| FORMAT | | | |
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| **1. Name of resource** | **Greening Curriculum Guidance: teaching and learning for climate action** | | |
| 2. Location | https://unesdoc.unesco.org/ark:/48223/pf0000390022 | | |
| 3. Alternative location | | | |
| 4. Author[s] | UNESCO | | |
| 5. Publisher/producer/host | UNESCO | | |
| 6. Year | 2024 | | |
| 7. Suggested citation | UNESCO (2024). Greening Curriculum Guidance: teaching and learning for climate action. UNESCO, available at https://unesdoc.unesco.org/ark:/48223/pf0000390022 | | |
| 8. Languages in which available | English | | |
| 9. Geographic area resource relates to | Global | | |
| 10. Does the resource relate to a specific time frame? | | | |
| 11. Type | Report | | |
| | Toolkit/Framework/Roadmap | Yes | |
| | Sign-post to other resource (database) | | |
| | Case studies | Yes | |
| | Other | Lesson/activity plans | |
| 12. Part of an initiative? | Education 2030, and Greening Education Partnership | | |
| **COLLECTIONS AND COLLECTIONS-BASED INSTITUTIONS** | | | |
| 13. Explicit links to collections | No | | |
| 14. Explicit links to museums/libraries/archives | Yes | | |
| 15. Types of institutions relevant to | Museums | X | |
| | Archives | X | |
| | Libraries | X | |
| | Other | X | |
| 16. Does the resource relate to specific disciplines? | Arts, humanities and social sciences: philosophy, psychology, religion, social sciences, law, politics, language, arts and recreation, architecture, literature, history, geography and ethnology, | X | |

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| | anthropology, archaeology | |
| | Science, natural history, technology, medicine, engineering, manufacturing | X |
| 17. If no explicit links to collections, justification for inclusion | The resource can be used by collections-based institutions to plan their public programming, education and related activities drawing on collections to promote transformative climate-related education and learning. | |

**HOW IT CONTRIBUTES TO SUSTAINABLE DEVELOPMENT**

**18. Collections-related activities the resource relates to (mark all that apply)**

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| **Develop collections to protect and safeguard wider cultural and natural heritage more effectively**, for example by targeting collecting to threatened forms of heritage in strategic ways | |
| **Use collections to promote learning and educational opportunities that contribute to sustainable development more effectively**, for example education for sustainable development and sustainable lifestyles, human rights, gender equality, promotion of a culture of peace and non-violence, global citizenship and appreciation of cultural diversity and of culture's contribution to sustainable development and/or skills development relating to collections | X |
| **Use collections to promote cultural participation/social inclusion more effectively**, for example by reducing barriers to participation, to ensure no-one is 'left behind' | |
| **Use collections to promote sustainable tourism more effectively**, for example by developing new products based on local cultural heritage, and/or considering the rights of stakeholder groups in relation to collections | |
| **Use collections to support research that contributes to sustainable development** (including all forms of personal and self-directed research at all levels that make use of stored collections) more effectively, for example by providing effective facilities, collections and information to meet researchers' needs | |
| **Make decisions around collections that contribute to sustainable development more effectively** | |
| i.      employment (recruiting, staff training, staff safety) | X |
| ii.      energy consumption, greenhouse gas emissions, reduction, monitoring and reporting | |
| iii.      waste management and reduction of waste | |
| iv.      transport (forms of transport, energy use) | |
| v.      commercial activities including copyright and IP | |
| vi.      governance and management | |
| vii.      security, disaster preparedness and risk reduction | |

