



Fundi Bots



20 | ANNUAL
24 | REPORT

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Message from Founder and Executive Director



Solomon King Benghe
Founder & Executive
Director

Dear Friends of Fundi Bots,

Thank you for taking the time to explore our annual report, where we reflect on our progress and celebrate our achievements.

Looking back on 2024, I'm immensely grateful for the journey Fundi Bots has taken. It has been a year of remarkable resilience, innovation, and transformation—though not without its challenges. With limited new funding following an exceptional fundraising year in 2023, we encountered financial hurdles that tested our adaptability, yet our dedication to our mission remained unwavering.

Despite the hurdles, we reached **23,281 learners** through our Enhanced Science Curriculum (ESC), and **4022 learners**, through our robotics program, proving the power of hands-on STEM education.

We also **launched the Virtual Fundi pilot in 51 schools**, leveraging technology to expand access to quality learning.

We are excited to see the completion of our four-year ESC program pilot. It stands out as our strongest model for large-scale impact. By incorporating practical, hands-on activities and robust digital learning tools, ESC effectively addresses systemic challenges in science education while remaining flexible and cost-efficient.

This model not only improves classroom engagement and learning outcomes but also sets the stage for rapid expansion to countless schools, communities, and countries, driving us closer to our goal of transforming science education for one million learners across Africa.

Additionally, we invested in new production machines, increasing our capacity to create high-quality learning tools and accelerate science education across Africa.

A proud moment was seeing Fundi Bots **featured on Times Square**, a global recognition of our impact and the importance of our work.

None of this would have been possible without our dedicated team, trusted partners, and the unwavering support of our beneficiaries.

As we look ahead, we remain focused on scaling our impact and shaping a future where every African child has access to quality STEM education.

Thank you for being part of this incredible journey. The best is yet to come!

Onwards & Upwards!

#WeAreFundi

About Fundi Bots

Who we are

Fundi Bots is an educational non-profit organisation accelerating science learning in African classrooms. Fundi Bots operates in 4 regions in Uganda: Eastern, Western, Northern and Central Uganda. Outside Uganda, we have carried out training in Tanzania, Kenya and Rwanda.

Mission and Vision

At Fundi Bots, our mission is to accelerate science learning in Africa, and our vision is to see Africa transformed through science.

10 year mission

Accelerate science learning and provide skills training for 1,000,000 African children and youth by 2030.

The Problem

Science education in Uganda and much of Africa remains outdated, theoretical, and exam-focused, failing to equip learners with practical skills.

Over 90% of students in Sub-Saharan Africa lack basic proficiency in science (UNESCO), and in Uganda, only 22% demonstrate adequate science competence. Large classes, limited resources, and teacher shortages worsen the issue. Cultural and systemic barriers keep girls underrepresented in STEM. Without hands-on learning, students are unprepared for the job market, widening inequality and slowing growth.

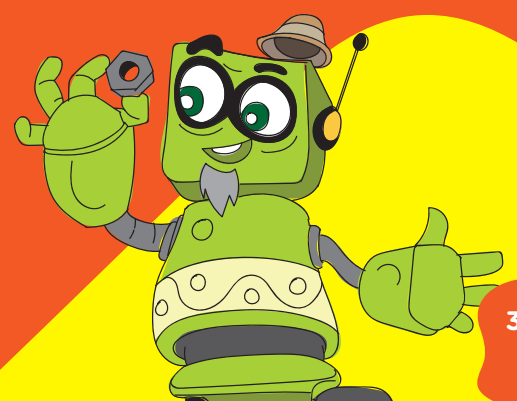
Our Solution

Fundi Bots' programs aim to achieve the following overall outcomes;

- Improved science performance.
- Improved teacher proficiency.
- Increased representation of girls and women in STEM fields.
- Improved technical skills.

Our impact: In 2023 national Primary Leaving Examinations (PLE), Fundi Bots supported schools demonstrated a 90% pass rate, compared to the national (control) average of 57%.

Our work has demonstrated measurable impact, improving science comprehension, school performance, and career readiness for thousands of students.



Our Learning Models

We use two main learning experiences which utilise a well-rounded and engaging methodology to increase students' performance in classrooms and provide career training and technical skills through custom STEM programs and curriculum.

