



United Nations
Educational, Scientific and
Cultural Organization



UNESCO
Associated
Schools



Resources for Education on Climate Change



I. Materials for Classroom Use

A. Materials from UNESCO

1. LEARNING TO ADDRESS CLIMATE CHANGE (VIDEO CLIP)

Brief Introduction: This video demonstrates in four minutes why climate change education is important to shape sustainable development and how it works in practice.

Source: UNESCO

Education level(s)/type(s): Primary, Secondary and Higher Education

Region(s): Global

Languages available:

- English:
http://www.unesco.org/archives/multimedia/?s=films_details&pg=33&id=2569
- French:
http://www.unesco.org/archives/multimedia/?s=films_details&pg=33&vo=2&vl=Fre&id=2569
- Spanish:
http://www.unesco.org/archives/multimedia/?s=films_details&pg=33&vo=3&vl=Spa&id=2569

2. YOUTH XCHANGE GUIDEBOOK ON CLIMATE CHANGE AND LIFESTYLES

Brief Introduction: This publication focuses on the challenges, opportunities and good practices of climate change. It explores the interrelationship between climate change and lifestyles through a scientific, political, economic, social, ethical and cultural angle and identifies actions young people might take towards more sustainable lifestyles. It provides information, case studies and useful tips around topics relevant to young people and their everyday lives, such as food and drink, travel and transport, leisure and entertainment. The guide was produced for young people and people working with them such as educators, teachers, trainers and youth leaders around the world.

Source: UNESCO and UNEP

Education level(s)/type(s): Primary and Secondary

Region(s): Global

Languages available:

- English: <http://unesdoc.unesco.org/images/0021/002128/212876e.pdf>
- French: <http://unesdoc.unesco.org/images/0023/002348/234825f.pdf>

3. SANDWATCH

Brief Introduction: Sandwatch is an educational process through which school students, teachers and local communities work together in the field to monitor their coastal environments; identify and evaluate the threats, problems and conflicts facing them; and develop sustainable approaches to address them. Climate change is integral part of the Sandwatch activities. The Sandwatch website provides inspiring examples on how students and young people have been addressing climate change so far. In addition, the manual “Adapting to Climate change and educating for Sustainable Development” was developed to guide teachers and educators to integrate climate change in Sandwatch activities with students.

Source: UNESCO

Education level(s)/type(s): Primary, Secondary and Higher Education

Region(s): Global - Coastal regions

Languages available:

UNESCO website:

- English: <http://www.unesco.org/new/en/natural-sciences/priority-areas/sids/sandwatch/>
- French: <http://www.unesco.org/new/fr/natural-sciences/priority-areas/sids/sandwatch/>

Sandwatch website:

http://www.sandwatch.ca/index.php?option=com_content&view=article&id=54&Itemid=3

Sandwatch Manual available in English, French, Spanish and Portuguese:

http://www.unesco.org/ulis/cgi-bin/ulis.pl?req=0&mt=100&mt_p=%3C&by=2&sc1=1&look=default&sc2=1&lin=1&fut8=1&gp=1&hist=1&pn=1&text=sandwatch&text_p=inc

4. EDUCATION FOR SUSTAINABLE DEVELOPMENT: GOOD PRACTICES IN EARLY CHILDHOOD

Brief Introduction: This publication presents 12 examples of programmes addressing education for sustainable development in early childhood settings and practice, including formal, non-formal and informal learning situations. Several programmes also address specifically climate change education.

Source: UNESCO

Education level(s)/type(s): Early Childhood

Region(s): Global

Languages available:

- French: <http://unesdoc.unesco.org/images/0021/002174/217413f.pdf>
- English: <http://unesdoc.unesco.org/images/0021/002174/217413e.pdf>
- Spanish: <http://unesdoc.unesco.org/images/0021/002174/217413s.pdf>

5. GROUNDWATER AND CLIMATE CHANGE (SMALL ISLAND DEVELOPING STATES)

Brief Introduction: This paper summarizes the current state of groundwater on Small Island Development States (SIDS), potential impacts of climate change to groundwater on SIDS, and the importance of groundwater resources in climate change mitigation on SIDS. SIDS studies are highlighted from the Pacific, Caribbean, and other regions of the globe.

