

Educational technology can transform learning in the Global South by providing access to quality resources and interactive tools, bridging educational gaps and empowering students with skills for a brighter future.

# Life-Changing Foundational Learning Through Edtech in Sub-Saharan Africa







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All children have immense potential, but millions lack access to the learning they need. This is especially true for girls and other marginalized children. Basic literacy and numeracy are the keys to unlocking a child’s potential and improving their health, wealth, and social outcomes — and these improvements extend to whole families and future generations. However, currently 89% of children in Sub-Saharan Africa are unable to read and understand a simple text by age 10.<sup>1</sup>

Despite sincere commitments to foundational learning, existing systems have been unable to solve the problem due to large class sizes, insufficient teacher training, lack of instructional materials, and a lack of power and connectivity. Building more schools and hiring more teachers has proven to be too slow, expensive, and ultimately ineffective in addressing persistent foundational learning gaps. And 99% of education technology products are unsuitable for the hundreds of millions of children who are in most need of innovative solutions. Talent is universal, opportunity is not. The scope of the challenge requires a massively scalable solution.

### Child-centered, tech-enabled learning at scale

Imagine Worldwide’s goal is to solve the literacy and numeracy crisis for millions of children across Sub-Saharan Africa. We provide a tablet-based, personalized learning solution specifically designed to overcome the systemic barriers that have historically prevented the widespread adoption of edtech in the developing world.

How it works:

- Each primary school-age child **learns on a tablet** (used by an average of 5 students per day for 30-60 minutes each)
- Tablets work **without internet** connectivity and are **solar-powered**
- **Adaptive** software includes a full, **culturally appropriate literacy/**







Photo: Sun King

**numeracy curriculum** created by our software partner onebillion (<https://onebillion.org>)

- Tablet sessions **supplement teacher-led instruction** with children learning at their own pace
- Data from tablets and community feedback sessions fuel **continuous improvement** of software and implementation model
- Annual cost per child is **less than \$7** and declining.

Working with local implementation partners and local governments, we currently serve students in seven Sub-Saharan African countries. Our model is unique and massively scalable.

**Accessible.** Unlike 99% of edtech, our solution is specifically designed to serve children in the lowest-income countries and most difficult environments. The tablets are designed to work without internet connectivity and are charged with solar power, as most schools lack electricity. The learning content is offered in the local language of instruction and the software adapts to the learner's level and pace, offering a personalized learning experience that is rare in these contexts. The annual cost of the tablet program is \$7/child and is declining due to economies of scale and the deflationary nature of technology.

**Effective.** Globally, less than 10% of edtech tools have evidence of impact.<sup>2</sup> Nine randomized controlled trials (RCTs)<sup>3</sup> on our tablet software (developed by onebillion) have shown dramatic learning gains across different countries, languages, and contexts. We have also seen increases in school attendance and enrollment, and improvements in attitudes toward learning. Our two-year RCT in Malawi showed:

- 4.2 months of additional literacy learning after 13 months of disrupted schooling due to COVID
- 72% children attained emergent or fluent mathematics status
- 50% more children advanced on national literacy benchmarks
- Girls benefited at least as much as boys, in contrast to standard classroom practice.

**Sustainable.** We believe that systemic change must be driven by governments and local actors if it is to have lasting impact. Imagine's role is collaborative and temporary. We mobilize early philanthropic capital to accomplish the elements necessary for national scale: government collaboration, ecosystem coordination, solar infrastructure, purchasing tablets and training, launching a critical mass of



schools, and developing country-specific evidence. We tap into the talent of local organizations and communities to strengthen the capacity, expertise, and infrastructure of government systems before stepping away for long-term local ownership.

**Catalytic.** While improving literacy and numeracy are our primary goals, we've learned that our stakeholders are also highly motivated by how our work impacts their ability to adopt future innovations. As we electrify schools, provide ICT training throughout the education system, and stimulate a robust local ecosystem of support services, we are catalyzing communities' readiness for next generation edtech tools and promoting community awareness of renewable energy.

