



Uganda Teacher Rising project – Annual Report Jan 2025

Teacher mentorship to improve STEAMie and learner outcomes in all subjects.

Aims

- To improve the quality of teaching in participating schools through school-based TPD, delivered by local mentors, upskilling teachers in rural Ugandan schools to become leading practitioners (LPs), and new mentors.
- To produce a low-cost mentorship TPD cascade model to generate high-quality, rapid, scalable, and sustainable teacher learning and improvement. Mechanisms evidenced and then shared with the ministry enabling them to achieve whole-county rollout.
- To improve learners' and teachers' STEM and ICT skills including developing low-resource STEAMie project-based learning income-generating businesses making products for sale in the local community.

Abbreviations

AET	Africa Educational Trust
EDI	Explicit Direct Instruction
LP	Lead practitioner
NTP	National Teacher Policy
STEAMie	Science, Technology, Engineering, Arts, Maths, and innovation with enterprise
TPD	Teacher professional development.
UTR	Uganda Teacher Rising

Brief

Improving education, employment, entrepreneurship, and higher education opportunities for students in Northern Uganda is crucial for driving socio-economic development. The Uganda Teacher Rising (UTR) project, building on AET's STEAMie training, has demonstrated significant improvements in teaching and learning through a school-based mentorship model.

The Education for All (EFA) initiative highlights that quality education is fundamental to achieving its broader objectives. Without improvements in teaching quality, progress in literacy, numeracy, and life skills development remains limited. Quality learning, particularly in primary education, is essential for long-term student success (GMR 2005).

Better education contributes to higher lifetime earnings and more robust national economic growth and helps individuals make more informed choices about fertility and other matters important to their welfare (GMR2005, P17).

Many commonly used teaching styles do not serve children well: they are often too rigid and rely heavily on rote learning, placing students in a passive role. Many educational researchers advocate structured teaching, a combination of direct instruction, guided practice, and independent learning – in a child-friendly environment (GMR2005, P17).

Recent progress.

At the end of 2023 the UTR project partnered with a cluster of schools in Kyotera district in Central Uganda. Over twelve months we have trained three primary schools with follow-through continuous mentorship. In 2025 we plan to add another two schools to our 'community of practice', in the Kyotera district, and two/three schools each year after that. We have provided start-up funds and training for making and selling liquid soap, bar soap, sandals, and tailoring. The two soap businesses have progressed well and are generating increasing revenue. The sandal-making project requires further development whilst the tailoring is still in its infancy. Our approach is to use local skilled tradespeople to act as mentors to get each project started and then rely on the innovation of teachers to sustain it. Access to local materials and tools to enable production can be a challenge in the rural areas that we work in.

Charity Finance

To date, the charity has been funded through private donations. Projections show that, when sustainability is achieved, the project cost per school should be less than \$100 per year. This equates to around 40 cents per child per year, attributed to training needs locally developed and sourced at local costs. Table 1 shows the cost projections at cost efficiency. The cost per school can be less than \$100 when the UK team ceases to be involved as trainers all training is sourced locally therefore eliminating significant international travel and accommodation costs.

Table 1- Projected cost structure.

5000 UGX = £1; 3700 UGX = \$1				Schools	3	6	10	15	23	34
Item	Unit cost	No.	Freq/year	Total cost UGX	USD	USD	USD	USD	USD	USD
Stationery	10,000	10	1	100,000	81	162	270	405	608	912
Local LPs/School/biannual data	25,000	1	2	50,000	41	81	135	203	304	456
LP allowance/ 3school cluster termly	300,000	1	3	900,000	243	270	378	495	743	1,115
Senior LP Travel allowance	-	1	10	-	-	-	-	-	-	-
STEM project costs	50,000	2	2	200,000	162	162	216	270	405	608
Travel / Subsistence UK vist & team	\$/UGX	No.		Total cost UGX	USD	USD	USD	USD	USD	USD
DSA : Team of two	30	10	2		600	720	864	1,037	1,244	1,493
Flights + visa	750	1	2		1,500	1,500	1,500	1,500	1,500	1,500
Local travel to schools for observations	15,000	3	20	900,000	243	316	411	534	695	903
Kampala-Airport - Kampala				250,000	68	68	68	68	68	68
Kampala-Kyotere-Lira - Kampala	100,000	3	2	600,000	162	162	162	162	162	162
Travel / Subsistence UK vist & team					2,573	2,766	3,005	3,301	3,669	4,126
				Annual cost \$	3,100	3,442	4,005	4,675	5,729	7,217
				Cost per school \$	1,033	574	400	312	255	214

2023-2024 accounts: Income: £1314. Expenditure: £2380.