Source: UNESCO International Hydrological Programme

Education level(s)/type(s): Secondary and Higher Education

Region(s): Global - Small Island Development States (SIDS)

Languages available:

- English: <http://unesdoc.unesco.org/images/0024/002428/242861e.pdf>
- French: <http://unesdoc.unesco.org/images/0024/002428/242861f.pdf>
- Spanish: <http://unesdoc.unesco.org/images/0024/002428/242861s.pdf>

6. WORLD HERITAGE AND CLIMATE CHANGE

Brief Introduction: This edition of the *World Heritage Review* takes a special focus on climate change and explores its impact on World Heritage sites as well as their role in mitigating and adapting to climate change.

Source: UNESCO World Heritage Center

Education level(s)/type(s): Secondary and Higher Education

Region(s): Global

Languages available:

- English: <http://unesdoc.unesco.org/images/0023/002355/235561e.pdf#243054>
- French: <http://unesdoc.unesco.org/images/0023/002355/235561f.pdf#243054>
- Spanish: <http://unesdoc.unesco.org/images/0023/002355/235561s.pdf#243054>

B. Materials from other organizations

7. CLIMATE CHANGE: DO YOU KNOW THE SCORE?

Brief Introduction: A free self-paced e-course on climate change in six modules for everybody who is interested in the topic.

Source: United Nations Framework Convention on Climate Change (UNFCCC)

Education level(s)/type(s): all types and levels

Region(s): Global

Languages available:

- English, French, Spanish are available upon registration on the website: <http://unccelearn.org/>

8. THE WORLD'S LARGEST LESSON: YOUNG PEOPLE TAKE ACTION FOR THE GLOBAL GOALS: GLOBAL GOAL 13 ON CLIMATE CHANGE

Brief Introduction: the webpage shows engaging teaching resources on climate change, including the video series of Simon Says “Save the Climate!” with a related work book for teachers, lesson plans, worksheets and as well as posters and comic strips.

Source: The World’s Largest Lesson - Project Everyone (UK)

Education level(s)/type(s): Primary and Secondary

Regions: Global

Languages available:

- English: <http://worldslargestlesson.globalgoals.org/global-goals/protect-the-planet/> (part of the materials is also available in other languages, including Arabic, Portuguese and Spanish)

9. TUNZA - CHILDREN ENVIRONMENTAL SERIES

Brief Introduction: A series of seven children’s environmental storybooks prepared by UNEP’s TUNZA programme, including two books on climate change and how children can mitigate its effects.

Source: United Nations Environment Programme (UNEP)

Education level(s)/type(s): Early Childhood and Primary

Regions: Global

Languages available:

- **Tore and the Town on Thin Ice**
English and Chinese:
http://www.unep.org/publications/search/pub_details_s.asp?ID=3798
- **Ting and the Possible Futures**
English: http://www.unep.org/pdf/Ting_Book_Layout.pdf

10. A CLIMATE-ACTION SUPERHERO: GREEN NINJA

Brief Introduction: This website provides fun videos about climate-change, energy and the environment and examples of actions of what children can do to protect the environment and address climate change. Each video comes with a teaching guide to help educators use it as an engagement piece for discussions in the classroom. In addition, the Green Ninja Academy provides videos and text-based materials to help educators update their own understanding of climate and energy topics.

Source: Green Ninja (San Jose State University (SJSU), USA)

Education level(s)/type(s): Primary and Secondary

Regions: Global

Languages available:

- English: <http://greenninja.org/>

11. CLIMATE CHANGE GAMES AND PUZZLES (ONLINE OR PRINT)

Brief Introduction: This website for children from the American Museum of Natural History provides games, stories, activities and videos on various science topics, including climate change to support teaching in the classroom. It also contains tips for educators of how to use the materials.

Source: American Museum of Natural History

Education level(s)/type(s): Early Childhood and Primary

Regions: Global

Languages available:

- English: <http://www.amnh.org/explore/ology/climate-change>

12. VISUAL GUIDES - LEARNING ABOUT CLIMATE CHANGE (A PACIFIC WAY)

Brief Introduction: Visual examples about the situations and impacts of climate change in Small Island Developing States (SIDS), including Fiji, Kiribati, Samoa, Tonga, Vanuatu.

