



UN CC:Learn

The One UN Climate Change Learning Partnership

Resource Guide for Advanced Learning on

Integrating Climate Change in Education at Primary and Secondary Level



Acknowledgements

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Specific inputs were provided by: Julia Heiss, UNESCO; Stephanie Hodge and Donna Goodman, UNICEF; Adriana Valenzuela, Cristina Rekakavas, Fayruz Mandil, Angus Mackay, Achim Halpaap and Amrei Horstbrink, UNITAR.

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Layout

We Are Boq, Lda.

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Part I Introduction

1.1 About the Series of Resource Guides

This Guide is part of a series of Resource Guides developed through UN CC:Learn¹ to facilitate access to existing state-of-the-art materials relevant for climate change learning on particular topics. The Guides are written from the perspective of a learner seeking to obtain an understanding of the topic and consider use of relevant learning materials. The references cited in each Guide collectively contribute to the compilation of Advanced Learning Packages on Priority Topics of Climate Change (ALPs). ALPs compiled under UN CC:Learn cover selected climate change topics that have been identified as a priority from a country perspective. Based on an analysis of existing learning resources, development of further materials may be initiated in order to fill gaps.

The learning resources presented in this Resource Guide are drawn primarily from within the UN and partners to UN CC:Learn. Resources published by other recognized international and other organizations are provided in Annex 1. UN CC:Learn is not responsible for the content of these third-party resources and their mention does not imply that these have been endorsed or recommended by UN CC:Learn.

1.2 How to Use this Resource Guide

This Resource Guide is organized into three parts. Part I provides basic orientation for readers, including a brief introduction to the subject area and an outline of the specific learning topics to be covered. Part II lists available written learning resources as well as a number of training courses currently being offered, organized by learning topic. For each selected learning resource a hyperlink is provided through to Part III of the Resource Guide, which provides more detailed factsheets and further links to source material. Readers are advised to: (A) start by reading Part I; (B) select a preferred learning topic; (C) identify the relevant learning resources for that topic under Part II; and (D) click on the relevant hyperlinks to access the factsheets.

1.3 Target Group for this Resource Guide

This Resource Guide has been designed to inform the following target groups interested in learning how to integrate climate change in both formal and informal education programmes at primary and secondary level:

- Decision makers in the education sector responsible for developing and implementing educational policies, programmes or projects;

¹ UN CC:Learn is a partnership of 33 multilateral organizations which supports Member States, UN agencies and other development partners in designing and implementing results-oriented and sustainable learning to address climate change. UN CC:Learn Partners to date include: CEB, EMG, FAO, GEF, IDB, IFAD, ILO, ITU, OCHA, UNAIDS, UNDP, UNECA, UNEP, UNESCAP, UNESCO, UNESWA, UNFCCC, UNFPA, UNHABITAT, UNICEF, UNIDO, UNISDR, UNITAR, UNSSC, UNU, UNWOMEN, UNWTO, UPU, WFP, WHO, WMO, WTO, World Bank.

- Curriculum development specialists and education planners in charge of curriculum review, reform and development;
- Primary and secondary teachers/youth educators;
- Teacher training institutions;
- Non-governmental organizations (NGOs) involved in the development and implementation of non-formal education programmes;
- Researchers working on education issues related to climate change;
- Interested citizens/youth/students.

1.4 Introduction to Climate Change Education

By raising awareness and promoting knowledge and skills-development, education is an essential component and a catalyst for responding to global climate change. Its importance has been increasingly highlighted at the international level. In particular, Article 6 of the UN Framework Convention on Climate Change (UNFCCC)² encourages Parties to promote, develop and implement educational, training and public awareness programmes on climate change and its effects. In addition, the United Nations General Assembly proclaimed the UN Decade of Education for Sustainable Development (DESD) 2005-2014, emphasizing that climate change is one of the key action themes of the Decade³.

Education for Sustainable Development (ESD) aims to promote the knowledge, skills, attitudes and values necessary to shape a sustainable future⁴. It affects all components of the education system – which include, among others, legislation, policy, finance, curricula, teacher education, instruction, learning, assessment, school governance and infrastructure – and considers learning as a lifelong process taking place in various settings. In addition, it proposes learning methodologies for promoting critical thinking, problem-solving skills, as well as predicting events affecting both natural and human ecosystems and acting on these in collaborative ways. ESD provides an umbrella for many forms of education⁵. In this framework, Climate Change Education (CCE) fosters understanding of the complexities and interconnection of the various challenges posed by climate change.

More specifically, CCE promotes learning about the causes and effects of climate change as well as possible responses, providing a cross-curricular and multidisciplinary perspective. It develops competences in the field of climate change mitigation and adaptation, with the aim to promote climate-resilient development and reduce the vulnerability of communities in the face of an uncertain future. Crucially, CCE helps individuals to make informed decisions. Additionally, by preparing learners, communities and education systems to face natural hazards, CCE contributes to disaster risk reduction (DRR) efforts. Finally, CCE highlights the links between consumption patterns and climate change in order to mobilize responsible actions contributing to reduced greenhouse gas emissions through more sustainable lifestyles.

1.5 Learning Topics Featured in the Guide

Many organizations have developed learning materials on the theme of climate change and education.

² Article 6 of the UNFCCC: http://unfccc.int/essential_background/convention/background/items/1366.php

³ UNESCO (2009). Learning to Mitigate and Adapt to Climate Change: UNESCO and Climate Change Education. http://climatefrontlines.org/ed_seminar_brochure.pdf, p. 2.

⁴ UNESCO. Education for Sustainable Development (ESD). <http://www.unesco.org/new/en/education/themes/leading-the-international-agenda/education-for-sustainable-development/>

⁵ UNESCO. Education - Education for Sustainable Development. <http://www.unesco.org/new/en/education/themes/leading-the-international-agenda/education-for-sustainable-development/education-for-sustainable-development/>

However, given the wealth of existing resources, interested learners can face difficulties in identifying specific materials that match their needs. This Resource Guide aims at facilitating access to learning by providing a “guided tour” to materials that are already available, focusing mainly on those available from within the UN system. These have been selected according to specific learning topics identified in consultation with the UN CC:Learn partners, further refined through the application of the following criteria:

- Universality: the resources featured in this package are relevant for interested learners regardless of their specific background and experiences;
- United Nations: the resources have been produced primarily by UN agencies, especially by agencies with specific expertise in the field of climate change education⁶;
- Quality: the resources are comprehensive and of high quality;
- State-of-the-art: given the developments in the field, resources are recent and up-to-date;
- Learning component: the resources selected are designed to promote learning activities.

Learning Topic 1: Strategies and Policies for Climate Change Education

In the context of climate change, there is often a need to reconsider or adjust existing approaches to education, especially their potential to provide learners with the necessary knowledge and training to help them respond to a diverse and rapidly changing world. In order to promote climate change education, decision makers need to develop and implement relevant policies and strategies, as well as integrate these in education plans and budgets. To adjust educational planning to climate change, it is also important to take into account the impacts of climate change on migration patterns and school enrolment, infrastructure maintenance and personnel, as well as disaster risk management⁷.

