Building Education Foundations through Innovation & Technology (BEFIT)

Year 1 - Research Technical Report - Executive Summary

13 November 2024

IMAGINE
THE FUTURE OF LEARNING

Ministry of Education
BeFIT

Executive Summary

Background

This report presents findings from research conducted by Imagine Worldwide - in collaboration with colleagues at the University of Malawi and RBC Consult - on the first year of BEFIT. A program of the Malawi government, **BEFIT - Building Education Foundations Through Innovation & Technology** - delivers foundational learning in literacy and numeracy through onebillion's award-winning software, *onecourse*. The program is delivered on tablets to whole classes during the school day and supplements standard instruction in Standards 1-4. During the 2023-24 school year, the Malawi government allocated 90 minutes per week for BEFIT in the official timetable. Schools were encouraged to use idle time, where available, to schedule a minimum of 150 minutes per week per child based on prior research. Local scheduling ranged from 90 minutes to 300 minutes per week.

The BEFIT program responds to a **development challenge in Malawi primary education** related to literacy and numeracy achievement. While the government has significantly improved access and equity in primary education, the primary school completion rate in Malawi was 52% in 2018, with fewer girls compared with boys completing primary education, and completion has been decreasing with rising enrollment (Malawi Education Sector Analysis 2019). In 2015, students in Standards 4 and 7 were lower in all subject areas except Chichewa than their counterparts in 2012 and the majority failed to reach a 40% mark in the national primary curriculum performance standards (Monitoring of Learning Achievement 2015). Although learners have shown some improvement since, overall performance continues to fall below standard (Malawi Education Sector Analysis 2019).

The BEFIT program is built on a **strong foundation of research evidence** of the efficacy of onebillion's software to improve foundational literacy and numeracy: at least nine randomized controlled trials (RCTs) have been conducted on onebillion's learning software in different countries, languages, and settings, including five RCTs conducted in Malawi government schools and lasting between 8 weeks and 2 school years. These RCTs consistently showed that onebillion's software produced positive and significant learning gains in both literacy and numeracy in the early grades (see Research Summary).

During 2023-24, the Malawi Ministry of Education **launched the BEFIT program in 500 schools** serving more than 247,000 learners. Referred to in this report as the Year 1 schools, these 500 schools were intentionally located in the most under-served and rural districts in Malawi. The Year 1 schools were also divided into two cohorts to facilitate implementation: 261 schools that were determined to be infrastructure-ready launched the BEFIT program in September 2023, with the remaining 239 schools launching in January 2024. Ultimately, the program will roll out to all 6,000 primary schools in Malawi serving 3.8 million learners in Standards 1-4 annually.

During the first two years of BEFIT rollout, **Imagine's research is focused on ensuring that quality is maintained as the program expands** to all Standards 1-4 in every district in the country. This focus is intended to avoid the typical attenuation of program effects at large scale. Thus, the primary purpose of our Year 1 research was to monitor outcomes and implementation quality, to check that the program was on track and to inform program monitoring and iterative improvement. Our **research questions** for BEFIT Year 1 included:

- Are we obtaining the expected learning gains based on prior research?
- What are stakeholder perceptions of the program's impacts?
- What are the barriers to and enablers of quality implementation?

Our Year 1 research involved collection of quantitative and qualitative data through three main activities: (1) baseline and endline assessments of learning gains, (2) an endline survey of stakeholder perceptions of impacts, and (3) implementation research conducted throughout the 2023-24 school year. The assessments and stakeholder surveys were conducted in 60 schools sampled to be representative of the full set of 500 Year 1 schools. Implementation research involving stakeholder interviews and tablet session observations was conducted in two schools in different zones in each of the 17 Year 1 districts.

Significant learning about implementation at scale will occur during these early implementation years. Through close monitoring, research, and continuous improvement, we expect the program to be ready for a multi-year RCT at scale beginning in BEFIT Year 3. This Executive Summary highlights key findings from our Year 1 research.

Overall Findings

Imagine's research indicated that, while expanding to 500 schools in the most rural areas of Malawi during 2023-24, **the BEFIT program exhibited a strong start**. Results were consistently positive, although not always statistically significant, and they met or exceeded expectations in most cases. The three sources of data combined to tell a coherent Year 1 story, while also contributing unique perspectives on the program.

Did we obtain the expected learning gains based on prior research?

