Turning Information into Action: Bridging the Policy–Practice Gap through a Scalable School Leadership Intervention

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Abstract

We study whether light-touch reminders paired with actionable guidance can convert standardized test report cards into school actions and higher achievement. In a **nationwide randomized controlled trial with 2,647 schools** in the Dominican Republic (2019), principals were sent instructions to retrieve their school report and to convene structured workshops with leadership teams, teachers, and families—supported by templates and guides—while follow-up reminder calls varied in content and intensity across treatment arms.

The intervention markedly increased intermediate engagement: email open rates rose by up to 26 percentage points, report downloads more than doubled, and documented workshop completion increased by about 30 percentage points.

Using post-COVID national exams (2023–2024) and a difference-in-differences/2SLS design instrumenting observed school actions with random assignment to reminder calls, we find no effects in 3rd grade but detect significant gains in 6th-grade mathematics for public schools.

Taken together, the results indicate that scalable, reminder-based implementation—coupled with simple, actionable guidance—can move schools from available assessment results to coordinated practice and, in some settings, higher learning.

Context

The National Diagnostic Assessment Campaign (2019)

The Dominican Ministry of Education (MINERD) launched the **National Diagnostic Assessments (ED)** in 2017 to generate standardized data on student learning in primary education.

The assessments began with **3rd grade in 2017** and expanded to **6th grade in 2018**, producing detailed **school-level report cards** with performance indicators by subject.

However, it was unclear whether schools **knew, accessed, or used** these reports—and whether doing so improved outcomes.

To address this, MINERD, in partnership with IDEICE and academic researchers, implemented in **2019** a **national campaign to promote data use**.

All **2,647 schools** received:
- An **email** with access to their report and structured **templates** for workshops with teachers and families.
- **Reminder calls** encouraging schools to hold those workshops and submit **improvement plans**.

The calls were **randomly assigned across 12 treatment arms**, varying in:
- **Number of follow-up calls:** 0–4
- **Type of message:** Verification, Management, Teachers, or Families

Originally, follow-up national tests were planned for **2020–2021**, but the **COVID-19 pandemic** postponed them until **2023 (3rd grade)** and **2024 (6th grade)**.

These later assessments allow us to test whether the **2019 behavioral intervention** led to **sustained improvements in school actions and student learning.**

Empirical Strategy

Implementation Effects – Policy Adoption

Treatment effects on compliance behaviors—such as email engagement, workshop execution, and plan submission—using the following OLS specification:

$$Y_s = \beta + \theta Treat_s + \delta_d + u_s$$

Learning Effects

To measure whether increased adoption translated into learning gains, we exploit pre- and post-intervention diagnostic test data (2018–2024) and estimate a two-stage difference-in-differences model:

$$\text{First } \textit{stage:} \quad D_s = \alpha + \pi(Treat_s \times Post_t) + \delta_s + \lambda Post_t + \epsilon_{st}$$

$$\textit{Second stage:} \quad A_{st} = \beta + \theta \widehat{D}_s + \delta_s + \lambda Post_t + u_{st}$$

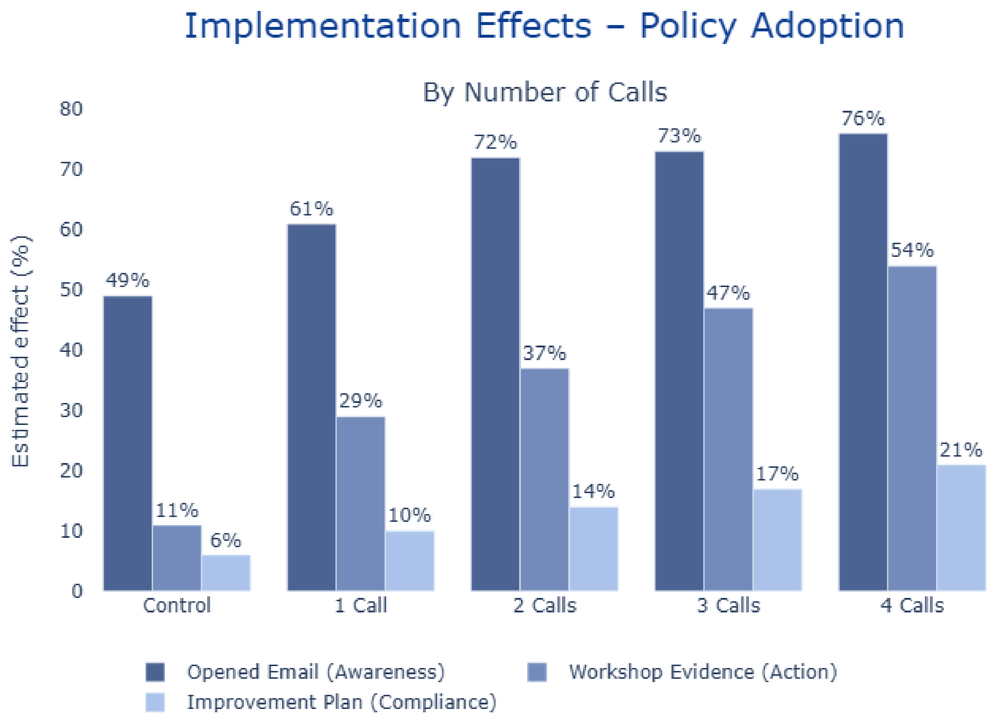
Where, D_s:is an indicator for whether school *s* conducted the workshop or submitted an improvement plan (instrumented by random assignment); Treat_s is the random assignment to reminder calls; Post_t: is the indicator for post-intervention period (2024 = 1, 2018 = 0); and A_{st}: is the average test score of school *s* in year *t*.