Learning Topic 2: Integration of Climate Change in School Curricula

To ensure effective learning and deep understanding of the subject matter, climate change education should be integrated across school curricula at all levels. The complexities of climate change require it to be addressed using a holistic approach that draws upon a range of disciplines and areas of expertise, including climate science, policy, law, ethic, sociology, economics and culture, with the aim of an effective and inclusive knowledge sharing approach⁸. In addition, knowledge of climate change, its science, impacts and coping measures has to be adapted to address and relate to specific target groups. Therefore, specific activities have to be developed and tailored according to age, school type and level as well as contexts and particular needs.

Learning Topic 3: Training and Teaching Materials for Teachers and Educators

To promote climate change education, it is crucial to strengthen teachers’ and educators’ capacities to deliver accurate information, integrate local content, promote critical thinking about and take action on climate change mitigation and adaptation⁹. This includes increasing their understanding of climate and

⁶ Selected publications from other relevant international and other organizations have been referenced in Annex 1.

⁷ UNESCO (2012). Climate Change Education for Sustainable Development in Small Island Developing States: Report and Recommendations. <http://unesdoc.unesco.org/images/0021/002164/216473e.pdf>, p. 28

⁸ UNESCO (2012). Climate Change Education for Sustainable Development in Small Island Developing States: Report and Recommendations. <http://unesdoc.unesco.org/images/0021/002164/216473e.pdf>, p. 27

⁹ UNESCO (2012). Climate Change Education for Sustainable Development in Small Island Developing States: Report and Recommendations. <http://unesdoc.unesco.org/images/0021/002164/216473e.pdf>, p. 25

sustainability issues as well as helping them develop necessary skills and providing them with pedagogical support. Furthermore, teachers and educators need dedicated materials to support their learning activities on climate change. Examples of relevant materials include manuals, teachers' resource guides, lesson models and training modules, but also books, cartoons and videos (to name a few) to guide, inspire and empower students.

Learning Topic 4: Safe and Sustainable School Campuses

The physical learning environment can play an important role when promoting climate change education. Environmentally speaking, sustainable schools provide ample natural light, good indoor air quality and ventilation. They are water and energy efficient, use non-toxic, locally available construction materials and run on renewable energy¹⁰. This way, they can develop the responsible and green habits of their attendees and their families, in an environment that models the principle of sustainability being taught. Therefore, sustainable schools and campuses serve as learning laboratories for students to demonstrate and further deepen understanding of the principles learned in the classroom. The ambition is to make the school itself a physical model of sustainability. In addition, climate change proofing of educational infrastructure minimizes the risks and associated costs of weather-related damages and promotes adaptation. Other practices, such as the use of solar panels, can also reduce greenhouse gas emissions and contribute to mitigating climate change.

¹⁰ UNICEF (2012). Climate Change and Environmental Education: A Companion to the Child Friendly Schools Manual. http://www.unicef.org/publications/files/CFS_Climate_E_web.pdf, p. 10

Part II

Guide to Learning Resources and Training Courses

Learning Topic 1

Strategies and Policies for Climate Change Education

Written Resources

Climate Change and Environmental Education: A Companion to the Child Friendly Schools Manual [Go to Factsheet](#)

General Audience(s)

Decision Makers; Technical Staff/Practitioners

Type of Material

Guidance Document/
Handbook

Relevance

This guidebook informs on how to develop strategies and policies for implementing climate change education in child-friendly schools by citing relevant examples and illustrating diverse approaches.

Climate Change Starter's Guidebook: An Issue Guide for Education Planners and Practitioners [Go to Factsheet](#)

General Audience(s)

Decision Makers; Technical Staff/Practitioners

Type of Material

Guidance Document/
Handbook

Relevance

This guidebook provides an introduction and overview for education planners and practitioners on the wide range of issues relating to climate change and climate change education, including causes, impacts, mitigation and adaptation strategies, as well as some broad political and economic principles, with the aim to facilitate the development of education policies that take climate change into account.

Climate Change Adaptation and Disaster Risk Reduction in the Education Sector [Go to Factsheet](#)

General Audience(s)

Decision Makers; Technical Staff/Practitioners; General Public

Type of Material

Guidance Document/
Handbook

Relevance

This package provides useful arguments as to why the mainstreaming and scaling up of climate change adaptation and disaster risk reduction in the education sector should be targeted and how these are impacted by educational policies and strategies.

Disaster Risk Reduction in Education: An Imperative for Education Policymakers [Go to Factsheet](#)

General Audience(s)

Decision Makers

Type of Material

Guidance Document/
Handbook

Relevance

This document directly targets policy makers and decision makers in the education sector to demonstrate the imperative of integrating disaster risk reduction in education.

Disaster Risk Reduction in School Curricula: Case Studies from 30 Countries [Go to Factsheet](#)

General Audience(s)

Decision Makers; Technical Staff/Practitioners

Type of Material

Analytical/Technical Document

Relevance

This document captures key national experiences and good practices with regard to the integration of disaster risk reduction in school curriculum to inform policy and strategic deliberation, development and implementation.

Education Sector Responses to Climate Change: Background Paper with International Examples [Go to Factsheet](#)

General Audience(s)

Technical Staff/Practitioners; General Public

Type of Material

Guidance Document/ Handbook

Relevance

This handbook provides guidance to policy makers on how, why and where to adjust educational systems to incorporate climate change learning and foster immediate undertakings that leave educators and learners equipped with skills and knowledge in mitigating and adapting to climate change.

Learning Topic 2

Integration of Climate Change in School Curricula

Written Resources

Climate Change Starter's Guidebook: An Issue Guide for Education Planners and Practitioners [Go to Factsheet](#)

General Audience(s)

Decision Makers; Technical Staff/Practitioners

Type of Material

Guidance Document/
Handbook

Relevance

The aim of this guide is to serve as a starting point for tackling and mainstreaming climate change education into schools curricula. The document has been created to enable education planners and practitioners to understand the issues at hand and to review and analyse their relevance to particular national and local contexts.

Climate Change Adaptation and Disaster Risk Reduction in the Education Sector [Go to Factsheet](#)

General Audience(s)

Decision Makers; Technical Staff/Practitioners; General Public

Type of Material

Guidance Document/
Handbook

Relevance

This package discusses methods to implement the preparations leading up to the actual mainstreaming of climate change learning in the education sector. In particular, module 9 examines different aspects of school-level implementation, including integration of climate change adaptation and disaster risk reduction in school curricula.

Climate Change and Environmental Education: A Companion to the Child Friendly Schools Manual [Go to Factsheet](#)

General Audience(s)

Decision Makers; Technical Staff/Practitioners

Type of Material

Guidance Document/
Handbook

Relevance

This guidebook provides in-depth information on how climate change and environmental education can be integrated into the design, implementation and practice of child-friendly schools, including reorienting existing curricula.

Disaster Risk Reduction in Education: An Imperative for Education Policymakers [Go to Factsheet](#)

General Audience(s)

Decision Makers

Type of Material

Guidance Document/
Handbook

Relevance

This document speaks of the requirements and actions for policy makers to take in order to ensure the successful integration of DRR in the education sector, which comprise the mainstreaming of DRR into the curriculum and school-wide activities.

Disaster Risk Reduction in School Curricula: Case Studies from 30 Countries [Go to Factsheet](#)

General Audience(s)

Decision Makers; Technical Staff/Practitioners

Type of Material

Analytical/Technical
Document

Relevance

This document captures key national experiences of 30 countries in the integration of DRR in the curriculum, identifies good practices, notes issues addressed and discusses learning outcomes.