Research has shown that **time-on-task using the learning software is the most critical factor** driving learning gains, other than the quality of the software itself. The Ministry of Education scheduled 90 minutes per week (three 30-minute sessions) for the BEFIT program in the official school time table. Schools were encouraged to use idle time during the school day, where available, to schedule a minimum of 150 minutes per week per child (e.g., five 30-minute sessions) based on prior research. Taking into account typical attendance rates (about 60%), time for distribution and collection of tablets during sessions (about 10 minutes per 30-minute tablet session), and exam and grading weeks when the program may not be run, our goal for time-on-task during Year 1 was a minimum of 9 hours per school term on average. This translated to a targeted minimum of 27 total hours for the September cohort of

schools (that participated for three school terms) and a targeted minimum of 18 total hours for the January cohort of schools (that participated for two school terms).

Targets for minimum time-on-task were met:

- Based on the 60 research-school sample, time-on-task using the onecourse software **exceeded the minimum targeted time-on-task** for 2023-24: averaging 31 hours (vs. 27 hours) for the September cohort and 21 hours (vs. 18 hours) for the January cohort.
- While average time-on-task exceeded targets, there was **significant variation** in time-on-task across schools, leaving room for improvement in the future. Particular attention should be paid to understanding factors affecting lower time-on-task and seeking to raise the floor on the time that children spend using the learning software, where possible.

Multiple analyses indicated that **the BEFIT program produced positive learning gains**:

- Although BEFIT Year 1 cohorts accumulated lower time-on-task than in prior studies where the sessions ran longer than 30 minutes per day, the cohorts exhibited similar or greater absolute **gains in both literacy and numeracy,** and proportional or greater percentage gains, compared with prior comparable research studies.
- Although the two cohorts were similar at baseline, the September cohort (with 31 total hours of time-on-task) had higher absolute **literacy achievement** in several cases than the January cohort (with 21 total hours of time-on-task) at the end of the school year. It should be noted that the software typically allocates 60% of time-on-task to literacy and 40% to numeracy.
- In a regression analysis that controlled for region, grade, and gender, the September cohort statistically **out-performed** the January cohort at the end of the school year on all four outcome measures examined (two each in literacy and numeracy).
- A difference-in-differences analysis (explained in the technical report) produced consistently **positive treatment effects** for the September (vs. January) cohort, although these results were not statistically significant.
- The percentage of learners achieving **emergent or fluent status** increased by 2.9x in reading and 2.8x in math between baseline and endline, exceeding our growth target of 2.0x.
- Consistent with prior research, girls gained at least as much as boys during 2023-24, in contrast to typical patterns of widening achievement gaps during the lower primary grades. And the **gender gap in math was closing by the end of the school year**. Specifically, the gender gap in the percentage of learners who were emergent or fluent in mathematics at baseline (13% for boys vs. 8% for girls) was no longer statistically significant at the end of the school year (31% for boys vs. 28% for girls). It will be interesting to see if this gap closes further after a second year of the BEFIT program.

What were stakeholder perceptions of the program's impacts?

At the end of the school year, stakeholders reported **overwhelmingly positive impacts for learners in both academic and non-academic areas**:

- In the endline survey, most **stakeholders** (90%+) reported strong impacts from BEFIT on learners in mathematics, reading, and class standing.
- Stakeholders also reported that BEFIT led to improvements in students' **social-emotional learning (SEL)**, particularly in areas that contributed directly to learning**:** attendance, paying more attention in class, being more willing to follow instructions, and working harder in class (with 94%+ of stakeholders reporting these impacts).
- **Parents** reported high positive impacts for their children in attendance, punctuality, technology, and several SEL areas (94%+).

Stakeholders also reported positive impacts for teachers and schools:

- **Teachers** reported strong positive impacts, with 93%+ of classroom teachers reporting BEFIT increased their enjoyment of teaching, developed their instructional ability, and developed their ability to use technology.
- The majority of **school leaders** reported positive impacts on their schools, with 87%+ reporting increased parent engagement, school enrollment, and teacher satisfaction.

Stakeholders indicated that **BEFIT was inclusive of girls and children with special needs and disabilities (SEND)**:

- Ninety percent (90%) of stakeholders reported that the BEFIT program helped girls as much as boys;
- And 81% of stakeholders reported that BEFIT enabled the participation of children with SEND.

Observations and interviews during **implementation research site visits reinforced the above findings:**

- T**eachers** often reported that some of their students (particularly in Grades 3 and 4) had become readers due to the BEFIT program.
- Researchers observed **girls participating equally** with boys in the BEFIT program.
- With the exception of learners with the most severe impairments (such as blindness), **children with SEND, including deaf children, were reported and observed to be participating** successfully in the BEFIT program.

