



DATA MUST SPEAK

## Profile of head teachers and teachers in public primary schools

Research on positive deviant schools to improve learning in Madagascar

### Key findings



**The proportion of teachers with a bachelor's degree has increased in recent years**, from 22 per cent to 30 per cent between 2017/18 and 2020/21. A similar, though less pronounced, trend was observed among head teachers.



**Having a more highly educated head and teachers was positively associated with student promotion rates and their success in the Certificate of Primary Education (CEPE).**



**The proportion of school staff who are civil servants has declined in recent years.** More head teachers than teachers hold this status. The majority of teachers are recruited by parent teacher associations and have FRAM status,<sup>1</sup> while the majority of head teachers are on state contracts.



**On average, schools with a head teacher who has FRAM status perform statistically less well than those with a head teacher who is a civil servant.**



**On average, 35 per cent of schools in Madagascar are led by women, a higher percentage than in any other African countries** for which data are available.

<sup>1</sup> FRAM status: teachers recruited by parent teacher associations

## Context

In Madagascar, the Ministry of Education has set ambitious goals to improve access to and quality of education, as well as school management and governance, as part of the Education Sector Plan 2018–2022. Nevertheless, significant challenges remain. The primary school completion rate, which measures the percentage of students who complete primary school, was slightly above 50 per cent in 2020.<sup>2</sup> More than 80 per cent of students assessed in a representative sample of primary schools had not mastered minimum reading skills in 2019.<sup>3</sup> However, some schools perform better than others, even in disadvantaged areas. By identifying these positive deviant schools and the good practices that make them successful, important lessons can be learned to improve the quality of education in Madagascar.



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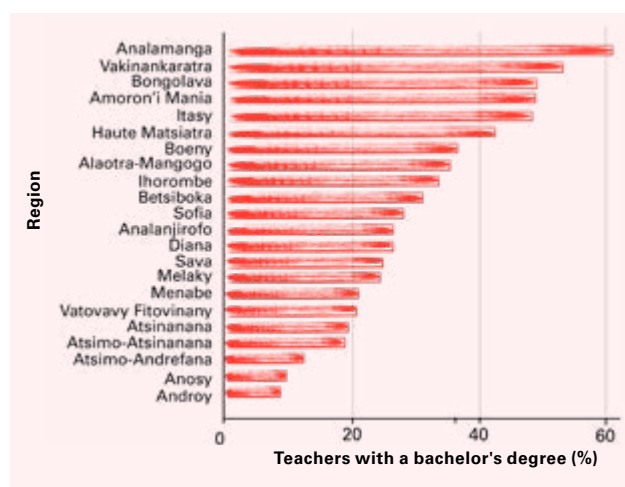
## Research on positive deviant schools

Against this background, the **Data Must Speak (DMS) research on positive deviant schools** explores local solutions for improving the quality of education in Madagascar. The first stage of the research was to conduct a statistical analysis using Education Management Information System (EMIS) data and CEPE test scores to identify factors influencing school performance. The analysis presented in this brief summarizes the key findings related to the profile of head teachers and teachers.<sup>4</sup>

## Research findings

**The proportion of teachers with a bachelor's degree has increased in recent years, although they remain a minority.** In theory, primary school teachers are required to have a bachelor's degree, but this is not always applied in practice. Efforts are currently under way to establish minimum qualification requirements at the national level. The proportion of teachers with a bachelor's degree increased from 22 per cent to 30 per cent between 2017/18 and 2020/21. A similar, though less pronounced, trend was observed among head teachers, among whom the percentage of bachelor's degree holders increased from 20 per cent to 23 per cent during this period. Significant regional disparities were noted: the proportion of teachers with a bachelor's degree ranges from 9 per cent in Anosy to 57 per cent in Analamanga (**Figure 1**). There are also considerable differences between urban and rural areas: 41 per cent of urban head teachers have civil servant status, compared with just 18 per cent in rural areas.

**Figure 1: Percentage of teachers with a bachelor's degree by region (averages from 2017/18 to 2020/21)**



Source: Calculations based on EMIS data.

