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MINISTRY OF EDUCATION
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Raising Innovators: The Power of STEAM Parenting

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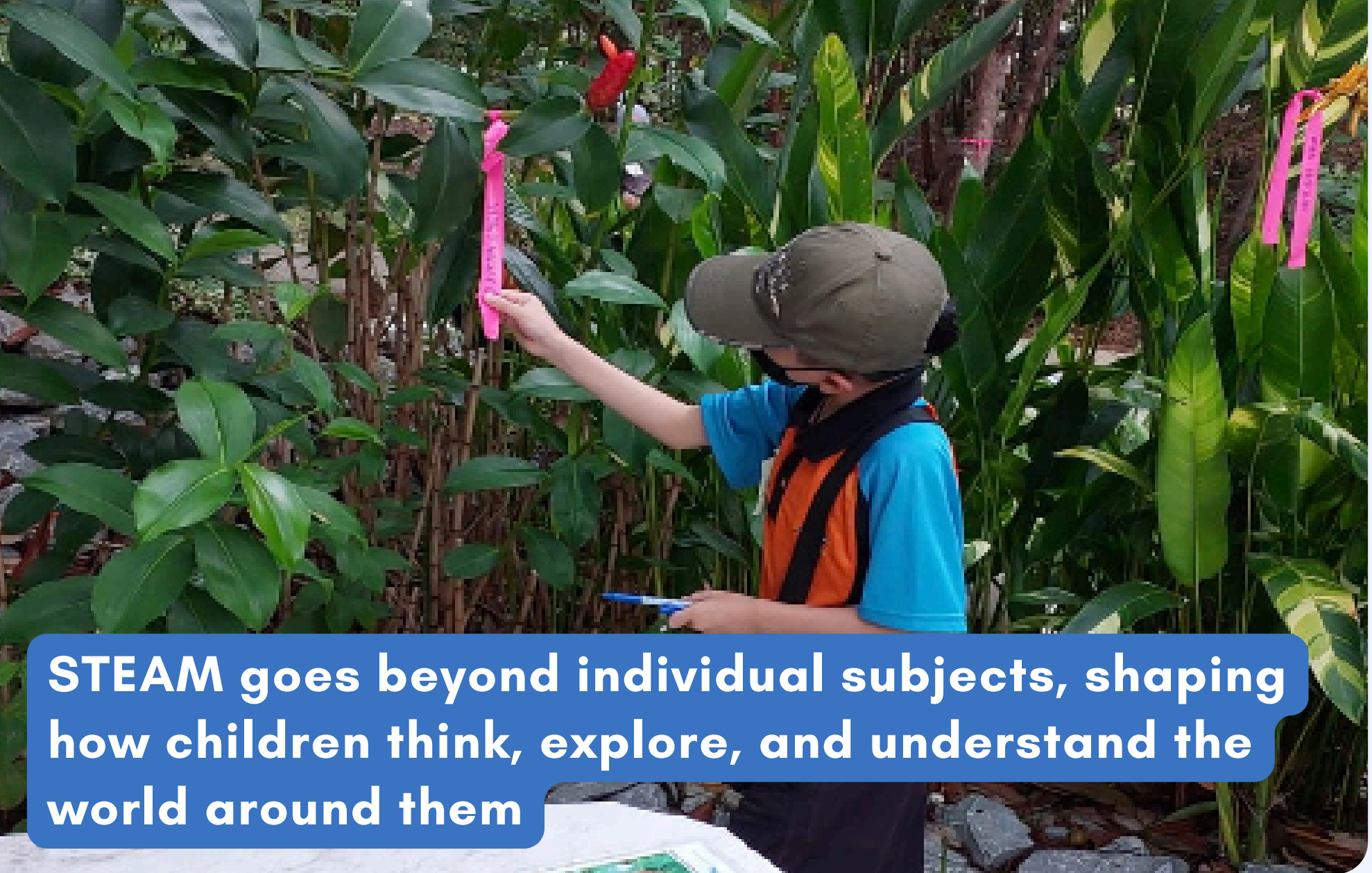
 feedback@moe.gov.bn