What were key barriers to and enablers of quality implementation?

During the implementation research site visits conducted throughout 2023-24, researchers **regularly encountered smoothly running tablet sessions**; focused and engaged children using the tablets; enthusiastic teachers, heads of school, and parents; reports from teachers of learners becoming readers or improving in math due to BEFIT; and reports and observations of girls and children with SEND participating in the program. However, the researchers also encountered variations in these practices and perspectives.

The most **critical barriers** to quality implementation can be grouped into two main categories: (1) barriers to learning gains and (2) barriers to program sustainability. Many of these barriers have already

begun to be addressed by the BEFIT implementation team. Strategies for addressing the barriers were brainstormed with stakeholders in November 2024.

Attention to the following barriers could help to improve the program further:

- Barriers to learning gains
  - Not all schools met the encouraged minimum time-on-task (at least 150 minutes per week).
  - In some cases, community fears about the content of the tablets interfered with learner attendance, at least initially before additional community sensitizations were held.
- Barriers to sustainability
  - Teacher engagement was affected in some cases by perceptions that the program was an outside program and not a government program.
  - Engagement of district and zonal officials was also affected in some cases by a misunderstanding about their role in the program.
- In addition, some regional variations in perceptions and practices could be investigated further.

Conclusion

Imagine's research demonstrated that, while expanding to 500 schools in the most rural areas of Malawi during 2023-24, **the BEFIT program exhibited a strong start**. Multiple analyses indicated positive learning gains in line with prior studies. And the multiple data sources combined to tell a coherent story of successful Year 1 implementation. The research also suggests areas for improvement that can strengthen the BEFIT program further.

During BEFIT Year 1, Imagine's research focused on monitoring outcomes and implementation quality, to check that the program was on track and to inform program monitoring and iterative improvement. We collected quantitative and qualitative data through baseline and endline assessments of learning outcomes; an endline survey of stakeholder perceptions of impacts; and implementation research conducted throughout the school year. Together and separately, the research pointed to the **program running largely as intended**, albeit with local variations: on average, children obtained the minimum targeted time-on-task and made statistically significant learning gains in line with prior research on the program. Comparisons of the two launch cohorts (September and January) offered several indications that children in the schools participating for three school terms exceeded the learning gains of their peers in schools that participated for two school terms. And stakeholders were overwhelmingly positive about the impacts of the program.

The **research also indicated areas for improvement**, many of which were shared with program implementers during the school year and have already begun to be addressed. While BEFIT was running well in many schools, future implementation efforts could focus on locales with weaker implementation, including understanding their particular barriers, thereby raising the floor on implementation quality across the country. A focus could also be on ensuring that teachers, school leaders, and local government

officials have full understanding of the government role in and vision for BEFIT. This will make a difference for immediate implementation quality as well as future sustainability of the program.

While exhibiting a strong start, **BEFIT has the potential to achieve an even greater magnitude of impact.** Increasing time-on-task, strengthening monitoring and support systems, and continuously improving the onebillion software can all add significant value to a program that is already making a meaningful difference in children's learning.

Additional details on the Year 1 research methods and findings can be found in the attached tables and in the Technical Report, available upon request ahead of publication by the end of 2024.

Table 1. BEFIT Year 1 baseline assessment sample, by cohort

	Total	Cohort		
		Sept 2023	Jan 2024	Diff.(1)
Schools				
Cohort 1 count	500	261	239	--
Assessment sample count	60	34	26	--
Learners				
Population estimate (N)	247,677	152,272	95,405	--
Final analytic sample count (n)	2,196	1,248	948	--
Column total % / average	100%	100%	100%	--
Region				
Central	43	63	11	*
Northern	21	14	32	
Southern	36	24	57	*
Grade				
Standard 1	30	30	30	
Standard 2	25	25	25	
Standard 3	25	26	24	
Standard 4	20	19	21	
Gender(2)				
Male	48	50	47	
Female	52	50	53	
Location(3)				
Rural	96	97	95	
Semi-urban	2	3	0	
Urban	2	0	5	
School proprietor				
Public	75	75	75	
Religious institution	25	25	25	

Note: The table presents weighted results at baseline for the final analytic sample. Calculations were performed on unrounded numbers. --Indicates not relevant.
(1)Indicates the significance of the difference between the September and January cohorts at the $p<0.05$ level, based on adjusted p-values using the Bonferroni correction for multiple pairwise comparisons.

