



IMPLEMENTATION MANUAL | 2026 EXPANDED EDITION

The STEM Programme Operating System

A 180-day field manual for moving African school STEM initiatives from announcement to durable institutional capability.

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For school leaders, programme directors, delivery partners, funders and public institutions that need more than a launch event.

FIELD-TESTED THINKING | PRACTITIONER TEMPLATES | EVIDENCE ANCHORS

What this manual helps you decide

Move from idea to explicit decisions, owners, evidence and next actions.

1	Operating thesis	See the programme as six connected systems rather than a collection of activities.
2	Diagnostic	Map the ordinary school week, constraints, owners and non-negotiable learning promise.
3	180-day cycle	Move through design, readiness, pilot, repair, institutionalisation and scale gates.
4	Learning model	Build a capability progression and assessment system that survives tool changes.
5	People and operations	Create teacher capability, ownership, maintenance and support routines.
6	Evidence and scale	Distinguish reach, quality, transfer and durability before expansion.

Use the manual as a decision cycle

1 OBSERVE	2 DECIDE	3 ASSIGN	4 REVIEW
Start with the ordinary operating condition, not the launch-day exception.	Record the choice, the alternatives rejected and the assumption carrying the most risk.	Name one accountable owner, the supporting actors and the evidence they must produce.	Set a date and define what evidence will trigger continuation, repair, redesign or stop.

A completed template is not evidence of success. Pair every decision with an observable artefact, a named owner and a scheduled review.

A programme is a system, not an event

A launch proves that a school can start. An operating system proves that it can continue, recover and improve.

The six conditions are PURPOSE, PROGRESSION, PEOPLE, ACCESS, OPERATIONS and EVIDENCE. Weakness in one eventually appears as failure somewhere else.

SYSTEM	DECISION	MINIMUM EVIDENCE
Purpose	What precise learner capability will the programme develop?	Capability promise and curriculum connection
Progression	What becomes more demanding across terms and years?	Sequenced pathway and transition tests
People	Who can teach, coach and troubleshoot locally?	Demonstrated teacher and facilitator capability
Access	Who participates, how often and in which roles?	Timetable, grouping and inclusion plan
Operations	How will the school store, maintain, fund and govern?	Named owners, routines, budget and support route
Evidence	What will show quality, transfer and durability?	Indicator definitions and decision calendar

The system test

Ask what happens on an ordinary Tuesday when the trained teacher is absent, power is interrupted, a component fails, the class has 45 learners and a reporting deadline is approaching. If the model only works during a supervised demonstration, it is not yet an operating system.

PRACTITIONER DEPTH

DECISION BRIEF	Treat the six conditions as an interdependent operating model. A strong curriculum cannot compensate for absent teachers, weak access or an unfunded repair path. Review the weakest condition first because it usually determines the real ceiling of the programme.
EVIDENCE TO LEAVE	Leave a one-page system map naming the learner capability, delivery cadence, local owners, access rules, operating routines and evidence gates. Every claim should point to an artefact, observation or named decision owner.
FIELD CHALLENGE	Stress-test the model against one ordinary-week disruption. If delivery stops when a single person, room, connection or supplier is unavailable, redesign before expanding.

DECISION GATE

ASSUMPTION	EVIDENCE OWNER	NEXT REVIEW	STOP / SCALE RULE
☐ Named	☐ Assigned	☐ Dated	☐ Recorded

Map the ordinary school week

Design against observed conditions, not the most optimistic version of the school.

REALITY	QUESTIONS TO INVESTIGATE	EVIDENCE TO COLLECT
Timetable	Where can repeated practice fit? What is displaced?	Current timetable, protected periods, exam calendar
Classroom	Class size, furniture, noise, movement and storage?	Observation, room dimensions, group model
Infrastructure	Power quality, connectivity, devices, charging and security?	Asset test, outage history, speed and coverage
People	Confidence, workload, turnover and decision authority?	Interviews, baseline task, role map
Learners	Prior exposure, language, disability, gendered participation and travel?	Disaggregated baseline and learner voice
Operations	Procurement lead time, repairs, consumables and approvals?	Process map, supplier routes, historical costs

Constraint register

Constraint and evidence	_____

Design response	_____

Owner and review date	_____

Residual risk	_____

PRACTITIONER DEPTH

DECISION BRIEF	Observe before interviewing. Timetables often describe intended practice while corridors, charging points, room changes and teacher workload reveal the operating truth. Design around the recurring pattern, not the best day witnessed during a visit.
EVIDENCE TO LEAVE	Collect a timetable, room observation, device and power test, teacher workload map, learner-access baseline and the actual approval path for schedule or procurement changes.
FIELD CHALLENGE	Ask which constraint cannot be solved with money alone. Authority, confidence, language, safeguarding and timetable control are frequently more decisive than equipment quantity.