1. Enhanced Science Curriculum

Our flagship learning model providing practical learning tools, teaching aids, and manuals that plug directly into the national curriculum to augment and amplify science lessons in classrooms for improved learning outcomes (intra-curricular).



**Teacher Support
in classrooms**



Digital Assistant



**Practical
learning Tools**



**Training Of
Teachers**

2. Robotics/ STEM Training

Provide hands-on, immersive training, in and out of school, to deepen science learning, foster innovation, and develop crucial skills to thrive in tomorrow's workplace (extra-curricular).



Mechanics



Electronics



Programming



The Fundi Bots team currently consists of 118 Fundis accelerating science education across four regions in the country: Kampala, Mbarara, Mbale, and Gulu.

Best of 2024



In 2024, we provided learning resources for **23,281 Ugandan students** in **51 schools** through the Fundi Bots Enhanced Science Curriculum (ESC) program. We have also trained **626 teachers** through our ESC and Virtual Fundi training of teachers sessions.

We launched the **Virtual Fundi** pilot in 51 schools across the country. It represents a transformative initiative aimed at digitizing and improving scalability of the ESC program in Ugandan schools. Each teacher is given a tablet featuring the Virtual Fundi app that offers 24/7 support on how to use the ESC tools to enhance practical learning in the classroom.



Fundi Bots was privileged to showcase our work on the **Nasdaq tower in Times Square**, courtesy of Personio Foundation, one of our generous partners. Personio Foundation provides financial and strategic support to NGOs operating in the field of climate action and education.



We welcomed a new funding partner, **Livelihood Impact Fund**. Their partnership and support will enable us to pilot our **Out-of-School Youth Skills Workforce Development Program**. Additionally, we received funding from the T&J Meyer Family.



We invested in new production machines that significantly boosted our capacity to create high-quality learning tools. **More production capacity = more learning tools = more Ugandan children learning science better = stronger expansion of accelerated science education in Africa.**

KEY MILESTONES

Fundi Bots uses **two primary learning models** to deliver practical, hands-on training both in and out of the classroom. These models include the **Enhanced Science Curriculum (ESC)** and **Robotics/STEM training**, which are implemented in schools, homes, universities, and among out-of-school youth to prepare them for the workforce.

1. Enhanced Science Curriculum

Our flagship learning model provides practical learning tools, teaching aids, and manuals that plug directly into the official national curriculum to augment and amplify science lessons in classrooms for improved learning outcomes (Intra-curricular).



**Teacher Support
in classrooms**



Digital Assistant



**Practical
learning Tools**



**Training Of
Teachers**

In 2024, our team improved science learning for **23,281 students** (53% female and 47% male) across **51 schools**. We also evaluated the national performance for the 2023 Primary Leaving Examinations (P.L.E).

Here are some key highlights from the assessment:

- Overall Performance: 90% of students from Fundi Bots schools achieved high scores (Divisions 1 and 2), compared to 58% nationally. Only 4% of Fundi Bots students scored in the lowest categories (Division 4 and Fail), significantly lower than the national average of 21%.
- Whereas the failure rate in Fundi Bots-supported schools was significantly lower at 1%, compared to the national average of 21%.

91%

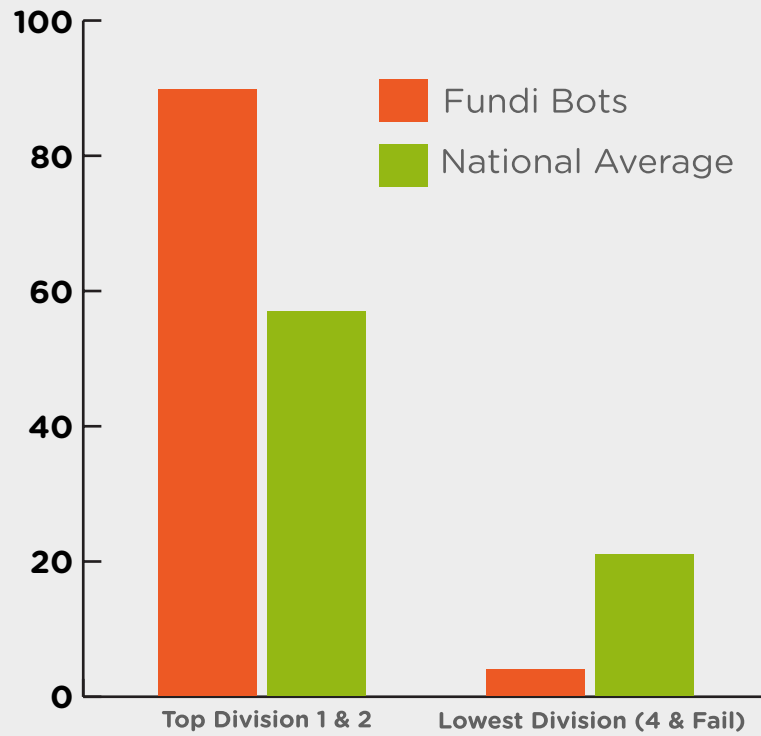
Growth in STEM
career Interest
among students.