### Proof-Point: Malawi

Based on the strong results of our efficacy research in early pilot programs in Malawi, the Government of Malawi has committed to scaling the tablet program (called BEFIT in Malawi<sup>4</sup>) to learners in Standards 1-4 in all 6,000 primary schools, serving 3.8 million students per year by 2029. BEFIT launched in September 2023 and was delivered on time and on budget, serving

nearly 300,000 students, training over 3,000 educators, and providing solar power to 500 schools.

"I like the tablet because when I make a mistake, it does not move on to the next student, but asks me to try again. And when I try, I get the right answer," shared one Standard 2 learner in Malawi. In addition to accelerating foundational learning skills, the BEFIT program has spurred a spike in school enrollment and student attendance, as well as improvements in behavior and attitudes toward learning. "The BEFIT program has been a game-changer for our school. It's not just about tablets; it's about igniting a passion for learning that transcends the classroom," said Mrs. Constance Mphaya, the head teacher at Namadidi Primary School, located in the Mulanje district of southern Malawi. The mother of an 8-year-old girl at St. Joseph Primary School in Malawi agrees, "Before BEFIT, (my daughter) struggled with mathematics," she confides. "But now, she's making rapid progress in adding and subtracting numbers."

BEFIT is on track to serve 600,000 students in nearly 1,000 schools in Year 2 of the program. This level of scale is unprecedented in the edtech sector and



Photo: YONECO





Photo: Imagine Worldwide

has few parallels in the global development sector as a whole. The Malawi program has created a roadmap for sustainable scale that other countries are eager to replicate.

In fact, demand from governments, communities, schools, parents, and students has been skyrocketing. Our solutions are getting easier to implement, even in the most remote locations, and the annual cost per child has decreased by 75% to less than \$7/child. In addition to Malawi, we are expanding the program across Sierra Leone, Liberia, Ghana, Senegal, Tanzania, and Burkina Faso. By early 2026, we will serve almost a million children across Sub-Saharan Africa.

### Just Imagine

I have always believed in the power of technology to deliver solutions to real challenges in Africa at scale, and in that way redistribute opportunity. I joined Imagine Worldwide as Co-CEO because Imagine's work is uniquely placed to have a generational impact. By 2030, nearly half of the world's youth will be African.<sup>5</sup> Imagine if these hundreds of millions of children were literate and numerate. Imagine the human, economic, and environmental benefits for the entire world if our children receive the education they

deserve. We've imagined it and, with our local partners, we are delivering it.

**Learn more  
at [www.imagineworldwide.org](http://www.imagineworldwide.org)**

**Watch the tablet program in action:**  
[www.youtube.com/watch?v=6ZsChda0xek](https://www.youtube.com/watch?v=6ZsChda0xek)

#### Notes:

<sup>1</sup> [www.unicef.org/media/122921/file/StateofLearningPoverty2022.pdf](http://www.unicef.org/media/122921/file/StateofLearningPoverty2022.pdf)

<sup>2</sup> [www.edsurge.com/news/2022-06-03-edtech-should-be-more-evidence-driven](http://www.edsurge.com/news/2022-06-03-edtech-should-be-more-evidence-driven)

<sup>3</sup> [www.imagineworldwide.org/wp-content/uploads/Imagine-Worldwide\\_Research-Summary\\_Sept-2023.pdf](http://www.imagineworldwide.org/wp-content/uploads/Imagine-Worldwide_Research-Summary_Sept-2023.pdf)

<sup>4</sup> [www.imagineworldwide.org/wp-content/uploads/Malawi-Project-Overview-General-2-27-23.pdf](http://www.imagineworldwide.org/wp-content/uploads/Malawi-Project-Overview-General-2-27-23.pdf)

<sup>5</sup> [www.weforum.org/agenda/2022/09/why-africa-youth-key-development-potential/](http://www.weforum.org/agenda/2022/09/why-africa-youth-key-development-potential/)

#### Disclosure Statement:

The author is an employee of Imagine Worldwide.