

AI for Good
Impact Initiative

**Robotics for Good
Youth Challenge**
Uganda

*Empowering the next generation
of AI and robotics innovators*

Organized by:



UniPod
powered by innovation

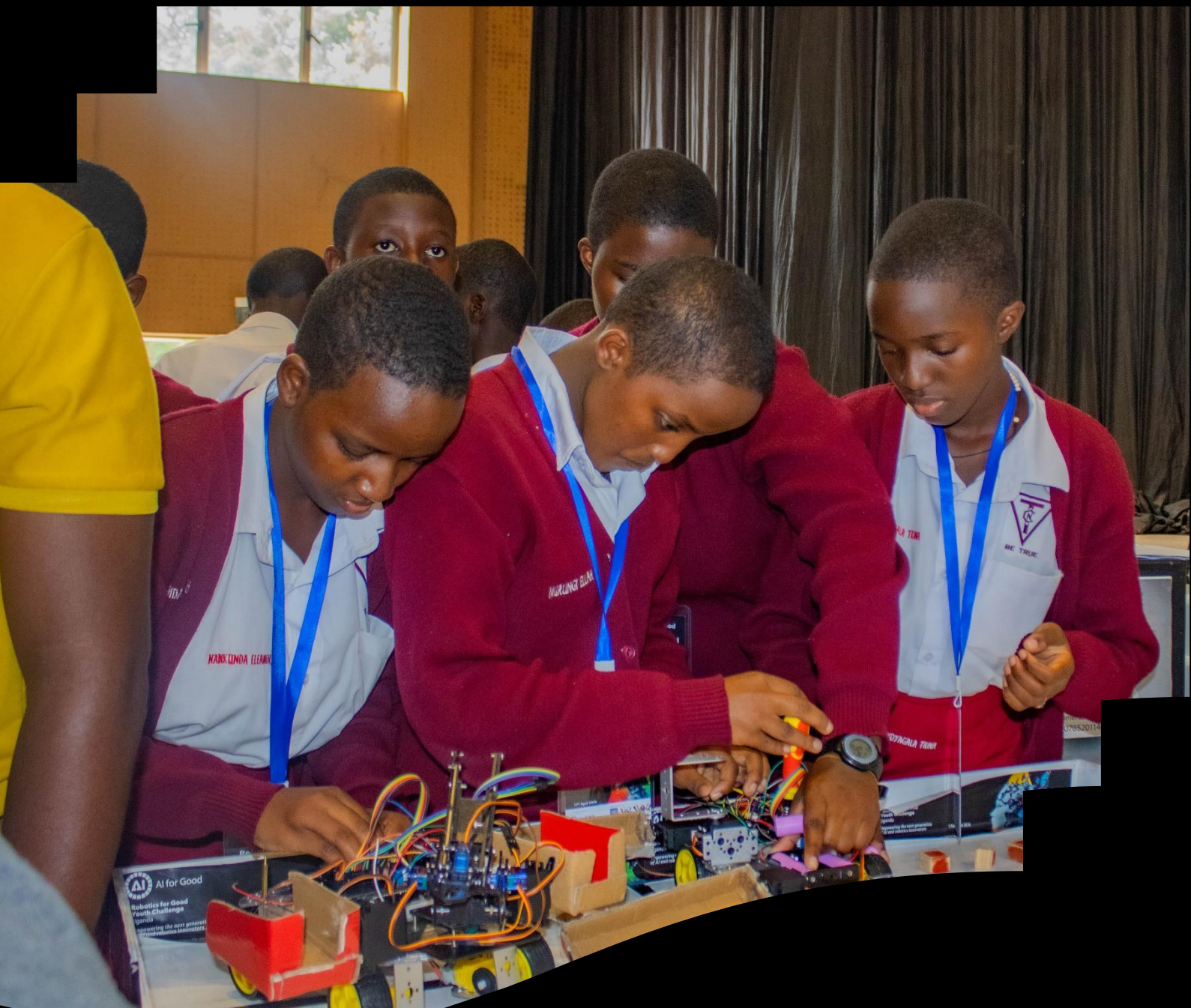
INSPIRE, EMPOWER & INNOVATE FOR AFRICA MAKERERE UNIVERSITY

With Support from:



IMPACT REPORT

December 2025 – April 2026



ACKNOWLEDGEMENTS

The Robotics for Good youth challenge 2025/2026 was organized by the International Telecommunication Union through its AI For Good global framework, implemented in Uganda by Creative Child Foundation, Makerere University Technology & Innovation Center and made possible by the commitment and direction of the Government of Uganda through the office of the state minister for youth and children, the ministry of ICT & National Guidance, secretariate of Science & Technology Innovation – Office of the president. The intervention was also supported through financial contribution and technical resources of the United Nations Development Program in Uganda.

The successful delivery of the **Robotics for Good Youth Challenge** stands as a powerful reflection of what becomes possible when institutions, leaders, educators, mentors, and young people come together around a shared belief: that every child deserves the opportunity to learn, innovate, and contribute meaningfully to society. On behalf of **Creative Child Foundation**, we extend our deepest gratitude to every individual and institution whose support, partnership, and commitment made this journey possible - from the earliest planning stages in 2025 through training workshops, school outreach engagements, the national championship, and the final rounds in April 2026.

Our appreciation greatly goes to **H.E. Yoweri Kaguta Museveni**, President of the Republic of Uganda, whose continued national emphasis on science, technology, skills development, and home-grown innovation has helped create the broader enabling environment within which initiatives like this can grow and inspire thousands of young learners.

We are profoundly grateful to **Makerere University**, and especially to **Prof. Barnabas Nawangwe**, for providing an enabling academic and innovation environment that elevated this initiative into a nationally credible platform. The collaboration with Makerere University Technology & Innovation Center (**MUTIC**) opened valuable pathways for young learners to connect with higher education, mentorship, research, and practical innovation.

Our sincere appreciation goes to the **International Telecommunication Union** for its continued global leadership in advancing responsible and inclusive technology, and for creating international platforms through which young innovators from Uganda can engage with the world. We are especially grateful to **Guillem Martínez Roura** for his consistent encouragement, thoughtful engagement, and unwavering belief in Uganda's potential within the global robotics and AI ecosystem.

We extend heartfelt appreciation to the **United Nations Development Programme** for its confidence in the vision of this initiative and its commitment to empowering young people through opportunity, innovation, and global exposure. Their support strengthened the aspirations of many young participants and affirmed that Ugandan children can confidently compete and contribute on international platforms.

We gratefully acknowledge the continued support of **Hon. Dr Balaam Barugahara Ateenyi**, whose encouragement and strategic engagement since 2024 have consistently strengthened the visibility of youth innovation and opened important pathways for young people to access transformative opportunities.

We also thank **Hon. Dr Monica Musenero Masanza** for her inspiring national leadership in championing science, technology, and innovation. Her broader efforts to nurture a culture of research, creativity, and youth-led problem-solving continue to shape an environment where young innovators can thrive.

To the headteachers, school administrators, teachers, mentors, parents, and guardians - thank you for believing in your learners, encouraging their curiosity, and standing with them throughout this journey. Your support transformed classrooms into laboratories of imagination and possibility.

To the judges, moderators, volunteers, university mentors, technical teams, and the entire organizing committee, we offer our deepest appreciation for the professionalism, flexibility, integrity, and long hours that ensured the successful implementation of this program under demanding timelines and complex logistical realities. Most importantly, we celebrate the students - the young innovators whose courage to experiment, build, fail, improve, collaborate, and try again gave this initiative its true meaning. Your ideas, creativity, discipline, and determination remind us that the future of Uganda is already taking shape in classrooms, workshops, and innovation spaces across the country. This report is therefore not only a record of activities delivered. It is a tribute to a growing national movement of belief, collaboration, and action.

To every partner, supporter, and contributor - thank you for helping ignite a generation of innovators who will shape the future of Uganda and contribute solutions to the world.

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Universities Involved

Makerere University, Cavendish University Uganda, Kyambogo University, Kampala International University, Isbat University, Uganda Christian University, Bugema University, Metropolitan International University, King Ceasor University

Primary & Secondary Schools Involved:

The North Green School, Kampala Parents School, Peak Primary School, Mbuya Parents School, Makerere Primary School, Nakivubo Blue Primary School, The Olive School, Kabojja Junior School, Sir Apollo Kagwa Primary School, St Francis Primary School – Ntinda, Nakasero Primary School, Buganda Road Primary School, British School of Kampala, Daffodils PS Kololo, Abeka Academy, Elyon PS Mutungo, Budo Junior Primary School, African School Of Innovations Science & Technology-Asist

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Special Note 1:



Special Note of APPRECIATION

TO HIS EXCELLENCY YOWERI KAGUTA MUSEVENI PRESIDENT OF THE REPUBLIC OF UGANDA

We extend our deepest respect and heartfelt appreciation to **H.E. YOWERI KAGUTA MUSEVENI**, President of the **Republic of Uganda**, for his longstanding national leadership in advancing **science, technology, innovation, and youth empowerment**.

The successful implementation of the **Robotics for Good Youth Challenge Uganda 2025/2026** reflects the growing national momentum created by a leadership vision that recognizes innovation not merely as a sector, but as a strategic driver of Uganda's future competitiveness, problem-solving capacity, and inclusive development.

Under his leadership, Uganda has continued to strengthen the national conversation around home-grown solutions, digital transformation, skills development, and the role of young people as creators of value rather than passive beneficiaries of opportunity. That broader national commitment has created an enabling environment in which initiatives such as this challenge can inspire children can youth to think boldly, build confidently, and innovate for the good of their communities.

Through this environment of national encouragement, thousands of young learners across Uganda have been able to engage with robotics, artificial intelligence, design thinking, teamwork, and practical problem-solving in ways that nurture confidence, ambition, and leadership.

We are especially grateful for the broader national direction that continues to **affirm that Uganda's greatest resource is the creativity, resilience, and potential of its young people**.



“Your visionary leadership today is shaping a stronger, more innovative and prosperous Uganda for tomorrow.”

Thank You
for inspiring a generation to
innovate, create and transform Uganda. ”



PROMOTING EDUCATION & STEM SKILLS
Supporting quality education and practical skills for the future.



ADVANCING SCIENCE & INNOVATION
Championing research, innovation and the application of science to solve real problems.



BUILDING A DIGITAL UGANDA
Driving ICT adoption, digital transformation, and emerging technologies for national development.



EMPOWERING YOUNG PEOPLE
Creating opportunities, mentorship and platforms that enable youth to innovate and lead.



NURTURING A CULTURE OF INNOVATION
Encouraging creativity, curiosity and enterprise among Uganda's young generation.



STRENGTHENING NATIONAL PROGRESS
Harnessing innovation for inclusive growth, jobs and sustainable development.

The impact of that leadership is visible in every child who dares to imagine a solution, every student who believes their idea can matter, and every young innovator who now sees a future where they can contribute meaningfully to national transformation and represent Uganda with pride on the global stage.

THANK YOU, YOUR EXCELLENCY, FOR LEADING UGANDA TOWARD A SMARTER, INNOVATIVE, AND PROSPEROUS FUTURE POWERED BY ITS YOUTH.



**INNOVATE TODAY.
TRANSFORM TOMORROW.
INSPIRE FOREVER.**

Special Note 2:



Special Note of APPRECIATION

With deep gratitude and utmost respect, we recognize

HON. DR BALAAM ATEENYI BARUGAHARA

State Minister for Youth and Children Affairs

For his unwavering support, encouragement and continued belief in the potential of Uganda's young people and the power of innovation to transform communities and shape the nation's future.



CONTINUOUS SUPPORT SINCE 2024
Standing with us through every stage of the journey, championing youth, innovation and practical skills for a better tomorrow.



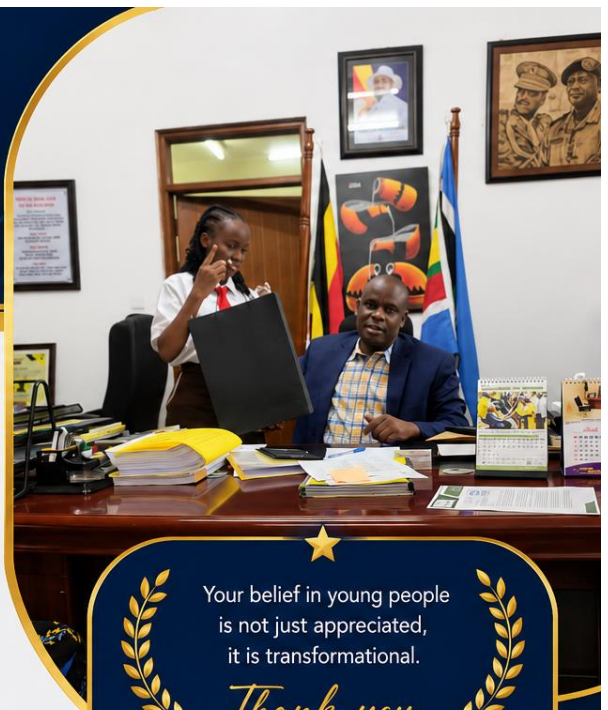
ADVOCATE FOR YOUNG INNOVATORS
Consistently inspiring students to dream bigger, work harder and believe that their ideas can solve real-world challenges.