- There are adequate reserves in the bank account to meet the year's deficit.
- There is already a significant increase in income for the current financial year

Methods and Rationale

Our methods have evolved from whole-day workshops, requiring teachers to be away from the classroom to a less intrusive system. Our team now immerses themselves for three days in partner schools carrying out joint observations with staff, followed by feedback and general dialogue to agree on ways that can enhance learner experience and ease teacher challenges in a large classroom context. During this visit, short end-of-day workshops are held to deliver UTR teaching pedagogy rationale and ICT and STEAMie training.

The core elements of the pedagogy are shown below.



UTR Pedagogy 21st Century Learning



- **Collaborative learning** - pairs, groups, planning, questioning, assessing.
- **Accelerated learning** –review, recall, reflect, feedback, knowledge schema, .
- **Thinking for learning** – metacognition, critical thinking, bloom's taxonomy.
- **Assessment for learning** - self, peer and teacher timely feedback.
- **Differentiation** – targeted challenge, inclusion.
- **Girls Education** – leadership opportunities , maximise progress.
- **STEM** – project based, STEAMie cycle: planning, making, marketing, sell.
- **Effective teacher behaviour** - circulate, Listen, feedback, facilitate.
- **Effective learner behaviour** – keen, pace, collaborative, independence.
- **ICT for learning** - communicative media, varied devices, calculate, code

The continuous school-based mentorship model, over a planned period of two years, ensures steady teacher improvement by integrating lesson observations, peer collaboration. This structured approach supports teachers in refining their pedagogical skills while promoting STEAMie learning and gender inclusion. Using these mechanisms and evidence-based tracking teachers can attain leveled certification seen in Picture 1.

UTR – Teacher Professional Development Certification

Level 1: UTR teacher training - Complete initial training, demonstrating effective practice of UTR pedagogy and *completing reflective portfolio* and action research.

Level 2: Lead practitioner training (LP) - Coaching and mentoring new teachers in UTR pedagogy to attain level 1 standard.

Level 3: Senior lead practitioner training - *Mentoring* new LPs to attain level 2 standards. Support planning and implementation of whole school training.

Level 4: Specialist leader in education - Developing LP training model and supporting STEM pedagogical training development across *multiple schools and districts*.



Picture 1 –levelled and certified teacher professional development.



Picture 2 – Lesson observation followed by quality feedback.



Picture 3 – Live 3-step teacher feedback and peer feedback/learning.

STEAMie

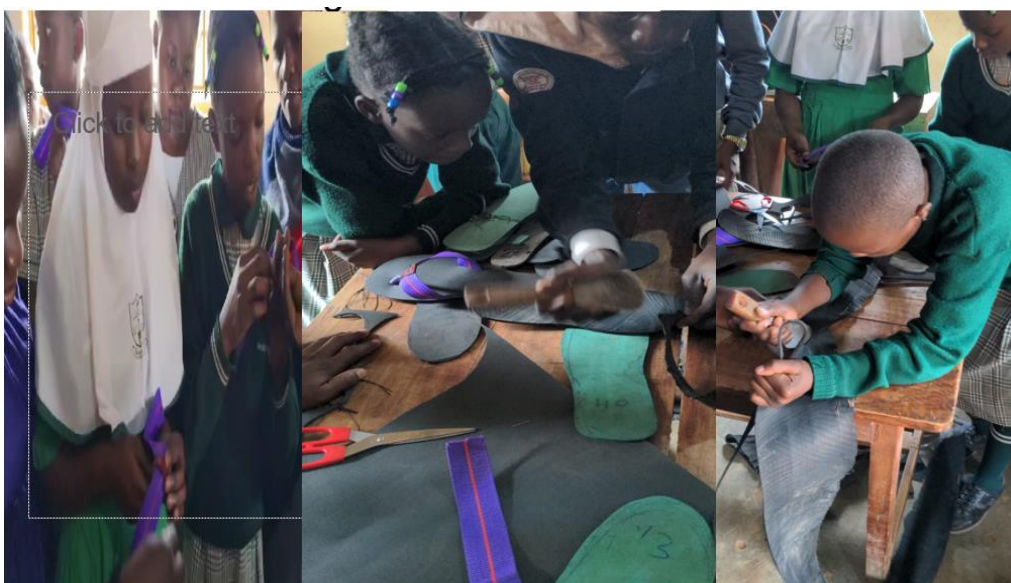
UTR's STEAMie multi-disciplinary project-based learning approach has a goal to produce real business enterprises with earnings opportunities. This is extremely motivational for teachers and learners. Learners must go through a business planning process, engage with business and marketing concepts, and use business mathematics learning even before making the product for sale. They must also learn the science of how their product is made and use engineering skills to make it. Marketing the product will then require art design and literacy skills.

