

Annual Report 2021

Background

UNESCO estimates that 1.5 billion children have had their schooling disrupted due to the COVID-19 pandemic. Even before the COVID-19 emergency, over 260M children and youth worldwide did not have access to school. Additionally, hundreds of millions of children do attend school, but never learn to read or do math because of overcrowded classrooms, lack of trained teachers and/or learning materials and many other barriers.

Imagine Worldwide exists to demonstrate that children with child-directed, technology-enabled learning solutions in their hands can become literate and numerate, driving their own instruction. We partner with organizations across the globe to achieve this goal. We build an evidence base for what works, for whom, and under what conditions. We use data to drive continuous improvement of learning content, approach, and implementation. Then we provide tools, expertise, capital, and a network to bring this opportunity to children across the globe. Demonstrating the effectiveness of child-directed, tech-enabled learning, beginning in places with few alternatives, can pave the way for limitless possibilities for all children.

While the pandemic continued to cause tremendous disruption in 2021, we witnessed rapid growing demand for tablet-based learning solutions. With the results of our first three randomized controlled trials (RCTs) showing consistently positive results for children in various learning environments, we began to form new partnerships, launch pilots in new countries and take important early steps in our journey towards scale. With a strong foundation beneath us, we look forward to serving significantly more children in new countries and contexts in 2022!



Sierra Leone (photo credit: Rising Academy Network)

2021 Program Review

Research

Over the last 12 months, we continued to build evidence of what works, for whom, and how. We enlarged our exciting portfolio of research, which spans multiple countries, settings, software products, and languages. We are employing a range of research methods to further our understanding about learning impacts, social-emotional learning, and longer-term educational outcomes, and to dive deeper into the question of what works for whom and under what conditions. And we're developing a continuous improvement loop by actively sharing our research findings with our software partners. Some key highlights of our recent research work are:

- 1. Our first three randomized controlled trials (RCTs) showed **consistent positive impacts** of personalized edtech on both literacy and math outcomes.
- 2. Children in the tablet program in **Malawi** who returned to school after seven months out of school due to COVID retained **significantly more learning than their peers** who received standard instruction only. Engaging edtech learning is sticky!
- 3. During school closures, we conducted interview research on households with primary age children who received onebillion's tablets as part of **home-based COVID-response pilots** in Malawi and in the U.S.
- 4. While the consistent positive average impacts are impressive, some children have not been making progress in reading. In 2021 we expanded our research to include a deep dive into factors affecting reading progress.
- 5. We carried out our first efficacy RCT with <u>Enuma</u>'s Kitkit School literacy software in the **Dzaleka** Refugee Camp.
- 6. We are supporting the development of **digital assessments** of foundational literacy and numeracy to make critical testing more accessible, including a partnership with <u>RTI</u> (the authors of global literacy and numeracy frameworks EGRA and EGMA) and with onebillion (creator of onetest).

With various studies concluding at the end of 2021, we will have a wealth of new results to share in the first quarter of 2022. This important research contributes to our impact evidence and supports our continuous improvement efforts.

Scale

Coming out of 2020, we assembled a strategic portfolio of potential opportunities to begin supporting children's learning at greater scale. During 2021, we are excited to have made significant traction on a number of these opportunities. Some key highlights are:

- 1. Building partnerships with two key implementation organizations in West Africa, Rising Academies and Afrikids, and launching pilots with them in preparation for scale in Sierra Leone and Ghana, respectively;
- 2. Winning bids in partnership with Counterpart International (Senegal) and Catholic Relief Services (Burkina Faso) to serve children at scale through the McGovern-Dole Food for Education Program;
- 3. Building our partnership with the International Rescue Committee (IRC) to explore scale opportunities;

4. Authoring a concept note in partnership with the Ministry of Education in Malawi and our partners, VSO and onebillion, to outline a plan for scaling the program nationwide to all 6,400 primary schools potentially serving almost 3 million children.

We are excited to have arrived at the next important phase in our work during which we will test our model with new partners in new contexts, ensure the availability of high-quality learning products, and develop a continuous improvement process to maximize children's learning.

In this report, we describe our progress during 2021 as well as our exciting plans for 2022!