BRIDGING OPPORTUNITIES & OPENING DOORS
Instrumental in connecting us with key partners and creating pathways that elevate Uganda's young talent to global stages.



BUILDING A LEGACY OF IMPACT
Your leadership today is inspiring a generation that will lead, innovate and proudly represent Uganda tomorrow.



“Your belief in young people is not just appreciated, it is transformational.”

Thank you
for investing in today's learners
and tomorrow's leaders.

Your support continues to empower young minds, strengthen communities, and build a proud legacy of innovation, leadership and national development.

Together, we are building Uganda's future.



We are deeply grateful for your continued leadership, partnership and commitment.
The impact of your support will be felt for generations to come.

Special Note 3:



Special Note of APPRECIATION

TO THE UNITED NATIONS DEVELOPMENT PROGRAMME IN UGANDA

We extend our deepest gratitude and heartfelt appreciation to the **United Nations Development Programme (UNDP) in Uganda** for standing with young people and believing in the power of innovation to transform communities and build a better future.

Your support to the Robotics for Good Youth Challenge 2025/2026 has been truly transformational. Through your commitment, encouragement and partnership, you have opened global doors for Uganda's young innovators, inspired confidence, and affirmed that their ideas can create real solutions to real challenges.



BELIEF IN YOUNG PEOPLE

You have demonstrated confidence in the creativity, talent and potential of young Ugandans to shape their communities and the nation.



OPENING GLOBAL OPPORTUNITIES

Your support has created pathways for learners to connect, learn, compete and showcase their innovations on the global stage.



STRENGTHENING CAPACITY

You have strengthened the skills, knowledge and mindset of students, teachers and mentors through meaningful engagement.



INSPIRING INNOVATION FOR IMPACT

You continue to champion solutions that drive sustainable development and empower communities for the future.



PARTNERSHIP FOR SUSTAINABLE CHANGE

Your partnership reflects true commitment to building an inclusive, innovative and resilient Uganda.



Your support was not just a contribution to a program — it was an investment in dreams, ideas, and a generation ready to lead. You have encouraged our youth to think bigger, innovate fearlessly and believe that they can represent Uganda and make a difference globally.

*Thank you for standing with us.
Thank you for believing in our youth.
Thank you for being a true partner in progress.*



Together, we are empowering young minds, building solutions and shaping a future where **no one is left behind**.

WE APPRECIATE. WE ARE INSPIRED. WE ARE GRATEFUL.

The impact of your support will be felt for generations to come.



**INNOVATE TODAY.
TRANSFORM TOMORROW.
INSPIRE FOREVER.**

Special Note 4:



Special Note of APPRECIATION

TO **Guillem MARTÍNEZ ROURA**

AI and Robotics Programme Officer,
Strategic Engagement Department,
Telecommunication Standardization Bureau (TSB),
International Telecommunication Union (ITU)

On behalf of the entire Robotics for Good Youth Challenge Uganda community, we extend our **deepest gratitude** for your **exceptional leadership, technical guidance, and unwavering support**.

Your expertise, encouragement, and belief in the potential of young innovators have significantly strengthened our mission to empower learners through robotics, innovation, and technology for good.

Your continued engagement and strategic support through the International Telecommunication Union (ITU) inspire us to dream bigger, build smarter, and create solutions that impact communities and shape a better future.



VISIONARY LEADERSHIP
Your leadership continues to inspire innovation and empower the next generation of creators and problem solvers.



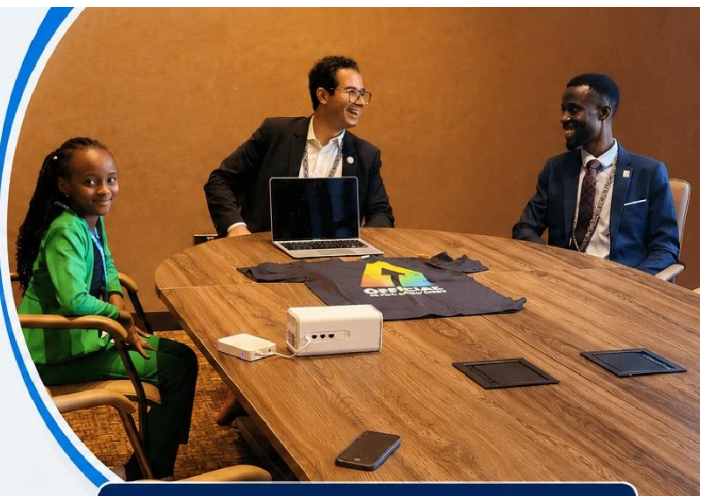
TECHNICAL EXCELLENCE
Your guidance on AI and robotics standards and emerging technologies helps build capacity and shape future-ready skills.



STRATEGIC PARTNERSHIP
Your partnership with Uganda's youth innovation ecosystem strengthens connections to global opportunities.



IMPACT & INSTIGATION
Your support fuels confidence, creativity, and a belief that our ideas can create real change.



“ Thank you for believing in our young people, investing in their potential, and walking with us as we build a future where technology serves humanity and no one is left behind. ”

We are truly grateful.
Your support. Your belief. Your partnership.
They make a lasting difference.



TOGETHER, WE ARE EMPOWERING YOUNG MINDS, TRANSFORMING IDEAS, AND BUILDING A BETTER FUTURE.



INNOVATE. COLLABORATE. ELEVATE.
With partners like you, the future is brighter for Uganda's youth.



**INNOVATE TODAY.
TRANSFORM TOMORROW.
INSPIRE FOREVER.**

Special Note 5:

Special Note of APPRECIATION

TO **DR CATHY IKIROR MBIDDE**

Director,
Makerere University Technology & Innovation Center

We extend our deepest gratitude and heartfelt appreciation to **Dr Cathy Ikiror Mbidde** for her exceptional leadership, guidance, and unwavering commitment to nurturing innovation, creativity, and entrepreneurship among Uganda's young people.

Through your visionary leadership at the **Makerere University Technology & Innovation Center**, you continue to create an enabling environment where ideas are transformed into solutions, and young innovators are empowered to build the future.



VISIONARY LEADERSHIP

Your leadership inspires us to dream bigger, innovate boldly, and create lasting change.



INSPIRING YOUNG INNOVATORS

You provide young minds with confidence, skills, and opportunities to turn ideas into impact.



ENABLING INNOVATION ECOSYSTEMS

Your work continues to strengthen Uganda's innovation and entrepreneurship space.



VALUED PARTNER & MENTOR

Thank you for walking with us as a partner, mentor and a true changemaker.



BUILDING A BETTER FUTURE TOGETHER

Together, we are shaping a generation that will lead solutions for Uganda and the world.

Your belief in our mission and your continuous support have inspired confidence, strengthened our impact, and opened new pathways for collaboration and growth.

THANK YOU

for championing innovation, empowering youth, and building a brighter, more innovative Uganda.



Your influence goes far beyond today — it lives in every young innovator you inspire, every idea you ignite, and every solution that will transform our communities and our nation.

We are truly grateful for your continued support.



MAKERERE UNIVERSITY
TECHNOLOGY & INNOVATION CENTER



**INNOVATE TODAY.
TRANSFORM TOMORROW.
INSPIRE FOREVER.**

Special Note 6:



Special Note of APPRECIATION

TO **MAKERERE UNIVERSITY**

We extend our sincere and profound appreciation to **Makerere University** for its invaluable partnership and steadfast support throughout the **Robotics for Good Youth Challenge Uganda 2025/2026** journey.

From the earliest planning stages to the successful delivery of the national championship and final rounds, Makerere University stood as more than a host institution—it stood as a true partner in shaping possibility for young innovators across **Uganda**.

Through the leadership and collaboration of the **Makerere University Technology & Innovation Center**, the university provided an enabling innovation ecosystem that connected young learners to higher education, mentorship, technical guidance, and real-world pathways for transforming ideas into solutions.

By opening its doors—particularly through the hosting of key national activities at the **Yusuf Lule Central Teaching Facility**—Makerere University helped elevate the challenge into a nationally credible platform where students from primary, secondary, tertiary, and university levels could learn, compete, collaborate, and be inspired.



STRATEGIC PARTNERSHIP
A true partner in advancing innovation, technology, and skills development for young people.



ENABLING ACCESS
Connected young innovators to higher education, resources, and mentorship.



INSPIRING EXCELLENCE
Provided a world-class environment that encouraged creativity, confidence and ambition.



INNOVATION ECOSYSTEM
Strengthened Uganda's innovation ecosystem and supported real-world problem solving.



BUILDING THE FUTURE
Nurturing a generation of leaders, changemakers and solution builders for tomorrow.



We are deeply grateful for **Makerere University's** continued belief in the power of youth innovation. Its contribution has not only strengthened this program, but has also helped nurture confidence, ambition, and a generation of problem-solvers whose impact will extend far beyond this competition.

Its partnership sent a powerful message to every participating child and young person: **your ideas matter, your talent belongs in spaces of excellence, and your future has a place in Uganda's innovation story.**

Thank You

for believing in young innovators and building a brighter future for Uganda.



TOGETHER, we are empowering young minds, transforming ideas into impact, and building a future where innovation drives sustainable development.

WE APPRECIATE. WE ARE INSPIRED. WE ARE GRATEFUL.
The impact of your support will be felt for generations to come.



**INNOVATE TODAY.
TRANSFORM TOMORROW.
INSPIRE FOREVER.**



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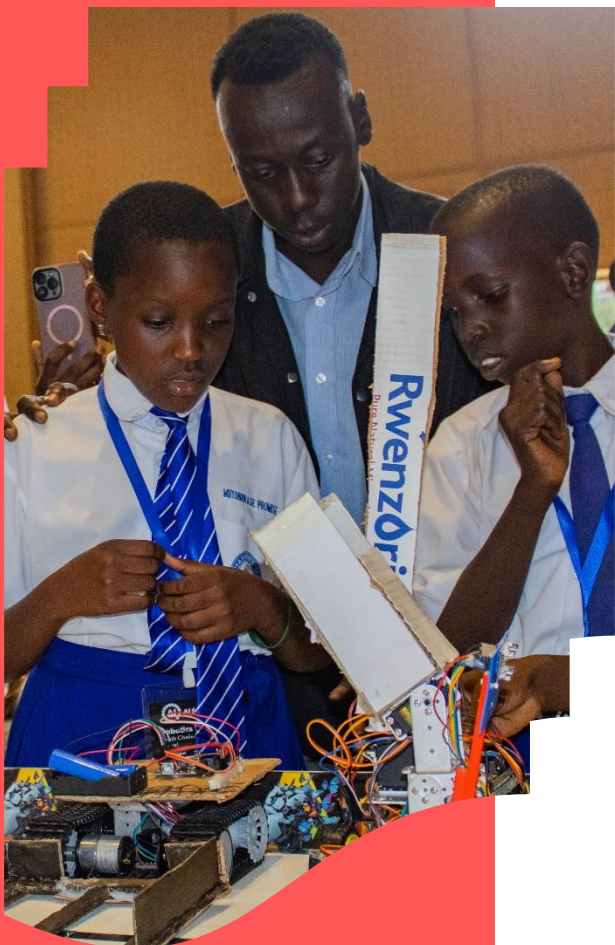
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EXECUTIVE SUMMARY

The **Robotics for Good youth challenge 2025/2026 – Uganda** represents a bold, high-impact national initiative that is redefining how young people engage with science, technology, and innovation. Implemented by Creative Child Foundation in collaboration with the Makerere University Technology & Innovation Center and aligned with the global vision of the International Telecommunication Union under the AI for Good platform, the program has successfully built a scalable model for inclusive, hands-on STEM education in Uganda.

At a time when access to practical digital skills remains limited, particularly in underserved communities - this initiative has demonstrated that early exposure to robotics and artificial intelligence can unlock creativity, strengthen problem-solving capacity, and inspire a new generation of innovators capable of addressing real-world challenges.

The 2025/2026 cycle was intentionally designed as a multi-phase, ecosystem-driven program, not just a competition. It began with a large-scale open workshop at Gayaza High School in December 2025, which introduced over **600 students and teachers** to robotics, AI, and innovation thinking. This foundational moment catalyzed a nationwide movement, followed by structured capacity-building programs targeting **university students, teachers, and school teams**.