DECISION GATE

ASSUMPTION	EVIDENCE OWNER	NEXT REVIEW	STOP / SCALE RULE
[] Named	[] Assigned	[] Dated	[] Recorded

Write a capability promise

A capability promise is a precise statement of what learners will be able to do, explain and transfer after repeated participation.

Template: By [time], [learner group] will be able to [observable capability] by producing [authentic evidence] under [relevant constraints].

Weak promise

Learners will be exposed to robotics and become innovative.

Decision-grade promise

By the end of two terms, participating JHS learners will design, program, test and explain an input-process-output system that responds to a locally relevant problem, using a documented iteration log and an oral technical defence.

Promise quality test

CHECK	DECISION TEST	EVIDENCE / OWNER
☐	The capability can be observed without relying on attendance or satisfaction.	
☐	The evidence requires learner reasoning, not tutorial completion.	
☐	The promise is feasible within actual time, equipment and teacher conditions.	
☐	A learner can apply the capability to a different problem.	
☐	The promise connects to curriculum, progression or a meaningful destination.	

PRACTITIONER DEPTH

DECISION BRIEF	Use verbs that expose judgement: design, compare, diagnose, verify, adapt and defend. Avoid promises built around exposure, awareness or completion. A credible promise identifies the learner, performance, evidence, constraints and transfer context.
EVIDENCE TO LEAVE	Preserve a baseline task, an end task of comparable difficulty, the rubric, selected learner artefacts and moderation notes explaining why the evidence supports the stated capability.
FIELD CHALLENGE	Give the promise to an independent teacher. If they cannot design an assessment from it without asking which product to use, the promise is still too vague.

DECISION GATE

ASSUMPTION	EVIDENCE OWNER	NEXT REVIEW	STOP / SCALE RULE
☐ Named	☐ Assigned	☐ Dated	☐ Recorded

Build the learner pathway before choosing tools

Progression protects the programme from becoming a cycle of introductory workshops.

STAGE	LEARNER MOVE	AUTHENTIC EVIDENCE	TRANSITION TEST
Explore	Identify systems, users, inputs and outputs	Annotated system map	Can explain cause and effect
Construct	Assemble and modify a working model	Build record and safety routine	Can change one variable deliberately
Program	Create logic using sequence, condition and repetition	Code plus prediction	Can trace and debug
Integrate	Combine sensing, actuation, data and interface	Working prototype	Can diagnose across subsystems
Design	Frame a problem and compare alternatives	Design rationale and test plan	Can defend trade-offs
Lead	Improve systems and support others	Portfolio, mentoring and reflection	Can transfer judgement

Progression rule

Advance learners when they can predict, modify, debug and explain at the current stage. Do not use age, time served or tutorial completion as the sole transition signal.

PRACTITIONER DEPTH

DECISION BRIEF	Progression is a change in the quality of thinking, not a list of technologies. Each stage should demand greater independence, integration, explanation and transfer. Tools enter only where they make that progression possible or more accessible.
EVIDENCE TO LEAVE	Document entry criteria, representative tasks, transition evidence, support for learners who need more time and the destination after the final stage. Map each stage to curriculum or opportunity pathways.
FIELD CHALLENGE	Remove the preferred kit or platform from the pathway. If the progression collapses, it is a product sequence rather than a learning sequence.

DECISION GATE

ASSUMPTION	EVIDENCE OWNER	NEXT REVIEW	STOP / SCALE RULE
[] Named	[] Assigned	[] Dated	[] Recorded

Diagnose and design

Do not purchase until the capability promise and ordinary-week delivery model are visible.

PERIOD	CORE WORK	READINESS GATE	OUTPUT
0-15	Interview, observe and test the operating reality	Problem and baseline agreed	Diagnostic memo and constraint register
16-30	Write capability, access, inclusion and evidence promises	Strategic fit approved	Programme charter
31-45	Design progression, projects, assessment and group model	Learning model approved	Curriculum and assessment map
46-60	Compare tools against objectives, total cost and support	Feasibility approved	Options appraisal and cost model

Gate 1: permission to prepare

CHECK	DECISION TEST	EVIDENCE / OWNER
[]	The programme begins with a capability, not a product category.	
[]	The proposed dosage can fit an approved timetable.	
[]	The model names who may be excluded and how access will be repaired.	
[]	The school can explain why physical, virtual or blended tools were selected.	
[]	Decision-makers understand the recurring cost and staffing implications.	