Education Sector Responses to Climate Change: Background Paper with International Examples [Go to Factsheet](#)

General Audience(s)

Technical Staff/Practitioners;
General Public

Type of Material

Guidance Document/
Handbook

Relevance

This handbook names different successful practices to help mainstream climate change learning in and across all different education channels, including discussions on integration in school curricula. Section 4.8 presents lessons from the mainstreaming of disaster risk reduction in school curricula in Madagascar.

Food Security and Climate Change Challenge Badge [Go to Factsheet](#)

General Audience(s)

Technical Staff/Practitioners;
General Public

Type of Material

Other

Relevance

This badge curriculum encourages ways of taking action for climate change mitigation and adaptation that could fit in a school environment and in extra-curricular hours. It includes a selection of activities divided in three categories: our climate, our food, and our world.

Education Kit on Climate Change and Child Rights - How to Defend Child Rights Affected by Climate Change: A Teacher's Guide for Exploration and Action with Children 11-16 Years Old [Go to Factsheet](#)

General Audience(s)

Technical Staff/Practitioners;
General Public

Type of Material

Training Manual/Material

Relevance

This toolkit was developed for use in industrialized countries for exploration and action activities with young people on the issue of climate change and its impact on child rights. It can be used in different school subjects, such as Geography, Citizenship Education, Science, Mathematics and Language(s).

Training Courses

Climate Change in the Classroom [Go to Factsheet](#)

General Audience(s)

Technical Staff/Practitioners

Type of Material

Course

Relevance

This course is designed to enable teachers at the secondary school level from diverse subject areas to introduce climate change education for sustainable development across the curriculum.

Teaching and Learning for a Sustainable Future: A Multimedia Teacher Education Programme [Go to Factsheet](#)

General Audience(s)

Technical Staff/Practitioners

Type of Material

Course

Relevance

This education programme provides professional development for curriculum developers on education for sustainable development. It includes a section on curriculum rationale and a section on integrating sustainable development across the curriculum. Module 19 focuses specifically on climate change. The contents can be adapted to different national and regional contexts.

Learning Topic 3

Training and Teaching Materials for Teachers and Educators

Written Resources

Climate Change Starter's Guidebook: An Issue Guide for Education Planners and Practitioners [Go to Factsheet](#)

General Audience(s)

Decision Makers; Technical Staff/Practitioners

Type of Material

Guidance Document/
Handbook

Relevance

This guidebook is intended to support educators in developing their understanding of the science of climate change, observed and anticipated impacts, and different possible responses with the aim to help inform the next generations and to better equip them to respond to the climate-related challenges ahead.

Climate Change Adaptation and Disaster Risk Reduction in the Education Sector [Go to Factsheet](#)

General Audience(s)

Decision Makers; Technical Staff/Practitioners; General Public

Type of Material

Guidance Document/
Handbook

Relevance

The package lays down a step-by-step approach with examples of tools and methodologies in approaching, analysing, monitoring and planning the climate change and disaster risk reduction learning in the education sector. It aims to promote the integration of climate change and disaster risk education into quality learning and teaching.

Climate Change Take Action Now! A Guide to Supporting the Local Actions of Children and Young People, with Special Emphasis on Girls and Young Women [Go to Factsheet](#)

General Audience(s)

Decision Makers; Technical Staff/Practitioners; General Public

Type of Material

Guidance Document/
Handbook

Relevance

This booklet presents a range of teaching techniques for teachers and educators to support young people to take action in addressing the challenges of climate change. Through suggestions and sample activities, its aim is to support young people to participate, give them a sense of empowerment, and build their skills and values.

Education Sector Responses to Climate Change: Background Paper with International Examples [Go to Factsheet](#)

General Audience(s)

Technical Staff/Practitioners; General Public

Type of Material

Guidance Document/
Handbook

Relevance

This handbook recommends practical approaches for teachers and educators to promote critical thinking and action in response to climate change.

Food Security and Climate Change Challenge Badge [Go to Factsheet](#)

General Audience(s)

Technical Staff/Practitioners; General Public

Type of Material

Other

Relevance

This badge inspires ideas on how to design and personalize informal learning activities and materials for climate change education. It includes activities targeting three age groups: five to ten years old, eleven to fifteen and sixteen to twenty.

<h2>Heat up over Climate Change: Exploring Climate Change and its Effects on the World's Children: A Peer Education and Action Pack Go to Factsheet</h2>	
<p>General Audience(s) Technical Staff/Practitioners; General Public</p> <p>Type of Material Training Manual/Material</p>	<p>Relevance This action pack can be used by peer educators, youth workers and teachers. It is designed to get a group thinking about and taking action on climate change.</p>
<h2>How Is Climate Change Affecting Our Health? A Manual for Teachers Go to Factsheet</h2>	
<p>General Audience(s) Decision Makers; Technical Staff/Practitioners; General Public</p> <p>Type of Material Training Manual/Material</p>	<p>Relevance This manual is designed to help teachers sensitize growing adults about the importance of the linkages between climate change and human health via interactive classroom activities. A manual for students is also available for further home study and information-sharing with families.</p>
<h2>Education Kit on Climate Change and Child Rights - How to Defend Child Rights Affected by Climate Change: A Teacher's Guide for Exploration and Action with Children 11-16 Years Old Go to Factsheet</h2>	
<p>General Audience(s) Technical Staff/Practitioners; General Public</p> <p>Type of Material Training Manual/Material</p>	<p>Relevance This toolkit guides teachers and facilitators for in-school and extracurricular activities in industrialized countries on climate change issues and impact on child rights. It provides step-by-step instructions for the preparation of various activities with children such as role plays, simulations, games and creative writing.</p>
<h2>Sandwatch: Adapting to Climate Change and Educating for Sustainable Development Go to Factsheet</h2>	
<p>General Audience(s) Technical Staff/Practitioners; General Public</p> <p>Type of Material Training Manual/Material</p>	<p>Relevance This document introduces the methodology used by Sandwatch, an initiative through which children, youth, teachers and communities work together to monitor their beaches and then design and implement activities to address some of the issues identified, whilst enhancing the beach environment and building resilience to climate change.</p>
<h2>Youth Xchange Climate Change and Lifestyles Guidebook Go to Factsheet</h2>	
<p>General Audience(s) Technical Staff/Practitioners; General Public</p> <p>Type of Material Guidance Document/ Handbook</p>	<p>Relevance This guidebook provides people working with youth, such as educators, teachers, trainers, as well as young people, with background information on climate change and lifestyles, examples of causes, effects and solutions from around the world, and suggested starting points for youth engagement and action.</p>

Training Courses

Climate Change in the Classroom

[Go to Factsheet](#)

General Audience(s)

Technical Staff/Practitioners

Type of Material

Course

Relevance

This course aims to promote professional development for teachers on climate change. It covers six main themes and has a flexible design. Users are invited to select sections and exercises and adapt the materials to their specific geographical social and cultural context.

Teaching and Learning for a Sustainable Future: A Multimedia Teacher Education Programme

[Go to Factsheet](#)

General Audience(s)

Technical Staff/Practitioners

Type of Material

Course

Relevance

This multimedia education programme contains 100 hours (divided into 27 modules) of professional development for use in pre-service teacher courses as well as the in-service education of teachers for the promotion values, behaviour, and lifestyles required for a sustainable future. Module 19 focuses specifically on climate change.