A key innovation of the program was the **mentorship model**, where university students were trained and deployed to support younger learners - creating a sustainable, peer-led learning ecosystem. This approach not only expanded reach but also strengthened leadership, collaboration, and knowledge transfer across education levels.

Over the course of implementation, the initiative directly engaged:

- ✓ 3000+ students and educators across Uganda
- ✓ 35+ primary, secondary, and tertiary institutions
- ✓ Participants from both urban centers and underserved communities

Through hands-on workshops and guided mentorship, students developed over 120 functional robotics prototypes and 60+ innovation concepts, with a strong focus on food security - a critical national and global development priority. These innovations ranged from automated farming solutions to intelligent monitoring systems, reflecting both creativity and contextual relevance.

The program culminated in the National Championship held on 17th April 2026 at Makerere University, bringing together top-performing teams to showcase their solutions through robotics competitions, innovation pitches, and exhibitions. Due to time constraints and the need to ensure fairness and quality evaluation, the final rounds for the top teams were conducted on 25th April 2026, where Peak Primary School (Junior Category) and Trinity College Nabbingo (Senior Category) were crowned national champions.



Figure 1: Mentors briefing their team before challenge starts.



Figure 2: Secondary school students being briefed about the competition during open workshop at Gayaza High School



Figure 3: Workshop for University students & teachers takes shape at Makerere University Innovation Pod (UNIPOD)



Figure 4: Students at Peak Primary School introduced to Robotics & coding

Importantly, the program upheld high standards of transparency and integrity. Following the competition, petitions were raised regarding certain game results. In response, Creative Child Foundation instituted a structured, evidence-based review process, inviting teams to submit formal complaints supported by visual documentation. All results were openly reviewed, reassessed where necessary, and validated through a transparent mechanism that ensured credibility, fairness, and collective trust in the final outcomes.

Beyond competition outcomes, the initiative delivered measurable and lasting impact:

- ✓ Enhanced STEM interest and confidence among participants
- ✓ Increased access to robotics and AI education in underserved areas
- ✓ Strengthened teacher capacity and mentorship networks
- ✓ Fostered a growing national innovation ecosystem connecting schools, universities, and partners

The Robotics for Good Youth Challenge Uganda is proving to be more than an event - it is a strategic platform for youth empowerment, digital inclusion, and innovation-driven development. It aligns strongly with global development priorities, including quality education, industry innovation, and reduced inequalities.

With the right investment and strategic partnerships, this initiative is well-positioned to scale its reach to thousands more young people, deepen its impact in marginalized communities, and establish Uganda as a regional leader in youth-driven innovation and AI for Good.

This is not just about building robots, it is about building a future where every young person has the opportunity, skills, and confidence to create solutions that matter.



Figure 5: Participants from Kawempe Muslim Sec Sch moments after national finals.

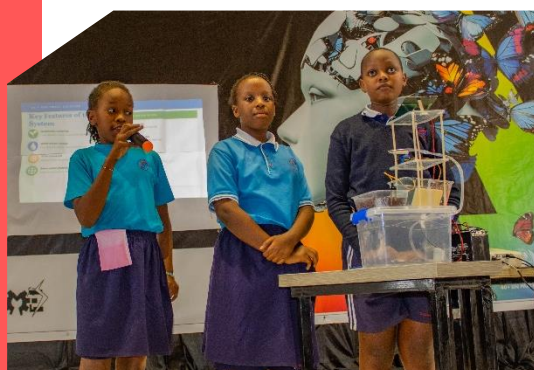


Figure 6: Pitch Presentation by Peak Primary School team



Figure 7: Pitch Presentation by Kampala Diplomatic School team



Figure 8: Pitch Presentation by St Charles Lwanga SSS Kibibi team

BACKGROUND & STRATEGIC CONTEXT

Uganda stands at a pivotal moment in its development journey - one defined by a rapidly growing youth population, expanding digital connectivity, and increasing demand for future-ready skills aligned with the Fourth Industrial Revolution. With over 75% of the population below the age of 30, the country holds immense potential to become a hub of innovation and technological advancement. However, this potential remains unevenly unlocked, particularly in the area of practical STEM education.

Across much of the education system, learning in science and technology remains largely **theoretical**, with limited access to hands-on tools, laboratories, and real-world problem-solving experiences. This gap is even more pronounced in **underserved and rural communities**, where schools often lack the infrastructure, trained personnel, and exposure required to deliver modern STEM education. As a result, many young people - despite their curiosity and talent - are left without the opportunity to explore, experiment, and innovate.



Figure 9: Training of students at Gayaza High School in preparation for the national championship.

UGANDA:

A YOUNG NATION. LIMITLESS POTENTIAL.

INNOVATING TODAY FOR A SUSTAINABLE TOMORROW.

Uganda stands at a critical moment. With the youngest population in the world and a growing digital future, empowering youth with Robotics, AI and Innovation skills is the key to solving real challenges and building an inclusive, prosperous nation.

THE CONTEXT

- Over 75% of Uganda's population is below 30 years – one of the youngest populations in the world.
- High youth unemployment due to a skills gap in emerging technologies.
- Limited access to hands-on STEM education, especially in rural and underserved communities.
- Real challenges like food security, climate change and poverty require innovative, local solutions.

THE OPPORTUNITY

- Robotics, AI and Innovation can unlock the potential of Uganda's youth.
- Technology empowers young people to solve real problems in their communities.
- Building a pipeline of innovators, creators and entrepreneurs for a sustainable future.
- Stronger partnerships can accelerate inclusive development and national transformation.

WHAT THIS MEANS FOR UGANDA

- A skilled, innovative and competitive youth.
- Locally relevant solutions for community challenges.
- Economic growth through technology and innovation.
- A stronger, more resilient and inclusive nation.

THE ROLE WE PLAY

- Inspire young minds
- Equip with skills and tools
- Mentor and support
- Enable innovation for good
- Connect to opportunities and networks

ROBOTICS FOR GOOD. INNOVATION FOR IMPACT. A BETTER FUTURE FOR ALL.

CONTRIBUTING TO THE SUSTAINABLE DEVELOPMENT GOALS

- 4 QUALITY EDUCATION
- 8 DECENT WORK AND ECONOMIC GROWTH
- 9 INDUSTRY, INNOVATION AND INFRASTRUCTURE
- 10 REDUCED INEQUALITIES
- 17 PARTNERSHIPS FOR THE GOALS

TOGETHER, LET'S BUILD AN INNOVATION ECOSYSTEM THAT LEAVES NO ONE BEHIND.



Figure 10: Training workshop at one of the under resourced schools



Figure 11: One of the finalist teams prepares their robot for planting



Figure 12: Students at one of the participating schools introduced to hardware programming in preparation for Robotics for Good youth challenge

At the same time, Uganda faces pressing national and global challenges, including food security, climate resilience, and youth unemployment. Addressing these challenges requires more than traditional approaches - it calls for a generation equipped with critical thinking skills, creativity, digital literacy, and the ability to design solutions rooted in local realities.



Figure 13: Makerere C.O.U Primary School pupils take a moment before the competition starts.

It is within this context that the Robotics for Good Youth Challenge 2025/2026 – Uganda was conceived, not merely as a competition, but as a strategic intervention to bridge the gap between education and innovation. Anchored within the global vision of the International Telecommunication Union through its AI for Good platform and implemented locally by Creative Child Foundation in collaboration with the Makerere University Technology & Innovation Center, the initiative aligns with international priorities on digital inclusion, youth empowerment, and sustainable development.

The program was intentionally designed to respond to three critical needs:

1. Bridging the Practical Skills Gap

While ICT is increasingly recognized within school curricula, access to **hands-on robotics and AI learning** remains limited. The challenge introduces experiential learning - enabling students to **build, test, and iterate real solutions**, moving beyond theory into application.

2. Expanding Inclusion in STEM

A core pillar of the initiative is ensuring that **no young person is left behind**. By extending training and participation opportunities to underserved districts and schools with limited resources, the program actively works to democratize access to emerging technologies. This inclusive approach ensures that innovation is not confined to a privileged few but becomes a **shared national opportunity**.

3. Linking Innovation to Real-World Challenges

Unlike conventional academic competitions, the Robotics for Good Youth Challenge emphasizes **problem-driven innovation**. The 2025/2026 edition focused on **food security**, encouraging students to design robotics and AI solutions that directly respond to challenges faced by farmers and communities. This approach fosters **contextual relevance**, ensuring that innovation is not abstract but deeply connected to societal needs.

A SYSTEMS-DRIVEN APPROACH TO IMPACT

The initiative adopts a **multi-layered ecosystem model**, bringing together:

- ✓ Primary and secondary school students
- ✓ University students as mentors
- ✓ Teachers as facilitators
- ✓ Innovation hubs and academic institutions
- ✓ Development partners and policymakers



Figure 14: Teachers being equipped with computer programming, Robotics and AI skills to introduce in their classrooms



Figure 15: One of the finalist teams pitch their medical device during the national championship



Figure 16: Some of the finalist teams sharing computer programming knowledge among each other

This ecosystem is critical in ensuring that impact is not short-term, but sustained and scalable. A key innovation within this model is the peer mentorship approach, where university students are trained to support younger learners - creating a continuous cycle of knowledge transfer, leadership, and capacity building.

ALIGNMENT WITH NATIONAL & GLOBAL PRIORITIES

The Robotics for Good Youth Challenge is strongly aligned with Uganda's development agenda and global frameworks, including:

- ✓ Human capital development and skilling for employment
- ✓ Digital transformation and innovation ecosystems
- ✓ STEM education advancement

It also contributes directly to key Sustainable Development Goals (SDGs):

- ✓ **SDG 4:** Quality Education
- ✓ **SDG 8:** Decent Work and Economic Growth
- ✓ **SDG 9:** Industry, Innovation, and Infrastructure
- ✓ **SDG 10:** Reduced Inequalities

WHY THIS INITIATIVE MATTERS NOW

The urgency of this intervention cannot be overstated. As technology continues to reshape economies and societies, countries that invest in youth innovation and digital skills today will define the future.

The Robotics for Good Youth Challenge Uganda demonstrates a powerful truth:

When young people are given access, mentorship, and the right tools, they do not just learn - they create, they solve, and they lead.

By embedding innovation at the grassroots level and connecting it to national and global ecosystems, this initiative is laying the foundation for a new generation of problem-solvers, capable of driving Uganda's transformation in an increasingly digital world.

This is not simply a program, it is a strategic movement to unlock potential, expand opportunity, and position Uganda's youth at the forefront of innovation for good.



Figure 17: Students at national championship demonstrate their robots and how they engineered them to work.



Figure 18: Students from Primary & Secondary schools in Uganda settling in at Makerere University Yusuf Lule CTF 2 Auditorium to get inspired as finalists compete



Figure 19: One of the training workshops for University students at Makerere University Technology & Innovation Center



