



Geep GLOBAL ENVIRONMENTAL EDUCATION PARTNERSHIP

Sharing ideas to create a more just and sustainable future through the power of environmental education

CASE STUDY

Sustainable Schools Initiative

Abu Dhabi, United Arab Emirates

CONTRIBUTORS

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GEEP is a partnership of the U.S. Environmental Protection Agency, the Environmental Protection Administration of Taiwan, and the North American Association for Environmental Education.



Sustainable Schools Initiative



Overview

This case study describes the United Arab Emirates' (UAE) [Sustainable Schools Initiative](#), or Al Madaris Al Mustadama, which was designed to reduce the nation's ecological footprint and help move environmental education from awareness to action.

Initiated in 2009 by the [Environment Agency – Abu Dhabi \(UAE\)](#), the initiative has facilitated the measurement of baseline resource consumption in public and private schools, and has achieved measurable outcomes in efficient use of resources. It has also led to the adoption new teaching and learning strategies that seek to instil positive changes in students' and society's behaviour, toward the goal of realizing national and local visions for sustainable development.

This case study illustrates how:

- Linkages between environmental education initiatives and broader national sustainability policies can foster program successes and partnerships
- For long-term sustainability, environmental education initiatives must demonstrate clear benefits for their diverse stakeholders
- Transparent communication and effective collaboration are essential for the success of programs that involve many partners



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Background

In 1998, the Environment Agency – Abu Dhabi initiated structured, school-based environmental educational programming in Abu Dhabi Emirate, the largest Emirate in the United Arab Emirates. While these environmental educational programs helped raise awareness amongst students and teachers, they did not appear to foster measurable changes in environmental action. Despite increased awareness shown by the Environment Agency’s annual awareness survey, the nation’s per capita ecological footprint remained high.

During the same time, teachers and schools expressed a desire for a new environmental education strategy. They needed programs that were interactive and hands-on, that promoted problem-solving and critical thinking skills, and that could be integrated easily into the curriculum. The Environment Agency – Abu Dhabi was also interested in changing its educational strategy by creating capacity-building programs aligned with the national sustainable development vision. Through collaboration with other government departmental strategies, the Environment Agency – Abu Dhabi also believed that its efforts could be cascaded down to the community level.

In 2009, the new Sustainable Schools Initiative engaged 26 schools in its programming. Through collaboration with government departments (water, electricity, waste, transportation), educational authorities, public and private schools, non-governmental organizations (NGOs), international environmental education organizations, and the private sector, the program grew to serve nearly 150 schools by its sixth year of implementation.

Approach

The Sustainable Schools Initiative was designed to help schools reduce their ecological footprints while increasing their ecological “handprints”—or, actions toward sustainability that support national sustainability goals. For students, the program seeks to promote critical thinking abilities, leadership qualities, problem-solving and 21st century skills, and sustainable environmental behaviour. The Sustainable Schools Initiative also strives to empower teachers with new instructional strategies that enable them to effectively integrate environmental education in their classrooms.

Participating schools engage with the Sustainable Schools Initiative by:

- **Assessing and addressing the school’s environmental impact**, enhancing environmental performance each year through green school auditing and management
- **Engaging in school-based and community-based environmental action** by initiating Eco Clubs that plan and implement action projects
- **Introducing teachers to new teaching and learning approaches** through training workshops conducted by internal and external experts
- **Providing opportunities for experiential learning** through hands-on field trips for students

The Environment Agency-Abu Dhabi supports participating schools by:

- **Producing curricular resources**, including manuals, guidelines, and books to support program implementation at schools
- **Offering professional development opportunities for teachers** related to Green School auditing and management, Eco Clubs, and curricular integration of environmental and sustainability issues. Teachers learn to take the role of facilitator, encouraging students to discover solutions independently and “learn by doing”.
- **Connecting schools with supporting organizations** that can help support program implementation and offer field trips for students
- **Providing opportunities for schools to share best practices** through annual two-day Eco Club summit where students share their projects and engage in workshops, and through the publication of a book of “Aha Moments” that documents participating schools’ successes. Some teachers and students also participate in international conferences.
- **Evaluating and rewarding schools’ progress** through excellence awards that provide cash awards to outstanding schools to support their environmental education efforts
- **Sharing data and achievements with government partners** to build support for the Sustainable Schools Initiative and participating schools themselves

The Sustainable Schools initiative engages a wide range of stakeholders including: schools, teachers, and students; the [Abu Dhabi Education Council](#); [Abu Dhabi Water and Electricity Authority](#); [Center of Waste Management – Abu Dhabi](#); [Abu Dhabi Department of Municipal Affairs and Transport](#); [British Petroleum](#) (main sponsor); non-governmental organizations; and international partners (e.g., [Centre for Environment Education \(CEE\)](#); Centre for Science and Environment -India , [North American Association for Environmental Education \(NAAEE\)](#); [Australian Association for Environmental Education \(AAEE\)](#)).