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| **Direct external leadership, partnerships and collaborations towards sustainable development more effectively**, for example by developing impactful partnerships | X |
| **19. Does the resource relate clearly to any international conventions (mark all that apply)?** | |
| Culture conventions: | |
| 1952, 71 Protection of Copyright and Neighbouring Rights | |
| 1954 Protection of Cultural Property in the Event of Armed Conflict | |
| 1970 Fighting Against the Illicit Trafficking of Cultural Property | |
| 1972 Protection of the World Cultural and Natural Heritage | X |
| 2001 Protection of the Underwater Cultural Heritage | |
| 2003 Safeguarding of the Intangible Cultural Heritage | |
| 2005 Protection and Promotion of the Diversity of Cultural Expressions | |
| Rio Conventions: | |
| Convention on Biological Diversity (CBD), Convention to Combat Desertification (UNCCD), Framework Convention on Climate Change (UNFCCC) | X |
| **AIMS AND CONTENT** | |
| **20. What issues does the resource aim to address?** | "Education is a powerful tool to transform the world and drive long-long-term climate change action. This Guidance responds to the calls from young people for a holistic approach to climate change and sustainability in the curriculum. It outlines a common language on how quality climate change and sustainability can be reflected in the curriculum by setting expected learning outcomes per age group (from 5-yearolds and up to 18+ age group, including a lifelong learning approach). This is crucial for accelerating country-level action and ensuring joint monitoring of progress. The objective is to have 90 per cent of all countries include climate change in their curricula by 2030, as established by the Greening Education Partnership. This Guidance aims to support countries, schools or individual practitioners in reassessing their ongoing practices to adopt a more action-oriented, holistic, scientifically accurate, justice-driven and lifelong learning approach to climate change." <br><br> "The Guidance is intended to: <br> ● Provide a clear understanding of greening education and clarify the desired positive outcomes; <br> ● Promote an understanding of the need for greening education programmes by raising awareness of relevant climate change and sustainable development issues and concerns that impact humans and the living world; |

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| | ● **Provide guidance on how to develop evidence-informed, age- and developmentally-appropriate curricula, teaching and learning materials and programmes that are culturally relevant and locally acceptable to assist policy-makers, educators, and curriculum developers;**<br>● **Ultimately, increase educators' preparation and enhance institutional capacity to provide high-quality greening education."** |
| 21. Intended audience of resource | [Educators and people organizing education and learning addressing climate change and its impacts.] |
| 22. Process of development | "The Guidance was developed on the basis of young people's demands, through a process designed to ensure quality, acceptability and ownership at the international level, and with input from experts and practitioners from different regions around the world. At the same time, it should be noted that the Guidance recognizes the diversity of different national and local contexts in which learning takes place, and the authority of governments to determine the content of educational curricula in their country.<br>This publication is based on a review of evidence and current practices. The authors comprised experts from across the globe, working in the fields of education, climate change, sustainable development, human rights, and gender equality. UNESCO and the Working Group 2 of the Greening Education Partnership also worked with numerous organizations, networks and specialists in reviewing and piloting earlier drafts of the Guidance. These networks included researchers, ministry of education officials, young people, NGO programme implementers and other partners." (p.24) |
| 23. Organisation/structure/ contents | **Foreword 5**<br>**Acknowledgements 6**<br>**List of abbreviations 10**<br>**List of tables 11**<br>**List of boxes 11**<br>**List of figures 11**<br>**Glossary of terms 12**<br>**Section 1: Introduction 17**<br>1.1. Context, objective and rationale 18<br>1.2. How to use the Guidance, structure and intended audiences 20<br>1.3. Key principles of greening education 21<br>1.4. Methodology 24<br>**Section 2: General strategies for greening education 25**<br>**What should we learn to get climate-ready? 27** |

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| | Step 7. Provide substantive orientation to greening education for textbook writers, examination board staff and other stakeholders, and obtain any necessary approvals. 170 |
| | Step 8. Provide educators with quality pre- and in-service training and continuous professional development opportunities, in cooperation with higher education institutions and CSOs. 171 |
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| FRAMEWORKS | |
| Framework structure | **Empowering:** It supports learners' empowerment, self-efficacy and agency by improving their analytical, communication, and other skills, and by supporting the acquisition of relevant knowledge and values for sustainable development and addressing climate change. |
| | **Learner-centred:** The pedagogy (e.g. critical, participatory, problem-oriented, learner-centred and experiential approaches) allows students to actively participate in learning processes, critically engage with personal experiences and their natural environment, and construct their own understanding. |
| | **Career-related:** It incorporates practices or ideas that can be applied to career choices and workplace practices. |
| | **Transformative:** It contributes to collective society-wide, local and global efforts to change human behaviour, systems and underlying causes and root drivers of climate change. |
| | **Based on a human rights approach:** It builds on and promotes an understanding of universal human rights – including the rights of children and young people – and the rights of all persons to health, education, information |

equality and non-discrimination. Using a human rights-based approach, within education addressing climate change, also involves raising awareness among young people, encouraging them to recognize their own rights, acknowledge and respect the rights of others, and advocate for those whose rights are violated.

