RAISING GLOBAL CITIZENS

THROUGH ACTION AND CREATIVITY, CHILDREN BELIEVE IN THEIR POTENTIAL TO SHAPE A BETTER WORLD.

Making their self-designed treehouse for displaced hornbills a reality

Pre-school By-The-Park (Dunearn) believes that children can play a role in addressing global issues, such as preserving the natural environment and rescuing endangered species. This initiated an annual project, 'Make*Believe', for which the centre received an ECDA Early Childhood Innovation Award (Distinction) in 2023. The children used STEAM concepts — the integration of science, technology, engineering, the arts and mathematics — to work on solutions to protect wild animals and the places where they live.

"The project encouraged children's creativity and helped them learn about the importance of environmental conservation and wildlife protection," says senior Mandarin teacher, Ms Steph Chu. "It gave them a sense of empowerment — a belief that they can make meaningful contributions to address the planet's challenges."

INGENIOUS SOLUTIONS

Driven by the mantra, "If I believe it, I can make it", children worked in groups to create secure habitats for animals that had lost their homes. They embarked on a self-directed learning journey, from brainstorming ideas to searching for materials and constructing prototypes. When challenges arose, educators provided resources such as videos, picture books and news articles, which the children used to find answers on their own.

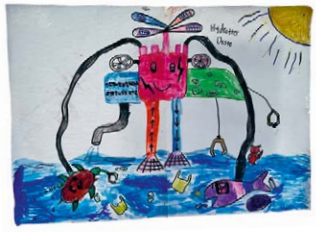
For example, Ms Chu's group of K2 children came up with the idea of a 'Hydrotter Drone' to save otters affected by water pollution. Made from recycled materials such as cardboard boxes, toilet rolls and plastic bottles, their prototype machine would be powered by clean energy and be able to fly over the sea, collect floating trash, and transport it to a recycling plant for sorting. To avoid startling marine creatures, the garbage collection boxes at the ends of the drone arms were designed to resemble turtles and fish. There was even a water filtration feature to ensure clean water.

"The prototype initially had two legs for support, but this contraption was unstable and damaged the drone's body," Ms Chu recalls. "Instead of pointing out the flaws, I showed the children photos of famous structures like the Eiffel Tower. By thinking things through and experimenting, the children discovered that adding two more legs would make the drone stable."

A FAMILY AFFAIR

Families were invited to a Make*Believe Day, where children unveiled their inventions and performed skits in both English and Mandarin.

Another group invented a floating machine with motion sensors to alert turtles to poachers



The children's initial blueprint for their Hydrotter Drone

Ms Jo Ong was very impressed with what her daughter Sophia Tan, then in K1, helped create: a treehouse made from used boxes for displaced hornbills. "Besides providing used boxes, I sewed costumes for the skit and made props such as a woodcutter's axe out of scrap material," says Ms Ong. "Through this project, Sophia learnt about deforestation and its threat to wildlife. I am pleased that she has become more environmentally conscious."

WELL-ROUNDED DEVELOPMENT

Ms Chu lists a few other positive impacts of the Make*Believe challenge.

- **Empathy.** Thinking about issues from diverse perspectives, such as from animals' point of view, helps children understand the needs and feelings of others.
- **Conflict-resolution skills.** Disagreements between teammates provide opportunities for them to discuss and reach a consensus.
- **Resilience.** Faced with design constraints or other setbacks, children can explore new approaches and learn from failures confidently.