(2)Gender proportions reflect the sampling design where the same number of girls and boys were randomly sampled for assessment within each school. The female proportion is slightly higher, because two of the sampled schools were girls-only schools.
(3)Among the 60 assessment schools, only one (September) school was designated as semi-urban and one (January) school as urban. The vast majority of learners in both cohorts (92-97%) attended rural schools. Because of lack of variation in location, this variable was dropped from subsequent analyses for Year 1.

Table 2. BEFIT Year 1 performance on primary outcome measures at baseline and endline and the associated gains: overall and by cohort, grade level, and gender

	Baseline					Endline					Gain									
		Cohort		Cohort	Sig		Cohort		Cohort	Sig		Sig.	% of	Cohort					Cohort	
	Total	Sept '23	Jan '24	diff.	(1)	Total	Sept '23	Jan '24	diff.	(1)	Total	(2)	baseline	Sept '23	Sig.(2)	Jan '24	Sig.(2)	diff.	Sig.(1)	
Final analytic sample count (n)	2,196	1,248	948	--		2,938	1,718	1,220	--		--			--		--		--		
Outcome measure																				
Literacy (EGRA)																				
Average % correct																				
Overall	23.1	23.6	22.4	1.2		31.4	32.2	30.2	2.0		8.3	*	36%	8.6	*	7.8	*	0.8		
Grade level																				
Standard 1	13.9	14.2	13.5	0.7		15.8	16.1	15.4	0.7		1.9	*	13%	1.9	*	1.8	*	0.0		
Standard 2	16.0	16.0	16.0	0.0		22.6	23.0	21.9	1.0		6.6	*	41%	7.0	*	5.9	*	1.1		
Standard 3	24.8	25.2	24.0	1.3		40.5	42.6	37.1	5.5	*	15.8	*	64%	17.3	*	13.1	*	4.2		
Standard 4	43.5	45.3	40.8	4.5		54.0	54.6	53.0	1.6		10.5	*	24%	9.3	*	12.2	*	-2.9		
Gender																				
Boys	22.8	23.5	21.5	2.0		30.2	31.2	28.5	2.8	+	7.4	*	33%	7.8	*	6.9	*	0.8		
Girls	23.4	23.6	23.1	0.6		32.5	33.1	31.7	1.4		9.1	*	39%	9.4	*	8.6	*	0.8		
% Attained emergent or fluent (3)																				
Overall	6.2	6.6	5.5	1.0		18.2	19.5	16.0	3.6	+	12.0	*	195%	13.0	*	10.4	*	2.5		
Grade level																				
Standard 1	0.0	0.0	0.0	0.0		0.5	0.8	0.0	0.8		0.5		n/a	0.8		0.0	--	0.8		
Standard 2	0.3	0.4	0.0	0.4		2.3	2.9	1.5	1.4		2.1	*	808%	2.4		1.5		0.9		
Standard 3	2.0	1.8	2.5	-0.7		24.7	28.2	18.7	9.5	+	22.6	*	1109%	26.4	*	16.2	*	10.2	+	
Standard 4	27.8	30.5	23.7	6.9		55.8	57.8	53.0	4.8		28.0	*	101%	27.2	*	29.3	*	-2.1		
Gender																				
Boys	6.5	6.5	6.5	0.0		15.9	16.8	14.5	2.3		9.5	*	146%	10.3	*	8.0	*	2.3		
Girls	5.9	6.6	4.7	1.9		20.3	22.2	17.3	4.9		14.4	*	245%	15.6	*	12.6	*	3.0		
Numeracy (EGMA)																				
Average % correct																				
Overall	19.5	19.6	19.3	0.3		31.8	32.4	30.8	1.6		12.3	*	63%	12.8	*	11.5	*	1.4		
Grade level																				
Standard 1	5.7	5.8	5.5	0.3		8.7	9.1	8.1	1.0		3.0	*	53%	3.3	*	2.6	*	0.7		
Standard 2	8.6	8.6	8.4	0.2		22.4	23.1	21.2	1.9		13.8	*	162%	14.5	*	12.8	*	1.7		
Standard 3	25.5	25.3	25.9	-0.6		44.4	46.0	41.7	4.3		18.9	*	74%	20.7	*	15.8	*	4.9		
Standard 4	46.0	46.9	44.5	2.4		61.8	61.7	62.0	-0.2		15.9	*	35%	14.8	*	17.5	*	-2.6		
Gender																				
Boys	20.6	21.0	20.0	1.0		31.5	32.6	29.8	2.8		10.9	*	53%	11.6	*	9.8	*	1.7		
Girls	18.4	18.2	18.8	-0.6		32.0	32.2	31.7	0.5		13.6	*	74%	14.1	*	12.9	*	1.1		
% Attained emergent or fluent (3)																				
Overall	10.6	10.7	10.5	0.3		29.4	30.0	28.3	1.8		18.8	*	177%	19.3	*	17.8	*	1.5		
Grade level																				
Standard 1	0.0	0.0	0.0	0.0		0.7	0.8	0.5	0.2		0.7		n/a	0.8		0.5		0.2		
Standard 2	0.9	0.4	1.7	-1.2		11.9	13.4	9.6	3.9		11.0	*	1209%	13.0	*	7.9	*	5.1		
Standard 3	10.4	10.1	10.8	-0.8		43.4	45.6	39.6	6.0		33.1	*	319%	35.6	*	28.8	*	6.8		
Standard 4	38.9	41.0	35.6	5.5		76.1	75.3	77.4	-2.1		37.2	*	96%	34.2	*	41.8	*	-7.5		
Gender																				
Boys	13.1	13.6	12.3	1.3		31.0	32.4	28.6	3.9		17.9	*	136%	18.9	*	16.3	*	2.6		
Girls	8.3	7.9	8.8	-1.0		27.8	27.7	28.0	-0.3		19.6	*	237%	19.8	*	19.2	*	0.6		