A Kalisizo school teacher and mentor recently said 'The STEAMie project is doing very well at Kalisizo primary school. We managed to get a profit of 300000 Uganda shillings in 2024 and we now are aiming to get more profits in the new year.'

Pictures 4 and 5 show liquid soap and shoe-making training of young learners. Picture 6 reveals the STEAMie cycle framework described above and Picture7 show ICT training at one of our new schools

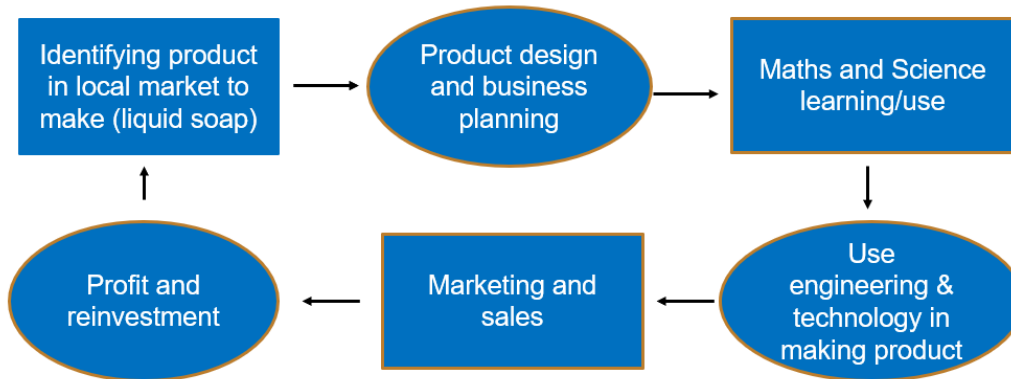


Picture 4 – Liquid soap production and training at St Agnes Primary School, Kalisizo Uganda.



Picture 5 – Students learning to make sandals Kalisizo Primary School, Uganda.

STEAMie cycle for learning



Experiential learning - Highly motivational for learners and teachers

Picture 6- STEAMie cycle for learning shows a project based learning approach.



Picture 7- ICT training of teachers in Kirumba Primary School.

Focus group review and analysis (2024)

It's clear that the new UTR project has made significant progress in equipping teachers with learner-centered teaching methods, ICT skills, and STEM training—especially live marking and collaborative learning—are making a big impact on both teachers and learners. The shift towards teacher facilitation rather than solely direct instruction has brought benefits like instant feedback, improved student engagement, and stronger classroom relationships. Feedback from teachers, head teachers, and mentors shows improved student and teacher motivation, and practical skills development. However, some challenges remain, particularly regarding managing differentiation in large classroom contexts, time constraints, and access to STEM resources.

Key Takeaways & Benefits:

- Live marking saves teachers hours of post-lesson marking and provides immediate feedback, though it requires careful time management.
- Collaborative learning boosts student communication skills, participation, and motivation, with expert learners assisting in assessment.
- Differentiation using Bloom's Taxonomy is helpful but challenging for teachers unfamiliar with its levels.
- STEM training has had both educational and financial benefits, with teachers and learners gaining skills to generate income.
- ICT training has helped teachers stay connected and continue learning through platforms like WhatsApp.
- Head teachers support the methods, noting that they improve relationships between teachers and learners while making assessments more efficient.
- Cost structure can fall below \$100 per school year, by developing local mentorship skills, thus making this training model very efficient and scalable.

Challenges & Suggested Improvements:

- Live marking can be time-consuming – Consider rotating marking across the week or limiting it to specific exercises.
- Expert learners helping with assessment may face jealousy – Rotating roles ensures fairness, and teacher supervision helps prevent misinformation.
- Differentiation is difficult for some teachers – More training on Bloom's Taxonomy and leveled questioning could help.
- Group work participation varies – Teachers should monitor closely and encourage all students to contribute.
- STEM material accessibility is a challenge – Schools will need to locate better supply chains
- Portfolio language is complex – Simplifying terminology could make it easier for teachers to engage with reflective tasks.
- Teacher motivation is key – Certification could help, but there's concern about corruption. Fair allowances to support private costs incurred in training is essential.

Conclusion

The overall response is very positive, and while some adjustments are needed, teachers, head teachers, and learners are seeing real benefits. Expanding training and mentorship—while addressing concerns like differentiation, time management, and material access—will help sustain these improvements.

Local STEAMie business & learning enterprises are developing well and already supporting school communities' with added income streams.

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