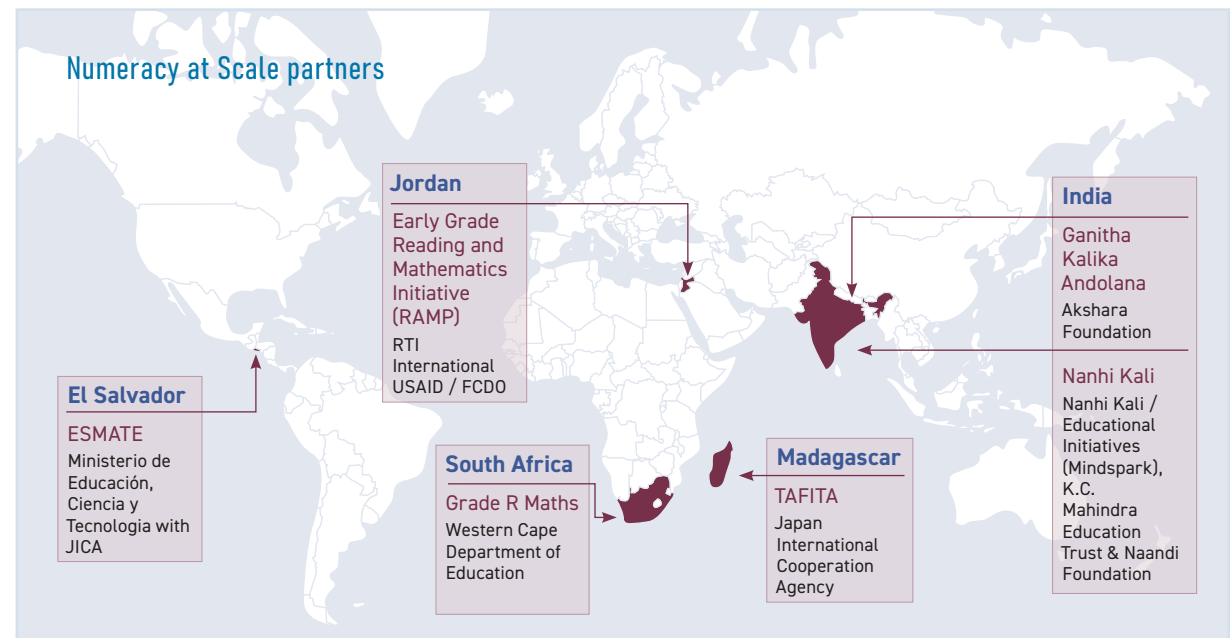
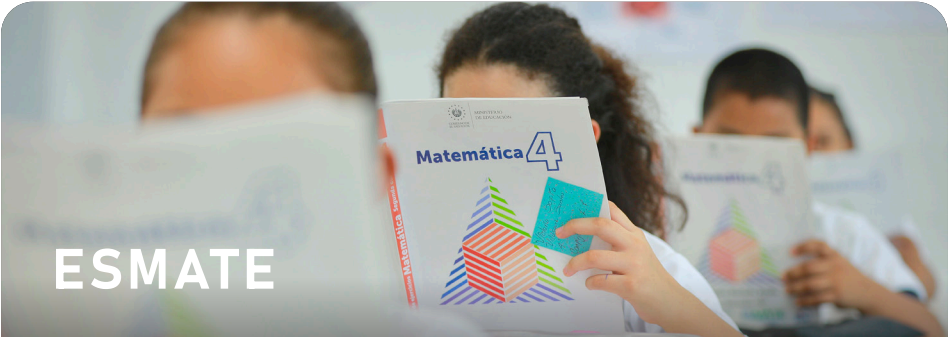


# Program Fact Sheet

*This Fact Sheet provides a quick overview of each of the six programs that featured in the five-country Numeracy at Scale study (part of the wider Learning at Scale study). The research is being led by RTI International and is part of the Center for Global Development education research consortium, funded by the Bill and Melinda Gates Foundation.*



The [Learning at Scale](#) study was designed to explore and examine programs that have a demonstrated impact on foundational literacy and numeracy outcomes at scale using rigorous evidence-based strategies. While the first phase of Learning at Scale focused on [literacy](#), the second phase, [Numeracy at Scale](#), is focused on (1) identifying instructional strategies that are essential for improving numeracy outcomes at scale in low- and middle-income countries; and (2) learning about the characteristics of the education systems within which successful scaled up numeracy programs operate. The research is being conducted across 6 programs in 5 countries (See map above) and individual country briefs are available [here](#).



