

EXPERTS SAY CODING IS ESSENTIAL, IN TODAY'S KNOWLEDGE-BASED ECONOMY

By John Masaba

The Uganda National Council for Science and Technology (UNCST) has called for the early introduction of coding and digital skills in schools.

The appeal was made by Steven Sebbale, the head of human capital at UNCST. He made the call during the 2026 National School Coding Competition held at ISBAT University City Campus in Lugogó, Kampala, on Saturday.

Sebbale said coding has become a critical skill in modern economies and should be introduced much earlier in schools rather than being left for university-level instruction.

Coding is the process of writing sets of instructions in a programming language to direct a computer's behaviour and solve specific problems. It involves designing algorithms and structures that power everything from mobile applications and websites to complex data analysis and system automation.

NURTURING CURIOSITY

Sebbale said coding and computing also help young people rethink traditional approaches to problem-solving.

He urged school proprietors, headteachers and teachers to rethink traditional teaching methods, noting that learning has evolved far beyond the classroom.

"Before, we used to sit in classrooms, but right now students are learning so much online," Sebbale said.

He added that education must move beyond blackboard teaching and expose learners to practical experiences.

"What we learn must be linked to the economy and to improving the well-

GOVT URGED TO INTRODUCE CODING EARLY IN SCHOOLS

PICTURE BY VIVIEN NAKITENDE



Winners of the 2025 National Coding Competition receive a dummy cheque from officials of the Uganda National Council for Science and Technology and ISBAT University during an event held at ISBAT University last week

being of people in the community," Sebbale said.

SCIENCE: DRIVER OF DEVELOPMENT

Sebbale said Uganda has made significant progress in prioritising science as a driver of national development, citing the National Development Plan IV, which places science and innovation at the centre of Uganda's economic transformation agenda.

He pointed to investments in sectors

such as agriculture, medicine, mobility and artificial intelligence as evidence of the Government's commitment to building a science-driven economy.

The coding competition, which was organised by ISBAT University, seeks to build an innovation-driven ecosystem by bringing together schoolchildren, university students, researchers, industrialists and government actors to accelerate Uganda's technological advancement.

Dr Paul Giju, the academic registrar

of ISBAT University, said the initiative aligns with Uganda's development agenda and is intended to strengthen STEM-based innovation across priority sectors.

STEM is the short form of science, technology, engineering and mathematics.

Giju stressed the importance of linking academia with industry so research and innovation can be translated into practical solutions.

"Innovative solutions have to be

WINNER SPEAKS OUT

Timothy Mugumio, the winner of the 2025 National Coding Competition and a Senior Six student at Standard High School in Zzana, said participating in the competition transformed how he views real-world challenges and the role of technology in solving them.

Mugumio said the competition showed him that young people can use coding to tackle evolving community problems.

He urged other young people to embrace digital skills early, stressing that coding is no longer reserved for university students or IT professionals.

"Your age doesn't matter... You can start as early as you can," Mugumio said.

However, he highlighted lack of parental support and limited access to laptops as major barriers for many Ugandan students pursuing coding.

integrated and come to society as usable ones. The incorporation of industry for sustainable innovative research is very important," he said.

Giju said Uganda has strong human capital and bright minds, but lacks a sufficient innovation ecosystem.

He urged Ugandans to build innovation ecosystems rather than wait for them to emerge naturally.