626

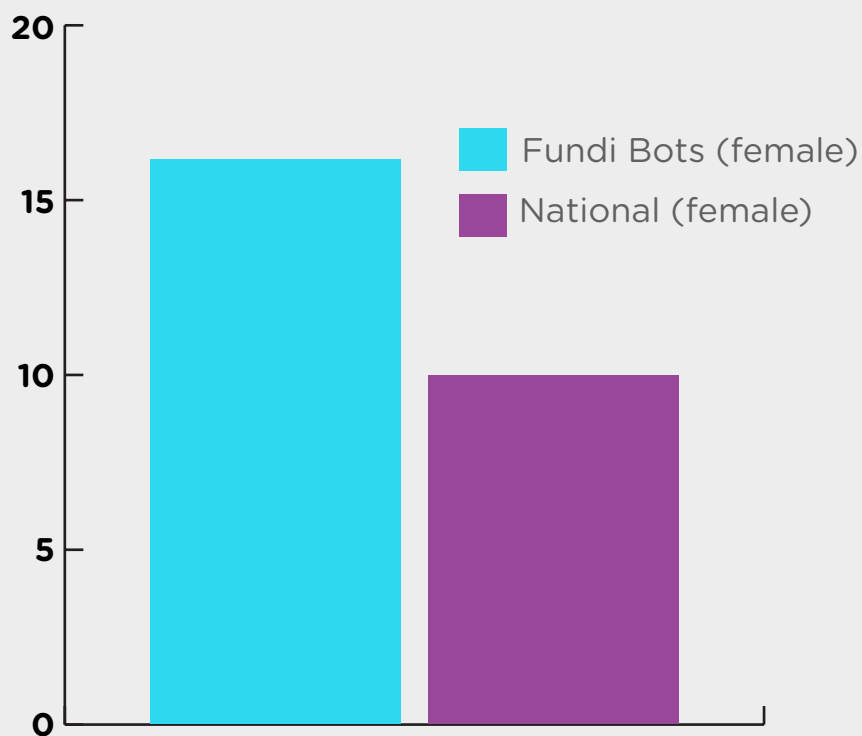
Teachers equipped
creating collaborative
learning environments.

Impact Of The ESC

Primary Leaving Examinations (Fundi Bots Vs National)



Female Distinctions in Science



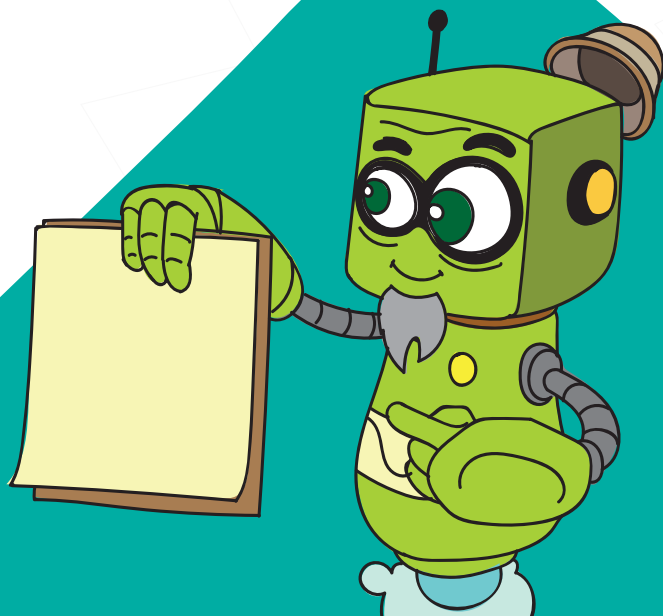
Virtual Fundi Program Pilot

We have also been working on enhancing our ESC program by developing and piloting a solution that we believe will reduce our high demand for human resources and provide continuous support for teachers in the classroom. **The Digital Assistants for ESC**, also known as **Virtual Fundi**, a pilot program that represents a transformative initiative aimed at digitizing the Enhanced Science Curriculum in Ugandan schools.