# ESMATE

COUNTRY	YEARS OF IMPLEMENTATION
<b>El Salvador</b>	<b>2015 to date</b>
IMPLEMENTER AND FUNDER	TECHNICAL ASSISTANCE
El Salvador's Ministry of Education	Japan International Cooperation Agency

- MAIN PROGRAM COMPONENTS
- ➔ Government run program in every public school in the country.
  - ➔ Focus on problem-solving approach to help students develop conceptual understandings
  - ➔ Provision of high-quality textbooks printed every year for all students
  - ➔ Active time on task, with students working independently
  - ➔ Teacher support for student learning, including one annual planning day, three annual teacher reflection days, and pedagogical support from school directors

REACH (as of 2023)	FOR MORE INFORMATION
All public schools in El Salvador: <b>4,666</b> primary schools, <b>2,726</b> junior high schools, and <b>705</b> senior high schools	<a href="#">ESMATE Numeracy at Scale Findings Brief</a> <a href="#">Spanish Version</a>

IMPACT

**0.49 SD** impact on math scores for 2nd grade students from impact evaluation (small scale); **0.18 SD** increase in math scores for lower secondary<sup>1</sup>



# GRADE R EARLY MATHEMATICS PROGRAM (R-MATHS)

COUNTRY	YEARS OF IMPLEMENTATION
<b>South Africa</b>	<b>2017 to date</b>
IMPLEMENTER AND FUNDER	TECHNICAL ASSISTANCE
Western Cape Education Department	University of Cape Town Schools Development Unit (pilot)

- MAIN PROGRAM COMPONENTS
- ➔ Curriculum restructure to enhance students' conceptual understanding of mathematics
  - ➔ Two-stage cascade training for subject advisors and then grade R teachers
  - ➔ Ongoing coaching and teacher support by subject advisors, as well as professional learning communities
  - ➔ Development of teacher manuals and other program materials in Afrikaans, isiXhosa, and English

REACH (as of 2023)	FOR MORE INFORMATION
All schools in Western Cape ( <b>8</b> districts; <b>~1,000</b> schools)	<a href="#">R-Maths Numeracy at Scale Findings Brief</a>

IMPACT

Approximately **0.2 SD** effect size for rural districts in first year of implementation (at scale)<sup>2</sup>

1 Maruyana, T., & Kurosaki, T. (2024). Developing Textbooks to Improve Math Learning in Primary Education: Empirical evidence from El Salvador. <https://www.journals.uchicago.edu/doi/full/10.1086/721768>

2 Roberts, N., & Mawoyo, M. (2020). R-Maths consolidation phase evaluation report. Kelello.



# GANITHA KALIKA ANDOLANA (GKA)

COUNTRY	YEARS OF IMPLEMENTATION
<b>India</b>	<b>2000 to date</b>

IMPLEMENTERS AND FUNDERS  
 Akshara Foundation in partnership with state governments

- MAIN PROGRAM COMPONENTS
- ➔ State-funded production of “math kits”—comprehensive sets of concrete materials emphasizing problem-solving skills, conceptual understanding, and real-world application
  - ➔ Training of key resource people, head teachers, and teachers through monthly cluster-level meetings held by the government
  - ➔ Ongoing support through sharing videos, active messaging on WhatsApp, and Pratibimba, a monthly podcast designed by teachers, for teachers, about best practices
  - ➔ Ongoing monitoring at the school level by education volunteers through the Karnataka Learning Partnership app to capture key program insights
  - ➔ Math competitions at the community level
  - ➔ Small-group, mixed-ability teaching (of 5–6 students) and teacher handbooks to strengthen math instruction

REACH (as of 2023)	FOR MORE INFORMATION
<b>50,000+</b> schools across <b>3</b> states in India (Karnataka, Odisha, and Andhra Pradesh)	<a href="#">GKA Numeracy at Scale Findings Brief</a>

IMPACT  
 Internal longitudinal evaluation (from prior phase) found **0.27 to 0.43 SD** impact on numeracy<sup>3</sup>; external randomized evaluation found **0.18** effect size for girls only<sup>4</sup>



# NANHI KALI

COUNTRY	YEARS OF IMPLEMENTATION
<b>India</b>	<b>2016 to date</b>

IMPLEMENTER  
 Naandi Foundation and Education Initiatives (Mindspark)

FUNDER  
 K. C. Mahindra Education Trust, Corporations and Individuals

- MAIN PROGRAM COMPONENTS
- ➔ Multigrade after-school club focused on supporting girls’ learning outcomes in community-based academic support centers 2 hours a day, 6 times a week
  - ➔ Trained program staff and “community associates” oversee and implement the program
  - ➔ Personalized mathematics instruction delivered through Mindspark, an adaptive learning software pre-loaded onto tablets, for an hour; students also have another hour of non-tablet math instruction
  - ➔ Ongoing training and capacity building for community associates