PRACTITIONER DEPTH

DECISION BRIEF	The first 60 days should reduce uncertainty before capital is committed. Separate non-negotiable learning and safeguarding conditions from assumptions that can be tested during preparation. Record disagreements rather than smoothing them away.
EVIDENCE TO LEAVE	Produce a diagnostic memo, capability charter, access and inclusion plan, progression map, assessment design, options appraisal and three-year cost range with named assumptions.
FIELD CHALLENGE	Do not pass the gate because documents exist. Sample the evidence behind them and ask the people who must operate the programme whether the proposed routines fit their week.

DECISION GATE

ASSUMPTION	EVIDENCE OWNER	NEXT REVIEW	STOP / SCALE RULE
[] Named	[] Assigned	[] Dated	[] Recorded

Prepare, rehearse and pilot

A pilot is an instrument for learning. Run it under representative conditions and preserve inconvenient evidence.

PERIOD	CORE WORK	READINESS GATE	EVIDENCE
61-75	Train a teacher team through experience, rehearsal and troubleshooting	People ready	Observed rehearsal and feedback
76-90	Install storage, inventory, safety, data and support routines	Operations ready	Owner map and runbook
91-105	Pilot with representative learners and realistic group size	Model workable	Observation, incidents and artefacts
106-120	Review dosage, reasoning, teacher decisions and exclusion	Changes agreed	Pilot learning memo

Pilot observation prompts

CHECK	DECISION TEST	EVIDENCE / OWNER
☐	Learners spend more time deciding, building and explaining than waiting or watching.	
☐	Roles rotate so that confident learners do not monopolise tools or code.	
☐	The teacher can recover from common technical and classroom failures.	
☐	Assessment reveals reasoning, debugging, transfer and iteration.	
☐	The team records failures without editing them out of the story.	

PRACTITIONER DEPTH

DECISION BRIEF	Rehearsal is where hidden workload and failure modes become visible. Run representative class sizes, rotate roles, interrupt connectivity, remove a component and ask a second teacher to lead. A pilot should create learning about the model, not promotional footage.
EVIDENCE TO LEAVE	Retain observation notes, teacher decisions, learner work before and after feedback, incident records, active-time sampling, support requests and a dated list of design changes.
FIELD CHALLENGE	If the pilot team explains every failure as unusual, repeat under ordinary conditions. A programme ready for scale must absorb predictable variation without extraordinary support.

DECISION GATE

ASSUMPTION	EVIDENCE OWNER	NEXT REVIEW	STOP / SCALE RULE
☐ Named	☐ Assigned	☐ Dated	☐ Recorded

Institutionalise and decide on scale

Scale means preserved quality with broader local ownership. Expansion before ownership multiplies fragility.

PERIOD	CORE WORK	DURABILITY TEST	DECISION
121-135	Simplify lessons, repair routines and close capability gaps	Second delivery improves	Continue / redesign
136-150	Second teacher leads; confirm support and recurring budget	Ownership distributed	Proceed with conditions
151-165	Schedule next term, replenish and map learner progression	Continuation funded	Institutionalise
166-180	Review relevance, equity, quality, people and reliability	Evidence supports decision	Scale / refine / stop

Gate 3: scale only when

CHECK	DECISION TEST	EVIDENCE / OWNER
☐	A second local educator can deliver and adapt the model with quality.	
☐	The operating budget includes support, consumables, repair and replacement.	
☐	The programme has evidence of capability, not only reach and enthusiasm.	
☐	The inclusion model has been tested with learners who face the greatest barriers.	
☐	The next site can receive a standard without copying unsuitable assumptions.	

PRACTITIONER DEPTH

DECISION BRIEF	Institutionalisation means the next cycle is scheduled, funded, staffed and governed before external attention moves elsewhere. Scale should reproduce a standard of capability while allowing local adaptation of examples, language and operating routines.
EVIDENCE TO LEAVE	Require a confirmed timetable, recurring budget, second-teacher demonstration, replenishment plan, support route, learner progression plan and signed scale decision with conditions.
FIELD CHALLENGE	Reduce external support during the final pilot cycle. What deteriorates reveals the capability that has not yet transferred to the institution.

