



Forward Thinking for Tomorrow's World

The fast pace of change in the world of technology is disrupting business models. At Stamford American School, the emphasis is on instilling critical thinking into the minds of pupils. – By Karrie Dietz

Preparing children for the future is a difficult task as the ever-changing technological landscape is transforming the way we live and work in such unpredictable ways, and it is expected to further disrupt business models and the labour market. That is why there is a shift towards skills; the World Economic Forum recently listed the top skills needed in what has been deemed the “Fourth Industrial Revolution”. These skills aren’t subject-specific but involve higher order thinking skills such as complex problem-solving, critical thinking and creativity to name a few. This shift in skills for success coincides with the emphasis on STEM education (science, technology, engineering, and maths) by many schools to give children the foundation they will need to succeed, Stamford American School being no exception.

In addition to STEM, Stamford has chosen to add in an element to the curriculum and focus heavily on

innovation, hence the program’s namesake STEMinn. Adding innovation as a core focus allows students to learn through a cross-curricular approach to produce ideas that address real-world problems, just as they would in a real job. Innovation also provides a natural opportunity to integrate projects as a critical element to our inquiry units. This allows students to build on all 10 in-demand skills such as creative thinking, coordinating and cognitive flexibility, and also to be naturally inspired by the curriculum, choosing to pursue projects related to the unit of study but not prescribed by the teacher. Students have produced amazing projects since Stamford opened in 2017 in Hong Kong following the success of its sister school in Singapore. An early triumph was a project based around the Volvo Race where middle school students built life-size boats which competed in Stamford’s own swimming pool. Although each group had the same materials, the four boats produced looked very different. Teams had to



consider the design and shape for buoyancy and speed as well as carrying capacity to meet the challenge to get the all the team members across the pool and, of course, the ultimate test – not to sink!

Stamford Global Mentor and environmental scientist, Cesar Jung-Harada, of MakerBay, led the project. Cesar is well-known for projects that address environmental and ecological issues such as oil spills and cataloging coral reefs. He is also passionate about




providing a space and tools for everyone to create, so there being no limits to their creativity, making him a respected and popular mentor among the students.

Since this project, students have shown their ingenuity to find solutions related to environmental challenges, made solar lights to donate to Papua New Guinea, and found new uses for garbage. Again, with the help of Cesar, students built space rovers and studied the effects of plants growing in low-gravity environments as part of another school project during #MissionInspire - a Cognita-wide salute to World Space Week.



Stamford often collaborates with the other Cognita schools - 70 in total in eight countries – providing an excellent opportunity for students to further their collaboration skills across oceans and cultures.

The question might remain, what about technology? Don't students need technology to prepare for the future of work? Yes and no. Yes, Stamford integrates technology into its core programs and uses it to support learning in all subjects from art, maths, drama, literacy, and more. Stamford offers a 1:1 iPad program in elementary and a 1:1 laptop program in middle school. Coding, robotics, and a variety of apps are used to support learning, with a dedicated Educational Technology coordinator and a STEMinn coordinator in place to ensure that students are accessing technology with a purpose that gets linked back to the curriculum. However, humans in the next generation will still have a lot to offer that can't be provided by computers. In fact, it will be those human characteristics such as emotional intelligence that set us apart from artificial intelligence. Therefore, Stamford and schools that promote this combination of skillsets will have graduates not only with the technological literacy needed for tomorrow's world but also the soft skills that will set them apart from their peers. 



Stamford American School Hong Kong offers inspiring education for students from age 5 using an inquiry-based learning approach combined with rigorous American academic standards, so graduates have access to top universities worldwide. To prepare children for the future, Stamford offers a pioneering STEMinn program developing skills needed for the 21st century. Stamford is part of Cognita, a global network of 70 schools worldwide.



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