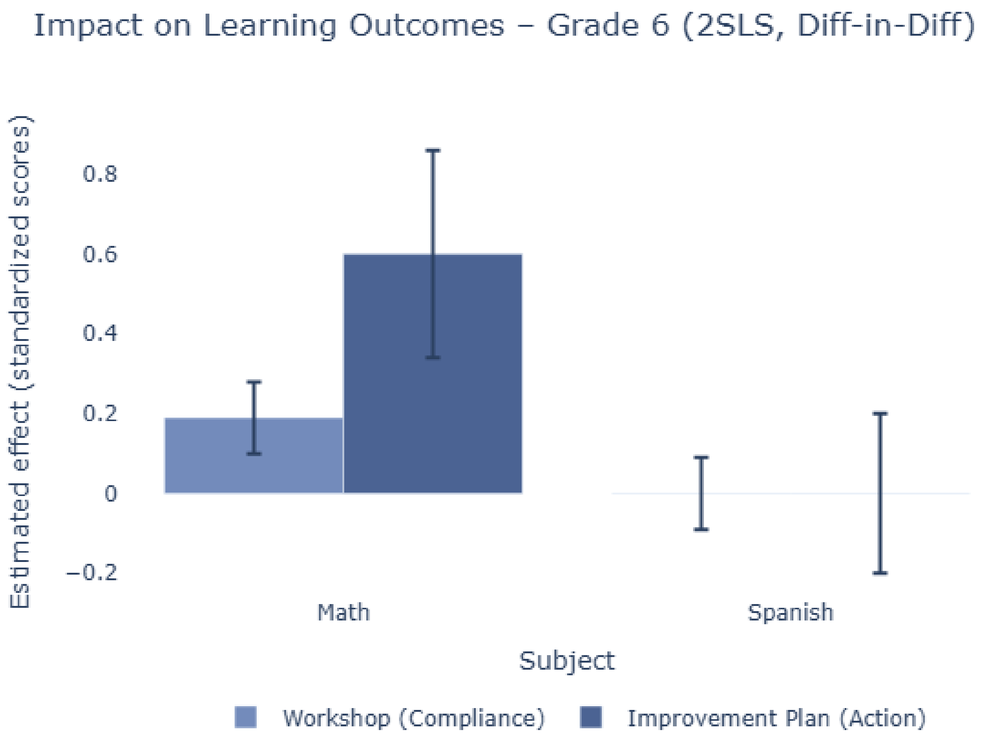
Results – Policy Adoption and Compliance

Implementation Intensity -> Increasing the number of reminder calls produced clear improvements along the implementation chain.
- **Email opening** rose from **49% in control schools to 76%** with four calls, indicating higher awareness of the Ministry's directive.
- **Workshop evidence**—the first tangible sign of collective action—grew from **11% to 54%**.
- **Improvement plan submissions** rose from **6% to 21%**, confirming stronger compliance with the data-use mandate.

The progression from awareness to compliance suggests that **repeated, low-cost reminders effectively translated central guidance into school-level action**.

Overall, results show that **behavioral nudges—through timely, structured, and repeated communication—can bridge the policy–practice gap** by converting information into collective school action.





Results – Learning Effects

Despite strong improvements in policy adoption and compliance, **learning effects remained limited**. The COVID-19 pandemic disrupted the implementation period, reducing the intensity and continuity of school-level actions. As a result, **no significant impacts were observed in 3rd grade outcomes**.

In 6th grade, however, we find **positive and significant effects in Mathematics**, concentrated among schools that were successfully reached and that implemented the **workshop-based approach**. These schools—especially those where **teachers** participated directly in workshops—showed gains of **0.2–0.3 SD** in mathematics learning. The effect was even stronger (around **0.6 SD**) among schools that both conducted the workshop and submitted an improvement plan. No detectable effects were found in **Spanish.**

Heterogeneity analyses (not shown here, available upon request) indicate that **teacher-oriented implementation is the most relevant channel**, since teachers are ultimately responsible for executing classroom-level improvement plans. This reinforces the view that **behavioral monitoring is most effective when it activates pedagogical agents, not just administrative compliance**.

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