We anticipate that the Virtual Fundi initiative will significantly improve our scalability, and expand our digital footprint across the African continent. **In 2024, we rolled this out in 51 schools across the country.**

Key Achievements from the Virtual Fundi rollout.

- **Improved Teacher Training and Digital Proficiency:** Comprehensive Training of Teachers (T.O.T) sessions were conducted, resulting in a 59% improvement in digital literacy and lesson preparation efficiency. Teachers reported increased confidence and a smoother transition to digital content, as evidenced by post-training assessments and survey feedback.
- **Streamlined Lesson Preparation and Increased Engagement:** The introduction of preloaded digital content significantly reduced lesson preparation time, improved the clarity of instructional delivery, and boosted student engagement (75% teachers reported). Multimedia resources, including step-by-step videos and interactive guides, enabled teachers to deliver science lessons more effectively.
- **Substantial Content Development:** A robust suite of digital resources was developed during the pilot, including extensive video scripts and over 100 instructional videos. These materials have been instrumental in standardizing lesson delivery and supporting teachers across diverse regions.
- **Positive Stakeholder Feedback:** Survey responses and direct teacher feedback highlight improved preparedness, improved lesson flow, and increased classrooms interactivity



2. Robotics/STEM Training

Through this learning model, we provide hands-on, immersive training, in and out of school, to deepen science learning, foster innovation, and develop crucial skills to thrive in tomorrow's workplace.



Mechanics



Electronics



Programming

- In 2024, our Robotics/STEM training program empowered **4,022 students** across **65 schools**, fostering creativity, critical thinking, and hands-on problem-solving. Students applied the skills acquired to develop **over 600 innovative projects**, tackling real-world community challenges. A notable highlight was the **Robotics Club at Comboni College**, which showcased its **Fuel-less Generator project** during the school launch of the Technology, Innovation, and Support Center, as well as at the national Teachers' Day event attended by the President of Uganda. This exemplifies how STEM education drives innovation and leads to practical solutions.
- Monitoring surveys conducted in 2024 among participating students indicated a growing passion for science, with more than 9 in 10 students reporting an increased interest in the subject, ultimately influencing their aspirations toward STEM careers (91% female, 94% male). This interest in science showed a steady improvement across different program cohorts: Term 1 saw 93% of male and 88% of female students express increased interest, Term 2 recorded 92% male and 91% female, and Term 3 reached 95% for both boys and girls.

- **Holiday Robotics and online learning videos**

In 2024, through our holiday robotics training sessions, we were able to equip **848 learners** with skills in robotics and coding during the national school holidays. This program was held simultaneously across all our regional offices in Kampala, Mbarara, Mbale, and Gulu.

Our young participants had the opportunity to utilize the skills they had learned by working on exciting and innovative projects. The enthusiasm and creativity of each child was truly inspiring, as witnessed by their parents during the project presentation day at the end of the training period.

Additionally, we were able to create and share learning videos on our YouTube channel. As such, we also experienced growth in various ways. There was an increase in our subscriber base, with **1,100 new subscribers** joining us, bringing our total to **2,240** dedicated followers. Our viewership metrics were equally impressive, gaining **129,532 (129.5k) views**, **46,800 (46.8k) unique viewers**, and **21,549** returning viewers.



1,100
new YouTube
subscribers



46,800
unique viewers,



21,549
returning viewers

- **Fundi @Work - Youth skills workforce readiness development.**

Despite funding limitations, our Fundi @Work team remained dedicated to achieving key milestones, delivering hands-on internship training to 68 students, and Robotics/STEM training to 396 students in institutions of higher learning.