Ghana (photo credit: Afrikids)

2021 Progress Reporting

Below are the goals and priorities from our 2021-22 Operating Plan as well as a report on the progress in each area:

Goal 1: Build an evidence base for child-directed, technology-enabled learning

Priority 1: Conduct efficacy research on targeted software solutions	
Metric of Success	2021 Achievements
Complete the Malawi long- term RCT, allowing children to finish the onebillion curriculum	We completed our two-year RCT in two Malawi schools, despite school closures and schedule disruptions due to COVID. We achieved 80% persistence in the study and satisfied baseline equivalence standards, ensuring that our forthcoming impact findings will be causally valid. However, due to the disruptions, children accumulated less time on task than expected and did not complete the literacy curriculum, which is extensive. In collaboration with the two schools, we have arranged for children in the literacy treatment group to continue using the tablet program in 2022, which should allow them to finish the literacy curriculum.
Launch and complete RCTs of onebillion's adaptive software in Swahili and French	We completed pilots—involving small RCTs—in two sites in Tanzania, using onebillion's adaptive software in a host community (in Swahili) and a refugee camp (in French). However, the subsequent larger efficacy RCTs have been delayed several months due to COVID-related disruptions and other implementation challenges. When the efficacy RCTs launch in March 2022, both sites will use onebillion's software in Swahili, due to a change in camp policy to use Swahili as the language of instruction in the early grades.
Launch and complete RCTs of Enuma's Kitkit School software in Swahili and English	As part of the above study, we completed a pilot-involving a small RCT-using Kitkit School in Swahili in a second host community in Tanzania. The efficacy RCT will launch in Q2 of 2022. In addition, we completed a 5-month RCT using Kitkit School's literacy software in English in the Dzaleka Refugee Camp in Malawi. We achieved 93% persistence in this study, and satisfied baseline equivalence standards, ensuring that our forthcoming impact findings will be causally valid.

Priority 2: Fill gaps in knowledge of what works, for whom and why	
Metric of Success	2021 Achievements
Conduct qualitative and quantitative studies of children not making progress in literacy skills	We conducted a mixed-methods (qualitative and quantitative) deep dive into the factors associated with reading progress and non-progress among children who had participated in the tablet literacy program at one of the Malawi schools in our long-term study. The study involved an assessment of working memory, a child survey of academic grit and self-control, observations of children's engagement when using the tablet software and participating in regular classrooms; child, parent, and teacher surveys of children's health functioning; parent and teacher surveys of children's learning behaviors, parent surveys of the home environment, and analysis of school administrative data on children's academic performance. We are using these data to identify characteristics that are predictive of non-progress in reading. The results will be used to inform future research on factors influencing non-progress in reading and will contribute to continuous software improvement efforts.
Develop a testing plan for modifying literacy software to address barriers to children's progress in literacy	Because of school closures and disruptions to the school calendars for 2020 and 2021 due to COVID, the above study of non-progress in reading was just concluded in November 2021. We are currently analyzing the data. We expect to complete our analysis in Q1 of 2022 and will then develop a plan in collaboration with onebillion to test potential improvements to the software to address factors emerging from the research that are most strongly associated with reading non-progress.

Priority 3: Define and conduct research on implementation models	
Metric of Success	2021 Achievements
Conduct descriptive research on 1-2 out-of-school implementations	We completed interview-based studies of two home-based pilots that were initiated in response to school closures due to COVID: one in Malawi and one in California in the U.S. The Community Learning Initiative distributed 700 tablets to households in two low-income villages in Lilongwe, Malawi. The Oakland onetab Pilot distributed 1,000 tablets to families in low-income communities in the San Francisco Bay Area. Due to restrictions on inperson contact during the pandemic, both studies relied on phone interviews with parents/guardians and children. About 100 households participated in each study. In both pilots, adults reported positive child interactions with the tablets, children wished they could spend more time using the tablets, and respondents reported positive impacts on children's learning and focus. We are preparing Research Briefs on each of the studies to become available in Q1 of 2022.

Plan supplemental
research on 1-2 scale pilots
and implementations

Opportunities in Ghana and Sierra Leone could involve large-scale, multi-year implementations and rigorous evaluations conducted by independent evaluators. In anticipation of these opportunities, we have developed plans for supplemental research to be undertaken by Imagine. Implementations in both countries may involve a broader range of grades (1-4 and 1-6, respectively) than previous implementations of onebillion's software (typically focused on grades 1-3). Further, large-scale initiatives usually result in greater variation in implementation practices than smaller-scale pilots. Consequently, Imagine plans to conduct supplemental research to (1) regularly monitor children's progress at each grade level to inform potential improvements to software content and (2) describe implementation contexts and variations in order to understand what works best under what conditions.

