

Centre of Excellence for Environment Education

Introduction

The journey in environment education in Marsiling Secondary School began with the founding of the school in 2000. From the onset, enrichment programmes in environment education were particularly successful. As such, a niche of excellence in environment education was quickly identified, and partnerships with supporters of the environment were established.

Two years later, the school was able to drive awareness and application of energy conservation among its students and N5 cluster schools as a result of a 3-year (June 2002 - June 2005) partnership project with Singapore Polytechnic and National Semiconductor Foundation. An array of solar panels and applications were installed and a series of solar-based programmes were established with the funding of US\$80,000 provided by National Semiconductor.

Leveraging on this strength, the school decided to take the focus to a level higher and the Environment Education Programme (EEP) framework was conceptualised in mid-2005. The framework outlines a school-wide three-pronged approach for EE implementation.

Framework



Objectives

Curriculum and pedagogy

- To facilitate the development and design of Environment Education curriculum
- To provide opportunities for staff and students to do applied research and development work to find ways to conserve the environment

Promotion of interest in Environment Education

- To gain awareness of the importance of environment conservation that will translate into good practices and habits
- To serve as a platform for effective transfer of knowledge in Environment Education
- To provide useful benchmark on excellence in Environment Education for other schools to compare their own growth and level up their performance

Synergistic partnerships

- To provide a platform for students to interact with and learn from Institutions of Higher Learning and the industry



Team learning during EEM



Problem-solving during EEM

About Environment Education Module (EEM)

EEM is a school-based curriculum which involves weaving common topics on the environment from the Science and Geography syllabuses to deepen students' understanding and to create greater awareness and responsibility towards the environment.

EEM comprises of two parts, Air and Water. It is a non-examinable subject offered to lower secondary classes. Each EEM comprises of several mini-lessons, which culminate in a final performance task. Each mini-lesson and performance task was specifically designed to cater to both the interest and ability of our students.

Using problem-based learning, students are constantly challenged to collaborate in groups to solve problems during EEM lessons. This makes learning more authentic for the students to appreciate the inter-connectedness of real-life issues.

3-Year Trend (2006 – 2008) of Recognition/Achievements Curriculum

- Prototyped Environment Education Module (EEM) for Sec 1 Exp/NA in 2006
- Selected as a MOE Teach Less Learn More Prototype School. Prototyped EEM for Sec 2 Exp in 2007
- Implemented Environment Projects for all Sec 3 Exp/NA students
- Introduced Advanced Elective Modules with Singapore Polytechnic and Republic Polytechnic in 2008
- Organized overseas learning journey, the Environmental Science Experience @ Yunnan



Environmental Science Experience @ Yunnan



Green Energy for Community Betterment @ Yunnan

Outreach

- Community Involvement – Seashore Life Programme



Seashore Life Programme @ Sembawang Park



Visit to EEH by students from Wujiang Experimental Junior School

- Organised Solar City Competition in conjunction with annual Clean and Green Schools' Carnival organized by NEA
- Organised learning journeys for N5 cluster schools
- Conducted learning journeys and solar energy workshop for primary schools in Woodlands/Marsiling
- Conducted learning journeys for teachers from Anderson JC, Bukit View Sec, Dunearn Sec, Si Ling Pri and N5 schools
- Hosted visits by international institutions in 2008:
 - Wujiang Experimental Junior School (our Twinning School from China)
 - Chitralada Palace School (from Thailand)
 - Overseas Environmental Studies Group from Miyazaki City (from Japan)



Visit by an environmental studies group from Miyazaki City of Japan