We also supported students in presenting their projects at five universities across the country, including Gulu University, Lira University, Busitema University, and Mbarara University of Science and Technology. Strengthening our commitment to expanding STEM education, we signed three partnership agreements with Busitema University, Kumi University, and UTC Lira while actively engaging with eight additional institutions, including Soroti University and Uganda Christian University, to explore future collaborations.

By the end of the year, we were excited to welcome a new funding partner, **Livelihood Impact Fund**, whose generous support will enable us to pilot our Out-of-School youth skills development program and provide workforce readiness and job placement to 140 youth across four regions of the country.

This initiative is a significant step toward empowering young adults who have dropped out of school but have a deep passion for STEM. It will be an intense, fast-tracked, and high-impact skilling program in robotics and three innovation areas: agricultural innovation, transportation engineering, manufacturing and maintenance.

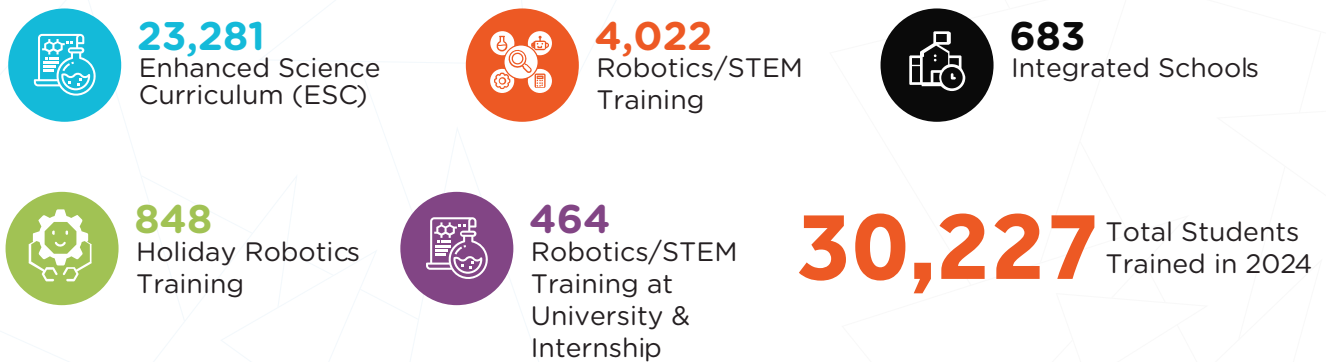
Through the support and partnership with Livelihood Impact Fund, we will equip these youth with **practical skills, hands-on experience, and career-building opportunities** that prepare them to become Africa's future **workforce, innovators, and creators.**



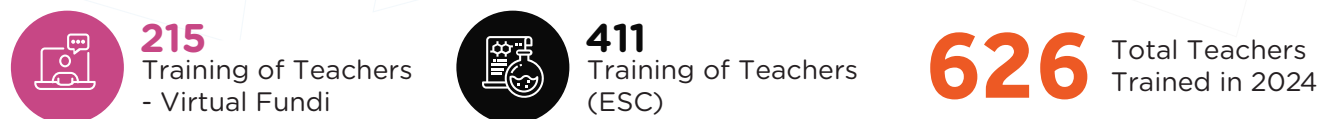
Internship students presenting their end of internship project.

Beneficiary Highlights - Monitoring, Evaluation, Accountability and Learning (M.E.A.L)

Number of students



Number of teachers



In 2024, our M.E.A.L department played a vital role in assessing and evaluating the impact of our various program learning models. Through rigorous data collection and analysis, the team achieved key milestones, including:

- Evaluating the ESC 2023 pilot - Conducted an end-of-year assessment, culminating in a comprehensive final report.(Read the [ESC Summary report](#) here and [detailed report here](#))
- Developing and implementing targeted surveys - Assessed program efficiency across Enhanced Science Curriculum, STEM Robotics, and internship training, providing critical insights to enhance program effectiveness.
- Updating program databases - Collected and analyzed qualitative and quantitative data from Robotics Outreach, Holiday Robotics, and University Internship programs to inform decision-making.
- Enhancing data visualization and reporting - Updated the Fundi Bots M&E dashboard with program achievements using Power BI for total reach tracking and an Indicator Performance Tracking Table for quarterly reporting.