Source: Secretariat of the Pacific Community

Education level(s)/type(s): Early Childhood, Primary and Secondary

Region(s): Pacific - Small Island Development States (SIDS)

Languages available: bilingual English/French:

- <http://www.spc.int/images/climate-change/cc-project/Fiji-complete.pdf>
- <http://www.spc.int/images/climate-change/cc-project/Kiribati-complete.pdf>
- <http://www.spc.int/images/climate-change/cc-project/Samoa-complete.pdf>
- <http://www.spc.int/images/climate-change/cc-project/Tonga-complete.pdf>
- <http://www.spc.int/images/climate-change/cc-project/Vanuatu-complete.pdf>

13. KIDS 4 CLEAN AIR

Brief Introduction: This website contains information sheets, games and puzzles about several issues related to climate change such as air pollution and global warming.

Source: Clean Air Kids (NGO, UK)

Education level(s)/type(s): Primary and Secondary

Region(s): Global

Languages available:

- English: <http://www.clean-air-kids.org.uk/acidrain.html>

14. CLIMATE CHANGE CHALLENGE BADGE (SECOND EDITION)

Brief Introduction: This guidance document aims to help educate children and young people about the vital role the climate plays in supporting life on Earth. The badge looks at how our daily lives impact the Earth's climate and provides ideas on how individuals can take action to help make this close relationship more sustainable. There are also Challenge Badges available on other topics related to climate change such as Biodiversity; Climate Change and Food Security; Energy; Forests; the Ocean; Soils; and Water (see [here](#)).

Source: Food and Agricultural Organisation (FAO) in collaboration with partners

Education level(s)/type(s): Primary and Secondary

Region(s): Global

Languages available:

- English: <http://www.fao.org/3/a-i5216e.pdf>
- Russian: <http://www.fao.org/3/a-i5216r.pdf>
- Spanish: <http://www.fao.org/3/a-i5216s.pdf>

15. GERMANWATCH CLIMATE EXPEDITION: EDUCATIONAL MATERIALS ON CLIMATE CHANGE

Brief Introduction: In the context of the Germanwatch project “Climate Expedition” a series of educational material was produced to teach climate change in German classroom. It includes the booklet “Climate Change from Above” providing an introduction to global climate change by using satellite images, and a series of worksheets on climate change and related topics such as melting glaciers, rising sea levels, tropical rain forests, food security or extreme events.

Source: Germanwatch (NGO, Germany)

Education level(s)/type(s): Secondary

Region(s): Global

Available Languages:

Worksheets:

- English (one also in Chinese): <http://germanwatch.org/en/worksheets>
- German: <http://germanwatch.org/de/arbeitsbl%C3%A4tter>

Booklet “Climate Change from Above” (English only): <http://germanwatch.org/en/8198>

Climate Posters (English and German): <http://germanwatch.org/de/poster>

16. YOUTH IN ACTION ON CLIMATE CHANGE: INSPIRATIONS FROM AROUND THE WORLD

Brief Introduction: A publication, which highlights concrete activities young people are leading around the world to tackle climate change.

Source: UN Joint Framework Initiative on Children, Youth and Climate Change

Education level(s)/type(s): Primary, Secondary and Higher Education

Region(s): Global

Languages available:

- Arabic, Chinese, English, French, Russian, Spanish:
https://unfccc.int/cc_inet/cc_inet/youth_portal/items/6581.php?displayPool=1584

17. GETTING THE PICTURE

Brief Introduction: Students and educators of all ages can use this free interactive educational tool to gain a fresh perspective on climate change. It offers an interdisciplinary approach to teaching climate science. Especially useful for middle and high school levels, this educational content extends far beyond Earth science and biology

and incorporates history, economics, geography, art science and social studies. The website also offers further resources on climate change for students and educators.

Source: Earth Vision Institute (NGO, USA)

Education level(s)/type(s): Upper Primary and Secondary

Region(s): Global

Languages available:

- English: <http://www.gettingthepicture.info/>

18. OUR PLANET UNDER WATER

Brief Introduction: This comic book raises awareness about climate change through the story of two children, one living in Tuvalu Island in the Pacific Ocean and one in a big European city.