Learning Topic 4

Safe and Sustainable School Campuses

Written Resources

Climate Change Adaptation and Disaster Risk Reduction in the Education Sector

[Go to Factsheet](#)

General Audience(s)

Decision Makers; Technical Staff/Practitioners; General Public

Type of Material

Guidance Document/
Handbook

Relevance

This document highlights that implementing climate change adaptation and DDR in the education sector also means that school buildings, facilities and grounds include efficient use of natural resources and energy and a clean environment. Schools can also act as laboratories, allowing children, teachers and communities to learn how to put environmental education into practice. Section 9.3 specifically focuses on these topics.

Climate Change and Environmental Education: A Companion to the Child Friendly Schools Manual

[Go to Factsheet](#)

General Audience(s)

Decision Makers; Technical Staff/Practitioners

Type of Material

Guidance Document/
Handbook

Relevance

Chapter 4 of this guidebook looks at the strong need for schools to be protective and physical safeties from impacts triggered by climate change. Chapter 5 discusses school buildings and grounds as laboratories to increase the physical environment's child-friendliness and promote school-based environmental project.

Disaster Risk Reduction in Education: An Imperative for Education Policymakers

[Go to Factsheet](#)

General Audience(s)

Decision Makers

Type of Material

Guidance Document/
Handbook

Relevance

This document lists some recommendations on actions for policy makers to take in order to promote disaster risk reduction teaching and learning as well as school safety and disaster management.

Disaster Risk Reduction in School Curricula: Case Studies from 30 Countries

[Go to Factsheet](#)

General Audience(s)

Decision Makers; Technical Staff/Practitioners

Type of Material

Analytical/Technical
Document

Relevance

This document stresses the importance of integrating disaster risk reduction not only in the school curriculum but also in schools on the whole, as school safety infrastructures and procedures.

Education Sector Responses to Climate Change: Background Paper with International Examples

[Go to Factsheet](#)

General Audience(s)

Technical Staff/Practitioners;
General Public

Type of Material

Guidance Document/
Handbook

Relevance

This handbook presents some successful practices to climate proof education infrastructure and promote sustainable schools by discussing examples implemented in different countries.

Food Security and Climate Change Challenge Badge

[Go to Factsheet](#)

General Audience(s)

Technical Staff/Practitioners;
General Public

Type of Material

Other

Relevance

This badge provides great ideas on where and how to start (or enhance) greening school campuses.

How Is Climate Change Affecting Our Health? A Manual for Teachers

[Go to Factsheet](#)

General Audience(s)

Decision Makers; Technical
Staff/Practitioners; General
Public

Type of Material

Training Manual/Material

Relevance

Chapter 3 of this document provides examples of mitigation measures to adopt at local levels, including in school milieus.

Training Courses

Climate Change in the Classroom

[Go to Factsheet](#)

General Audience(s)

Technical Staff/Practitioners

Type of Material

Course

Relevance

This course book highlights that a whole-school approach is considered vital for effectively addressing climate change challenges and demonstrating the urgent need for practical action. This approach includes various initiatives towards making the school carbon neutral, transforming unsustainable institutional practices, and enaging students with climate change adaptation and mitigation initiatives within their school.

Part III Factsheets

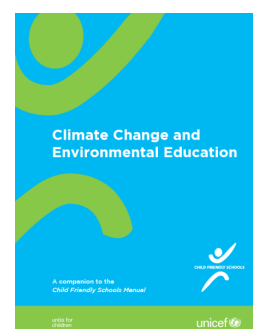
Climate Change and Environmental Education: A Companion to the Child Friendly Schools Manual

Go to Document

Organization(s)	Language	Type of Material
UNICEF	English	Guidance Document/Handbook
Year of Publication	General Audiences	
2012	Decision Makers; Technical Staff/Practitioners	

Value of Learning Resource

This guidebook informs the learner on how climate change and environmental education can be integrated into the design, implementation and practice of child-friendly schools by providing supporting examples and illustrating approaches. It is intended as a guidance adaptable to different contexts and settings and would interest readers wanting to learn more about the relationship between climate change and children's rights. The guidebook provides educators with solid theories in advancing the scaling up and mainstreaming of climate change adaptation and disaster risk reduction in the education sector.



Structure and Content

- Section 1 States the purpose and the scope of this guidebook. It notes an essential need for a strong global institutional framework that addresses children's vulnerabilities to climate change and the skills needed for them to mitigate and adapt to climate change and disaster risks;
- Section 2 Explores the incorporation of different models of climate change and environmental education into child-friendly schools in different contexts;
- Section 3 Looks at the required inputs for child-centred pedagogy and teacher education in climate change education;
- Section 4 Argues for the strong need for schools to be the protective and physical safeties from impacts triggered by climate change;
- Section 5 Supports the needs for school-based environmental projects that encourage child participation as a good starting point for climate change learning;
- Section 6 Looks at schools and communities' dependence on each other: the community as a resource for schools and vice versa;
- Section 7 Discusses the scaling-up and mainstreaming of climate change in the education sector and other sectors and highlights that a cross-sectoral approach can help apply child-friendly school principles to global and national frameworks around climate change;
- Section 8 Concludes by stating that on-going mechanisms must monitor and evaluate the effectiveness and efficiency of climate change education with results guiding to where adjustments to programmes and processes are needed.

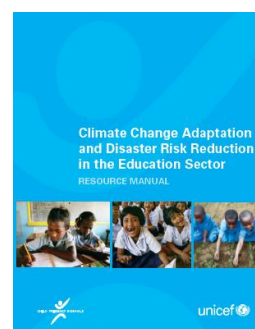
Climate Change Adaptation and Disaster Risk Reduction in the Education Sector

[Go to Document](#)

Organization(s)	Language	Type of Material
UNICEF	English	Guidance Document/Handbook
Year of Publication	General Audiences	
2012	Decision Makers; Technical Staff/Practitioners; General Public	

Value of Learning Resource

This manual assists governments and education practitioners in scaling up and mainstreaming climate change adaptation and disaster risk reduction in the education sector. It identifies key entry points at the policy, planning and advocacy levels and calls for a process based on country-specific evidence and socio-economic analysis. This manual aims for multiple stakeholders to participate, collaborate and communicate so to achieve quality education.



Structure and Content

- Module 1 Describes the purpose, content and rationale of this manual;
- Module 2 Advises on how to present the case of mainstreaming climate change learning in the education sector and how to defend it;
- Module 3 Discusses international legal instruments related to child rights and education, climate change, disaster risk reduction and education for sustainable development;
- Module 4 Enlightens effective approaches for scaling up and mainstreaming climate change education;
- Module 5 Provides an overall conceptual framework describing how non-formal education can complement formal schooling systems and play a key role in the overall education of children;
- Module 6 Examines methods in risk analyses of vulnerable communities;
- Module 7 Suggests monitoring and evaluating tools in involving youth as stakeholders and prioritizing the effectiveness, efficiency and quality of implementation of climate change learning in the education sector;
- Module 8 Encourages multi-sectoral and cross-sectoral approaches to planning and implementation of climate change adaptation and disaster risk reduction in education, and describes potential points of engagement for different sectors;
- Module 9 Discusses implementation plans and different approaches for education sector mainstreaming and scaling up of climate change adaptation and disaster risk reduction;
- Module 10 Concludes the manual by showing how the different steps discussed work in practice by using Albania, Brazil, The Maldives, The Philippines and Zimbabwe as case studies.