**Based on gender equality:** It addresses the different ways that gender norms can influence inequality, and how these inequalities can affect vulnerabilities to climate change.

**Based on inter-generational equity:** It develops a notion that ensures the rights and obligations of future generations while maintaining those of the present generation.

**Based on intra-cultural equity:** It develops a vision of environmental, economic, and social justice and fairness across communities and cultures within the current generation.

**Scientifically accurate:** The content is based on evidence related to climate change and sustainable development.

**Conveys urgency:** Greening education stresses the urgency of adequately addressing the growing climate emergency.

**Age- and developmentally-appropriate:** The content is responsive to the evolving capabilities of the child and young person as they grow.

**Indigenous-influenced:** Indigenous knowledge and perspectives are incorporated within education, especially from indigenous groups who are locally based.

**Balanced:** Cognitive, social and emotional, and behavioural learning dimensions are addressed in a balanced manner to ensure a holistic approach to greening education.

**Comprehensive:** It provides opportunities to acquire comprehensive, accurate, evidence-informed and age-appropriate information on sustainable development and climate change over time and throughout a learner's formal, non-formal and informal (e.g. museums and libraries) education, and including TVET.

**Lifelong:** This is a continuing educational process that starts at an early age, and where new information builds upon previous learning, using a spiral-curriculum approach.

**Culturally relevant and context appropriate:** It fosters learning outcomes that are relevant to local climate change challenges and solutions, and cultural structures

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| | and norms that affect people's choices in addressing sustainable development and climate change.<br>**Inclusive:** Greening education involves a range of actors from inside and outside education, including experts, parents, community members and local leaders who bring alternative perspectives, new skills, intergenerational and indigenous knowledge to understand climate challenges and solutions.<br>**Institution-wide:** Greening education principles are integrated throughout the learning environment, affecting the organization-wide culture and practices. |
| 24. Relevant policy considerations | Yes |
| 25. Resources for implementation identified | Yes |
| 26. Specific assessment points/indicators/milestones/action plan for monitoring | Yes |
| **27. ASPECTS OF SUSTAINABILITY COVERED BY RESOURCE (mark all that apply)** | |
| People (social sustainability) | X |
| Planet (environmental sustainability) | X |
| Prosperity (economic sustainability) | X |
| Peace | X |
| Partnerships | X |
| **28. CROSS-CUTTING CONSIDERATIONS COVERED BY RESOURCE (mark all that apply)** | |
| Gender perspectives | X |
| North and South perspectives | X |
| **HOW THE RESOURCE CONTRIBUTES TO AGENDA 2030 AND THE SDGs** | |
| **HOW AGENDA 2030 AND THE SDGs FEATURE IN THE RESOURCE** | |
| 29. SDGs and Agenda 2030 specifically mentioned? | Yes |
| 30. SDGs specifically mentioned? | Yes |
| 31. SDG targets specifically mentioned? | Yes |
| 32. SDG indicators specifically mentioned? | No |
| **SDGs AND SDG TARGETS AND LINKAGES** | |
| 33. Comments on SDG linkages | The resource can help support action for SDG targets relating to education related to climate change, including 4.4 (staff skills), 4.7 (education for Sustainable development), 12.8 (information for sustainable |

