

Gemini Guided Learning — A Pre-Registered RCT of AI Math Tutoring in Port Loko District, Sierra Leone

AI in Education · Good practice · Sierra Leone

Quality score: 73/100

Evidence strength: Randomised controlled trial

Summary

A pre-registered 8-week RCT of Google DeepMind's Gemini "Guided Learning" tutor across 1,763 students in 12 Port Loko schools found a +0.258 SD math gain (0.380 SD for high-usage students) — but higher-baseline students benefited most, an equity gap flagged by researchers.

Key dimensions

Dimension	Score
Evidence of learning impact	3/3
Equity & inclusion	1/3
Transparency, ethics & data protection	3/3
Teacher capability & pedagogy	2/3
Scalability & sustainability	2/3

Evaluated by C-NAPSE

Data sources

[C-NAPSE web research](#) — accessed 2026-07-18

[Google DeepMind](#) — accessed 2026-07-18

[Google DeepMind: Measuring the impact of learning with AI in Sierra Leone and beyond](#) — accessed 2026-07-18

[EdTech Innovation Hub: Google Gemini Guided Learning raises math scores in Sierra Leone classroom trial](#) — accessed 2026-07-18

[DeepMind: Rapid Evidence for AI in Education — An RCT Playbook, Sierra Leone](#) — accessed 2026-07-18

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