance of school inputs to improving learning

Unpacking factors influencing school performance in Côte d'Ivoire

Key findings



School kits and books have a positive effect on student retention and end of primary school exam (CEPE) pass rates.



Overall, 44 per cent of public schools are able to provide each student with a school kit. Schools with a limited number of kits sometimes distribute them unevenly among classes, especially in rural areas.



Availability of mathematics and French textbooks has improved since 2020, but there is only around one textbook for every two students.



Textbooks are unevenly distributed. In general, textbooks are more difficult to obtain in rural areas and their availability can vary considerably from school to school.

Context

In recent years, the Ivorian Government has implemented several ambitious educational reforms, including the compulsory education policy and the school feeding policy. Despite these efforts, **challenges in access, equity, quality and governance remain.** However, some schools perform better than others, even in disadvantaged areas. By identifying these schools, called positive deviant schools, and the good practices that make them successful, important lessons can be learned to improve learning in Côte d'Ivoire and inform the development of the Education and Training Sector Plan 2016–2025.

Research on positive deviant schools

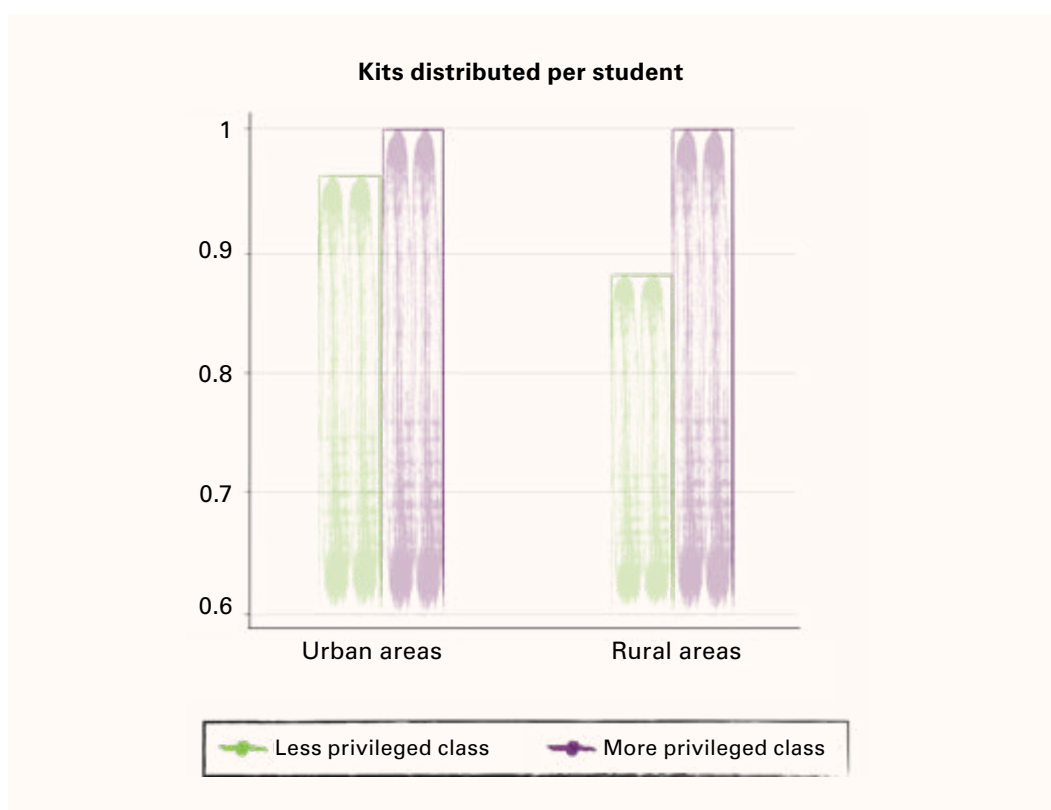
Against this background, the **Data Must Speak (DMS) research on positive deviant schools** explores local solutions for improving the quality of education in Côte d'Ivoire. The first and second stages of the research involved conducting an **econometric analysis using Education Management Information System (EMIS) data to identify factors influencing school performance and to quantify their effects.** The analysis presented in this brief summarizes the key findings of these early stages of the research.¹



Research findings

In Côte d'Ivoire, school supplies are distributed free of charge in public schools, with textbooks and school kits² distributed separately. In 2022, **there were 0.9 kits per student, with little difference between urban and rural areas** (see **Figure 1**).

Figure 1: Difference in kit distribution in urban and rural public schools, by grade



¹ Although rigorous, this analysis has its limitations because it is based on observational data. The econometric models used include school fixed effects and numerous control variables to reduce the likelihood that the relationships identified are due to systematic differences between schools.