Disaster Risk Reduction in Education: An Imperative for Education Policy-makers

Go to Document

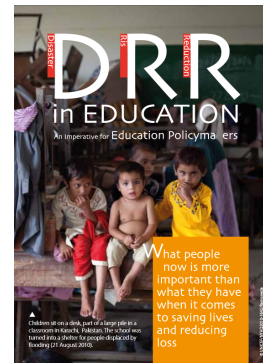
Organization(s)	Year of Publication	Type of Material
UNICEF and UNESCO	2010 Language English	Guidance Document/Handbook General Audiences Decision Makers

Value of Learning Resource

This document highlights the importance of education for building a society resilient to environmental and climate hazards. It directly targets policy makers and decision makers in the education sector to demonstrate the imperative of integrating disaster risk reduction in education. It looks at what disaster risk reduction in education is, why policy makers should invest in it, how education policy makers can contribute to it and, finally, recommends actions for policy makers to raise its importance and application in the education sector.

Structure and Content

- 1 Why Invest in DRR in Education?: lists the reasons for investing in disaster risk reduction in education;
- 2 What is DRR in Education?: explains what disaster risk reduction in education involves and what it can do;
- 3 How Can Education Policymakers Contribute?: introduces actions for policy makers to take in order to ensure the successful integration of disaster risk reduction in the education sector;
- 4 Recommended Actions for Policymakers: lists some recommendations on actions for policy makers to take in order to mainstream disaster risk reduction in education policy and planning, promote its teaching and learning and provide school safety and disaster management.



Disaster Risk Reduction in School Curricula: Case Studies from 30 Countries

[Go to Document](#)

Organization(s)	Year of Publication	Type of Material
UNESCO and UNICEF	2012 Language English	Analytical/Technical Document General Audiences Decision Makers; Technical Staff/Practitioners

Value of Learning Resource

This document captures key national experiences in 30 countries of their integration of DRR in the curriculum by identifying good practices, noting issues addressed and reviewing learning outcomes. This document's strength lies in its in-depth and wide-scale analysis of DRR in formal education, identifying the gaps in its delivery and what needs to be included to strengthen its curricular status in the selected countries. Consequently, this document particularly targets curriculum developers and other decision makers in the education sector.



Structure and Content

- Section 1 States the purpose, methodology and target audience of this document;
- Section 2 Discusses the methodology employed in the study;
- Section 3 Looks at which school subjects in the curriculum DRR learning is already integrated in, in the selected countries;
- Section 4 Looks at the current approaches to integrating DRR in the school curriculum of the 30 countries and lists their advantages and disadvantages;
- Section 5 Investigates the current and other possible pedagogical approaches to DRR;
- Section 6 Discusses the assessment of student learning in DRR education across the 30 selected countries;
- Section 7 Evaluates the quality and efficiency of teacher training programmes for DRR education in the selected countries;
- Section 8 Discusses the established learning outcomes of DRR education;
- Section 9 Identifies other factors of policy, planning and implementation;
- Section 10 Lists and discusses the case studies carried out in 30 selected countries;
- Section 11 Provides a checklist of optimal DRR curriculum practice.

Climate Change Starter's Guidebook: An Issue Guide for Education Planners and Practitioners

Go to Document

Organization(s)	Year of Publication	Type of Material
UNESCO and UNEP	2011 Language English	Guidance Document/Handbook General Audiences Decision Makers; Technical Staff/Practitioners

Value of Learning Resource

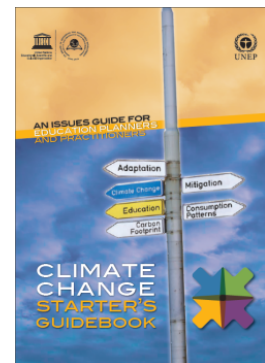
This guide provides an introduction and overview for education planners and practitioners on the wide range of issues related to climate change and climate change education, including causes, impacts, mitigation and adaptation strategies, as well as some political and economic principles. The aim of this guide is to serve as a starting point for mainstreaming climate change education into schools curricula.

Structure and Content

- Chapter 1 The Science of Climate Change: explains the components of the climate system, outlines the underlying factors of observed climate change and concludes by presenting the climate change impacts that can be observed today;
- Chapter 2 Society and Climate Change: explores the social impacts of climate change, especially on the most vulnerable populations;
- Chapter 3 Responding to Climate Change: focuses on mitigation and adaptation strategies and presents various options for each. It also looks at the economics of climate change and explains the international policy framework for dealing with climate change as well as current negotiated global agreements;
- Chapter 4 Education and Climate Change: describes educators' and education's role in the fight against climate change and preparation for its current and future impacts.

Additional Information

This guide also provides a glossary with definitions of specific climate change-related terms.



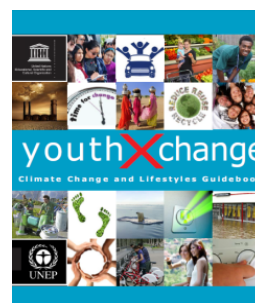
Youth Xchange Climate Change and Lifestyles Guidebook

[Go to Document](#)

Organization(s)	Year of Publication	Type of Material
UNESCO and UNEP	2011 Language English	Guidance Document/Handbook General Audiences Technical Staff/Practitioners; General Public

Value of Learning Resource

This guidebook is designed for direct use by youth (15-24 years old) as well as for people working with youth such as educators, teachers, trainers and youth leaders in both developed and developing countries. Its overall objective is to educate young people about our everyday lifestyle choices and how these contribute to climate change and its impacts. It compares a high-carbon consuming lifestyle to a sustainable consumption and way of living for raising youngsters' concern and motivation to take action against climate change.



Structure and Content

- 1 Learning for Change: stresses that education is vital in helping young people to respond to the challenges of climate change and introduces the concept of education for sustainable development (ESD);
- 2 Changing Climates & Changing Effects and Impacts: explain key issues surrounding climate change and discuss its effects on the planet;
- 3 Lifestyle Choices & Good Life: underline that lifestyle choices have an impact on the planet and discuss sustainable consumption;
- 4 Food: analyses impacts of choices that consumers make on food and beverages and possible alternatives to this current behaviour;
- 5 Energy Control & Travel and Transport: focus on energy control and highlight that transport accounts for about 15% of overall greenhouse gas emissions;
- 6 Leisure and Entertainment & Shopping for Stuff: propose ways to have fun whilst taking action on climate change and stress that shopping is one of the biggest areas in which young people can make a contribution to counter climate change;
- 7 Money and Jobs: highlights that choices about the way people spend or invest money as well as jobs can have a big impact on climate change;
- 8 Connecting with Others: advises on how to communicate well with others about the causes, effects and ways of reducing climate change;
- 9 Taking Action: speaks of young people as the generation with the knowledge, skills and technology needed to prevent the catastrophic impacts of climate change;
- 10 Online Resources: lists free online resources for additional information;
- 11 Useful Terms: defines key terms in relation to climate change and sustainable development.