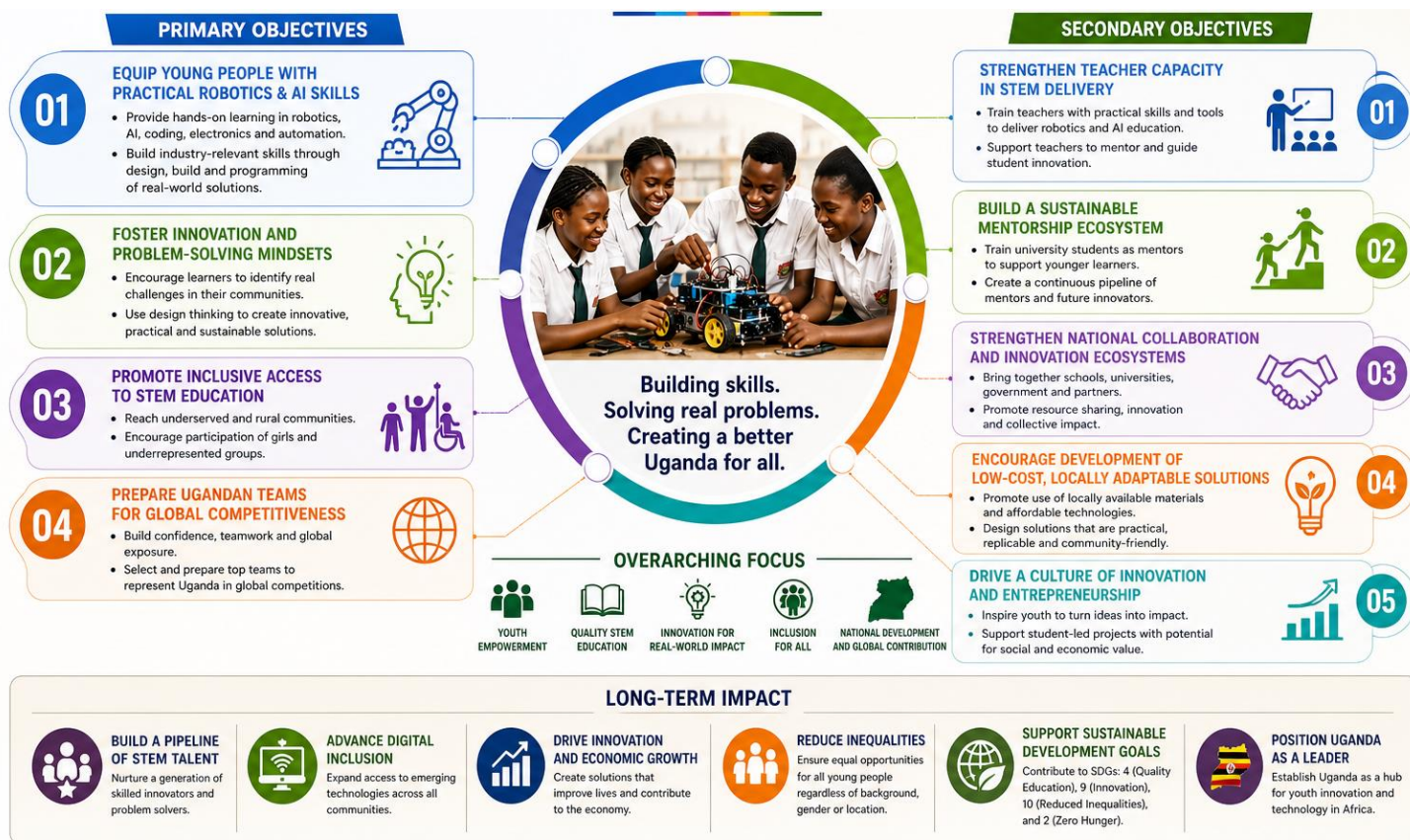
Figure 20: Finalist teams await announcement of results during the Uganda national championship of Robotics for Good youth challenge 2025/2026

PROGRAM OBJECTIVES

The Robotics for Good youth challenge 2025/2026 - Uganda was designed with a clear, ambitious, and impact-driven set of objectives aimed at transforming how young people engage with science, technology, and innovation. These objectives are rooted in the urgent need to equip Uganda's youth with future-ready skills, while ensuring that innovation is inclusive, practical, and aligned with national development priorities.



Figure 21: Empowered girls build their robots during one of the workshops conducted in schools



1. PRIMARY OBJECTIVES

1.1. Equip Young People with Practical Robotics and AI Skills

At the heart of the program is a commitment to move beyond theoretical learning and provide hands-on, experiential education in robotics, artificial intelligence, and engineering.

The program aims to:

- ✓ Introduce learners to real-world applications of STEM
- ✓ Enable students to design, build, and program functional robotic systems
- ✓ Develop foundational skills in coding, electronics, and automation

By doing so, the initiative directly addresses the gap between classroom learning and industry-relevant competencies, preparing young people for emerging opportunities in the digital economy.

1.2. Foster Innovation and Problem-Solving Mindsets

The program is structured to nurture critical thinking, creativity, and solution-oriented mindsets among participants.

Students are challenged to:

- ✓ Identify real challenges within their communities
- ✓ Apply design thinking methodologies
- ✓ Develop innovative solutions using robotics and AI

With a thematic focus on food security, participants are encouraged to create solutions that are not only technically sound but also socially relevant and impactful.



Figure 22: Primary School pupils putting acquired skills into practice during one of the training workshops

1.3. Promote Inclusive Access to STEM Education

A core pillar of the initiative is ensuring that no young person is left behind, regardless of geographic location or socio-economic background.

The program actively:

- ✓ Targets underserved and rural communities
- ✓ Engages schools with limited access to STEM resources
- ✓ Encourages participation of girls and underrepresented groups

This inclusive approach ensures that innovation is democratized, unlocking talent across the country and reducing inequalities in access to emerging technologies.

1.4. Prepare Ugandan Teams for Global Competitiveness

The challenge provides a pathway for Ugandan students to compete and collaborate on the global stage.

Through structured training, mentorship, and competition, the program aims to:

- ✓ Build confidence and global exposure
- ✓ Align student innovations with international standards
- ✓ Select and prepare top teams to represent Uganda in global competitions under the International Telecommunication Union framework

This objective positions Uganda's youth as contributors to global innovation conversations, not just participants.



Figure 23: Teachers equipped with embedded systems skills during one of the teacher training workshops at Makerere University Technology & Innovation Center



Figure 24: One of the finalist teams pitch their Agriculture smart monitoring system during national finals at Makerere University

This ecosystem is critical in ensuring that impact is not short-term, but sustained and scalable. A key innovation within this model is the peer mentorship approach, where university students are trained to support younger learners - creating a continuous cycle of knowledge transfer, leadership, and capacity building.

2. SECONDARY OBJECTIVES

2.1. Strengthen Teacher Capacity in STEM Delivery

Recognizing the central role of educators, the program invests in building the capacity of teachers to:

- ✓ Deliver practical robotics and AI training
- ✓ Support student-led innovation projects
- ✓ Integrate experiential learning into classroom environments

This ensures that the impact of the program extends beyond the competition into long-term educational transformation.

2.2. Build a Sustainable Mentorship Ecosystem

A key innovation of the program is the peer mentorship model, where university students are trained to support primary and secondary school learners.

This objective aims to:

- ✓ Create a self-sustaining learning ecosystem
- ✓ Promote leadership among university students
- ✓ Enable continuous knowledge transfer across education levels

Through this model, the program builds a pipeline of innovators and mentors, ensuring continuity and scalability.

2.3. Strengthen National Collaboration and Innovation Ecosystems

The program brings together a diverse network of stakeholders, including:

- ✓ Academic institutions such as the Makerere University Technology & Innovation Center
- ✓ Government agencies
- ✓ Development partners
- ✓ Schools and community organizations

This objective focuses on building strong partnerships that support innovation, resource sharing, and long-term sustainability.

2.4. Encourage Development of Low-Cost, Locally Adaptable Solutions

In line with Uganda's socio-economic context, the program emphasizes:

- ✓ Affordability and accessibility of innovations
- ✓ Use of locally available materials
- ✓ Development of solutions that can be replicated and scaled within communities

This ensures that innovation is not only advanced but also practical, inclusive, and sustainable.



Figure 25: Teachers (especially women) demonstrating their projects during a workshop at Makerere University



Figure 26: Students from Primary & Secondary schools introduced to 3D modelling in preparation for the Robotics for Good youth challenge



Figure 27: Trainer at Makerere University Technology & Innovation Center guides students how to build robot parts using one of the 3D printers donated by UNDP

PROGRAM IMPLEMENTATION TIMELINE

The Robotics for Good Youth Challenge 2025/2026 - Uganda was implemented as a multi-phase, strategically sequenced national program designed to move participants from awareness and exposure to skills acquisition, innovation development, mentorship, competition, and global readiness.

Rather than treating the initiative as a single event, Creative Child Foundation adopted a continuum-of-learning model, ensuring that each stage built on the gains of the previous one. This approach was essential in delivering both depth of learning and national reach, while maintaining strong alignment with the broader goal of nurturing a sustainable innovation ecosystem in Uganda.



Figure 28: One of the competing teams refining their robot ahead of the challenge



Figure 29: Students present their robot ideas during one of the mini competition events to qualify for the national championship



Figure 30: Students present their robot concept at one of the mini competition events to qualify for the national championship



Figure 31: Maya Amarli Mbabazi – President at Creative Child Foundation presents the 2025/2026 Robotics for Good youth challenge Uganda proposal to Hon. Dr Balaam Barugahara Ateenyi – State Minister for Youth & Children, Republic of Uganda

PHASE 1: STRATEGIC PLANNING, STAKEHOLDER ENGAGEMENT & PROGRAM DESIGN

October – December 2025

The implementation process began with a deliberate planning phase focused on establishing the strategic foundations necessary for national rollout.

During this stage, Creative Child Foundation undertook consultations with key stakeholders, including:

- ✓ The International Telecommunication Union through the AI for Good framework
- ✓ The Makerere University Technology & Innovation Center
- ✓ School leaders, STEM educators, and mentors
- ✓ Government and development partners

Key Activities

- ✓ Adaptation of the international Robotics for Good challenge framework to the Ugandan education context
- ✓ Development of:
 - training content
 - challenge guidelines
 - competition criteria
 - mentorship structures
- ✓ Identification of priority schools and outreach pathways, with emphasis on underserved communities
- ✓ Establishment of operational partnerships and event hosting arrangements

Strategic Significance

This phase ensured the program was not merely imported but contextualized for Uganda's realities, particularly around affordability, accessibility, and relevance to local development challenges.



Figure 32: Picture moments after open workshop at Gayaza High School in December 2025

PHASE 2: NATIONAL LAUNCH & OPEN ACCESS STEM WORKSHOP

18th December 2025 – Gayaza High School

The official launch of the program took place through a **large-scale open workshop at Gayaza High School**, designed to introduce participants to the core ideas of robotics, artificial intelligence, and innovation for social impact.

Participation

- **600+ students and teachers**
- Representation from multiple schools and institutions

Key Activities

- ✓ Introduction to:
 - robotics design fundamentals & artificial intelligence concepts
 - engineering thinking & innovation for sustainable development
- ✓ Demonstration of practical robotics applications
- ✓ Orientation on the Robotics for Good challenge structure



Figure 33: First planning meeting ahead of Robotics for Good youth challenge Uganda 2025/2026



Figure 34: Workshop for University students & teachers takes shape at Makerere University Innovation Pod (UNIPOD)



Figure 35: One of the finalist teams pitch their food security innovation and robot during the Robotics for Good youth challenge Uganda national championship

PHASE 3: UNIVERSITY STUDENT TRAINING & MENTOR DEVELOPMENT

December 2025 – February 2026

Recognizing the importance of sustainability and peer-led learning, the program invested in preparing **university students as technical mentors**.

Participation

- ✓ **100+ university students trained**

Training Focus

- ✓ Robotics assembly and programming
- ✓ Facilitation techniques for younger learners
- ✓ Team coaching and problem-solving support
- ✓ Challenge rulebook interpretation

Strategic Value

This phase created one of the most important structural strengths of the program: a multi-level mentorship ecosystem.

University students became:

- ✓ role models
- ✓ technical coaches
- ✓ innovation facilitators

This significantly increased the program's capacity to support schools beyond centralized training sessions.



Figure 36: A very beautiful moment, one of the 2nd finalists under the junior category whose Robotics & AI journey started this February 2026 and 2 months later she was excited to excel with top performance at the Robotics for Good youth challenge

PHASE 4: TEACHER CAPACITY BUILDING & SCHOOL-BASED PREPARATION

January – April 2026

To strengthen long-term impact within schools, teachers and school-based mentors were engaged through targeted capacity-building sessions.

Participation

- ✓ **70+ teachers and mentors trained**

Focus Areas

- ✓ Understanding the challenge framework
- ✓ Guiding robotics projects in school settings
- ✓ Supporting innovation development and pitch preparation
- ✓ Introducing practical STEM learning methodologies



Figure 37: A team of judges guiding students during the first session of the Robotics for Good youth challenge Uganda on 17th April 2026



Figure 38: Some primary school pupils share a moment after the open training workshop at Gayaza High School in December 2025



Figure 39: Students at Kabajja Junior School sharing their expectations of the event on arrival at the National championship of the Robotics for Good youth challenge Uganda 2025/2026

Targeted School Support Workshops

Beyond centralized sessions, Creative Child Foundation also responded to requests from schools requiring direct technical support.

Implementation

- ✓ On-site and remote workshops delivered
- ✓ Additional mentorship for schools needing assistance with:
 - robot building
 - programming logic
 - game strategy
 - innovation development

Reach

- ✓ 35+ primary, secondary, and tertiary institutions engaged

Inclusion Lens

A deliberate effort was made to extend support to schools with limited prior exposure to robotics, ensuring broader participation beyond already well-resourced institutions.

PHASE 5: INNOVATION DEVELOPMENT & TEAM PREPARATION

January – April 2026

During this phase, participating teams moved from learning foundational concepts to applying them through prototype development and innovation design.

Thematic Focus

The 2025/2026 edition centered on **food security**, challenging students to create relevant and practical solutions.

