AI Tutor for Uganda – Education System Overview & Project Vision

1. Full Ugandan Education System Overview (Including Postgraduate) Pre-Primary (Nursery) • Baby, Middle, Top Class (Ages 3–5) • Focus: Phonics, numbers, shapes, colors, social skills • AI Features: Voice learning, visual stories, gamified basics **Primary (P1–P7)** • Ages 6–12 • Subjects: English, Math, Science, SST, RE • Exam: PLE • AI Features: Explanations, quizzes, animations, PLE prep **Lower Secondary (S1–S4)** • Ages 13–16 • Subjects: Physics, Chemistry, Biology, Math, English, Geography, History, CRE, Commerce, ICT, Agriculture, Fine Art • Exam: UCE (O-Level) • AI Features: Interactive diagrams, past papers, experiment simulations **Upper Secondary (S5–S6)** • Ages 17–19 • Specialization with combinations (e.g., PCM, HEG, BCM) • Exam: UACE (A-Level) • AI Features: Deep explanations, numerical solutions, essay grading **Vocational / Technical (BTVET)** • Skills: Carpentry, plumbing, welding, catering, automotive, ICT • AI Features: Step-by-step skills, safety guides, practical demos **Tertiary (Diploma, Undergraduate)** • Includes universities, institutes • Programs: SE, CS, Law, Medicine, Nursing, Engineering, Business, etc. • AI Features: Coding help, research tools, summaries, lab assistance **Postgraduate (Masters, PhD)** • Advanced research, specialization, thesis work, publishing • AI Features: – Research assistance – Literature review support – Data analysis help – Academic writing guidance – Citation and formatting tools – Thesis structuring and editing ---------- **2. Why This AI Tutor Can Be a Billion-Dollar Platform** • Covers ALL academic levels — nursery to postgraduate. • Includes teacher mode for lesson planning, assessments, and analytics. • Fully aligned with Ugandan NCDC curriculum and exam standards. • Accessible: low-data mode, offline features, voice interaction. • Brings gamification to boost motivation. • Can serve schools, universities, institutions, and individuals. ---------- **3. Core Target Users** • Students (all ages) • Teachers (primary → university) • Lecturers & academic researchers • Parents & guardians • Vocational trainees • Schools, colleges, universities ---------- **4. Key Technical Requirements** • Mobile + Web platforms • AI curriculum engine • Assessment generator • Teacher dashboard • Student analytics engine • Multilevel content system • Offline + low-data optimization ---------- **5. Next Steps** • Define modules for each academic level • Choose tech stack for mobile + web • Build MVP for one level (e.g., P5 science or S2 math) • Expand to full curriculum coverage • Create teacher dashboard portal • Add postgraduate research tools ---------- This document can be shared with your partners to explain the scope, value, and potential of the AI Tutor project.