Goal 2: Testing, refining and replicating our implementation model for scale

Priority 1: Ensure strategic use of resources	
Metric of Success	2021 Achievements
Identify and launch at least 1-2 scale implementations	 We are excited to have begun planning and launching work in new contexts in preparation to support children's learning at greater scale. We were awarded two bids through the McGovern Dole Food for Education program to work in Burkina Faso (in partnership with Catholic Relief Services) and Senegal (in partnership with Counterpart International). We will be launching a pilot in Burkina Faso in early 2022 in preparation for our work at scale beginning in Q3-4 2022. We are in the early planning stages for our pilot in Senegal as well. We also launched a pilot in northern Ghana in partnership with Afrikids in four government schools in preparation for our EOF application to serve children in 85 schools. We conducted a pilot in two schools in rural Sierra Leone in partnership with Rising Academies. Given the success of the pilot, we are actively exploring opportunities for a larger partnership in Sierra Leone.

Priority 2: Create high-quality and affordable bundled solutions		
Metric of Success	2021 Achievements	
Develop 1-2 new software partnerships with pilot opportunities	 In 2021, we took important steps to expand our software portfolio: We launched our first RCTs with Enuma's Kitkit School software in both Tanzania and Malawi to develop our understanding of the impact of their product on student learning outcomes. Given the limited software market that currently serves our implementation contexts, we also contracted with a team of learning scientists at Wisewire to investigate options to expand the number of high-quality content partners and solutions. If we uncover a new high-potential product and/or an opportunity to build one, we will take next steps towards a pilot. We are supporting the development of digital assessments of foundational literacy and numeracy, through a partnership with RTI (the authors of global literacy and numeracy frameworks EGRA and EGMA) and with onebillion (creator of onetest). We will be testing these assessments in Ghana in the first half of 2022. 	
Pilot and/or invest in expansion of software content and/or new languages	 We conducted the first pilot of onebillion's software in French in Tanzania and will be using an updated version of the French software in Senegal and Burkina Faso. We collaborated with onebillion to support enhancement of their product by including additional math content and adding additional diagnostic levels in their adaptive software. 	
Create a bundled solution that is affordable and effective in target contexts	 We continued to make progress lowering costs and delivered our bundled solution at less than \$10/child/year (down from \$40 a few years ago) We are now working to aggregate purchasing to drive down the cost of tablets and accessories and add customization that will be beneficial in the contexts where we work COVID created significant supply challenges in 2021, which we did our best to manage. We will be making a bulk purchase of tablets and accessories in 2022 to help alleviate these issues. 	

Priority 3: Ensure high-quality and affordable implementation at scale	
Metric of Success	2021 Achievements
Test and refine systems for managing and monitoring scale implementations and ensuring continuous improvement	We piloted new systems to collect data from the field even in areas without cell phone coverage using basic smartphone devices. The lessons from these pilots led to a second iteration of the data collection process to be used in Burkina Faso, which will make the monitoring process even more feasible for our implementation partners. We also created our first version of automated monitoring dashboards to support both Imagine and our partners to quickly review implementation quality and identify issues in the field that need close management.

Goal 3: Ensuring a strong financial position

Metric of Success	2021 Achievements			
Manage expenses and cash	Imagine Worldwide			
flow within budget	YTD Budgeted Expenses vs Actual			
	January - December 2021			
			TOTAL	
		Actual	Budget	% of Budget
	Total 5000 Personnel Expenses	\$1,415,055	\$1,587,767	89%
	Total 5100 Consulting Expenses	\$ 295,827	\$ 385,000	77%
	Total 5200 Program Partner Expenses	\$ 680,906	\$1,520,000	45%
	Total 5300 Operating Expenses	\$ 90,947	\$ 126,600	72%
	Total Expenses	\$2,482,734	\$3,619,367	69%
	 Some highlights from our budget to actual We grew our team by four members apersonnel spending in 2021 (within both consulting expenses. We had a large program-related disboth moved to our 2020 books, resulting in also budgeted significantly more that and software development work. Our operating expenses remain under continued suspension of travel. Overall, we underspent in 2021 by over issue mentioned above and conservations. 	and, therefor udget) and dursement to a perceived n was required to budget mer \$1MM due	e, increase ecreased ca partner the underspersed for our reading due to the pay	hat was nd. We new pilo to ment