<sup>2</sup> United Nations Educational, Scientific and Cultural Organization (UNESCO) statistics

<sup>3</sup> Programme for the Analysis of Education Systems (PASEC) of the Conference of Ministers of Education of French-speaking Countries, 2019

<sup>4</sup> This analysis has limitations, since the available data only partially explain student performance. The results obtained can thus be used to identify correlations between the variables and their statistical significance, but not necessarily causal relationships.

**Table 1: Characteristics of head teachers and teachers**

	2017/18	2018/19	2019/20	2020/21
<b>Profile of head teachers</b>				
Average age of head teachers	42	41	41	41
Female head teachers (%)	35	35	35	35
Head teachers on state contracts (%)	46	50	52	53
Head teachers with FRAM status (%)	27	29	32	30
of head teachers who are civil servants	26	21	16	16
Head teachers with a bachelor's degree or higher (%)	20	22	22	23
<b>Profile of teachers</b>				
Average age of teachers	34	34	34	34
Female teachers (%)	42	41	41	41
Teachers on state contracts (%)	30	28	27	29
Teachers with FRAM status (%)	57	61	65	65
Teachers who are civil servants (%)	7	5	4	5
Teachers with a bachelor's degree or higher (%)	22	25	28	30
<b>Total number of schools</b>	<b>25,540</b>	<b>25,869</b>	<b>26,273</b>	<b>26,752</b>

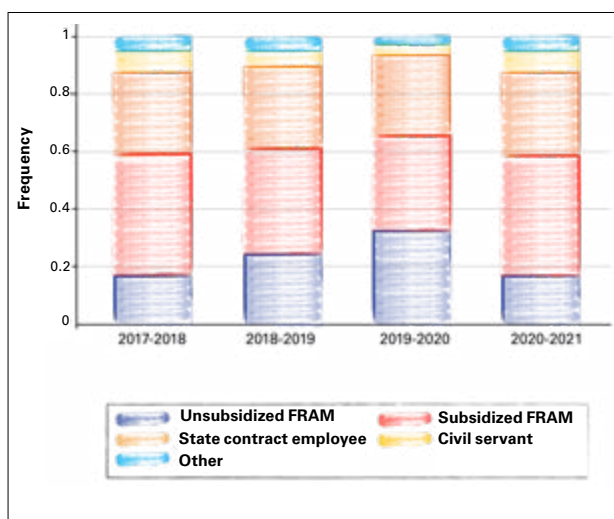
Source: EMIS data.

**The proportion of staff with civil servant status has declined in recent years. Head teachers are still more likely than teachers to have this status.** In 2020/21, 16 per cent of head teachers and 5 per cent of teachers had civil servant status. The majority of primary school head teachers – 53 per cent in 2020/21 – are on state contracts; this proportion has increased in recent years (**Table 1**).

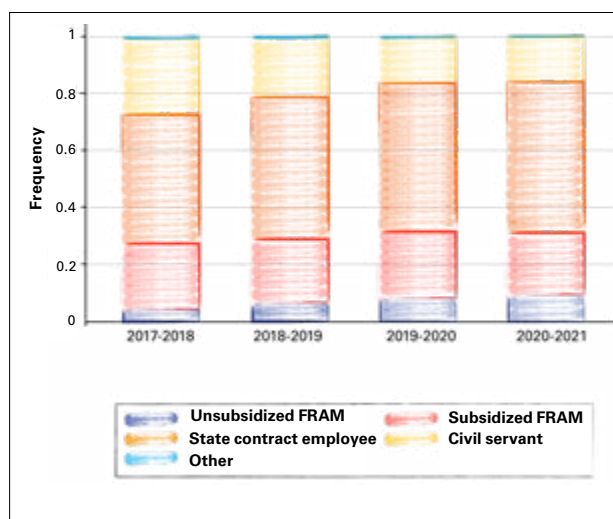
**The majority of teachers – 65 per cent in 2020/21 – are recruited by parent teacher associations and have FRAM status, as do 30 per cent of head teachers.** Among teachers, this proportion has increased slightly in recent years, due to a marked increase in the share of FRAM contracts that are not subsidized by the state at the expense of subsidized ones. (**Figures 2 and 3**). Head teachers with unsubsidized FRAM status are twice as likely to have a bachelor's degree as those with subsidized FRAM status (44 per cent and 19 per cent respectively in 2020/21).