 2381301

 Ministry of Education
Brunei Darussalam

 [moe_brunei](https://www.instagram.com/moe_brunei)

 [M0Education_BRN](https://twitter.com/M0Education_BRN)



STEAM goes beyond individual subjects, shaping how children think, explore, and understand the world around them

Cikgu Hajah Kartika binti Haji Othman, an ICT and **STEAM** teacher at Sekolah Rendah Rimba III, believes that meaningful learning begins with curiosity and everyday experiences. As both an educator and a parent, she values learning beyond the classroom and nurtures her child's sense of wonder about the world around them.

"One sunny afternoon, my child noticed tiny rainbows forming in the mist as we sprayed water from a hose," Cikgu Hajah Kartika recalled. "Curious, he asked why it happened. Instead of explaining immediately, we explored together by adjusting the spray and observing how sunlight created different colours in the air."



Learning Through a Child's Eyes

When asked what her child enjoys most about learning with his mother, he spoke fondly of the freedom to explore. He enjoys being trusted to try things on their own, even if it means making mistakes or things not turning out perfectly. Learning, to him, is fun, exciting, and filled with discovery.

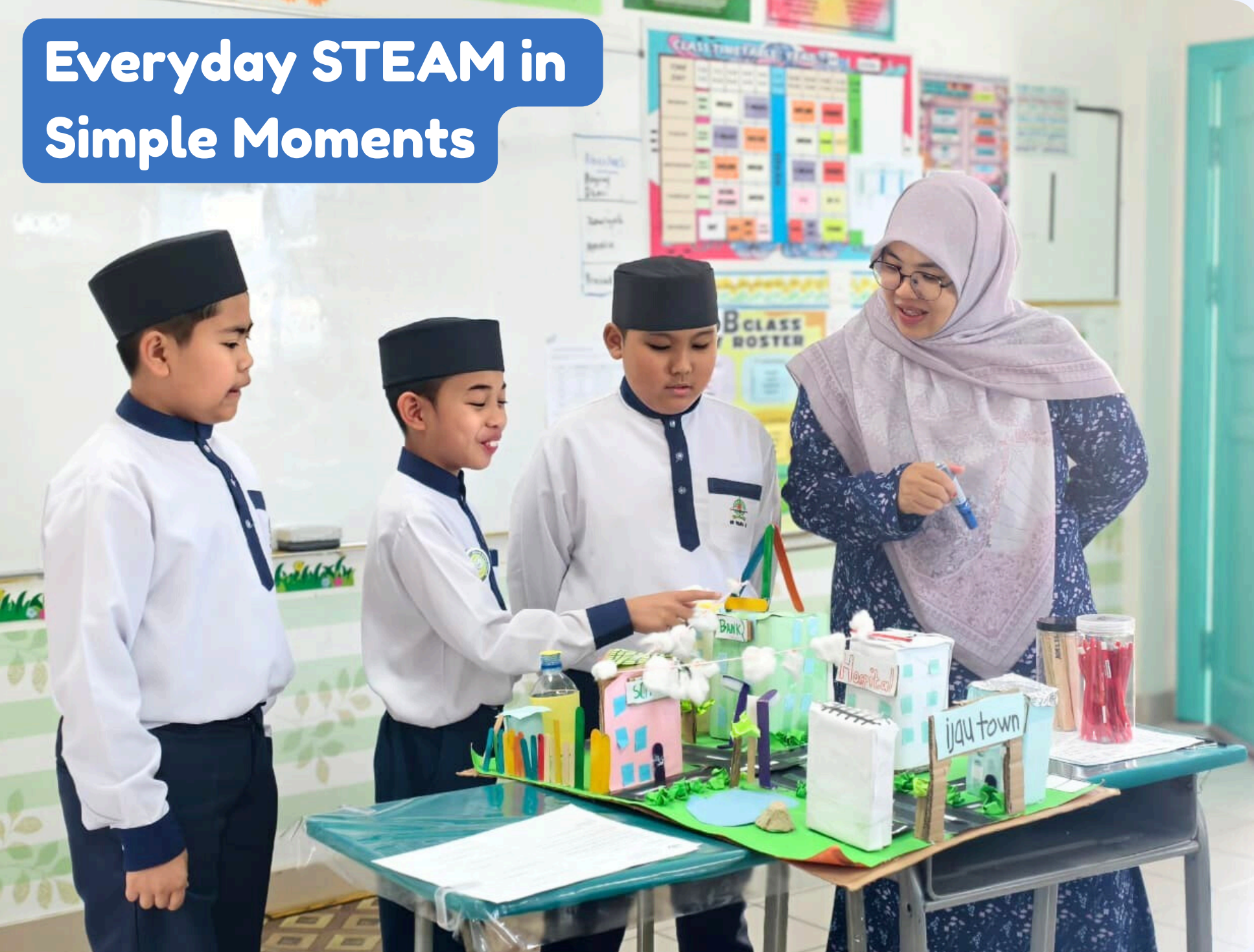
One of his favourite memories is building the Green City Savings Bank, a **STEAM** project that taught him not only how to save money but also how to care for the environment.



