

SmarTone 5G Ednovation Programme Creates a “5G Smart Terrarium” for Man Kwan Pak Kau College to Promote Interest in STEAM Learning

(Hong Kong, 18 May 2023) “SmarTone 5G Ednovation Programme” brings 5G technology into school campuses by integrating education and innovation. As part of the initiative, SmarTone has recently created a “5G Smart Terrarium” at one of the programme’s pilot schools – Man Kwan Pak Kau College. This engaging new turtle habitat is equipped with Internet of Things (IoT) technology to collect various real-time data and record the growth and living conditions of turtles, thus fostering students’ passion for STEAM learning.

Man Kwan Pak Kau College has kept pet turtles in science and STEAM education, but the school wanted to add a touch of technology to further inspire its students. Created in partnership with SmarTone, the school’s “5G Smart Terrarium” is connected to multiple monitoring devices and sensors via IoT technology and SmarTone 5G network. These devices and sensors collect various data in the terrarium, including the temperature and humidity, contamination level, water level, and water pH. In the event of detecting anomalies, such as a low water level or high contamination level, the sensors send out real-time warning signals.

The students responsible for the terrarium can also control the lighting and temperature systems by remote control, ensuring that the turtles can always enjoy an optimal environment. SmarTone has also set up a dashboard to display all the real-time data generated by the “5G Smart Terrarium”, which not only helps students more easily monitor the real-time conditions, but also keeps track of how many people have viewed the terrarium.

Tracy Law, SmarTone’s Head of Broadband and Telephone Line Businesses, said, “SmarTone has been committed to applying 5G technologies to various facets of the society. The ‘SmarTone 5G Ednovation Programme’ aims to combine 5G with innovative teaching strategies to introduce an all-new smart teaching solution for schools. Combining animal-raising education with 5G broadband and IoT, we hope the ‘5G Smart Terrarium’ we’ve built for Man Kwan Pak Kau College will further boost the overall quality of teaching and learning, with even greater teaching efficiency and more interactions in the classroom.”

Mr. Wong Wing-tung, William, Principal of Man Kwan Pak Kau College, added: “Man Kwan Pak Kau College has placed great emphasis on information technology and STEAM learning to stimulate students’ interest in learning with technologies. In light of the 15th anniversary of our school’s relocation, we were delighted to collaborate with SmarTone to build the ‘5G Smart Terrarium’. This has greatly enhanced students’ animal-raising experience with 5G and IoT technology. Students can now monitor the turtles’ growth online anytime and anywhere, with many taking the initiative to be a ‘School Ambassador’ and take care of the turtles. We hope this increases the students’ interest in STEAM learning while nurturing their respect for life and cultivating a sense of responsibility.”

“SmarTone 5G Ednovation Programme” aims to provide schools with tailor-made smart campus solutions, such as innovative 5G smart learning solutions, as well as smart administration and class management systems. SmarTone will continue to collaborate with more schools and organisations in the future to co-develop diverse and innovative new 5G smart campus solutions, paving the way for Hong Kong to become a smart city.

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