DECISION GATE

ASSUMPTION	EVIDENCE OWNER	NEXT REVIEW	STOP / SCALE RULE
☐ Named	☐ Assigned	☐ Dated	☐ Recorded

Treat teacher capability as infrastructure

A trained person is not yet an operating capability. Capability appears when the teacher can plan, facilitate, diagnose, adapt and improve.

DIMENSION	1 - FRAGILE	2 - EMERGING	3 - WORKABLE	4 - DURABLE
Facilitation	Follows slides only	Runs a prepared task	Adapts pacing and groups	Designs and coaches quality practice
Technical judgement	Waits for vendor	Resolves known faults	Diagnoses unfamiliar faults	Builds local support capability
Assessment	Checks completion	Uses a task rubric	Interprets reasoning and transfer	Calibrates assessment with peers
Inclusion	Participation is assumed	Roles are assigned	Patterns are monitored	Design is adapted using evidence
Leadership	Works alone	Shares materials	Supports peers	Sustains a community and standard

Capability evidence

Use rehearsal video, lesson plans, observation, learner work, troubleshooting demonstrations and teacher reflection. A certificate should state what was demonstrated, not merely that a workshop was attended.

PRACTITIONER DEPTH

DECISION BRIEF	Budget teacher planning, rehearsal, coaching and peer calibration as core infrastructure. Product training answers how a tool works; professional capability answers when to use it, how to adapt it and how to protect learning when it fails.
EVIDENCE TO LEAVE	Use observed lessons, troubleshooting tasks, adapted plans, learner evidence and peer moderation. Certificates should name demonstrated capabilities and the conditions under which they were observed.
FIELD CHALLENGE	Ask the teacher to redesign the lesson for a larger class, weaker connectivity and a learner with an accessibility need. Adaptation reveals more than recall.

DECISION GATE

ASSUMPTION	EVIDENCE OWNER	NEXT REVIEW	STOP / SCALE RULE
☐ Named	☐ Assigned	☐ Dated	☐ Recorded

Make continuation someone's job

Assign a primary owner, backup, cadence and escalation route. A task without an owner is an assumption.

FUNCTION	PRIMARY OWNER	BACKUP	CADENCE	EVIDENCE
Curriculum and lesson quality				
Teacher coaching and peer learning				
Timetable and learner access				
Inventory, charging and storage				
Repairs, spares and consumables				
Safeguarding, privacy and incidents				
Evidence review and reporting				
Budget and partner coordination				

Minimum operating cadence

Weekly: readiness and incident check. Monthly: utilisation, teacher support and inventory review. Termly: learner evidence, equity, cost and progression review. Annually: model, policy, vendor and sustainability decision.

PRACTITIONER DEPTH

DECISION BRIEF	Ownership must be distributed but never ambiguous. Every recurring function needs a primary owner, backup, cadence, escalation threshold and visible record. Governance should survive staff transfer and partner exit.
EVIDENCE TO LEAVE	Maintain a live responsibility map, inventory, issue log, support service levels, renewal calendar, monthly operating review and handover pack stored where the institution controls access.
FIELD CHALLENGE	Choose one failure logged in the past term and trace who noticed it, who could act, how long recovery took and which system change prevented recurrence.

DECISION GATE

ASSUMPTION	EVIDENCE OWNER	NEXT REVIEW	STOP / SCALE RULE
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Design the recovery path before failure

Robust programmes recover predictably instead of depending on heroic improvisation.

FAILURE	IMMEDIATE RESPONSE	RECOVERY OWNER	SYSTEM IMPROVEMENT
Power interruption	Shift to unplugged/local task	Teacher / technician	Charging, backup and lesson mode plan
Internet unavailable	Use stored resources and offline core	Teacher	Cache, local network and sync window
Equipment failure	Isolate, record and re-group	Lab owner	Spares, warranty and repair turnaround
Teacher absent	Activate backup and shared plan	School leader	Team teaching and succession
Unsafe incident	Stop activity and follow escalation	Safeguarding lead	Root-cause review and policy repair
Low participation	Observe roles and barriers	Programme lead	Grouping, access and facilitation redesign

Incident learning record

What happened and who was affected?	_____
Immediate action	_____
Root cause	_____
Control or design change	_____

PRACTITIONER DEPTH

DECISION BRIEF	Recovery design converts predictable disruption into bounded learning loss. Prepare alternative lesson modes, spare capacity, escalation routes and communication templates before the first incident. After recovery, repair the system rather than celebrating heroics.
EVIDENCE TO LEAVE	For each priority risk, document trigger, immediate protection, continuity action, owner, response time, escalation route, recovery evidence and the control changed after review.
FIELD CHALLENGE	Simulate a power outage, absent teacher and failed device during rehearsal. Time the recovery and observe whether learners continue meaningful work.