Through these efforts, our M.E.A.L team continues to drive data-driven decision-making, ensuring our programs remain impactful and responsive to learners' needs.

Operational Highlights



Human Resource

We held a **management team retreat** centered on **leadership training, team cohesion, and employee wellness**, reinforcing our commitment to strong and effective leadership. Additionally, we organized a **digital leadership training** series for middle managers to enhance their skills in navigating leadership in a digital landscape.

To further invest in our team, we launched a **talent development project** aimed at strengthening our workforce. This initiative involved **reviewing and refining job descriptions, creating a competency framework, mapping employee skills, and planning for succession**. Phase 1 was completed, with updated job descriptions shared across the organization.

Fundraising and Finance

In November 2024, we secured \$150,000 in funding from the **Livelihood Impact Fund** to launch our out-of-school youth pilot program in 2025. This initiative will equip 140 out-of-school youth with technical skills in key sectors such as agricultural innovation, transportation engineering, manufacturing and maintenance. By the program's conclusion, 110 participants will be placed in jobs.

Over the next 3–5 years, we hope to raise \$7.5M–\$10M to enhance learning outcomes for one million children and scale our impact across Africa. This funding will expand our reach, strengthen programs, and ensure sustainability, creating lasting systemic change.



Statement of Comprehensive Income and Expenditure

Income (USD)

Donor Funding
1,879,500

Robotics Classes
20,547

Other Local Revenue
12,945

Total income
1,912,992

Expenditure (USD)

Salaries & Wages -
General Administration
462,830

Overheads
139,862

Administrative Activities
211,553

Program Activities
1,073,139

Equipment and Machinery
170,877

Total Expenditure
2,058,261

Net Surplus/Deficit: \$ 145,269



Fundi Bots Board

We are proud to have a diverse and experienced group of leaders on our Board who believe in the power of education, innovation and technology to shape the future. We extend our gratitude for their invaluable contributions and steadfast belief in our mission.

Despite a challenging year, our Board's unwavering support and strategic insight helped us refine our strategies, strengthen partnerships, and continue driving impact.