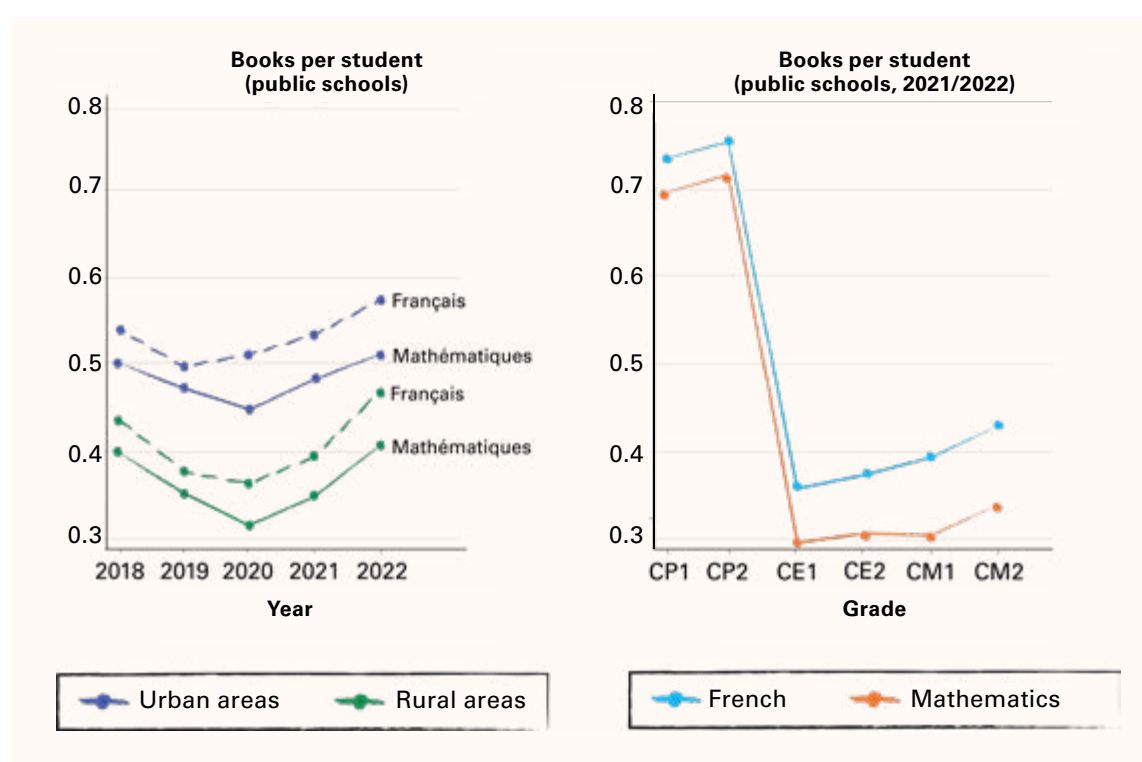
² School kits' contents vary slightly depending on the student's grade, but they generally include a backpack, notebooks, boxes of coloured pencils, pens, geometry materials and slates.

In 44 per cent of public schools, every student received a kit, but in 56 per cent of schools, it was necessary to prioritize certain classes over others, creating some inequality within schools.

French and mathematics textbooks have steadily become more available in public schools since 2020 (see **Figure 2**). **Nevertheless, wide disparities remain between urban and rural areas. In 2022, students in urban public schools were, on average, 22 per cent more likely to have a mathematics textbook and 18 per cent more likely to have a French textbook than students in rural public schools.** Students in both rural and urban public schools were 13 per cent more likely to have access to French textbooks than mathematics textbooks.

Textbook availability also varies across the primary cycle: availability is much better in the first two years of primary school (CP1 and CP2), at around 0.7 textbooks per student,³ whereas the ratio drops to less than 0.4 textbooks per student from the third year of primary school (CE1) onwards (see **Figure 2**). **Distribution is also uneven at the national level: 18 per cent of students attend a school that has one French textbook per student, while 20 per cent of students do not have access to a French textbook at their school.** The figures are similar for mathematics: 17 per cent of students have access to one textbook per student in their school, while 24 per cent attend a school without any textbooks.

Figure 2: Books per student across years and grades



It is important to ensure that textbooks and school kits are adequately distributed among students because these resources have a positive relationship with student retention and the CEPE pass rate. **For example, if every student had access to a French and mathematics textbook, the promotion rate could increase by 0.5 percentage points and nearly 5,000 more students could pass the CEPE.**

³ The ratio is calculated by dividing the number of textbooks for a given grade by the number of students in that grade. Ratios above 1 in a school are capped at 1. The ratio therefore indicates the number of textbooks that students can actually use.

Suggested areas for further exploration



The school kit policy seems to be effective and should be extended to schools that are not yet covered.



Access to textbooks also plays a significant role, especially for learning. Having one textbook for each student could significantly improve results.



More research is needed on the uneven distribution of kits and textbooks. It is particularly important to understand why some schools have no textbooks.

About the Data Must Speak research on positive deviant schools

The DMS research on positive deviant schools in Côte d'Ivoire was developed jointly by the Ministry of Education and Literacy, local research partners, the United Nations Children's Fund (UNICEF) Côte d'Ivoire country office, and the UNICEF Innocenti – Global Office of Research and Foresight. This global research is being implemented in 14 countries in Africa, Asia and Latin America. It is co-funded by the Knowledge and Innovation Exchange (KIX) programme of the Global Partnership for Education/International Development Research Centre, the Hewlett Foundation, the Jacobs Foundation, the Norwegian Agency for Development Cooperation, the Schools2030 programme (led by the Aga Khan Foundation) and UNICEF's Thematic Fund for Education.

Series of policy briefs

This brief is the first in a series of documents produced as part of the DMS research in Côte d'Ivoire. It focuses on gender issues in the Ivorian education system and aims to inform policy dialogue in Côte d'Ivoire and other relevant countries. To access the full research documents, including the report analysing the factors influencing school performance in Côte d'Ivoire and the tables illustrating the results described above, please see [here](#).

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