Sandwatch: Adapting to Climate Change and Educating for Sustainable Development

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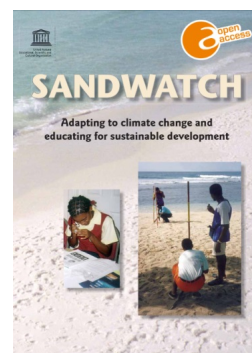
Organization(s)	Year of Publication	Type of Material
UNESCO	2010	Training Manual/Material
	Language	General Audiences
	English	Technical Staff/Practitioners; General Public

Value of Learning Resource

This document aims to educate young learners on the resilience of beaches to climate change. Sandwatch provides a framework for youth, adults, teachers and communities to evaluate problems facing their beaches and develop sustainable approaches to address these issues. This document is designed for youth and educators whom should find it applicable in the drive for implementing climate change actions.

Structure and Content

- 1 Introduction & Climate Change Adaptation and Education for Sustainable Development: state objectives and methodology and explore ways in which Sandwatch can contribute to adaptation through education for sustainable development;
- 2 Getting Started & Observation and Recording: advise on how to get involved in this initiative and discuss how to develop data on a beach environment;
- 3 Erosion and Accretion & Beach Composition: point at how to observe climatic changes on a beach environment and how human activities contribute to these changes;
- 4 Human Activities on the Beach & Beach Debris: indicate at how to observe human activities on a beach environment and speak of the natural and man-made debris left behind and its health and economic impacts on beach users and local communities;
- 5 Water Quality: discusses how climate change affects the quality of the water in a beach environment;
- 6 Wave Characteristic, Currents & Plants and Animals: argue that climate change will likely impact wave regimes as well as longshore current regimes and discuss how projected impacts of climate change will affect beach ecosystems;
- 7 Creating your Sandwatch Network & Taking Action: explain how to share findings and how to design, implement and evaluate a beach-related project.



Additional Information

This document is literally designed for environmentally active youth and educators whom should find it self-explanatory, fun, relatable and applicable in the drive for implementing climate change actions.

Education Kit on Climate Change and Child Rights - How to Defend Child Rights Affected by Climate Change: A Teacher's Guide for Exploration and Action with Children 11-16 Years Old

[Go to Document](#)

Organization(s)	Year of Publication	Type of Material
UNICEF	2011	Training Manual/Material
	Language	General Audiences
	English	Technical Staff/Practitioners; General Public

Value of Learning Resource

This toolkit guides teachers and facilitators for in-school and extracurricular activities in industrialized countries on the issue of climate change and its impacts on child rights. Its goal is to enlighten youngsters on the links between climate change and their rights so to empower them to fight against it and become actors of change. The toolkit was developed for young people aged 13–15 though could be used with younger and older audiences, by adapting the content depending on their skills and knowledge. It is rich in activities with step-by-step instructions for facilitators and teachers to involve children through role plays, simulations and games, to name a few.



Structure and Content

- 1 Introduction for Teachers and Facilitators: introduces the toolkit, including target audience and purpose, and explains how teachers can use it;
- 2 Information Background: Climate change, Children and Child Rights: provides a general introduction to the issue of climate change and children (definitions, impacts and children's rights);
- 3 Activities: includes two modules. Module 1 explores the issue of climate change and its link with child rights; Module 2 is action-oriented and contains a series of activities to enhance children's skills and motivation in becoming actors of change for climate change mitigation;
- 4 Annex: features a student handout for inspiration and ideas to take away from reading and practising this toolkit.

Additional Information

This toolkit is an excellent resource for activities with step-by-step instructions for facilitators and teachers involving children through various activities such as role plays, simulations, games and creative writing.

Heat up over Climate Change: Exploring Climate Change and its Effects on the World's Children: A Peer Education and Action Pack

[Go to Document](#)

Organization(s)	Year of Publication	Type of Material
UNICEF	2009	Training Manual/Material
	Language	General Audiences
	English	Technical Staff/Practitioners; General Public

Value of Learning Resource

This action pack targets peer educators, youth workers and teachers and is designed to get a group thinking about taking action on climate change. It proposes a series of activities aimed at raising awareness of climate change and its effects on children, promoting group thinking on how to concretely address climate change, as well as sharing experience and inspiring others to get involved.

Structure and Content

- 1 Know More: includes three activities that enable users to find out more about climate change and its effects on the world's children;
- 2 Explore More: proposes two activities that encourage users to consider some big climate questions, such as 'who is responsible for climate change?', 'who is responsible for sorting it out?' and 'how can we make any difference?';
- 3 Do More: provides users with the support and guidance to get a group thinking about what action they could take on climate change;
- 4 Share More: provides a simple form for users to complete to tell about their activities and send any pictures and videos that inspire others to get involved.



How Is Climate Change Affecting Our Health? A Manual for Teachers

Go to Document

Organization(s)	Year of Publication	Type of Material
WHO	2008	Training Manual/Material
	Language	General Audiences
	English	Decision Makers; Technical Staff/Practitioners; General Public

Value of Learning Resource

This manual aims to sensitize growing adults about the importance of the links between climate change and human health. Students will learn the reasons for the changes going on, how they affect each one of us in one way or another, and how we can respond to them. The complete resource consists of two manuals: one for teachers and one for students. The teachers' manual is a training resource to support spreading the information via interactive classroom activities; while the student's manual is for them to take home, study and share information about climate change and its impacts on human health with their families.



Structure and Content

- 1 Climate Change in Our Region: introduces the manual users to the issue of climate change and its major impacts, and proposes some exercises supporting the knowledge acquired in this section;
- 2 Impacts of Climate Change: How Does It All Relate to Me?: describes the impacts of climate change on human health and needs. This section ends with exercises reflecting on the knowledge acquired in the chapter;
- 3 What Can We Do to Make a Difference?: provides examples of mitigation and adaptation measures and a list of tips for personal action to help reduce the adverse health impacts from climate change.

Additional Information

Additional chapters in this manual are annexes with "Food for Thought" questions, case studies, activities and a glossary. A version of this manual designed to be used by young people with their families, including additional activities that could be carried out outside school hours, is available at the following link: <http://www.unclearn.org/sites/www.unclearn.org/files/inventory/WHO04.pdf>

Food Security and Climate Change Challenge Badge

[Go to Document](#)

Organization(s)	Year of Publication	Type of Material
FAO, World Association of Girl Guides and Girl Scouts, Youth and United Nations Global Alliance	2009	Other
	Language	General Audiences
	English	Technical Staff/Practitioners; General Public

Value of Learning Resource

This badge educates children and young people about climate change and food security while encouraging them to take action against global warming, environmental degradation and hunger in the world. The ambition behind the carrying out of the suggested activities is to reduce their environmental footprint and learn how to make better consumer and lifestyle choices. This badge directly targets the young aged from 5 to 20, viewing them as important players and responsible citizens in the drive of establishing and developing climate change education.