| | development and lifestyles in harmony with nature), 13.3 (education and awareness for climate mitigation, adaptation and risk reduction), 17.16 and 17.17 (global and more local partnerships respectively). Stakeholder consultation in curriculum development and revision supports SDG 16.7 (inclusive decision making), as well as 17.17. Implementing the framework can support many further SDG targets. |
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| **34. SDGs and SDG targets the resource helps advance** | |
| **SDG 4. Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all** 4.4 By 2030, substantially increase the number of youth and adults who have relevant skills, including technical and vocational skills, for employment, decent jobs and entrepreneurship | Number of young people and adults in skills-development activities and programmes drawing on collections, for employment, decent jobs and entrepreneurship<br><br>Increase in number of young people and adults in such programmes<br><br>Number and proportion of staff who have received training in the last year, to better support their contribution to the SDGs.<br><br>Programs and processes in place to ensure the availability of a skilled workforce |
| **SDG 4. Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all** 4.7 By 2030, ensure that all learners acquire the knowledge and skills needed to promote sustainable development, including, among others, through education for sustainable development and sustainable lifestyles, human rights, gender equality, promotion of a culture of peace and non-violence, global citizenship and appreciation of cultural diversity and of culture's contribution to sustainable development | Numbers of people in each type of programme drawing on collections from different demographic groups.<br><br>Increases in numbers of people in each type of programme from different demographic groups.<br><br>Proportion of people involved in such programmes in relation to overall audience size.<br><br>Evidence that learners have acquired knowledge and skills to promote sustainable development. |
| **SDG 12 Ensure sustainable consumption and production patterns** | *12.8.1 Extent to which (i) global citizenship education and (ii) education for sustainable development (including climate change education) are mainstreamed* |

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| 12.8 By 2030, ensure that people everywhere have the relevant information and awareness for sustainable development and lifestyles in harmony with nature | *in (a) national education policies; (b) curricula; (c) teacher education; and (d) student assessment*<br><br>Extent to which global citizenship education and education for sustainable development (including climate change education) are mainstreamed in formal, informal and non-formal education programmes and activities drawing on and related to collections. |
| **SDG 13. Take urgent action to combat climate change and its impacts**<br>13.3 Improve education, awareness-raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning | Plans in place to enhance positive contributions to addressing climate change through use of collections. Plans in place to ensure collections, collections institutions and broader society can adapt effectively to climate change.<br><br>Plans in place for effective education and awareness raising on climate change mitigation, adaptation, impact reduction and early warning.<br><br>Plans in place to reduce negative contributions of collections-related functions, e.g. measuring greenhouse emissions with plans and targets in place to reduce them. |
| **SDG 16. Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels.**<br>16.7 Ensure responsive, inclusive, participatory and representative decision-making at all levels | *16.7.1 Proportions of positions (by sex, age, persons with disabilities and population groups) in public institutions (national and local legislatures, public service, and judiciary) compared to national distributions*<br><br>*16.7.2 Proportion of population [audience/users/non-users] who believe decision-making is inclusive and responsive, by sex, age, disability and population group*<br><br>Decision-making addresses societal, environmental and economic challenges related to the community, considering short-term and long-term risks and opportunities.<br><br>Decision-making draws on diverse backgrounds, viewpoints and interests, reflecting a broad base of stakeholders, and working to promote inclusion and provide effective services for all of society. |
| **SDG 17. Partnerships for the goals** | Number and/or increase in number, and diversity of global and international multi-stakeholder partnerships that share collection-related knowledge, expertise, |

| 17.16 Enhance the global partnership for sustainable development, complemented by multi-stakeholder partnerships that mobilize and share knowledge, expertise, technology and financial resources, to support the achievement of the sustainable development goals in all countries, in particular developing countries | technology and financial resources to address the SDGs, or that otherwise involve collections-based organisations and institutions.<br><br>Number and/or increase in number, and diversity of global and international multi-stakeholder partnerships involving developing countries that share collection-related knowledge, expertise, technology and financial resources to address the SDGs. | | | | |
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| **SDG 17. Partnerships for the goals**<br>17.17 Encourage and promote effective public, public-private and civil society partnerships, building on the experience and resourcing strategies of partnerships | *17.17.1 Amount of United States dollars committed to public-private and civil society partnerships*<br><br>Number and/or increase in number, and diversity of local, national and regional multi-stakeholder (public, public-private and civil society) partnerships that address the SDGs drawing on collections, or that otherwise involve collections-based organisations and institutions. | | | | |
| 1 | 2 | 3 | 4 | 5 | 6 |
| 7 | 8 | 9 | 10 | 11 | 12 |
| 13 | 14 | 15 | 16 | 17 | |