Meet fundraising goals and	We are thrilled to have exceeded our fundraising goals in 2021 with more
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reserve target by renewing	funds raised from new funders than from legacy funders. In total, we
existing grants and adding	raised \$3.8MM with seven new funders added at the \$150K level or above.
new funders	All of our existing grantors also renewed their grants or are expected to
	renew them in early 2022. Finally, we have hired a phenomenal Director of
	Development, Nafis Islam, who will support our fundraising work in 2022
	and beyond.

Priority 2: Establish alternative funding streams for Imagine	
Metric of Success	2021 Achievements
Self-fund direct costs of scale implementations	All scale contracts, such as McGovern Dole and EOF Ghana, include a fee-for-service line. In aggregate, these fees (approximately \$100K) will offset the incremental expenses of implementing these contracts.

Goal 4: Building, growing and maintaining a healthy organization

Priority 1: Ensure strong company values and culture	
Metric of Success	2021 Achievements
Create working groups to address critical areas such as organizational culture, DEI/anti-racism, and performance management	Our People and Culture Committee (PCC) was established and conducted a robust set of interviews with the entire staff in order to identify key areas of focus for the organization. Next, we established a set of team development priorities and will be holding dedicated working sessions on a monthly basis to address how we continuously improve as a team. We will supplement these sessions with outside coaching as needed. Finally, we worked with a DEI consultant who helped facilitate our summer offsite and a team diagnostic of strengths and opportunities for growth. Feedback from the facilitator was that our team was one of the strongest and most aligned amongst her clients.

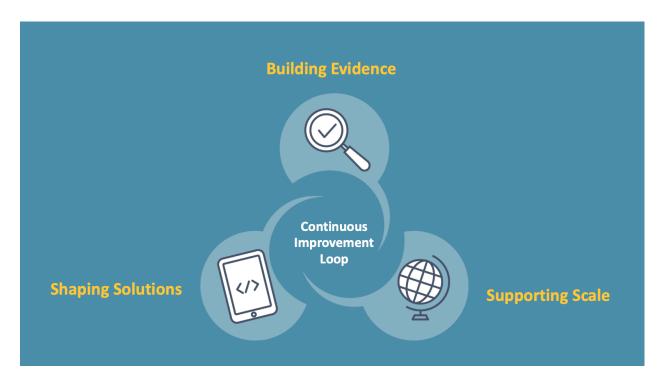
Priority 2: Attract and retain a strong and diverse team	
Metric of Success	2021 Achievements
Add at least 2 new FTEs: o Program Manager in West Africa o Research Analyst	 We are thrilled to have hired five new staff in 2021 in the following roles: We hired two new Research Analysts/Associates based in the U.S. (Abraham Bahlibi and Celeste Lopez) to support our growing research portfolio in six countries. We hired a Program Manager, Victor Atipagah, based in northern Ghana, to support our work with local partners in West Africa. We hired Neema Kanyua, Director of Scale, who is based in Kenya and is leading the development of tools and systems to support high-quality training, implementation and monitoring at scale. We hired a Director of Development, Nafis Islam, former Senior Director of Development at CARE, who will support our fundraising work in 2022 and beyond.

Priority 3: Ensure strong governance and maximize value-add of board	
Metric of Success	2021 Achievements
Create and execute process to evaluate how we will decide renewal	Three high impact board members renewed their terms. We also added Kanini Mutooni from Draper Richards Kaplan Foundation to our board.

Priority 4: Increase visibility of organization	
Metric of Success	2021 Achievements
Present at a minimum of 2 conferences/speaking opportunities per year	We presented research findings in 2022 at the Comparative and International Education Society (CIES) Conference and the mEducation Alliance Symposium. And our short-listed proposal, Technology-enabled Literacy Learning in a Second Language, was published on the Interagency Network for Education in Emergencies (INEE) Promising Research blog. We will be looking to increase our external presence over the next few years.