DECISION GATE

ASSUMPTION	EVIDENCE OWNER	NEXT REVIEW	STOP / SCALE RULE
☐ Named	☐ Assigned	☐ Dated	☐ Recorded

Measure the chain from access to durability

Headline reach can be useful, but it cannot carry a claim about learning, transfer or institutional change.

LEVEL	QUESTION	EVIDENCE	DECISION
Reach	Who received what dosage?	Unique participant and attendance data	Access and targeting
Experience	Was delivery feasible and appropriate?	Observation, feedback and logs	Repair implementation
Capability	What can participants now do?	Authentic tasks, portfolios and demonstrations	Improve learning model
Transfer	Can capability be used in a new context?	Adaptation, classroom use and novel task	Judge meaningful learning
Progression	What happens next?	Advanced work, mentoring and destinations	Strengthen pathway
Durability	What remains when support reduces?	Budget, timetable, local delivery and maintenance	Scale, redesign or stop

Claim discipline

For every headline figure, define the reporting period, participant type, denominator, attendance threshold, duplicate-removal method, data source and limitation. Make only the claim that the evidence supports.

PRACTITIONER DEPTH

DECISION BRIEF	Evidence should become more demanding as claims become more ambitious. Reach supports an access claim; it does not prove capability. A portfolio supports learning; it does not prove that the school can sustain delivery after funding ends.
EVIDENCE TO LEAVE	Create an evidence register linking every public claim to indicator definition, source, denominator, collection date, quality check, limitation and decision use. Disaggregate access, participation and progression.
FIELD CHALLENGE	Rewrite the programme's strongest claim using only the evidence available today. The gap between the original and defensible versions identifies the next measurement priority.

DECISION GATE

ASSUMPTION	EVIDENCE OWNER	NEXT REVIEW	STOP / SCALE RULE
☐ Named	☐ Assigned	☐ Dated	☐ Recorded

Run a 45-minute operating review

The review is for decisions, not performance theatre.

1. Five minutes: restate the capability promise and the decision required.
2. Ten minutes: examine learner work, observation and disaggregated access data.
3. Ten minutes: review incidents, operating cost, teacher workload and unresolved constraints.
4. Ten minutes: identify the one assumption that is most likely to be wrong.
5. Ten minutes: choose scale, continue, redesign or stop; assign conditions, owners and dates.

Decision record

Decision	_____
Evidence supporting it	_____
Evidence against it	_____
Conditions, owners and dates	_____
Next review	_____

PRACTITIONER DEPTH

DECISION BRIEF	A useful review spends less time describing activity and more time examining exceptions, learner work and unresolved assumptions. Put the decision required at the top of the agenda and circulate evidence before the meeting.
EVIDENCE TO LEAVE	Keep a decision log with evidence considered, dissent, conditions, owner, deadline and next review. Link actions to the operating risk or learning question they are meant to resolve.
FIELD CHALLENGE	End with one of four positions: scale, continue, redesign or stop. 'Continue monitoring' is not a decision unless the missing evidence, collection method and deadline are explicit.

DECISION GATE

ASSUMPTION	EVIDENCE OWNER	NEXT REVIEW	STOP / SCALE RULE
☐ Named	☐ Assigned	☐ Dated	☐ Recorded

From robotics club to school capability

This fictional example shows how the operating system changes a familiar activity model.

BEFORE	OPERATING DECISION	AFTER
Twenty enthusiastic learners meet irregularly	Protect weekly dosage and define entry/progression	Two cohorts with scheduled practice and transition tasks
One external trainer delivers	Prepare a two-teacher team through rehearsal	Local teachers lead; external expert coaches
Success means a competition appearance	Add capability and transfer evidence	Portfolio, technical defence and new-context challenge
Kits are stored when parts fail	Create inventory, spares and repair turnaround	Faults are logged, isolated and resolved
Girls attend but handle fewer technical roles	Rotate roles and review participation evidence	Access and technical decision-making are monitored

The improvement is not more activity. It is a stronger relationship between purpose, progression, people, access, operations and evidence.

