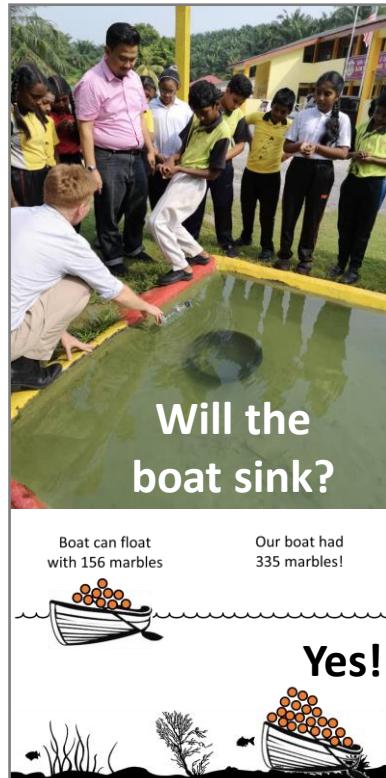


Greening Malaysia in the Classrooms

Written by: Gregers Reimann

Project partners: Malaysian Institute of Architects (PAM), malaysiagBC, GBI, KLAf, SA², Nippon and IEN Consultants

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IEN initiated the "Greening Malaysia in the Classrooms" program as one of the public engagement activities under the Kuala Lumpur Architecture Festival (KLAf).

The initiative sprung from a desire to raise awareness about environmental issues, sustainable development and climate change among the younger generation by engaging them in fun, surprising and informative ways. And to teach them what environmental actions can be taken at school, at home and in society at large. Equally important, for maximum impact across the nation the activities under the "Greening Malaysia in the Classrooms" were properly documented by a professional film crew. With both the instructional videos and the teaching material being made available online, it is hoped that school teachers across Malaysia and beyond, will incorporate material in their own teaching.

The first topic of the "Greening Malaysia in the Classrooms" program is on climate change. In order to make the students understand the severity of the issue (which the UN warns is an existential threat to Humanity), the students are helped to calculate their own impact on climate change based on their living, eating and transport habits. Then, each student is given a proportional number of marbles to match their individual climate impact. Now comes the exciting part, where the students have to load their marbles onto a miniature boat, which represents Earth and its threshold for coping with climate change. For this experiment, it is assumed that everybody on Earth has the same climate change impact as the students. If the boat sinks, it means we are headed for catastrophic climate change on Earth, unless we change our ways. If the boat floats, it means that the students are living within the carrying capacity of Earth. But of course, it does not mean that this is the case for the rest of the World's population.

The second topic of the "Greening Malaysia in the Classrooms" program is on green buildings. The students are taught about simple climatic design principles, for example, how to avoid that excessive solar heat enters the building. To illustrate how these principles of heat flow work, the students are given a fun hands-on group activity of building three or more different types of solar ovens. Once completed, temperature measurements show that the best performing solar ovens with the highest temperatures are those with dark interior surfaces for effectively absorbing the solar energy as well as insulated oven surfaces to slow the solar heat from escaping.

The students are also helped to launch a campaign for saving electricity and water at the school. To raise awareness among the other children at the school, the students are asked to make environmental posters. This includes labels for light switches asking people to switch off air-conditioning and the lights when leaving the room. Moreover, the students are also encouraged to audit the school for any leaking toilets and taps, and to report it to the school management for immediate repair. From reading the main water and electric meter of the school, the students' campaign lead to 20% water savings and 17% electricity savings. Well done!

Note: The program launched in February 2020, but was shortly after put on hold due to the Covid-19 pandemic