Structure and Content

- 1 Introduction to Food Security and Climate Change: states the impacts of climate change on food security and the role of this badge in addressing such impacts;
- 2 About the Badge: discusses uses of this badge and how its curriculum is divided into 3 main categories: "our climate", "our food" and "our world";
- 3 Our Climate: presents activities to help young people understand weather and climate, determine their impacts on the environment and find solutions to deal with the effects of climate change;
- 4 Our Food: presents activities to help young people learn about the consequences of our food and lifestyle choices on our planet and our dependence on climate for our health and nutrition;
- 5 Our World: presents ideas to help youngsters carry out projects and programmes in their local communities, reduce unsustainable use of resources, restore ecosystems and fight world hunger;
- 6 Resources and Additional Information: provides links to organizations and training materials for further knowledge and ideas.

Additional Information:

This badge is particularly ideal for use in boys and girls scouting activities and in summer programmes to train young people to appreciate the natural world and its resources. It is also a great source of knowledge and ideas for designing extra-curricular activities that centre around climate change education.

Climate Change Take Action Now! A Guide to Supporting the Local Actions of Children and Young People, with Special Emphasis on Girls and Young Women

Go to Document

Organization(s)	Year of Publication	Type of Material
UNICEF, FAO, The International Award Association, International Federation of Red Cross and Red Crescent Societies, World Alliance of YMCAs, World Young Women's Christian Association, World Association of Girl Guides and Girl Scouts, World Organization of the Scout Movement	2009	Guidance Document/Handbook
	Language	General Audiences
	English	Decision Makers; Technical Staff/Practitioners; General Public

Value of Learning Resource

This booklet guides facilitators, peer educators, project officers, teachers and youth workers in supporting young people to take climate change action in non-formal learning settings, both in and out of school. This can take up a range of different forms, from practical projects to awareness workshops, performances, community mapping or preparations for natural disasters. Through suggestions and sample activities, it aims to support young people to participate, empower them and build their skills and values. This resource can be used with any group but places emphasis on the power and potential of girls and young women as catalysts for change in their communities.



Structure and Content

Introducing Climate Change: Take Action Now: states the purpose of this booklet and how it is structured;

- Step 1 Getting Started: Find out More about Climate Change: suggests ways through which a group of young people can carry out research to understand more about the greenhouse gas effect and the impact of a changing climate on their community;
- Step 2 Identifying the Problem: speaks of how a group of young people can identify and research a single problem in their own community;
- Step 3 Planning your Activity: concerns the planning of activities, the setting of some goals and the development of a plan to reach those goals;
- Step 4 Taking Action: discusses implementation and suggests a range of actions the group can take, depending on the aim and the resources available;
- Step 5 Spreading the Word: speaks of the importance of good communication as part of making the project successful;
- Step 6 How Did We Do?: reflects on the success of the action through evaluation and monitoring of progress;
- Step 7 Next Steps: inspires users to continue on with their interests, to learn more, to take further action and to inspire others to act.

Additional Information

This booklet also includes a series of fact sheets, a list of resources for further information and a glossary of key terms in the annex.

Education Sector Responses to Climate Change: Background Paper with International Examples

[Go to Document](#)

Organization(s)	Year of Publication	Type of Material
UNESCO	2012	Guidance Document/Handbook
	Language	General Audiences
	English	Technical Staff/Practitioners; General Public

Value of Learning Resource

This handbook explores the relationship between the education sector and climate change. It introduces how education is both impacted by and has an impact on this phenomenon, and proposes various sector responses. It provides guidance on how, why and where to adjust educational systems to incorporate climate change learning and foster immediate initiatives that leave educators and learners equipped with the skills and knowledge to support climate change mitigation and adaptation action now and in the near future.



Structure and Content

- Section 1 Discusses the negative impact of climate change on education and the challenges to its incorporation into the education sector;
- Section 2 Stresses the importance of education as a key player in acting on climate change resilience;
- Section 3 Provides an analytical framework of climate change responses in the education sector, discussing various interventions.
- Section 4 Speaks of the successful practices emerged that address different aspects of climate change adaptation and mitigation;
- Section 5 Concludes by stating that the education sector responses to climate change are still in the early stages and that the building of a culture which is resilient to climate change at all societal levels is a long-term effort and strategy.

Additional Information

This handbook is particularly ideal for countries where their national education sector already has climate change learning embedded in different school subjects. This is because it guides on ways to adjust an already existing school system to better train educators and learners on climate change adaptation and mitigation.

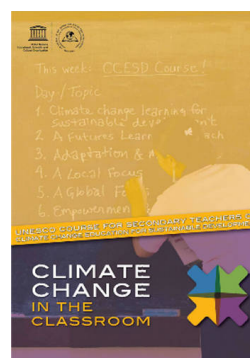
Climate Change in the Classroom

[Go to Document](#)

Organization(s)	Year of Publication	Type of Material
UNESCO	2013	Course
	Language	General Audiences
	English	Technical Staff/Practitioners

Value of Learning Resource

This course enables secondary school teachers from diverse subject areas to introduce climate change education for sustainable development across the curriculum. Previous studies have shown that there is a need to respond to climate change challenges through systematic teacher education programmes that are not restricted to a single subject area. This teacher education course is an attempt to fill that current gap and is in line with one of UNESCO's key objectives for climate change education for sustainable development, that is, to support teacher training on climate change for sustainable development.



Structure and Content

- 1 Welcome: provides a brief introduction and an outline of the document;
- 2 Course Framework and Overview: sets the stage for the course, providing background on climate change education for sustainable development (CCESD), course rationale, module overviews, and practical hints and tips for organizing and giving the course;
- 3 Day One: Climate Change Learning for Sustainable Development: explores education for sustainable development (ESD) and climate change education (CCE) in theory and practice and their mutually reinforcing characteristics;
- 4 Day Two: Climate Change: A Futures Learning Approach: explores teaching and learning about climate change across time, especially the present and the future;
- 5 Day Three: Learning for Climate Change Adaptation and Mitigation: delves into climate change mitigation and adaptation and the overlaps and relationships between the two;
- 6 Day Four: Climate Change Learning: A Local Focus: focuses on local community and school-based climate change learning;
- 7 Day Five: Climate Change Learning: A Global Focus: takes a global perspective, exploring climate change as a complex global phenomenon and weaving together cross-cutting issues such as gender, health, human rights, peace and social justice;
- 8 Day Six: Confronting Climate Change: Towards Empowerment and Action: gives participants experience in eliciting their students' concerns about the future and in translating their feelings of despair and powerlessness in the face of climate change into feelings of purposefulness and empowerment;
- 9 Regional Resource Pack: Africa: contains Africa-specific information to be used as background for classroom lessons and activities;
- 10 Regional Resource Pack: Asia: contains Asia-specific information to be used as background for classroom lessons and activities;
- 11 Regional Resource Pack: Europe and North America: contains Europe and North America-specific information to be used as background for classroom lessons and activities;

- 12 Regional Resource Pack: Small Island States: contains Small Island States-specific information to be used as background for classroom lessons and activities;
- 13 Facilitation Guide for Classroom Activities – Day 1 - Learning about Climate Change: provides daily classroom materials for teachers to promote climate change learning;
- 14 Facilitation Guide for Classroom Activities – Day 2 - Futures Learning: provides daily classroom materials for teachers on climate change across time, especially the future;
- 15 Facilitation Guide for Classroom Activities – Day 3 - Climate Change Mitigation and Adaptation: provides daily classroom materials for teachers on climate change mitigation and adaptation;
- 16 Facilitation Guide for Classroom Activities – Day 4: Climate Change Learning: A Local Focus: provides daily classroom materials for teachers with a focus on local communities and schools;
- 17 Facilitation Guide for Classroom Activities – Day 5 - A Global Focus on Climate Change: provides daily classroom materials for teachers focusing on climate change as a global phenomenon;
- 18 Facilitation Guide for Classroom Activities – Day 6 - Towards Empowerment and Action: provides daily classroom materials for teachers on involving and empowering students.