Note: The table presents weighted results for the final analytic samples. Calculations were performed on unrounded numbers.
(1)Indicates significance of the difference between the two cohorts at the p<0.05 level (*) and p<0.10 level (+), based on adjusted p-values using the Bonferroni correction for multiple pairwise comparisons.
(2)Indicates significance of the gain between baseline and endline at the p<0.05 level (*) and p<0.10 level (+), based on adjusted t-values using the Bonferroni correction for multiple pairwise comparisons.
(3)Standard 2 benchmarks were applied consistently for each grade to show growth across the grades.

Table 3.-Comparison of gains on literacy and mathematics outcome measures, between the BEFIT Year 1 study and prior Imagine studies in government schools in Malawi and Tanzania

					TOT(1)	Literacy (EGRA)								Numeracy (EGMA)							
						Average % correct				% Emergent or fluent				Average % correct				% Emergent or fluent			
Study and group	Grades	Software version	Software language	Months program ran	(avg hours in literacy / math)	Baseline	Endline	Gain	% of baseline	Baseline	Endline	Gain	baseline	Baseline	Endline	Gain	% of baseline	Baseline	Endline	Gain	% of baseline
Multiple grades																					
BEFIT Year 1 Study																					
Overall	1-4	Adaptive	Chichewa	n/a	16 / 11	23.1	31.4	8.3	36%	6.2	18.2	12.0	195%	19.5	31.8	12.3	63%	10.6	29.4	18.8	177%
Sept cohort	1-4	Adaptive	Chichewa	9	18 / 12	23.6	32.2	8.6	36%	6.6	19.5	13.0	198%	19.6	32.4	12.8	65%	10.7	30.0	19.3	180%
Jan cohort	1-4	Adaptive	Chichewa	6	12 / 8 (2)	22.4	30.2	7.8	35% (2)	5.5	16.0	10.4	188% (2)	19.3	30.8	11.5	59% (2)	10.5	28.3	17.8	171% (2)
5-month RCT - Tanzania																					
Treatment group	1-3	Adaptive	Kiswahili	5	16 / 11	12.0	20.0	8.0	67%	3.4	11.0	7.5	220%	16.0	24.0	9.0	56%	7.5	12.4	9.0	120%
Control group	1-3	Adaptive	Kiswahili	n/a	n/a	10.0	16.0	5.0	50%	2.9	7.1	4.3	150%	14.0	19.0	6.0	43%	7.9	6.4	6.0	76%
Standard 2 learners only																					
BEFIT Year 1 Study																					
Overall	2	Adaptive	Chichewa	n/a	16 / 11	16.0	22.6	6.6	41%	0.3	2.3	2.1	792%	8.6	22.4	13.8	162%	0.9	11.9	11.0	1209%
Sept cohort	2	Adaptive	Chichewa	9	18 / 12 (3)	16.0	23.0	7.0	44% (3)	0.4	2.9	2.4	581% (3)	8.6	23.1	14.5	168% (3)	0.4	13.4	13.0	3095% (3)
Jan cohort	2	Adaptive	Chichewa	6	12 / 8	16.0	21.9	5.9	37%	0.0	1.5	1.5	n/a	8.4	21.2	12.8	151%	1.7	9.6	7.9	n/a
8-month RCT - Malawi																					
Treatment group	2	Proc. v1	Chichewa	8	56 / 56	11.0	19.0	8.0	73%	1.0	9.1	8.1	796%	--	--	--	--	6.1	18.7	12.6	208%
Control group	2	Proc. v1	Chichewa	n/a	n/a	12.0	16.0	4.0	33%	0.5	6.4	5.9	1111%	--	--	--	--	5.3	12.9	7.6	143%