**The profile of head teachers and teachers reveals a relatively high degree of gender parity in Malagasy schools.** On average, 35 per cent of head teachers and 41 per cent of teachers in 2020/21 were women. In comparison, the percentage of female head teachers in other African countries for which data are available is much lower, averaging between 10 and 20 per cent.<sup>5</sup>

<sup>5</sup> See the research programme [Women in Learning Leadership: Women's School Management and Leadership Practices](#), conducted by UNICEF Innocenti – Global Office of Research and Foresight and the International Institute for Educational Planning (IIEP-) UNESCO Dakar Office.

**Figure 2: Teacher status by year**

Source: Calculations based on EMIS data.

**Figure 3: Head teacher status by year**

Source: Calculations based on EMIS data.

**On average, schools with a head teacher who has FRAM status perform statistically worse than those with a head teacher who is a civil servant.** In schools with FRAM head teachers, promotion rates are on average three percentage points lower and the CEPE pass rate is on average five percentage points lower. This trend is also observed, to a lesser extent, in schools whose head teachers are under a state contract or another type of arrangement. The correlation is not as clearly established in the case of teachers (a negative correlation is observed for CEPE scores, but not for promotion rates), suggesting that the impact of staff status on educational outcomes may depend on the position held.

**Having a more highly educated head and teachers (bachelor's degree or higher) correlates positively with student promotion rates and their success in the CEPE.** Similarly, having a head teacher with a bachelor's degree or higher is associated with better outcomes, resulting in a one percentage point increase in the promotion rate and a 1.8 percentage point increase in the CEPE pass rate.

**Female-led schools, as well as schools with a higher proportion of female teachers, generally achieve better promotion rates.** However, this difference is only noted in the promotion rate for girls, suggesting that they may benefit more from the presence of a female head or female teacher than boys. Similar results have been obtained in other countries.<sup>6</sup>

<sup>6</sup> UNICEF, *Increasing Women's Representation in School Leadership*, 2022.

## Education policy areas for further exploration



**Analyse head teacher and teacher practices and behaviours** that are associated with better student performance, and understand the specific practices and behaviours used by women that may explain why girls appear, on average, to do better in female-led and female-staffed schools.



**Analyse the various factors that explain why schools with head teachers who are civil servants seem to perform better than others** (such as training, pay, incentives or other factors). It is also important to understand whether these factors apply to teachers in the same way and for what reasons.



**Analyse existing policies and funding systems that support the recruitment of more highly educated school staff** with civil servant status, particularly in rural areas. On average, 41 per cent of urban head teachers have civil servant status, compared with just 18 per cent in rural areas.

## About the Data Must Speak research on positive deviant schools

The DMS research on positive deviant schools in Madagascar was developed jointly by the Ministry of National Education of Madagascar, local partners, UNICEF Madagascar, and 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 Jacobs Foundation, the *Knowledge and Innovation Exchange* (KIX) programme of the Global Partnership for Education/International Development Research Centre, the Hewlett Foundation, the Norwegian Agency for Development Cooperation (NORAD), the Schools2030 programme (led by the Aga Khan Foundation) and UNICEF's Thematic Fund for Education.

## Series of thematic briefs

This brief is the second in a series of documents produced as part of the DMS research in Madagascar. It focuses on the profile of head teachers and teachers in primary schools and their impact on educational outcomes, and aims to inform policy dialogue in Madagascar and other relevant countries. To access the full research documents, including the report analysing the factors influencing school performance in Madagascar and the tables illustrating the results described above, please see [here](#).

## For more information:

- Voahangy Rahelimanantsoa, Head of the Department of Education Policy Studies and Evaluations, Directorate of Education Planning, Ministry of National Education of Madagascar, [voahangyrahel@gmail.com](mailto:voahangyrahel@gmail.com)
- Mamy Andrianarilala, Education Monitoring and Evaluation Specialist, UNICEF Madagascar, [mandrianarilala@unicef.org](mailto:mandrianarilala@unicef.org)
- Renaud Comba, DMS Research Coordinator, UNICEF Innocenti, [rcomba@unicef.org](mailto:rcomba@unicef.org)

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