Outputs

Participants developed:

- ✓ 120+ robotics prototypes
- ✓ 60+ food security-related innovation concepts

Examples included:

- ✓ automated irrigation systems
- ✓ smart farm monitoring tools
- ✓ mechanized harvesting concepts
- ✓ robotics-assisted food production ideas

Learning Outcomes

Students demonstrated growth in:

- ✓ engineering design thinking
- ✓ teamwork
- ✓ prototyping
- ✓ iteration and troubleshooting
- ✓ public speaking and innovation pitching



Figure 40: One of the finalist teams shares their innovation journey experience with judges during robot homologation.



Figure 41: Kings College Budo students getting ready to pitch their robots during the youth challenge



Figure 42: Students at Caltex Academy School sharing knowledge amidst limited resources during one of the robotics training workshops



Figure 43: Students engineering their robot from Scratch during Robot Defense session to prove the robot was built by them

PHASE 6: NATIONAL CHAMPIONSHIP

17th April 2026 – Makerere University

The national championship brought together top teams from across Uganda for a high-visibility showcase of learning, creativity, and technical skill.

Held at Makerere University, the event attracted:

- ✓ students
- ✓ educators
- ✓ university leadership
- ✓ government representatives
- ✓ development partners

Key Components

- ✓ Robotics challenge matches
- ✓ Innovation pitch presentations
- ✓ Food security solution exhibitions
- ✓ STEM networking and learning activities

Participation

- ✓ 500+ attendees
- ✓ Top-performing teams from across the country

Strategic Importance

The championship elevated the initiative from a training program into a national platform for youth innovation, giving participants exposure to influential stakeholders and affirming the value of their work.

PHASE 7: FINALISTS' ROUND & CHAMPIONSHIP CONCLUSION

25th April 2026

Due to time constraints during the national championship and the desire to ensure robust evaluation, the **top four teams in each category** progressed to a final round held on **Saturday 25th April 2026**.

Format

Finalists were evaluated through:

- ✓ robotics challenge performance
- ✓ innovation pitch presentations
- ✓ sustainability assessment
- ✓ robot innovation defense

Final National Champions

🏆 **Junior Category:** Peak Primary School

🏆 **Senior Category:** Trinity College Nabbingo



Figure 44: One of the participants at the Robotics for Good youth challenge open workshop shares his AI aspirations with the President Creative Child Foundation



Figure 45: Teams carrying out final touches on their robots before the challenge begins during the national finals

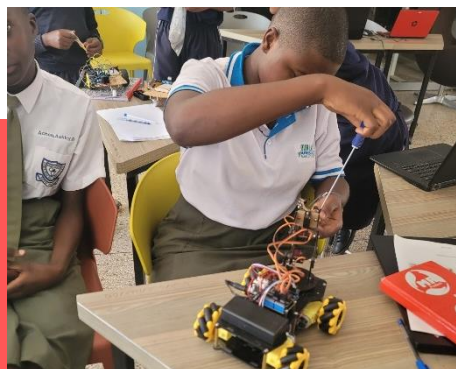


Figure 46: Student screwing a servo motor onto her robot planting mechanism



Figure 47: Empowered mentors being flagged off to visit schools and train students ahead of Robotics for Good youth challenge Uganda 2025/2026

PHASE 8: POST-COMPETITION REVIEW, PETITIONS & INTEGRITY MANAGEMENT

Late April 2026

Following the final rounds, a number of petitions and concerns were raised regarding aspects of the challenge game results.

Rather than dismiss these concerns, Creative Child Foundation prioritized fairness, transparency, and institutional credibility.

Integrity Measures Implemented

- ✓ Teams were formally invited to submit concerns
- ✓ Submissions required **visual evidence** where available
- ✓ All challenge results were openly shared
- ✓ Technical and judging teams conducted evidence-based review
- ✓ Reassessment was undertaken where necessary

Outcome

This process ensured:

- ✓ confidence in the legitimacy of the final outcomes
- ✓ broad acceptance by participating teams
- ✓ protection of the competition's integrity

Strategic Value

For development partners and stakeholders, this was a critical demonstration that the program is guided not only by innovation, but by strong governance, accountability, and ethical leadership.



Figure 48: Mbuya Parents School team take a moment to celebrate after qualifying for the last stage of the championship.

WHY THE IMPLEMENTATION MODEL MATTERS

The success of the Robotics for Good Youth Challenge Uganda lies not simply in the number of participants reached, but in the **quality and structure of the implementation model**.

This timeline reflects a program that was:

- ✓ progressive rather than episodic
- ✓ inclusive rather than exclusive
- ✓ skills-focused rather than event-focused
- ✓ ecosystem-driven rather than isolated

By intentionally moving participants from exposure to mastery, from mentorship to competition, and from learning to innovation, the program created a durable pathway for youth empowerment.

This is the kind of implementation model capable of national scale, regional relevance, and long-term developmental impact.



Figure 49: Students excited to share their knowledge of Robotics and Artificial Intelligence during the finals



Figure 50: A student explains all parts of their robot during the Robot Defense session at the finals



Figure 3: A student physically developing a robot solution after running a successful simulation using Tinkercad

AWARDS & RECOGNITION

A defining strength of the Robotics for Good youth challenge 2025/2026 - Uganda was its deliberate effort to ensure that recognition extended beyond final rankings. The awards framework was intentionally designed to celebrate not only competitive success, but also the broader values that drive meaningful innovation - creativity, social relevance, resilience, affordability, teamwork, and long-term impact.

This approach was important for two reasons.

First, it ensured that students understood innovation as more than winning a game. It reinforced the principle that the true purpose of robotics and artificial intelligence is to create solutions that respond to real human challenges.

Second, it created space to recognize different forms of excellence - allowing participants from varied contexts, including schools with limited resources, to see that resourcefulness, originality, and social impact are equally worthy of national recognition.

NATIONAL CHAMPIONS – OVERALL WINNERS

JUNIOR CATEGORY NATIONAL CHAMPION



PEAK PRIMARY SCHOOL

SENIOR CATEGORY NATIONAL CHAMPION



TRINITY COLLEGE NABBINGO

SPECIAL RECOGNITION AWARDS

BEST FOOD SECURITY
INNOVATION AWARD
KAMPALA DIPLOMATIC



HIGH IMPACT
INNOVATION AWARD
PEAK PRIMARY SCHOOL



BEST LOW-COST
INNOVATION AWARD
THE OLIVE SCHOOL





BEYOND TROPHIES,
WE CELEBRATE:

- ✓ Creativity & Originality
- ✓ Problem Solving & Impact
- ✓ Teamwork & Collaboration
- ✓ Resilience & Determination



A HEARTFELT APPRECIATION TO ALL PARTICIPATING
SCHOOLS, MENTORS, TEACHERS AND PARTNERS.
YOU ARE ALL INNOVATION CHAMPIONS!

1. NATIONAL CHAMPIONS – OVERALL WINNERS

Following a highly competitive national cycle involving months of training, mentorship, prototype development, challenge rounds, and final technical evaluations, the two teams that emerged as national champions demonstrated exceptional performance across all major assessment areas, including:

- ✓ challenge game execution
- ✓ technical design and robot functionality
- ✓ innovation defense and systems understanding
- ✓ sustainability of solution
- ✓ teamwork and adaptability under pressure

Junior Category National Champion

Peak Primary School

Peak Primary School distinguished itself through a powerful combination of technical precision, composure under pressure, and creative problem-solving. Their performance reflected not only strong preparation but also a remarkable capacity to translate learning into practical execution.

Their victory carries important national significance. It demonstrates that young learners, when given opportunity and mentorship, can meaningfully engage with advanced concepts such as robotics, systems thinking, and engineering design.



Figure 4: Exciting moment after launch of Robotics for Good youth challenge training workshops

Senior Category National Champion

Trinity College Nabbingo

Trinity College Nabbingo emerged as the overall winner of the Senior Category, delivering one of the most compelling performances of the competition.

Their robot design, technical understanding, consistency across challenge rounds, and clarity of innovation defense collectively positioned them at the top of a highly competitive field.

Their success reflects the growing strength of school-based innovation ecosystems in Uganda and highlights the role of sustained mentorship, disciplined preparation, and collaborative learning.

As senior category champions, Trinity College Nabbingo now stands as a symbol of what is possible when young people are empowered not only to learn technology - but to master it, apply it, and lead with it.

2. RUNNERS-UP & EXCEPTIONAL FINALISTS

The competition was characterized by extremely narrow margins between top-performing teams, underscoring the high quality of preparation across participating schools.

Senior Category – First Runner-Up

King's College Budo

King's College Budo delivered an outstanding performance throughout the championship and came within the narrowest margin of securing the top position.

Their participation stood out for:

- ✓ technical excellence
- ✓ strategic execution
- ✓ consistency across rounds
- ✓ impressive composure in high-pressure situations



Figure 53: Peak Primary School declared winners – Junior Category



Figure 54: Trinity College Nabbingo declared winners – Senior Category



Figure 55: King's College Budo declared 1st runners up – Senior Category

Junior Category – First Runner-Up

The Olive School

The Olive School emerged as one of the most inspiring teams of the competition.

Their strong showing in the junior category reflected:

- ✓ creativity
- ✓ determination
- ✓ technical growth
- ✓ a high degree of adaptability

Their performance illustrates the extraordinary potential of early-stage STEM engagement and reinforces the importance of investing in innovation pathways for younger learners.



Figure 56: The Olive School declared 1st runners up – Junior Category

3. SPECIAL RECOGNITION AWARDS

Beyond the overall competition rankings, special recognition awards were introduced to celebrate distinct dimensions of innovation that align strongly with Uganda's development priorities.

Best Innovation – Food Security Award

Kampala Diplomatic International School

This award recognized the team whose innovation most effectively addressed the challenge theme of **food security**.

Kampala Diplomatic International School was recognized for developing a solution that demonstrated:

- ✓ contextual relevance
- ✓ strong problem identification
- ✓ practical applicability
- ✓ potential social value

This recognition highlights the growing ability of young innovators to connect technology to one of the most urgent development priorities of our time.

It affirmed that innovation within the program was not merely technical - but also socially responsive and development-oriented.

Best Low-Cost Sustainable Challenge Robot Award

The Olive School

The Olive School also received national recognition for developing the **Best Low-Cost Sustainable Challenge Robot**. This award celebrated a robot design that demonstrated:

- ✓ affordability
- ✓ practical use of locally adaptable materials
- ✓ replicability within ordinary school environments
- ✓ strong engineering efficiency without reliance on expensive resources



Figure 57: Kampala Diplomatic International School celebrate winning the best food security innovation award



Figure 58: The Olive School celebrate winning Best Low-Cost Sustainable Challenge Robot Award



Figure 59: Photo moments by one of the Girls schools after the finals as they await results

In a country where many schools operate with limited resources, innovations that are accessible, adaptable, and locally replicable are particularly valuable.

The award reinforces one of the central messages of the program:

Meaningful innovation does not have to be expensive - what matters most is ingenuity, relevance, and the ability to solve real problems within real-world constraints.



Figure 60: A team from Creative Child Foundation meets the Deputy Resident Representative – United Nations Development Program in Uganda

High Impact Innovation Award

🏆 Peak Primary School

Peak Primary School was additionally recognized for developing the **High Impact Innovation** of the championship.

This award honored an innovation that showed strong potential for:

- ✓ wider societal relevance
- ✓ practical usefulness
- ✓ future scalability
- ✓ transformative impact if further developed

This recognition was especially powerful because it highlighted the ability of young learners not only to build functional prototypes, but to think about broader societal change.

4. RECOGNITION OF PARTICIPATION, RESILIENCE & LEARNING

While a limited number of teams received formal awards, the broader success of the initiative lies in the achievements of all participating teams.

Across the country, students demonstrated:

- ✓ courage to experiment
- ✓ willingness to fail and improve
- ✓ teamwork under pressure
- ✓ persistence in the face of technical setbacks

Many teams entered the program with little or no prior exposure to robotics. By the end of the cycle, they had built robots, pitched ideas, defended technical decisions, and competed at national level.

That transformation itself represents one of the most meaningful forms of recognition.

Each award told a larger story - that within classrooms, school workshops, and young minds across Uganda, a new generation of innovators is already emerging.



Figure 61: Some of the participants receive their certificates after events went down successfully during the Uganda national championship



Figure 62: Winners of the 2024/2025 Robotics for Good youth challenge Uganda national championship share their experience with the audience during the 2025/2026 finals



Figure 63: Peak Primary School pupils celebrate winning the High Impact Innovation Award

CHALLENGES & INTEGRITY MANAGEMENT

The successful implementation of the Robotics for Good Youth Challenge 2025/2026 - Uganda was not without challenges. As with any ambitious national initiative that brings together diverse institutions, learners, mentors, and stakeholders across multiple regions, the program encountered a number of operational, technical, and competition-related constraints.