Evaluation Plan

There are three key aspects the Sustainable Schools Initiative evaluation process.



- A. Evaluation of Environment Agency – Abu Dhabi.** Schools, teachers, students, and other stakeholders and partners evaluate the Environment Agency – Abu Dhabi through feedback surveys for every action.
- B. Evaluation of participating schools.** After each Sustainable Schools Initiative session, schools submit reports on the four program components (green school audit, environment clubs, teacher professional development, and field trips), demonstrating evidence of environmental education improvements. Schools are evaluated through both self-evaluations and agency-level evaluations, in which schools are shortlisted by their report submissions. Finally, an expert evaluation committee from governmental and non-governmental organizations validate schools’ data and achievements.
- C. Final reporting.** Environment Agency – Abu Dhabi collates and analyses all school data and submits it to program management to show the measurable changes achieved each year by all participating schools.

Outcomes

Key outcomes of the Sustainable Schools Initiative have included:



- **Successful engagement of educators and students** through community outreach projects
- **Wider adoption of interdisciplinary and problem-solving approaches to teaching and learning at schools** through SSI program components (green school audit, environment clubs, teacher professional development, and field trips)
- **Enrichment of the school curriculum** with accurate and up-to-date information on key environmental issues facing society
- **Student empowerment** to use ingenuity to generate creative solutions for addressing environmental issues
- **Increased youth advocacy** for sustainable growth and environmental conservation
- **Increased interest from stakeholders**, including organizations from both industry and government, to participate in the Sustainable Schools Initiative
- **A new forum for a dialogue and action** as a result of the Sustainable Schools Initiative



Lessons Learned

Key lessons learned from the first six years of Sustainable Schools Initiative implementation have included:

- **Clear benefits for all stakeholders are essential.** The Sustainable Schools Initiative must remain robust for all parties concerned – including students, teachers, school management, and the Education council. Unless all see clear benefits, schools will lose interest and the initiative will be short-lived.
- **Communication and effective collaboration are essential.** Motivated Sustainable Schools Initiative coordinators from every participating school are an important part of the project's success. Collaborating on a regular basis with all stakeholders, including through annual reviews and evaluation, is crucial.
- **It is helpful to link environmental education initiatives with the larger political context.** Alignment of the Sustainable Schools Initiative with the goals of other stakeholders, including [Abu Dhabi Vision 2030](#), UAE's green growth policy, and educational policies has contributed to its success.
- **Inclusivity, transparency, and a shared vision are essential among partners.** Engagement of all stakeholders from the implementation phase through the evaluation phase was crucial.
- **Stakeholders vary in their skills, competencies, engagement, and interests.** Not all stakeholders are the same – there exists a continuum of engagement from minimum to maximum. Stakeholder groups (e.g., schools, teachers, partners) vary in what they are able to contribute to the project in terms of skills of competencies. Further, stakeholders vary in their intentions for participation – it is important to prevent “hijacking” of the project in directions that veer away from its broader purpose and toward the interests of individual stakeholders.
- **Program success may bring greater program expectations.** With each small success of the Sustainable Schools Initiative, expectations of the program increased. Meeting, keeping pace with, and managing increasing expectations required ongoing attention.

Resources

- Sustainable Schools Initiative website
<https://sustainableschools.ead.ae/en-us/Pages/default.aspx>
- Green School Manual – A Do It Yourself guide – Sustainable Schools Audit:
<https://sustainableschools.ead.ae/en-us/Pages/gsa.aspx>
- A Guide to Running and Establishing Eco Clubs at School
<https://sustainableschools.ead.ae/en-us/Pages/Environmentalclubs.aspx>
- Towards a Sustainable World – Methods and Approaches for Teachers (Intermediate, Primary, and Secondary)
<https://sustainableschools.ead.ae/en-us/Pages/Training.aspx#trainers>
- Outdoor Education Manual and Activities – Part 1 and 2
<https://sustainableschools.ead.ae/en-us/Pages/StudentTrips.aspx>
- E- Advantage Platform – Online course on Educating for Sustainability for Intermediate School Teachers
<https://training.sustainableschools.ae>

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