PRACTITIONER DEPTH

DECISION BRIEF	The worked example shows a shift from dependence to institutional capability. The critical moves are protected dosage, teacher transfer, repair routines, progression evidence and equitable technical roles - not simply purchasing more kits.
EVIDENCE TO LEAVE	Compare two consecutive terms using active learner-hours, teacher-led sessions, repair turnaround, transition-task performance and participation by technical role. Record what changed and what remained fragile.
FIELD CHALLENGE	Apply the same conversion to an existing coding club or AI workshop. Identify the single dependency that would end the activity if external support stopped next month.

DECISION GATE

ASSUMPTION	EVIDENCE OWNER	NEXT REVIEW	STOP / SCALE RULE
[] Named	[] Assigned	[] Dated	[] Recorded

Evidence anchors and further reading

The frameworks translate public guidance and implementation evidence into practical decision tools.

SOURCE	RESOURCE	ADDRESS
Ghana Ministry of Education	Education Strategic Plan 2018-2030 (2018)	https://moe.gov.gh/edge/content/uploads/2019/05/Education-Strategic%20Plan-2018-2030.pdf
NaCCA	Secondary Education Curriculum (2025)	https://nacca.gov.gh/secondary-education-curriculum/
NaCCA	Robotics Curriculum for Secondary Education (2025)	https://nacca.gov.gh/wp-content/uploads/2025/04/ROBOTICS-Curriculum.pdf
UNESCO GEM Report	Technology in education: A tool on whose terms? (2023)	https://gem-report-2023.unesco.org/
UNICEF Innocenti	Digital Learning, Real Classrooms: Implementation Research in Ghana (2025)	https://www.unicef.org/innocenti/reports/digital-learning-real-classrooms
Ghana Cyber Security Authority	National Child Online Protection Framework (2024)	https://www.csa.gov.gh/resources/National%20COP%20Framework.pdf
African Union	Continental Education Strategy for Africa 2026-2035 (2025)	https://static.au.int/en/documents/20250616/continental-education-strategy-africa-2026-2035
World Bank	Devices for Education Knowledge Pack (2025)	https://documents1.worldbank.org/curated/en/099916207092523135/pdf/IDU-88a5de28-77c9-40f7-a841-9d425cdc505d.pdf

Use these sources as starting points. Confirm current law, policy, curriculum and regulator guidance before making consequential institutional decisions. This manual is an implementation aid, not legal, financial or safeguarding advice.

Evidence quality protocol

CHECK	QUESTION	RECORD
Currency	Is the source still current for the decision date, jurisdiction and learner group?	Version, publication date and date checked
Authority	Is it primary guidance, independent research, implementation evidence or vendor material?	Source type and responsible institution
Fit	Do its assumptions match the school, infrastructure, language, staffing and safeguarding context?	Transfer limits and local verification needed
Use	Which decision does this source inform, and what would cause that decision to change?	Decision link, owner and review trigger

Build systems that outlast the launch

A practical contribution to stronger AI, coding, robotics and STEM education systems in Ghana and Africa.

The value of a framework is not the elegance of its diagram. It is the quality of the decisions, routines and learning that it makes possible.

About Jonathan Kennedy Sowah

Jonathan is a Ghanaian AI engineer and K-12 STEM systems builder working across robotics, coding, applied artificial intelligence, teacher development and context-aware education technology. His wider portfolio has reached 25,000+ learners, trained 2,500+ educators and engaged 100+ schools. KodeVR has more than 10,000 active learners.

He works with schools, governments, companies and development partners to turn high-visibility technology ambitions into practical learning systems that can operate under real African conditions.

Use this work responsibly

Adapt the tools to the programme, participants, institution and regulatory context. Record assumptions. Seek qualified technical, legal, safeguarding, financial and evaluation review where the decision requires it.

Before commissioning implementation support

QUESTION	A STRONG ANSWER SHOULD NAME
What capability must remain after the engagement?	The learner, teacher and institutional behaviours that should continue without external supervision.
What conditions shape delivery?	The ordinary timetable, infrastructure, language, safeguarding, procurement and maintenance realities.
How will quality be governed?	Decision owners, evidence definitions, review cadence, repair route and stop-or-scale thresholds.
What will the institution inherit?	Reusable learning assets, local capability, documented routines, data rights and an affordable continuity plan.

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