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Организация  
Объединенных Наций по  
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منظمة الأمم المتحدة  
للتربية والعلم والثقافة

联合国教育、  
科学及文化组织

## Learning to Mitigate and Adapt to Climate Change:

# UNESCO and Climate Change Education

*Climate change is a global challenge. It will impact all ecosystems and human societies, in different ways and to different degrees.*

Over the past 30 years, UNESCO has actively contributed to building the global knowledge base on climate change. Primarily through its contribution to climate science (global ocean observation systems, assessment and monitoring) and secondarily by promoting education, capacity development, public awareness and access to information. As Task Manager of Chapter 36 of Agenda 21 – which relates to the promotion of education, public awareness and training – and lead agency for the UN Decade of Education for Sustainable Development (DESD, 2005-2014), the Organization plays a lead role in promoting Education for Sustainable Development (ESD). Climate change is one of the key action themes of the Decade, as was reaffirmed at the World Conference on Education for Sustainable Development held in Bonn in April 2009.

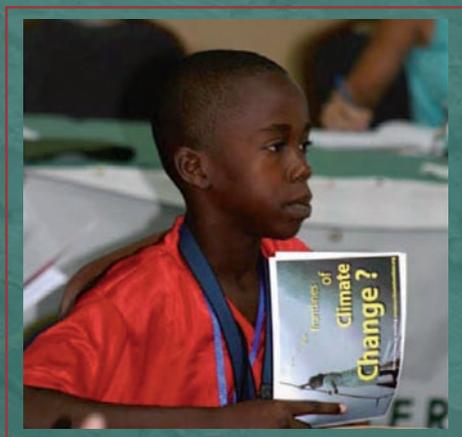
Education has a central role to play in understanding, mitigating and adapting to the changing climate. While education at all levels and in both formal and informal settings is needed, instilling climate change awareness and understanding at a young age is ultimately the best way to change behaviours and attitudes. What children learn today will shape tomorrow's world. Through the New Delhi work programme – which is a flexible programme for country-driven action engaging all stakeholders on education, training and public awareness on climate change, UNESCO supports its Member States to implement Article 6 of the United Nations Framework Convention on Climate Change. Similarly, the UNESCO Enhanced Plan of Action for the Strategy for Action on Climate Change recognizes the importance of and outlines action for education in promoting mitigation of and adaptation to climate change.

Climate change is a truly interdisciplinary challenge. UNESCO has therefore mobilized several of its intersectoral platforms, which effectively link the Organization's relevant competencies and resources across its Headquarters, Field Offices and other

partners, to work jointly to promote climate change education. The platforms involved include: UNESCO Action to Address Climate Change; Small Island Developing States; Education for Sustainable Development; and Science Education.

## UNESCO International Seminar on Climate Change Education

(Paris, 27-29 July 2009)



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Climate change education was the topic of a three-day expert seminar organized by UNESCO with financial support from Denmark at UNESCO Headquarters in Paris, 27-29 July 2009.

Designed to reach and involve key stakeholders involved in climate change education, the event brought together a multidisciplinary and diverse group of more than 60 educators, scientists, educational planners, many of them from Small Island Developing States (SIDS) – as well as multilateral and non-governmental organizations – to discuss and make recommendations on the role and potential for education in addressing global climate change.

Its specific objectives were to:

- Promote the effective integration of climate change education into educational programmes and school curricula;

- Mobilize support for teacher training on climate change education;
- Enhance the exchange of experiences and good practices on climate change education among ministries, teachers, practitioners and young people;
- Identify opportunities for using various networks (such as the UNESCO Associated Schools Network, World Heritage sites, biosphere reserves and the networks of the International Hydrological Programme) to encourage local field-based education on climate change; and
- Identify learning materials and good practices on climate change education and enhance their dissemination via information and communication technologies, as well as other means.

The Seminar provided a unique opportunity to gather and address this important topic through presentations and discussions in both plenary and working group sessions. It was particularly important for participants from Small Island Developing States, which are most vulnerable to the negative impacts of climate change and which make up about 25 % of UNESCO's Member States. Divided into three working groups, participants conducted in-depth discussions focused around three themes:

1. Educational policies, programmes and curricula;
2. The identification of climate change education tools, materials and good practices; and
3. The mobilization and engagement of networks and partnerships in support of climate change education.

There was a general consensus that there is an urgent need for climate change education, and that this should be interdisciplinary and holistic; integrating

scientific, social, gender, economic, cultural and ethical dimensions; and incorporating local, traditional and indigenous knowledge perspectives and practices. Climate change education should be integral to an education for sustainable development that helps people to develop the attitudes, skills and knowledge to make informed decisions for the benefit of themselves and others, now and in the future – and to act upon these decisions.

***“Education should make young people be critical-thinkers, lifelong learners and adaptable”.***

Carole Young, University of Auckland, New Zealand

Among a number of challenges, participants identified that sharing information from different sources and locations among many diverse networks is a key problem to be addressed. Sharing such information is difficult for

a number of reasons, among which are: the lack of co-ordination between groups or executive bodies, complexities in working across sectors and agencies, problems in fostering and supporting national and regional networking, and the lack of access to modern communication technologies in developing countries.

There is a particular need for materials to address the ethics of climate change and the social dimensions of climate change mitigation and adaptation. It was noted that there is a lack of materials other than in English and with little or no framework for establishing quality or appropriateness for a given context.