Strategic Plan for 2022-2023

We have reviewed and updated our Strategic Plan to align with our three strategic core activities outlined in the graphic below:



As such, we now have five total goals, three of which pertain to our core activities and two of which focus on Imagine as an organization:

- Goal 1: Building evidence
- Goal 2: Shaping the solution
- Goal 3: Supporting scale
- Goal 4: Ensuring a strong financial position
- Goal 5: Building, growing and maintaining a healthy organization

Below, we have detailed our priorities in relation to each goal as well as our metrics of success for 2022:

Goal 1: Building an evidence base for child-directed, technology-enabled learning	
Priorities	Metrics of Success
Conduct and extend efficacy research on targeted software	 Conduct 1-2 follow-up studies to understand longer-term educational outcomes Conduct 1-2 efficacy RCTs with onebilion's new adaptive software
Fill gaps in knowledge of what works, for whom, and under what conditions	Complete analysis of reading progress study, summarize implications for improving software and implementation, and plan further research

Conduct implementation studies of new models and large-scale implementations	 Conduct an implementation study comparing different in-class delivery models to inform Malawi scale work Develop and execute on an implementation research agenda for large-scale projects
Communicate and disseminate findings	 Design and produce Research Briefs for 3-4 priority research studies Deliver 1-2 panels/presentations at international conferences

Goal 2: Testing, refining and replicating our implementation model at scale	
Priorities	Metrics of Success
Design and execute on a robust and strategic portfolio of new pilots in preparation for scale	 Launch new work or expand existing projects in at least three countries Execute on a portfolio that includes at least: 2 software partners 4 languages 6 countries Serve at least 100K children by the end of 2024
Ensure high-quality implementation in all contexts	 Execute and refine collaborative design process with partners Build a portfolio of implementation models for various contexts (e.g. in-school, emergency, community-based) Create and refine tools and systems for supporting partners with training, data collection and monitoring
Create feedback process within Imagine and with partners to support continuous improvement	 Develop process for documenting lessons learned in sites Continue to share findings from research with software and implementation partners Use lessons learned to increase impact of future work
Develop relationships with governments and funders to support potential for adoption and funding at scale	 Participate in scale bids that include government or other key scale funding partners Work with existing government partners to identify opportunities to serve more children Help mobilize funding for direct implementation costs of scale projects

Goal 3: Shaping the solution		
Priorities	Metrics of Success	
Improve and expand effective and affordable software offerings	 Work with software partners to identify and improve product features Develop new partnerships to expand products / product features in the market 	
Identify high-quality and affordable hardware solutions and peripherals	Assess the landscape of vendors and products to determine the optimal products for scale bids	
Create systems and processes to assess and supplement required infrastructure for implementation (e.g. power, data, security)	 Work with partners to execute and refine needs assessment of local infrastructure Work with partners to execute necessary supplements to existing infrastructure 	
Build processes for efficient local and international procurement	 Continue to build our understanding of procurement barriers and develop potential workarounds Ensure products arrive on time and on budget for all projects 	

Goal 4: Ensuring a strong financial position	
Priorities	Metrics of Success
Ensure funding of operations and adequate reserve	 Create two-year budget Manage expenses and cash flow within budget Meet fundraising goals to cover budget (plus any additional expenses) and maintain a minimum of a \$2mm reserve Self-fund direct costs of scale implementations
Increase visibility of organization	 Create communications strategy Develop cultivation calendar and plan to keep website updated Retain communications consultant and coordinate with new Director of Development
Ensure strong governance and increase value-add of Board	 Create needs assessment for board additions Consider expansion of board if we find the right addition Create plan to best leverage each individual board member

Goal 5: Building, growing and maintaining a healthy organization	
Priorities	Metrics of Success
Ensure strong company values and culture	 Set aside dedicated time monthly for both team development and connection Conduct annual review of culture and incorporate feedback Conduct annual review of policies regarding safeguarding, anti-harassment, and whistleblowing Conduct necessary trainings and have all employees sign off on policies Have team offsite in Africa (COVID dependent)
Attract and retain a strong and diverse team	 Create individual professional development plans as part of annual review process Develop systems for tracking, sharing and building knowledge across our team

Conclusion

We continue to be even more convinced of the power of child-directed, technology-enabled learning for children all over the world. We are deeply appreciative of your past support and renewed commitment to our expanding work to empower every child, everywhere to build the literacy and numeracy skills they need to achieve their full potential.



Malawi (photo credit: Jjumba Martin)