REACH (as of 2023)	FOR MORE INFORMATION
<b>6,100</b> centers across <b>8</b> states, reaching <b>160,000</b> girls	<a href="#">Nanhi Kali Numeracy at Scale Findings Brief</a>

IMPACT  
 Evaluations of Mindspark found a large impact on numeracy scores from an initial small pilot (**1.7 SD** effect size)<sup>5</sup> and a moderate impact on numeracy scores in a second pilot (**0.37 SD** effect size)<sup>6</sup>

3 Vajjayanti, K., Suma, M.N., Mondal, A. (2016). *The Impact of Akshara Ganitha: A Longitudinal Study 2012-13 to 2014-15*. Akshara Foundation.

4 de Barros, A., Fajardo-Gonzalez, J., Glewwe, P., Sankar, A. (2023). “The Limitations of Activity-Based Instruction to Improve the Productivity of Schooling.” *The Economic Journal*, June 2023. <https://de-barros.com/publication/de-barros-the-2023/de%20Barros%20et%20al.%20-%202023%20-%20The%20Limitations%20of%20Activity-Based%20Instruction.pdf>

5 Grey Matters India. (2020). Outcome Measurement: EI/PIF- Mindspark. Year 1 Endline. (Presentation).

6 Muralidharan, K., Singh, A., & Ganimian, A. J. (2019). “Disrupting education? Experimental evidence on technology-aided instruction in India.” *American Economic Review*, 109(4), 1426–1460. DOI: 10.1257/aer.20171112



# RAMP

COUNTRY <b>Jordan</b>	YEARS OF IMPLEMENTATION <b>2015-2023</b>
IMPLEMENTERS RTI International, Jordan's Ministry of Education, and technical assistance partners <sup>7</sup>	FUNDERS US Agency for International Development and UK's Foreign, Commonwealth & Development Office

- MAIN PROGRAM COMPONENTS
- ➔ Development and distribution of improved learning materials to every K2–grade 3 classroom in Jordan
  - ➔ Training of teachers, principals, supervisors, and field directorate and Ministry of Education administrators on how to provide more effective instruction
  - ➔ Promotion of community participation in reading and mathematics education
  - ➔ Support for the nationwide adoption of early grade reading and mathematics policies, standards, curricula, and assessments

REACH (as of 2022) <b>2,970</b> public schools, including <b>20,000+</b> teachers and <b>1.1 million+</b> students	FOR MORE INFORMATION <a href="#">RAMP Numeracy at Scale Findings Brief</a>  <a href="#">Arabic Version</a>
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IMPACT  
**10 percentage point (50%)** increase in the proportion of grade 2 students nationally who can do grade-level mathematics with understanding<sup>8</sup>



# TAFITA

("Tantsoroka ho an'ny Fitantanany sekoly" in Malagasy)

COUNTRY <b>Madagascar</b>	YEARS OF IMPLEMENTATION <b>2016 to date</b>
IMPLEMENTERS Madagascar's Ministry of Education and Japan International Cooperation Agency	FUNDERS Japan International Cooperation Agency

- MAIN PROGRAM COMPONENTS
- ➔ Trainings to strengthen the capacity of school management committees to develop and carry out action plans, including plans for Teaching at the Right Level (TaRL) remediation activities, through collaboration with parents, teachers, and community members
  - ➔ Training and ongoing support to local actors to implement the TaRL remediation intervention in reading and mathematics for children in grades 2–5

REACH (as of 2023) Math program in <b>2</b> regions, including <b>2,725</b> schools and <b>288,896</b> students	FOR MORE INFORMATION <a href="#">TAFITA Numeracy at Scale Findings Brief</a>  <a href="#">French Version</a>
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IMPACT  
**0.56 SD** increase in grade 3 math scores based on randomized controlled trial (endline in 2019)<sup>9</sup>

7 Queen Rania Teacher Academy, Change Agent for Arab Development and Education Reform, Dajani Consulting, Kaizen Company, Mercy Corps, Prodigy Systems, UNICEF, We Love Reading, Integrated International, Edwise ME  
8 RTI International. (2019). *Early Grade Reading and Mathematics Initiative: Endline survey report*. USAID. [https://pdf.usaid.gov/pdf\\_docs/PA00WPQD.pdf](https://pdf.usaid.gov/pdf_docs/PA00WPQD.pdf)  
9 Maruyana, T., & Igei, K. (2022). Community-wide support for primary students to improve foundational literacy and numeracy: Empirical evidence from Madagascar. <http://dx.doi.org/10.2139/ssrn.4076787>