STEAM as a Way of Life

At home, **STEAM** has transformed the parents' way of life. Rather than providing instant answers, Cikgu Hajah Kartika often invites her child to explore questions together. Mistakes are not discouraged but embraced as part of the learning process. Curiosity is celebrated more than perfection, and every question becomes an opportunity to discover something new.

Everyday STEAM in Simple Moments



Cikgu Hajah Kartika shared that everyday **STEAM** activities play a crucial role in nurturing children's scientific thinking. "Building small bridges using straws encourages problem-solving and engineering thinking, while cooking together becomes a lesson in measurement, observation and change. Even nature walks spark discussions about patterns, shadows, plants and living organisms," she said.

Through these experiences, children begin to see that science, creativity, and critical thinking exist everywhere not just in books or laboratories.



When Curiosity Turns into Confidence

One of Cikgu Hajah Kartika's most memorable **STEAM** moments began with her child's BAT project, a recycled-material savings bank designed as a miniature city with a solar-panel roof and a rooftop garden. This was recognised as the best in the class.

Inspired by this achievement, she extended the idea into her classroom. She guided her students to research green cities and build eco-city models that fostered creativity, confidence, communication, and environmental responsibility.



Bridging Home and School Through STEAM

In one of her **STEAM** initiatives, Cikgu Hajah Kartika led a project on plastic pollution, through which students explored its environmental impact, designed informative posters, and created interactive **Scratch** games promoting recycling and environmental care.

The impact of such projects is not confined to the classroom. Learning extends beyond the classroom into the home, allowing children to apply sustainability knowledge in real-life situations and strengthening **STEAM** as a bridge between home and school.

Philosophy Behind the Practice



At the heart of Cikgu Hajah Kartika's teaching philosophy are three guiding principles: **Explore**, **Experiment**, and **Express**. Children are encouraged to explore ideas freely, experiment without fear of failure, and express their understanding creatively.

This philosophy is reflected in her **STEAM**-based teaching practices, which encourage children to see challenges as opportunities to innovate and grow. By modelling lifelong learning, she instils the belief that learning never stops.

Looking Towards the Future



“Whether they become scientists, designers, or community leaders, I believe that **STEAM** gives them the confidence and skills to innovate and contribute positively to society,” Cikgu Hajah Kartika shared.

Her hope is for her children and students to remain curious, compassionate, and courageous, using their knowledge to build a better and greener world.

A Journey Shared with Heart

Being both a teacher and a parent means wearing two roles but sharing one heart. While classrooms provide structure and guidance, learning truly begins at home in everyday moments of curiosity, patience, and care.

Through **STEAM** education, Cikgu Hajah Kartika continues a journey of shared discovery with her children and students, where every experiment becomes a lesson, every question sparks wonder, and every idea carries the potential to shape a better future.