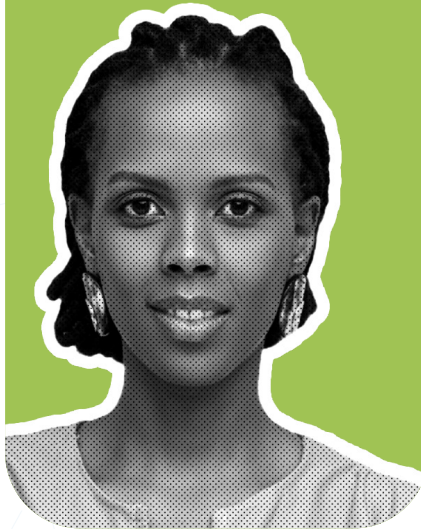
Evelyn Omala Kiwana

*Portfolio Manager
(Africa) Partners
for Equity*



Linda Mutesi

Adalci Advocates



Dr. Oliver Rothschild

*- M.D Draper Richards
Kaplan Foundation*



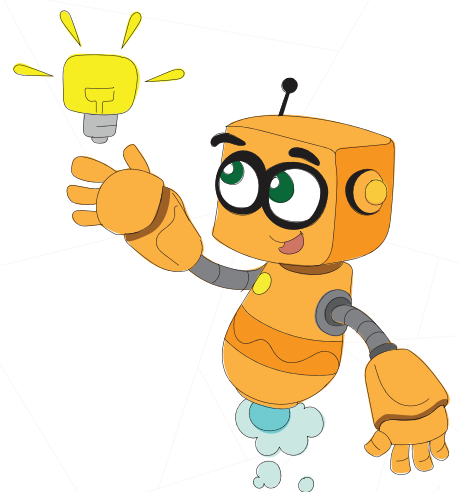
Cher-Wen DeWitt

*Director of
Development at
Imagine Worldwide*



Solomon King Benge

*Executive Director
Fundi Bots*

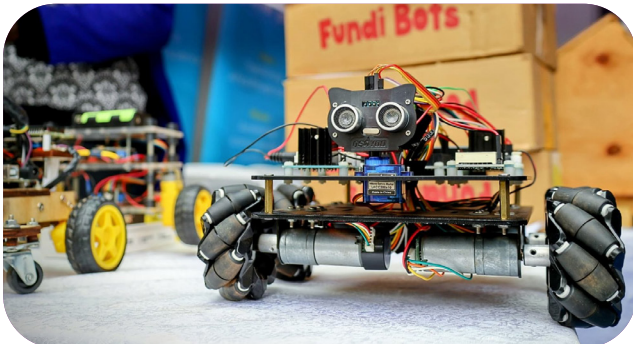


Partnerships and Events 2024 Highlights



MTN Foundation: We were honoured to receive a donation of technology tools and resources (379 electronic items valued at Shs 65 million) from MTN Uganda. This donation will go a long way towards our work in accelerating science education and building technical skills for Africa's children and youth.

We were honoured to take part in the **Regional Education Learning Initiative (RELI's) East African Community Regional Education Conference**. During the event, we participated in a panel discussion and engaged with inspiring education leaders and innovators from across the region.



We participated in the **Gathering of Givers event organised by CivSource Africa**, where we showcased our work, had insightful conversations on generosity during a live podcast recording, and most importantly, networked with like-minded industry experts and young people.

NTV Skills Youth Fest—During NTV Youth Skills Fest 2024, we had the privilege of showcasing our work and conducting mini-training sessions in Robotics. This gave us the unique opportunity for brand visibility but, most importantly, a chance to network with fellow industry experts, partners, and young people who are at the heart of the work we do.



Specifically in May, **we organised an insightful Twitter space sharing about the journey of "Building Fundu Bots" and our big-picture vision as well as our impact.** Over 4000 people tuned in and engaged, you can scan the QR code to listen to the recording.





Students of Trinity College Nabbingo present their project at the end of their Robotics/STEM training.

Key Challenges

1. Funding Constraints Funding Constraints and Resource Limitations

The biggest challenge was operating with limited resources, especially financially, which restricted our ability to scale programs and invest in key operational areas, making sustainability a major concern.

While demand for our ESC and Virtual Fundis programs increased, financial and logistical constraints slowed expansion, limiting the number of learners we could reach. However, by leveraging technology, refining our program models, and optimizing existing resources, we can enhance our impact and reach.

To ensure long-term resilience, we are actively diversifying funding

sources, exploring alternative revenue streams, and strengthening partnershipsresources, we can increase impact and reach.

2. Operational Pressures – With limited

funding and resource constraints, maintaining high-quality program delivery required significant adaptability, pushing our teams to improvise with fewer resources.

3. Talent and Workforce Development

The need for ongoing staff training, leadership development, and succession planning became evident as we worked to strengthen internal capacity amid financial limitations.

4. Expanding production capacity to new regional centers came with logistical challenges, including the need for **comprehensive staff training** and **enhanced tools** to streamline production.

Looking Ahead - 2025

Priority 1: Complete and evaluate the Enhanced Science Curriculum 4-year pilot.

Fundi Bots will continue to improve baseline science education for **24,000 students** in our **51 pilot schools** by providing enhanced learning tools that teachers can use in classrooms to provide a better learning experience that is student-centered, practical, and hands-on.

Key Objectives

1. Provide teacher training for **250 teachers**
2. Continue to develop and improve learning modules and tools.
3. Build on work with Virtual Fundi to develop and use ESC digital content to support teachers and learners in the classroom.
4. Complete the **4-year (2022-2025)** ESC program pilot evaluation and reporting.

Priority 2: Strengthening the Out-of-School Youth Program.

Provide STEM-focused workforce readiness training, job creation, and entrepreneurship support for out-of-school youth across four regions in Uganda. By equipping out-of-school youth with high-value STEM skills and industry exposure, we address employability gaps and nurture entrepreneurship.