What distinguished this initiative, however, was not the absence of challenges - but the manner in which they were addressed.

Throughout the program cycle, Creative Child Foundation and Makerere University Technology & Innovation Center remained firmly committed to fairness, transparency, inclusion, and accountability. These principles guided every major decision and were especially important in protecting the credibility of the competition, the confidence of participating teams, and the trust of partners and stakeholders.

1. PROGRAMMATIC & OPERATIONAL CHALLENGES

1.1. Unequal Levels of Prior Exposure to Robotics and AI

One of the most significant structural realities was the uneven level of exposure among participating schools.

While some institutions had prior experience in:

- ✓ robotics assembly
- ✓ coding
- ✓ structured STEM clubs

many others - particularly schools from less-resourced and underserved communities - were encountering robotics for the first time.

This created notable disparities in:

- ✓ technical readiness
- ✓ access to equipment
- ✓ familiarity with challenge rules
- ✓ confidence in prototyping and programming

Mitigation Measures

To address this imbalance, the program intentionally expanded its capacity-building model through:

- ✓ additional orientation sessions
- ✓ mentor-led school support visits
- ✓ direct technical guidance for teams requiring extra support
- ✓ simplified explanations of rules and robotics concepts

This ensured that participation remained broadly inclusive rather than narrowly elite.



Figure 64: One of the teams arriving with their incredible robots ahead of the competition.



Figure 65: Challenge in action, teams excited to watch their robots execute tasks they programmed them to do



Figure 66: One of the teams that shared their one-week innovation sprint developing robots while doing end of term exams at school

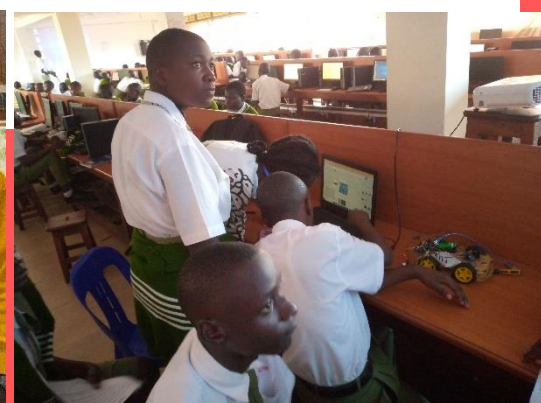


Figure 67: Students at Our Lady of Africa SS Namityango being introduced to Fundamentals of Robotics and Artificial Intelligence

1.2. School Calendar Disruptions and Compressed Preparation Time

The 2025/2026 cycle coincided with disruptions in school programming that affected the readiness of many participating teams.

A major contributing factor was the broader education calendar disruption associated with the **Uganda general elections**, which led to delayed reporting of students in several schools.

As a result:

- ✓ preparation timelines became compressed
- ✓ some teams requested more time for robot testing and innovation refinement
- ✓ mentors had limited time for sustained in-school support

Mitigation Measures

In response to these realities, Creative Child Foundation and Makerere University Technology & Innovation Center took a strategic decision to reschedule the national championship.

The event, originally planned for March 2026, was moved to **17th April 2026**.

This decision:

- ✓ responded directly to participant feedback
- ✓ preserved quality of preparation
- ✓ strengthened fairness across teams
- ✓ increased the likelihood of meaningful learning outcomes rather than rushed participation

The decision was communicated transparently to stakeholders, including the International Telecommunication Union.

1.3. Resource and Infrastructure Constraints

As with many growing innovation initiatives in emerging contexts, some teams faced practical limitations in:

- ✓ access to robotics kits
- ✓ access to reliable internet and technical resources
- ✓ adequate practice environments
- ✓ availability of standardized game field conditions

For schools operating with limited infrastructure, these constraints directly affected preparation quality.

Mitigation Measures

The program responded by emphasizing:

- ✓ low-cost innovation approaches
- ✓ use of locally adaptable solutions
- ✓ mentorship support focused on resource optimization rather than resource dependency

This was particularly important in reinforcing the broader philosophy that **innovation should not be defined by privilege, but by ingenuity and adaptability**.



Figure 68: Engineering session during teacher training, learning the importance of simulation before building systems



Figure 69: Training session at one of the public schools in Uganda ahead of the Robotics for Good youth challenge Uganda 2025/2026



Figure 70: Students from 9 different Universities being trained to support as mentors to budding innovators in primary & high schools



Figure 5: Students at Mbogo High School being introduced to embedded systems during one of the workshops in preparation ahead of the Robotics for Good youth challenge

2. NATIONAL CHAMPIONSHIP IMPLEMENTATION CHALLENGES

2.1. Time Constraints During the National Event

The national championship held at Makerere University attracted strong participation and significant interest.

However, the richness of the event - which included:

- ✓ challenge matches
- ✓ innovation pitch presentations
- ✓ exhibitions
- ✓ stakeholder engagement
- ✓ public learning sessions

created time pressure within the available program schedule.

As the competition advanced, it became clear that completing all final competitive rounds within the same day would compromise:

- ✓ quality of judging
- ✓ fairness of technical assessment
- ✓ adequate participation time for finalists

Mitigation Measures

To preserve the integrity of the championship, Creative Child Foundation & Makerere University Technology & Innovation Center made the deliberate decision to defer the final rounds for top teams to Saturday 25th April 2026.

This ensured that finalists had:

- ✓ adequate time to prepare
- ✓ sufficient technical readiness
- ✓ fair opportunity for robust evaluation

Rather than forcing rushed conclusions, the program prioritized **quality over convenience**.

2.2. Technical Difficulties with Robots and Game Field Conditions

A number of teams experienced technical issues during the challenge rounds, including:

- ✓ robot calibration inconsistencies
- ✓ sensor response problems
- ✓ movement alignment issues
- ✓ adaptation difficulties related to game field conditions

In addition, feedback emerged regarding aspects of the challenge field that teams felt could be improved for better fairness and consistency.



Figure 6: Welcome Remarks from the National Coordinator Robotics for Good Youth Challenge Uganda during finals



Figure 73: Young girls building electronics systems with confidence and passion during a training workshop at Kampala Parents School



Figure 74: Students at Gayaza High School learning embedded systems



Figure 75: Students being oriented to the Robotics for Good youth challenge 2025/2026

Mitigation Measures

The organizing team responded by:

- ✓ allowing a one-week adjustment period before final rounds
- ✓ making modifications to game field conditions based on reasonable technical feedback
- ✓ giving teams opportunity to troubleshoot and refine robots

This was an important decision.

It ensured that outcomes reflected engineering capability and adaptability, rather than momentary technical disadvantage alone.

3. PETITIONS, RESULT CONCERNS & INTEGRITY MANAGEMENT

3.1. Post-Competition Petitions

Following the championship, a number of petitions and concerns were raised by finalist teams regarding certain challenge game outcomes.

These concerns centered on:

- ✓ interpretation of match outcomes
- ✓ technical observations during game play
- ✓ perceived inconsistencies in specific recorded results

Such situations are not uncommon in highly competitive environments.

However, what matters most is how they are handled.

4. THE INTEGRITY RESPONSE FRAMEWORK

Creative Child Foundation treated these concerns with seriousness, professionalism, and fairness.

Rather than dismissing concerns or allowing uncertainty to undermine confidence in the process, a structured review mechanism was immediately activated.

Key Integrity Measures Implemented

4.1. Formal Submission Process

Teams were formally invited to submit concerns through a documented channel.

They were requested to provide:

- ✓ written explanation of the concern
- ✓ relevant visual or video evidence where available

This ensured that reviews were based on evidence rather than emotion or speculation.

4.2. Transparency Through Shared Results

All challenge game results as recorded during the event were openly shared with participating teams.

This created:

- ✓ visibility of the scoring process
- ✓ opportunity for verification
- ✓ confidence that no hidden processes influenced outcomes



Figure 76: One of the junior teams relaxed after a rigorous competition before announcement of results

4.3. Evidence-Based Technical Review

The organizing team, together with relevant technical and judging personnel, reviewed submitted concerns against:

- ✓ official recorded scores
- ✓ available visual documentation
- ✓ applicable competition rules

Where necessary, clarifications were made to ensure interpretation remained consistent with established standards.



Figure 77: Judges announcing results during the national championship.

4.4. Commitment to Neutrality

The review process was deliberately conducted with neutrality. The objective was not to defend prior decisions at all costs, but to determine whether the declared outcomes remained valid under fair scrutiny. This distinction was critical in preserving legitimacy.

5. OUTCOMES OF THE INTEGRITY MANAGEMENT PROCESS

The integrity management process produced several important outcomes.

5.1. Strengthened Confidence in Final Results

The review process provided teams with assurance that outcomes had been subjected to scrutiny and were not arbitrarily maintained. This was particularly important in preserving trust among finalists.

5.2. Reinforced Credibility of the Competition

By openly acknowledging concerns and providing a formal review pathway, the program demonstrated that it values:

- ✓ fairness
- ✓ accountability
- ✓ institutional maturity

For partners and donors, this is a strong indicator of responsible program governance.

5.3. Preserved Relationships Among Teams

In competitive environments, unresolved disputes can damage long-term collaboration and participation.

By handling petitions respectfully and transparently, the program helped maintain:

- ✓ mutual respect among teams
- ✓ willingness to continue participating
- ✓ confidence in future editions of the challenge

6. STRATEGIC LESSONS FOR FUTURE SCALE

The challenges encountered also generated important lessons that will strengthen future editions of the program.

Key lessons include:

- ✓ Need for earlier distribution of technical resources and field specifications
- ✓ Expanded pre-event rule clarification sessions
- ✓ More structured referee and technical observation systems
- ✓ Increased regional mentorship support before competition dates
- ✓ More robust time allocation for final rounds and technical appeals

KEY IMPACT AREAS



The **Robotics for Good youth challenge 2025/2026 - Uganda** delivered impact far beyond the competition arena. What began as a national robotics and innovation challenge evolved into a broader platform for skills development, inclusion, mentorship, youth leadership, and systems-level collaboration.

Its most important contribution lies in the fact that it did not simply expose young people to technology - it equipped them to use technology as a tool for solving real problems.

Across the full implementation cycle, the program generated measurable outcomes at the level of learners, teachers, schools, mentors, institutions, and the wider innovation ecosystem.

1. TRANSFORMING ACCESS TO PRACTICAL STEM EDUCATION

One of the most significant impacts of the initiative was its contribution to shifting STEM learning from theory to practice.

In many schools, science and technology education remains largely classroom-based, with limited opportunity for experimentation, building, testing, and iteration.

The program directly responded to this gap by introducing young people to:

- ✓ robotics design and assembly
- ✓ programming logic
- ✓ systems thinking
- ✓ prototyping and troubleshooting
- ✓ real-time problem-solving under practical conditions

Measured Impact

Across the program cycle:

- ✓ 3000+ students and educators were directly reached
- ✓ 35+ primary, secondary, and tertiary institutions participated
- ✓ learners engaged in hands-on building rather than passive observation

2. EXPANDING INCLUSION IN STEM FOR UNDERSERVED COMMUNITIES

A defining strength of the program was its deliberate commitment to inclusion.

Rather than concentrating opportunities only among schools with established robotics capacity, the initiative intentionally expanded participation to schools and communities with limited prior exposure.

This was especially important in a context where access to emerging technologies remains uneven.

Inclusion Outcomes

The program created opportunities for:

- ✓ schools with limited STEM infrastructure
- ✓ learners with no prior robotics experience
- ✓ participants from underserved communities
- ✓ younger learners who are often excluded from advanced technology conversations

Strategic Significance

This approach helped democratize innovation.

It sent a powerful national message:

Talent is universal, but opportunity is not - and expanding opportunity changes outcomes.

The challenge therefore became not only a STEM intervention, but also a meaningful instrument of educational equity and digital inclusion.

3. DEVELOPMENT OF FUTURE-READY SKILLS

The initiative strengthened a broad range of competencies essential for the future of work and innovation.

Participants developed technical skills, but equally importantly, they developed the human capabilities required to apply those skills meaningfully.