BEFIT study values are based on weighted analyses. Calculations were based on unrounded numbers. "n/a" Indicates not applicable.

(1)Time-on-task (TOT) for the BEFIT Year 1 study was calculated based on tablet usage data processed on 28 August 2024. In the adaptive software, about 60% of the total usage time was spent in literacy activities and 40% in numeracy activities. For the 8-month RCT, children spent the same amount of time in either subject.

(2)The BEFIT January cohort accumulated about 75% of the time-on-task of the Tanzania 5-month treatment group (based on unrounded numbers).

(3)The BEFIT September cohort accumulated 32% of the time-on-task of the Malawi 8-month treatment group in literacy and 21% of their time-on-task in numeracy.

-- The mathematics curriculum in the software used for the 8-month RCT in Malawi contained limited content, which was augmented in subsequent studies. Thus, the math results on the "average % correct" measure are not comparable to the other studies. However, the math curriculum did cover material relevant to the missing number EGMA subtest, which is used in the "emergent or fluent in math" measure, so that measure is reported.

Table 4. Coefficients on the cohort variable (September vs. January) based on regressions of primary outcomes on independent variables: baseline and endline

	Cohort(1)			
	Baseline	Sig.(2)	Endline	Sig.(2)
Final analytic sample count of learners (N)	2,196		2,938	
Primary outcomes				
Literacy (EGRA)				
Average % correct(3)	1.91	+	2.67	*
% Attained emergent or fluent(4)	1.64	+	1.69	*
Numeracy (EGMA)				
Average % correct(3)	1.88		2.42	+
% Attained emergent or fluent Std 2(4)	1.46		1.33	+

Note: The table presents weighted results for the final analytic samples of learners.
(1)Coefficients represent the association of cohort (September 2023 vs. January 2024) and the outcome measure, controlling for region, grade, and gender.
(2)Statistical significance: * indicates significance at the $p<0.05$ level; + indicates significance at the $p<0.10$ level.
(3)Ordinary least squares regressions were run on the continuous "average % correct" dependent variables.
(4)Logistic regressions were run on the binary "attained emergent or fluent" variables (yes/no). Due to lack of variation in the outcome, Grade 1 and Grade 2 learners were excluded from the EGRA analyses when no learners in the grade attained emergent or fluent status in literacy at either baseline and/or endline.

Table 5. Average treatment effects for September 2023 vs. January 2024 BEFIT cohorts, based on difference-in-differences regressions of primary outcomes on independent variables

Primary outcomes	Average treatment effect on the treated		
Observations (baseline + endline) (n)	5,134	--	--
	Coeff.(1)	p-value	Sig.(2)
Literacy (EGRA)			
Average % correct(3)	0.80	0.34	
% Attained emergent or fluent(4)	1.36	0.20	
Numeracy (EGMA)			
Average % correct(3)	1.18	0.49	
% Attained emergent or fluent Std 2(4)	1.13	0.58	

Note: The table presents weighted results.
(1)Coefficients represent the added change in the outcome variable for the September cohort vs. the January cohort.
(2)Statiscial significance of the coefficient. Blank means p-value does not meet $p<0.05$ or $p<0.10$.
(3)Ordinary least squares (OLS) regressions were run on the continuous "average % correct" dependent variables. Note that coefficients >0.00 in these OLS analyses indicate that the September 2023 cohort had greater gains than the January 2024 cohort, although the treatment effects were not statistically significant.
(4)Logistic regressions were run on the binary "attained emergent or fluent" variables (yes/no). Note that coefficients >1.00 in these logistic analyses indicate that the September 2023 cohort had greater gains than the January 2024 cohort, although the treatment effects were not statistically significant.