Teaching and Learning for a Sustainable Future: A Multimedia Teacher Education Programme

[Go to Document](#)

Organization(s)	Year of Publication	Type of Material
UNESCO	2010	Course
	Language	General Audiences
	English	Technical Staff/Practitioners

Value of Learning Resource

This education programme helps teachers understand key concepts and issues of sustainable development and integrate it in established school curricula. It considers various interdisciplinary topics. Module 19 specifically addresses climate change. The programme also includes a set of modules to build teachers' skills on the teaching and learning strategies to promote education for sustainable development. The content of the programme can be adapted to different national and regional contexts and provides valuable insights also for educators and curriculum developers.



Structure and Content

- 1 Curriculum Rationale: looks at the rationale for education for a sustainable future including global realities, imperatives for sustainable development and educational issues;
- 2 Sustainable Development across the Curriculum: illustrates ways in which education for sustainable development can be integrated into all areas of the curriculum, especially into cross curriculum themes such as health and consumer education;
- 3 Contemporary Issues: illustrates ways in which a variety of curriculum themes may be recognised to integrate an interdisciplinary emphasis on a sustainable future;
- 4 Teaching and Learning Strategies: enlists a set of modules to develop professional skills for using teaching and learning strategies that can help students achieve a wide range of knowledge, skills and values of education for sustainable development.

Additional Information

This programme could also serve as a blueprint for integrating sustainable development and climate-related developments in a curriculum.

ANNEX 1

Selected Non UN Written Resources and Training Courses

Learning Topic 3

Training and Teaching Materials for Teachers and Educators

Climate Change - Primary Education Materials

Department of Environment and Conservation, Government of Western Australia, 2007

This manual contains materials, resources and worksheets for primary school teachers working with students in years 3-7. The lessons are designed to engage students in scientific inquiry to explain and understand some of the observable impacts of climate change.

https://www.google.ch/url?sa=t&rct=j&q=&esrc=s&source=web&cd=2&ved=0CCQFjAB&url=http%3A%2F%2Fwww.dec.wa.gov.au%2Fpublications%2Fdoc_download%2F1713-climate-change-primary-education-materials.html&ei=98jPU6r_J-mv0QWe8IEQ&usg=AFQjCN-G8ahwXcbJB8Wfyu-7utxp00ACTQQ

Climate Change - Secondary Education Materials

Department of Environment and Conservation, Government of Western Australia, 2007

This manual contains materials, resources and worksheets for secondary school teachers working with students in years 8-10. The lessons are designed to engage students in scientific inquiry to explain and understand some of the observable impacts of climate change.

https://www.google.ch/url?sa=t&rct=j&q=&esrc=s&source=web&cd=2&ved=0CCYQFjAB&url=http%3A%2F%2Fwww.dec.wa.gov.au%2Fpublications%2Fdoc_download%2F1714-climate-change-secondary-education-materials.html&ei=N8jPU4ySEKWm0QWnmYCICA&usg=AFQjCNEU8Ck-b89rW8JtLkQIEwqtgfenfPg

The My2050 Schools Toolkit: A Guide for Teachers Wanting to Engage Students in the Climate Change Debate

Department of Energy and Climate Change, UK Government, Involve, Think Global and Sciencewise-ERC, 2012

This toolkit includes a set of activities that can be used in the classroom to engage students in debates about climate change and energy. It has been designed for use in the citizenship, geography, science or maths curriculum. The target audience in schools is students between the ages of 11 and 16, but can be modified for use by younger or older students.

<http://www.involve.org.uk/wp-content/uploads/2011/12/schools-toolkit-pdf-version.pdf>

Climate4Classroom

The British Council, The Royal Meteorological Society and The Royal Geographical Society

The Climate4Classrooms website provides curriculum linked teaching resources about climate change for secondary school students all around the world. It features a series of teaching modules, each with clear learning outcomes, activity plans and student activity sheets. Additional resources include: interactive data sets showing the latest global and national climate predictions, videos, case studies and guidance for teachers.

<http://www.climate4classrooms.org/>

Climate Chaos

Oxfam

These materials provide an overview of the causes and consequences of climate change, and help teachers explore its impact on everyone, especially people in the developing world. This resource is divided into five days of activities about climate change for ages 9–11.

<http://www.oxfam.org.uk/education/resources/climate-chaos>

Teaching about Global Climate Change: An Online Resource for Teachers

Association of American Geographers with funding support from NASA's Global Climate Change Education Program

This online professional development module targets geography and social studies teachers at the middle school level. It provides the preparation materials for teachers who are teaching about global climate change. It includes: Earth system science background and overview; common student misconceptions; resources for learning and teaching about global climate change; and a teacher to teacher forum to share ideas, resources, and teaching strategies.

http://meridian.aag.org/climate/index.cfm#pairing_id=1

Learning Topic 4

Safe and Sustainable School Campuses

Sustainable Schools: Best Practices Guides

Ministry of Education, Government of British Columbia, Canada, 2010

The guide is designed to help the school community at the elementary or secondary level address sustainability issues. It outlines best practices to help green-team leaders (e.g. students, teachers, administrators, support staff, parents) lead the school community through environmental actions in the areas of energy, waste, water, school grounds, and transportation. The guide contains ideas for school-based solutions in each of these areas, with questionnaires, checklists, and specific resources.

<http://www.bced.gov.bc.ca/greenschools/pdfs/sustbestpractices.pdf>

Guide for Sustainable Schools in Manitoba

International Institute for Sustainable Development, Manitoba Education, 2010

This guide seeks to support Manitoba schools and their communities in their goals to become sustainable. The guide invites schools to take a whole-school approach to sustainability, exploring sustainability through curriculum, in addition to real-life learning experiences, improvements in school management of resources and facilities (e.g. energy, waste, water, biodiversity, schoolyard design, and purchasing of products and materials) and associated social and financial issues.

http://www.edu.gov.mb.ca/k12/esd/pdfs/sustainable_guide.pdf

About UN CC:Learn

UN CC:Learn is a partnership of 33 multilateral organizations which supports Member States in designing and implementing results-oriented and sustainable learning to address climate change. The Secretariat for UN CC:Learn is provided by the UN Institute for Training and Research (UNITAR). One of the objectives of UN CC:Learn is to facilitate access to existing climate change learning materials and to support the development of complementary learning resources, as appropriate. The publication of Advanced Learning Packages on Priority Topics of Climate Change (ALPs) contributes to this objective. ALPs are compiled for selected topics of climate change that have been identified as important topics from a country perspective. Core funding for the 2011-2013 implementation phase of UN CC:Learn is provided by the Swiss Government. For further information please contact: uncclearn@unitar.org

www.uncclearn.org

Funding for the 2011-2013 UN CC:Learn pilot implementation phase is provided by the Government of Switzerland.



Schweizerische Eidgenossenschaft
Confédération suisse
Confederazione Svizzera
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Swiss Confederation

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and Cooperation SDC