Skills Strengthened

Students demonstrated growth in:

- ✓ critical thinking
- ✓ creativity and innovation design
- ✓ collaboration and teamwork
- ✓ technical communication
- ✓ resilience under pressure
- ✓ public speaking and presentation ability
- ✓ systems analysis and iterative improvement



Figure 78: One of the teams arriving ahead of finals

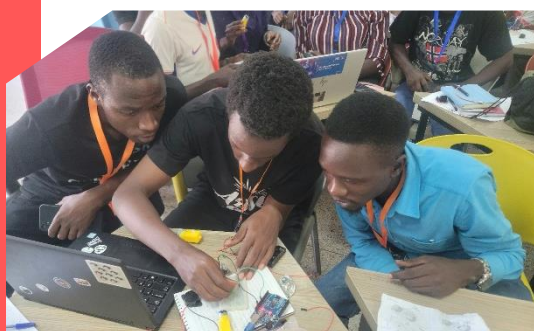


Figure 79: Participants building circuits at the teacher training workshop at Makerere University

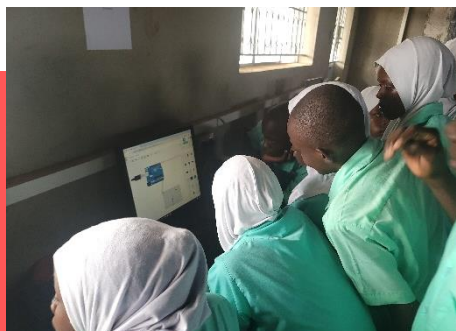


Figure 80: Students learning fundamental concepts of firmware development during one of the workshops in Kawempe division



Figure 81: A team demonstrates their food security innovation during an exhibition at the national championship

Observed Transformation

Many students entered the program uncertain of their ability to engage with robotics.

By the end of the cycle, they were able to:

- ✓ build functional robots
- ✓ present innovation concepts publicly
- ✓ defend technical design choices before judges
- ✓ respond to real-time technical challenges

This growth reflects not only skills acquisition, but also confidence formation and leadership development.



Figure 82: Primary school pupils collaborate to build their robot during a training session

4. YOUTH-LED INNOVATION FOR REAL-WORLD CHALLENGES

A central impact area was the connection between technology and real societal problems.

The 2025/2026 edition placed special emphasis on **food security**, encouraging students to move beyond technical performance toward socially relevant innovation.

Innovation Outputs

Participants developed:

- ✓ 120+ robotics prototypes
- ✓ 60+ innovation concepts linked to food security

Examples included:

- ✓ automated irrigation ideas
- ✓ smart monitoring concepts
- ✓ mechanized agricultural support tools
- ✓ robotics-assisted production efficiency ideas

Why This Matters

The significance of this goes beyond the competition, it demonstrates that young people can engage not only as learners of technology, but as problem-solvers capable of contributing to national development priorities. This is one of the strongest indicators of long-term impact.

5. STRENGTHENING TEACHER CAPACITY AND SCHOOL-LEVEL STEM ECOSYSTEMS

The program recognized that lasting impact requires investment beyond students alone. Teachers and school-based mentors were therefore intentionally engaged as core enablers of sustainability.

Capacity Building Outcomes

- ✓ **70+ teachers and mentors** received targeted support
- ✓ educators strengthened their understanding of:
 - robotics facilitation
 - innovation coaching
 - practical STEM delivery
 - challenge-based learning methods



Figure 83: Students introduced to software and firmware development at Nabinsunsa Girls' School during one of the workshops in preparation for the Robotics for Good Youth Challenge 2025/2026



Figure 84: Nabinsunsa Girls' School students collaborating to build circuits for their robots



Figure 85: Students building circuits with ease during one of the training workshops

6. BUILDING A SUSTAINABLE PEER MENTORSHIP MODEL

One of the most innovative structural achievements of the program was the creation of a multi-level mentorship ecosystem. University students were trained not merely as participants, but as mentors supporting younger learners.

Mentorship Outcomes

- ✓ 100+ university students trained
- ✓ mentors supported:
 - school preparation
 - technical troubleshooting
 - challenge interpretation
 - innovation development

Strategic Value

This model created:

- ✓ leadership opportunities for university students
- ✓ relatable learning support for younger participants
- ✓ scalable pathways for future growth

It also significantly improved sustainability by reducing dependence on centralized technical delivery.

7. STRENGTHENING NATIONAL COLLABORATION FOR INNOVATION

The challenge served as a convening platform that brought together multiple actors within Uganda's innovation ecosystem.

Key collaborations involved:

- ✓ the International Telecommunication Union
- ✓ the Makerere University Technology & Innovation Center
- ✓ schools and educators
- ✓ mentors and university students
- ✓ development partners
- ✓ public sector stakeholders

Why This Matters

This ecosystem-building role is strategically important.

It helps create:

- ✓ stronger institutional relationships
- ✓ shared ownership of youth innovation outcomes
- ✓ greater legitimacy for scaling future editions

In many ways, the challenge became a platform not only for competition, but for national innovation ecosystem strengthening.

8. GLOBAL EXPOSURE AND INTERNATIONAL ASPIRATION

The program also created an important bridge between local innovation and global opportunity. National champions earned the opportunity to represent Uganda on the international stage through the global Robotics for Good framework.



Figure 86: Students from Kazo Muslim High School celebrating their participation at the national championship.



Figure 87: A mentor introduces students to electronics circuits simulation using Tinkercad during one of the training workshops

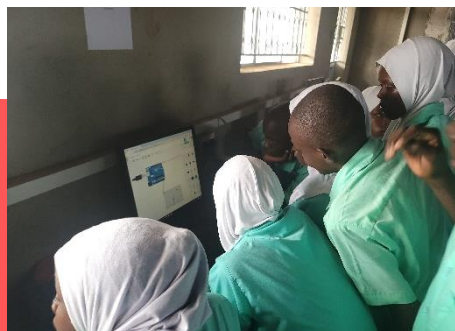


Figure 88: Students at Mbogo College School introduced to electronics circuit simulation



Figure 89: Students programming circuits using Arduino based programming boards and C programming language

9. CULTIVATING A CULTURE OF ETHICAL COMPETITION AND INTEGRITY

An often overlooked but highly important impact area was the strengthening of integrity culture.

The structured handling of petitions and competition concerns reinforced lessons in:

- ✓ fairness
- ✓ evidence-based accountability
- ✓ respect for rules
- ✓ responsible competition

Why This Matters

Innovation ecosystems thrive only where trust exists. By embedding integrity into competition processes, the initiative helped nurture not only better innovators - but also responsible future leaders.



Figure 90: Exciting moments during opening sessions of the finals

10. SHIFTING MINDSETS ABOUT WHO CAN INNOVATE

Perhaps the deepest impact of the program was psychological and cultural. Across schools, communities, and institutions, the challenge helped shift assumptions about innovation itself. Young people who might previously have been seen only as learners emerged as:

- ✓ creators
- ✓ builders
- ✓ presenters
- ✓ problem-solvers
- ✓ leaders

The Broader Message

The initiative demonstrated that meaningful innovation can emerge from:

- ✓ young learners
- ✓ ordinary classrooms
- ✓ schools with limited resources
- ✓ underserved communities

That shift in mindset is powerful because it changes how a nation begins to think about its future innovators. The Robotics for Good Youth Challenge Uganda 2025/2026 generated impact that was **educational, social, institutional, and transformational**.

It strengthened skills.

It expanded inclusion.

It nurtured leadership.

It connected technology to real human challenges. Most importantly, it demonstrated something profound:

When young people are trusted with tools, mentorship, and opportunity, they do not merely participate in the future—they begin building it.

For donors, partners, and national stakeholders, this program offers compelling evidence that investment in youth innovation is not only worthwhile - it is strategic, scalable, and nationally consequential.



Figure 91: Students at Gayaza High School introduced to fundamentals of computer programming and embedded systems



Figure 92: University students being introduced to electronics design and programming during a 2-weeks training program



Figure 93: Students arriving at the Auditorium ahead of the national championship

PARTNERSHIP & COLLABORATION

The success of the Robotics for Good youth challenge 2025/2026 – Uganda was made possible through a purposeful coalition of institutions united by a shared belief: that Uganda’s young people must be equipped not only to participate in the future, but to help shape it.

At the center of this collaboration was Creative Child Foundation, which provided strategic leadership, program coordination, school engagement, mentor mobilization, and overall implementation stewardship from the planning phase through final competition rounds.

A particularly important institutional partner was the Makerere University Technology & Innovation Center. Through this collaboration, the program benefited from:

- ✓ access to a credible university innovation ecosystem
- ✓ technical mentorship and knowledge exchange
- ✓ student volunteer engagement
- ✓ hosting of the national championship at the Yusuf Lule Central Teaching Facility

This partnership helped bridge school-based learning with higher education innovation pathways, creating a stronger pipeline of future innovators.

The program also drew strength from collaboration with the International Telecommunication Union, whose global Robotics for Good youth challenge framework provided international relevance, technical direction, and a global platform through which Ugandan students could connect their ideas to wider global innovation conversations.

Support from the Government of Uganda added further national legitimacy and momentum. In particular, the engagement of Balaam Barugahara Ateenyi helped strengthen strategic linkages that expanded opportunity for participating learners.

A major milestone emerged through engagement with the United Nations Development Programme, whose commitment to support international travel for finalists represented far more than logistical assistance. It sent a powerful signal that young innovators from Uganda can be seen, trusted, and elevated onto global platforms.

Equally important were the contributions of:

- ✓ participating primary, secondary, and tertiary institutions
- ✓ teachers and school administrators
- ✓ university mentors and technical volunteers
- ✓ parents and community supporters

Together, these actors transformed the initiative from a competition into a national learning ecosystem.



Figure 94: Mentors receive certificates after 2 weeks training program



Figure 95: University students put their robot to a test during the training of trainers workshop



Figure 96: Students building their robots from scratch as they prepare for the Robotics for Good youth challenge



Figure 97: One of the judges sharing results with teams after one of the competition rounds during the finals

SCALABILITY & FUTURE VISION

The Robotics for Good youth challenge 2025/2026 - Uganda has demonstrated that youth-centered robotics and artificial intelligence education can be implemented successfully, inclusively, and with measurable impact across diverse learning environments.

What has emerged through this cycle is not merely a successful competition model, but a scalable national platform for future-ready learning, innovation development, and youth empowerment.

The lessons, partnerships, systems, and implementation structures established during this program provide a strong foundation for expansion at both national and regional levels.

1. WHY THE MODEL IS SCALABLE

A major strength of the initiative lies in the fact that its success was not dependent on highly specialized infrastructure alone.

The program proved that meaningful STEM engagement can be delivered through a model built on:

- ✓ structured mentorship
- ✓ low-cost robotics approaches
- ✓ school-based participation pathways
- ✓ challenge-based experiential learning
- ✓ locally adaptable innovation design

This makes the model particularly suitable for broader adoption across Uganda, including schools operating with limited resources.

Scalability Advantages

The 2025/2026 model demonstrated:

- ✓ strong student demand and enthusiasm
- ✓ adaptability across primary, secondary, and tertiary levels
- ✓ capacity for implementation within existing school ecosystems
- ✓ replicability through trained mentors and university volunteers
- ✓ alignment with national priorities around skills development, digital transformation, and youth innovation

These characteristics significantly reduce barriers to expansion.



Figure 98: Maya engages the Hon. State Minister for Youth & Children to support the Robotics for Good Youth Challenge Uganda



Figure 99: Teachers sharing ideas during prototyping session at one of the teacher training workshops



Figure 100: Training of primary school pupils ahead of national finals of Robotics for Good youth challenge



Figure 101: Participants get their robots ready for the challenge

2. NATIONAL EXPANSION OPPORTUNITY

The current cycle reached **35+ institutions** and directly engaged **3000+ students and educators**. These numbers tripled our impact in the first edition (2024/2025). This provides only an early indication of the scale of unmet opportunity. Uganda has thousands of schools whose learners remain largely excluded from practical robotics, coding, and AI learning experiences.

Near-Term National Growth Pathway

Future program cycles can scale through:

- ✓ regional training hubs anchored in universities and innovation centers
- ✓ district-level robotics workshops prior to national competitions
- ✓ teacher training cohorts to strengthen school-based continuity
- ✓ localized pre-qualification mini challenges to widen participation
- ✓ expansion into rural and underserved districts

This would enable the initiative to move from a national event model toward a national movement for applied STEM learning.

3. THE MULTIPLIER EFFECT OF THE MENTORSHIP MODEL

One of the strongest assets for scale is the multi-level mentorship structure. The training of **100+ university mentors** demonstrated that peer-led support can significantly increase reach while maintaining quality.

Why This Matters for Scale

University mentors can serve as:

- ✓ regional trainers
- ✓ school support facilitators
- ✓ technical coaches
- ✓ role models for younger learners

This creates a multiplier effect where each trained mentor can support multiple schools.

As the mentor network expands, so does the program's capacity to scale without proportional increases in central delivery costs. This makes the model both cost-efficient and sustainable.

4. BUILDING A NATIONAL INNOVATION PIPELINE

The future vision of the program extends beyond annual competition.

The long-term goal is to build a **continuous national innovation pipeline** through which learners can progressively move from:

- ✓ early exposure
- ✓ practical experimentation & prototype development
- ✓ innovation pitching
- ✓ advanced mentorship
- ✓ national competition & global participation

This creates a structured pathway for nurturing innovation talent over time rather than through isolated interventions.