Participants made a number of recommendations to UNESCO and its partners, outlining actions to be taken in order to follow up key issues identified during the seminar.

Priority areas for action included:

1. Undertaking a review of existing educational policies and curricula, in order to initiate the development of guidelines to facilitate the inclusion of climate change issues into educational programmes, policies and curricula;
2. Undertaking a comprehensive review and inventory of existing tools,

***“Climate change education is about helping learners understand and address the impacts of global warming today, while at the same time encouraging the change in attitudes and behaviour needed to put our world on a more sustainable path in the future”.***

Koïchiro Matsuura, Director-General of UNESCO

materials and practices in teaching and learning climate change;

3. Addressing quality assurance and standard setting in climate change education;
4. Developing ways for supporting a 'community of practice' around climate change education;

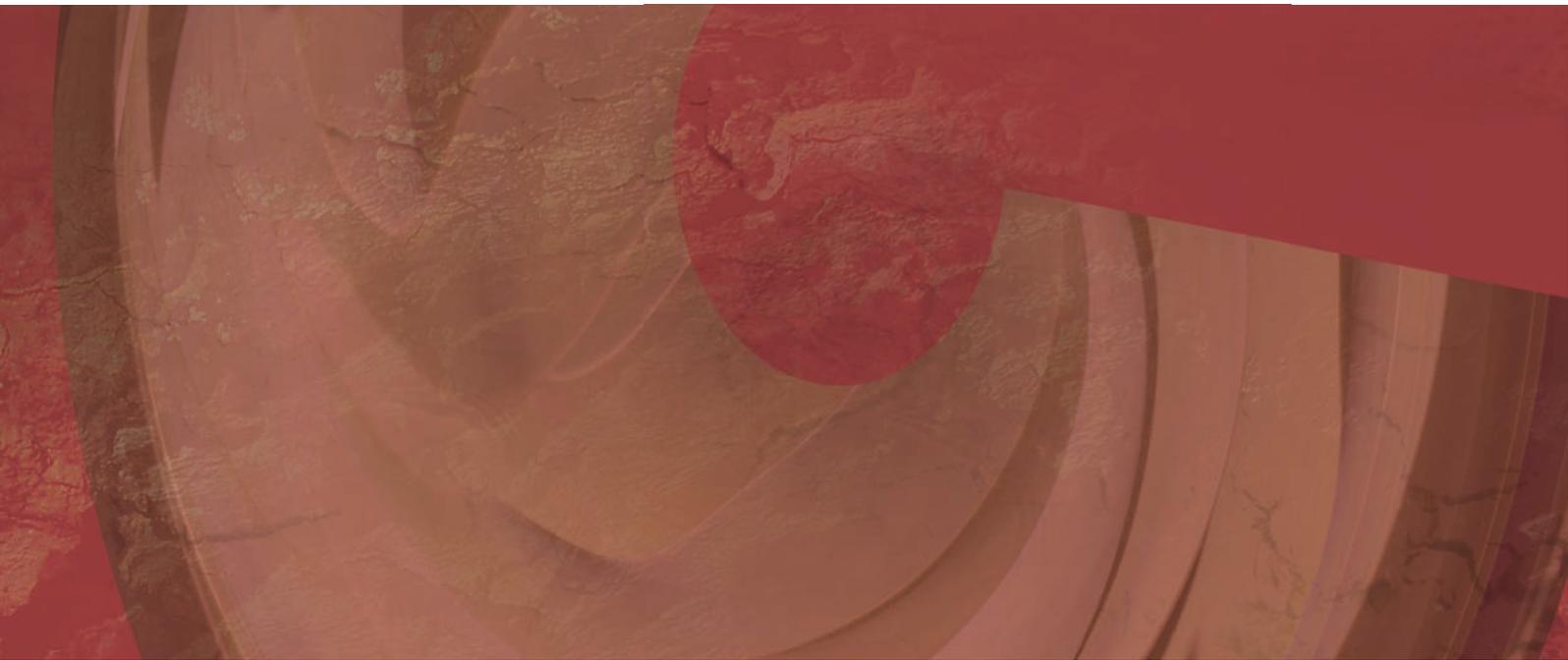
Enhancing networking and cooperation for action on climate change education among all stakeholders, in particular through actively engaging communities and youth;

Enhancing action-research in social and human sciences, ethics and adaptable teaching materials to suit specific situations in relation to climate change issues.

As a practical first step to address these immediate concerns, participants recommended the development of a climate change education knowledge hub to be coordinated by UNESCO in close cooperation with the UNFCCC, engag-

ing international policy actors at strategic levels (Earth Charter, IPCC, UNEP, governments, youth, indigenous and women's groups, as well as community-level initiatives). The primary purpose of this hub would be to serve as a gateway for the exchange of information on climate change education for scientists, educators, planners, youth, funding agencies, media, NGOs, community-based organisations and any other interested parties. The hub would also serve as a coordinating mechanism to review existing climate change education resources and prepare new materials, and promote field activities and networking mechanisms on the ground.

Combining its multidisciplinary nature – bringing together expertise in education, natural and social sciences, culture and communication – with its capacity as the leading UN agency on educational issues, UNESCO is well-placed to address climate change education, which by its very nature necessitates an interdisciplinary approach.



## For more information:

[www.unesco.org/en/climatechange](http://www.unesco.org/en/climatechange)

[www.unesco.org/en/esd/](http://www.unesco.org/en/esd/)

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