Source: Alofa Tuvalu and the Environment and Energy Management Agency (ADEME), France

Education level(s)/type(s): Primary and Secondary

Region(s): Global

Languages available:

- Available in 15 languages, including Arabic, Danish, English, French, German, Japanese and Portuguese: http://www.alofatuvalu.tv/page_cadres_fr.html

II. Materials for the Training of Teachers and Educators

1. CLIMATE CHANGE IN THE CLASSROOM: UNESCO COURSE FOR SECONDARY TEACHERS

Brief Introduction: This is the first six-day online course on climate change designed to enable teachers at the secondary level from diverse subject areas to introduce climate change education for sustainable development (CCESD) across the curriculum. It includes 4 parts: (1) Course Framework and Overview, (2) Teachers' Education Course daily materials, (3) Regional Resource Packs, and (4) Daily Classroom Materials for teachers.

Source: UNESCO

Education level(s)/type(s): Teachers at Secondary level

Regions: Global

Languages available:

- English: <http://unesdoc.unesco.org/images/0021/002197/219752e.pdf>
- French: <http://www.unesco.org/new/fileadmin/MULTIMEDIA/HQ/ED/CCEC/index.html#4>
- Portuguese: <http://unesdoc.unesco.org/images/0022/002297/229737por.pdf>

2. TEACHING AND LEARNING FOR A SUSTAINABLE FUTURE - A MULTIMEDIA TEACHER EDUCATION PROGRAMME, (MODULE 19 ON CLIMATE CHANGE)

Brief Introduction: Module 19 of this training toolbox provides resources for teachers so that they can feel confident in their knowledge of climate change science and the impacts of the climate crisis and plan interesting and relevant lessons for their students.

Source: UNESCO

Education level(s)/type(s): Teacher Training

Region(s): Global

Languages available:

- English: http://www.unesco.org/education/tlsf/mods/theme_c/mod19.html?panel=1#top

3. CLIMATE CHANGE STARTER'S GUIDEBOOK: AN ISSUE GUIDE FOR EDUCATION PLANNERS AND PRACTITIONERS

Brief Introduction: 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 school curricula. It aims to facilitate the development of education policies, curricula, programmes and lesson plans.

Source: UNESCO and UNEP

Education level(s)/type(s): Primary, Secondary and Higher Education Professionals

Region(s): Global

Languages available:

- English: <http://unesdoc.unesco.org/images/0021/002111/211136E.pdf>

4. LEARNING WITH INTANGIBLE HERITAGE FOR A SUSTAINABLE FUTURE - GUIDELINES FOR EDUCATORS IN THE ASIA-PACIFIC REGION

Brief Introduction: The guide provides teacher educators and teachers with an understanding of why Intangible Cultural Heritage (ICH) should be integrated into the curriculum in tandem with the principles and perspectives of Education for Sustainable Development (ESD). It contains the reference materials for teachers, including sample teacher-training modules, examples of documentation related to ICH, and sample lesson plans.

Source: UNESCO

Education level(s)/type(s): Upper primary and lower secondary school teachers, teacher educators in teacher education institutions, and curriculum development professionals.

Region(s): Asia-Pacific

Languages available:

- English (some parts of the document are in Vietnamese):
<http://unesdoc.unesco.org/images/0023/002323/232381E.pdf>

5. EDUCATION FOR SUSTAINABLE DEVELOPMENT IN BIOSPHERE RESERVES AND OTHER DESIGNATED AREAS - A RESOURCE BOOK FOR EDUCATORS IN SOUTH-EASTERN EUROPE AND THE MEDITERRANEAN:

Source: UNESCO

Education level(s)/type(s): Primary, Secondary and Higher Education professionals

Region(s): South Eastern Europe and the Mediterranean

Languages available:

- English: <http://unesdoc.unesco.org/images/0021/002199/219946e.pdf>

6. CURRENT ISSUES IN CLIMATE CHANGE FOR PRIMARY AND SECONDARY EDUCATION

Brief Introduction: This publication informs and raises awareness among teachers about climate change and its challenges to our societies. In this way, this publication seeks to enhance the importance of dialogues and co responsibility through collective processes and innovative practices supported by participatory methodologies. In addition to the readings, there is also a chapter with suggestions for activities, which can be easily carried out in the classroom.

Source: INCLINE, San Pablo University, Brazil

Education level(s)/type(s): Primary and Secondary Education Professionals

Region(s): Global

Languages available:

- Portuguese:
http://www.incline.iag.usp.br/data/arquivos_download/TEMAS_ATUAIS_EM_MUDANCAS_CLIMATICAS_on-line.pdf