Figure 102: Students being taken through the Rulebook of the challenge in preparation for the Robotics for Good youth challenge.



Figure 103: Exciting moments as robots autonomously carryout missions while the young scientists look on



Figure 104: Our mentors training students who had the passion to compete at the Robotics for Good youth challenge but didn't have the skills



Figure 105: A teacher testing a line follower robot during one of the training workshops with her learners

5. DEEPENING REAL-WORLD PROBLEM SOLVING

Future editions will increasingly strengthen the connection between technology and national development priorities.

Building on the success of the food security theme, future cycles can expand challenge themes into areas such as:

- ✓ climate resilience
- ✓ healthcare innovation
- ✓ education technology
- ✓ smart agriculture
- ✓ clean energy
- ✓ accessibility and inclusive design

This would deepen the program's relevance not only as an education initiative, but also as a youth-driven innovation platform contributing to national development goals.



Figure 106: National Coordinator Robotics for Good youth challenge Uganda meeting state minister for Innovation and Technology of Ethiopia, H.E. Dr. Yeshurun Alemayehu with the idea of building an ecosystem that supports African teams to excel at global competition

6. REGIONAL AND INTERNATIONAL POSITIONING

The global pathway provided by the Robotics for Good youth challenge offers an important opportunity for future growth. As the Ugandan model matures, it has the potential to become:

- ✓ a regional learning model for East Africa
- ✓ a case study in inclusive innovation education
- ✓ a platform for stronger international collaboration

This would elevate Uganda's visibility within global conversations on:

- ✓ youth innovation
- ✓ STEM inclusion
- ✓ practical AI education
- ✓ future workforce readiness



FUNDING OPPORTUNITY

The results of the Robotics for Good youth challenge 2025/2026 – Uganda demonstrate that this initiative represents far more than a competition. It is a scalable national investment opportunity in; future-ready education, youth employability, innovation leadership, inclusive digital transformation, locally relevant problem-solving capacity. The 2025/2026 cycle has already validated the model. With strategic support, the initiative can expand significantly in both reach and depth.

Why This Is a High-Value Investment

1. Proven Delivery Capacity

The program successfully delivered:

- ✓ national multi-stage implementation
- ✓ school outreach and capacity building
- ✓ university mentor engagement
- ✓ national competition delivery under credible institutional partnerships

This reduces implementation risk for future funding.

2. Strong Cost-to-Impact Ratio

PROGRAM EXPENDITURE (OCTOBER 2025 – APRIL 2026)

#	BUDGET LINE	DESCRIPTION	AMOUNT (USD)	% OF TOTAL
1	Program planning & coordination	Concept development, planning meetings, stakeholder engagement, scheduling, program administration from October 2025 onward	1,800	3.6%
2	Open outreach & awareness activities	Initial mobilization activities, school engagement communication, promotional materials, registration coordination	1,500	3.0%
3	Training workshops (schools, teachers & university students)	Facilitation, learning materials, technical sessions, workshop logistics across multiple engagements	6,010	12.1%
4	Mentor preparation & technical orientation	Training of university mentors, technical briefings, challenge preparation support	1,800	3.6%
5	School support visits & follow-up technical guidance	Travel, field coordination, in-school support sessions, technical troubleshooting	2,600	5.2%
6	Robotics materials, challenge field setup & technical consumables	Field preparation, repairs, technical consumables, testing materials, prototype support	3,700	7.4%
7	National championship logistics (17 April 2026)	Venue preparation, event setup, registration, technical support, basic branding and logistics	3,200	6.4%
8	Participant welfare	Breakfast, lunch, water, hospitality for participants, volunteers, and invited guests	2,400	4.8%
9	Judging, moderation & protocol support	Judges facilitation, moderator support, protocol coordination	1,100	2.2%
10	Awards, recognition & documentation	Certificates, plaques, photography, video capture, reporting documentation	790	1.6%
11	Final rounds implementation (25 April 2026)	Technical coordination, field modifications, final competition logistics	1,200	2.4%
12	Communications, reporting & contingency	Post-event communication, reporting, unforeseen technical and operational adjustments	1,800	3.6%
13	Monitoring, evaluation & learning	M&E tools, reporting, feedback collection, learning documentation	1,800	3.6%
TOTAL PROGRAM EXPENDITURE			24,800	100%

With 3000+ direct beneficiaries, the investment demonstrates strong efficiency relative to the scale of skills, exposure, and institutional engagement generated. The cost per direct beneficiary remains highly competitive compared to many comparable youth innovation interventions.

PRIORITY FUNDING AREAS FOR 2026/2027 EXPANSION

INVESTING IN YOUNG INNOVATORS. TRANSFORMING COMMUNITIES. BUILDING UGANDA'S FUTURE.

These priority areas will significantly expand the reach, depth, and impact of the Robotics for Good Youth Challenge Uganda, creating sustainable pathways for youth innovation, skills development, and inclusive national transformation.



The Robotics for Good youth challenge 2025/2026 - Uganda has shown that when young people are given access to practical learning, mentorship, and meaningful challenge, they do far more than participate.

They create.

They solve.

They lead.

Across workshops, school engagements, technical mentoring, and national competition platforms, this initiative demonstrated that Uganda's young people possess remarkable creativity, resilience, and problem-solving potential. The program also proved something equally important:

High-impact innovation does not begin with advanced infrastructure alone - it begins with opportunity, belief, and intentional investment in young minds.

With 3000+ students and educators reached, strong institutional partnerships, proven implementation systems, and a growing national appetite for practical STEM learning, the foundation for scale has already been laid.

Measured Impact

Across the program cycle:

- ✓ 3000+ students and educators were directly reached
- ✓ 35+ primary, secondary, and tertiary institutions participated
- ✓ learners engaged in hands-on building rather than passive observation

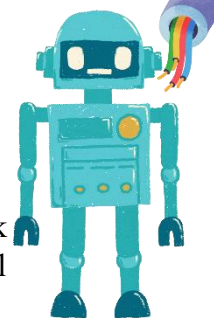
The next chapter is clear.

It is no longer simply about running a successful competition. It is about building a national pipeline of young innovators equipped to solve local challenges, contribute to national development, and represent Uganda on global stages.

Investment in this initiative is not merely support for a program. It is investment in the architects of Uganda's future.

Welcome to Creative Child Foundation

INSPIRE, EMPOWER & INNOVATE FOR AFRICA



A not-for-profit organisation based in Uganda, Creative Child Foundation works closely with a wide range of global partners, educators, government institutions, nonprofits and family foundations to design and lead the rollout and scaling of impact-driven educational initiatives and resources that change people's lives.

We craft equity-centred curriculum support resources and training material for teachers' and educators to aid them in widening walls that spur innovation & creative learning in classrooms around Uganda.

We have a proven track record in scaling digital education programs in Uganda, from STEM-centred hackathons and competitions all the way to very impactful skilling initiatives for young people in underserved communities.



Our programs focus on equipping children with essential 21st-century skills such as coding, robotics, and creative problem-solving through interactive learning workshops, training sessions, and co-creation hubs.

We launch & scale digital skills initiatives for young people in Uganda

In 2023 alone, Creative Child Foundation organized a series of **Robotics and Coding workshops** for children aged 6 to 18, targeting underserved communities, including slums and rural areas. We managed to directly reach close to 5,000 children from 50 schools, 47% of whom were girls, contributing to increased gender equality in STEM education. To ensure the sustainability of our impact and extend the reach of quality STEM education, we also organized **train-the-trainer programs** for primary and secondary school teachers. The aim was to equip educators with the skills and resources necessary to teach creative coding, robotics, and innovation to their students. A follow-up study conducted in mid-2024 showed a **20% increase in students' problem-solving abilities** and creativity in STEM subjects after the teachers implemented the coding curriculum.



Our innovation training programs for children focus on nurturing future innovators who will contribute to building resilient infrastructure and promoting sustainable industrialization. By encouraging children to create and develop tech-based solutions through coding and robotics, we are cultivating a generation that is well-equipped to drive technological advancement and innovation. Creative Child Foundation supports initiatives such as

We develop educational materials & run training programs that promote innovation for sustainable development

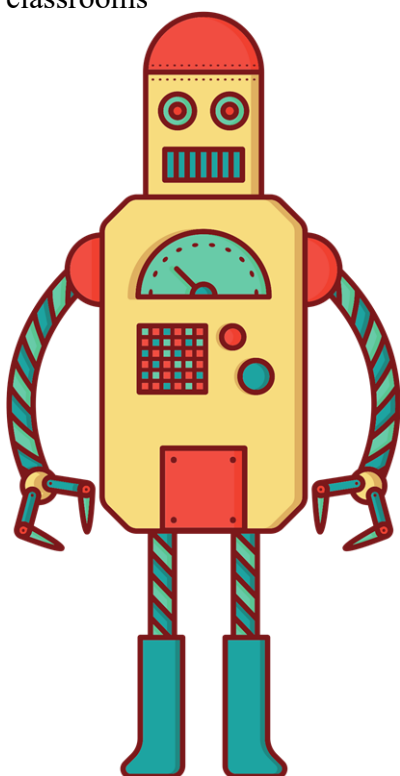
Through the initiatives we run for the community, Creative Child Foundation is contributing to building a resilient and inclusive infrastructure in Uganda, fostering an innovation-driven mindset among children, and laying the groundwork for sustainable industrial development. By empowering young innovators, especially girls and marginalized youth, to engage in **technological innovation**, we are helping to create the next generation of problem-solvers who will continue to push the boundaries of **industry, innovation, and infrastructure**. Our programs have led to increased **STEM participation** in underserved communities

hackathons, co-creation hubs, and workshops where children learn to design innovative solutions for real-world challenges, thereby fostering a culture of innovation.

and have provided students with the necessary resources and skills to develop solutions that can have a **long-term positive impact on their communities and the national economy**. As a result, we are contributing to a more sustainable, inclusive, and technologically advanced Uganda.



We strive to form meaningful connections with organisations and educators around the world to co-design and rollout impactful initiatives, curricula and resources aimed at spurring creativity in classrooms



We build partnerships for good to collectively achieve the UN SDGs

True to SDG17, we have proved our ability to facilitate fruitful dialogue between public & private and partners on an unprecedented scale to multiply teacher and student training in Uganda, Rwanda and Kenya with a sharp focus on girl engagement. Our work in Uganda inspired MIT Media Lab to develop OctoStudio, a coding app which is supporting millions of children across the globe to understand computer science concepts. In 2021, we were selected to join Scratch Education Collaborative which is a global network of education organisations receiving capacity building and financial support to develop equity-centred creative computing resources, curricula and toolkits for children, teachers and parents around the world. Driving policy development to boost the adoption of coding into national curricula, Creative Child Foundation is telling the real-life story Africans had been longing to hear for a while: that of all society stakeholders finally getting together to bring free, quality and relevant education to where it is most needed, in every urban and rural corner of the youngest country in East Africa.



Our foundation is focused on reaching children in marginalized communities, including those living in slums, refugee camps, and rural areas. Through partnerships with schools and local organizations, we offer access to education and technology resources that are often out of reach for these populations. By ensuring that underserved children have access to STEM education, we contribute to reducing inequalities and

We have a special focus on adolescent girls, single mothers and children with disabilities, most of whom often excluded from lifelong learning opportunities

In partnership with **Touch the Slum Charity Foundation**, Creative Child Foundation has worked tirelessly to bring **STEM (Science, Technology, Engineering, and Mathematics) education** to the heart of Namuwongo slum. Namuwongo is one of the largest and most impoverished slum areas in Kampala, where children face extreme economic hardship, inadequate schooling, and limited access to technology. To address these challenges, we introduced **STEM workshops** designed to equip children and youth with digital literacy, coding, robotics, and creative thinking skills. These workshops aimed to

ensuring that all children, regardless of their socio-economic background, have the opportunity to thrive in the digital age.



bridge the digital divide and provide young people with opportunities for upward social mobility. Over 500 children in Namuwongo have participated in our coding and robotics workshops, many of whom had never interacted with a computer before. By providing hands-on learning experiences, we are equipping these young learners with skills that can significantly enhance their future employment prospects and reduce economic disparities. Our partnership with **Touch the Slum Charity Foundation** places a special focus on adolescent girls, single mothers and children with disabilities—two groups that are often excluded from mainstream education and technological advancements.

Cocreation Hubs Network

We conduct research & evaluation

We have developed a research framework which we have implemented for teacher training and will use to inform best practice to all CCF run projects moving forward.

Thank You!



**Let's Get
In Touch**

Contact Us

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Visit Our Website

creativechildf.org/youthchallenge