GRADE 4-5 CURRICULUM

Shaping Bright Futures: An Overview of Our Innovative Curriculum

In Grades 4-5, learners explore how technology helps us communicate, send information, and control devices. Through guided, hands-on activities, learners gain a practical understanding of how digital systems work – while developing confidence, creativity, and problem-solving skills.

📶 Radio Communication & Data Transmission
Learners discover how messages can be sent wirelessly using radio signals. Through simple experiments and demonstrations, learners learn that information can travel from one device to another without cables, helping them understand modern communication in a real-world context.

📥 Receiver Devices
Learners learn how receiver devices accept and interpret information. This builds understanding of listening, responding, and following instructions – both in technology and everyday life.

📤 Transmitter Devices
Learners explore how transmitter devices send information. Activities help learners understand how messages are created and shared, reinforcing clear communication and logical thinking.

🔁 Transceiver Devices
By working with devices that both send and receive information, learners develop a deeper understanding of two-way communication and teamwork.

🧠 The Micro:bit Radio Library
Using the Micro:bit, learners are introduced to basic coding tools that allow devices to communicate with one another. This supports early programming skills, sequencing, and cause-and-effect thinking in a safe, age-appropriate environment.

🔤 Morse Code
Learners explore Morse code as an early form of digital communication. This strengthens pattern recognition, sequencing, and problem-solving, while linking history with modern technology.

🚗 Engineering & Coding in Action

🛠️ Building a Micro:bit Car

Learners apply their knowledge by building a simple Micro:bit-controlled car. This hands-on project encourages creativity, perseverance, teamwork, and practical problem-solving.

🎵 Coding Sound on the Micro:bit
Learners learn how to code the Micro:bit to produce sounds. This supports understanding of commands, sequencing, and logical instructions, while making learning interactive and fun.

➡️ Coding Movement of the Micro:bit Car
Learners code the car's movements by giving clear, step-by-step instructions. They test, adjust, and improve their code, developing confidence, critical thinking, and resilience.

Contact us for a detailed guide or to schedule a visit. Join us in nurturing the next generation of leaders, thinkers, and innovators.

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