Key Objectives

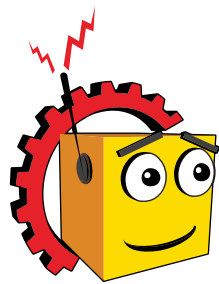
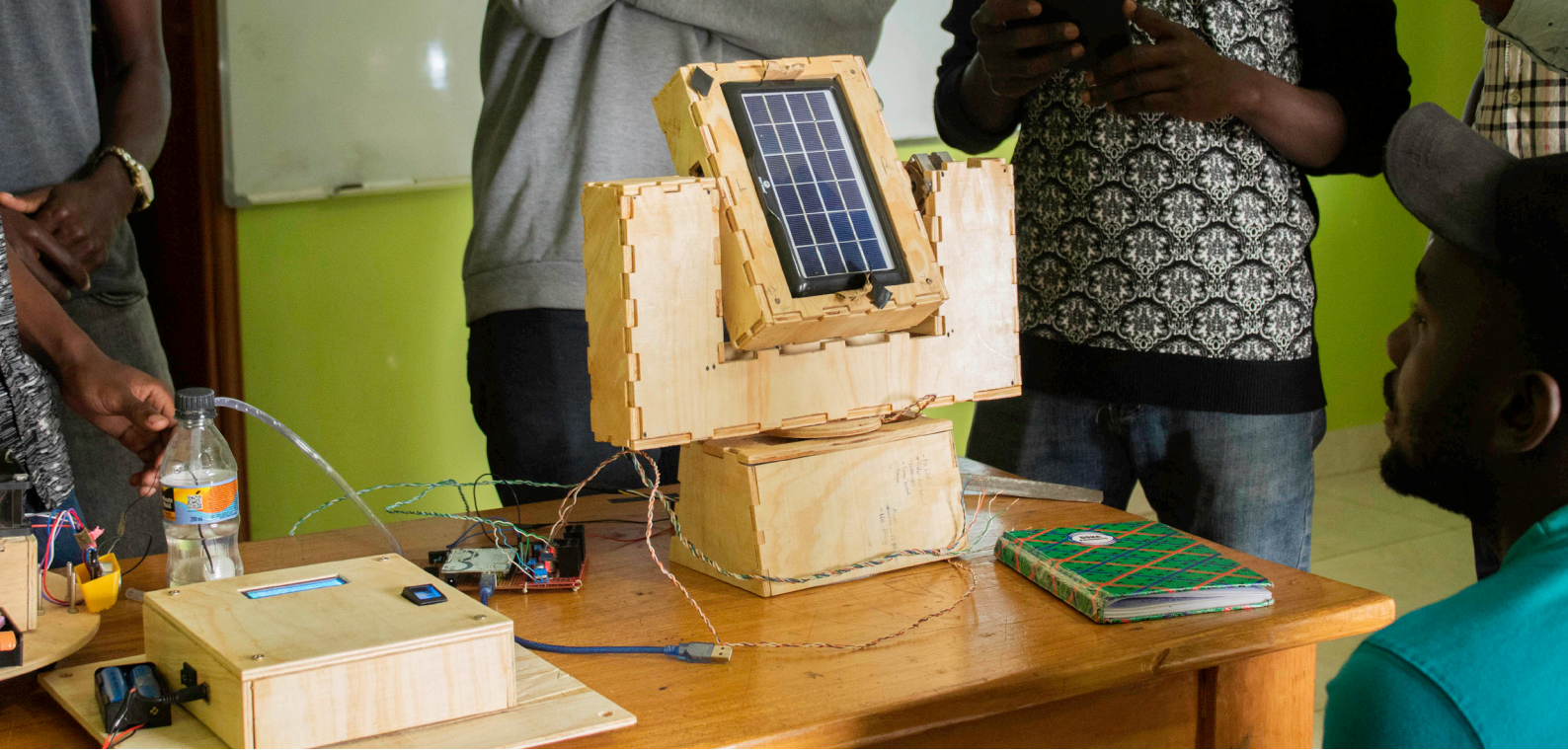
1. Deliver STEM/Robotics and workforce readiness training to 140 youth.
2. Facilitate work placements for at least 110 youth in four regions.
3. Conduct baseline, mid-term, and end-line evaluation of the Out-of-School Youth Program.

Priority 3: Strengthening organisational capacity for scale and long term sustainability.

Fundi Bots will prioritise internal capacity development and organisational realignment to support the two core priorities above and build the organization for sustainable scale and impact.

Specifically, we will;

1. Update and Improve the Robotics/STEM Learning Model.
2. Develop and Implement a Gender-Responsive Strategy.
3. Foster Organizational Realignment for Sustainable Scale and Impact.



Fundi Bots
accelerating science learning in africa

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