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Page 7: Teacher icon by Gan Khoon Lay, in the People Jobs, Occupations, Career Collection'

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Getting every school climate-ready

How countries are integrating climate change issues in education

Key findings

- Nearly half (47 per cent) of national curriculum frameworks of 100 countries reviewed had no reference to climate change. The rest mentioned climate change in their documents but the depth of inclusion was usually very minimal.
- Currently, the countries most likely to include climate change content are those in regions most vulnerable
 to the impacts of climate change, as opposed to those largely responsible for the emissions causing climate
 change.
- In a review of the profiles of 20 countries on climate change communication and education, it was found that efforts are mainly focused at the primary and secondary education levels (90 per cent). Fewer countries have frameworks to support climate change education in technical and vocational education and training (70 per cent), higher education (70 per cent) and teacher training education (55 per cent).
- In a recent survey of teachers, nearly 95 per cent of teachers believed that it is important or very important to teach about the severity of climate change and its effects but fewer than 40 per cent were confident in teaching it and only about one-third felt able to explain well the effects of climate change on their region or locality.
- About 40 per cent of teachers are confident in teaching the cognitive dimensions of climate change but only about onefifth can explain well how to take action.
- Only 55 per cent of teachers reported that they had received training – either pre-service or in-service – on climate change and sustainable lifestyles and fewer than 50 per cent reported that their school had an action plan on climate.
- There are some good country examples on climate change education, including good practices of inter-ministerial collaboration among ministries responsible for education and environment and other sustainable development issues, which may inspire others in their future efforts to place climate change at the core of educational content and practice.



of national curriculum frameworks of 100 countries made no reference to climate change.

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Last, but not least, we wish to thank country experts who have helped to collect and review the relevant documents in various languages, as well as those who have responded to our survey, with the hope of contributing to the advancement of climate change education for ourselves and our future generations.

How well is climate change integrated in national curricula?

Findings from a review of National Curriculum Frameworks of 100 countries on climate change education

This document begins with the assumption that education is essential to prepare societies to address the climate crisis. UNESCO has been supporting countries to integrate the study of climate change into education through its focus on Education for Sustainable Development (ESD). However, there is a need to understand the depth of inclusion of climate change education within national curriculum frameworks.

This document responds to this need, drawing from data and methodologies used in prior UNESCO research. In particular, this report builds on research conducted for **Learn for our planet**, which analysed environment-related content within national curriculum frameworks and education sector plans for 46 countries. National Curriculum frameworks were available and analysed for 39 of those countries. This document includes an analysis of national curriculum frameworks for an additional 61 countries (100 countries in total, representing 52 per cent of UNESCO Member States).

Methodology

In total, 129 documents from a geographically diverse group of 100 countries were analysed for key terms related to climate change, which included: greenhouse gas, global warming, climate change, climate crisis, and carbon. Steps were taken to reduce the likelihood of identifying more general references to terms such as 'climate.' Documents in 16 languages were examined, mainly using the data management software NVivo 12. Languages of documents included Albanian, Arabic, English, Finnish, French, Greek, Hungarian, Italian, Japanese, Korean, Malaysian, Norwegian, Portuguese, Somali, Spanish, and Swedish. A series of matrix queries were then run to identify the overall extent of climate change focus by region. Keyword frequency results were standardized by one million words to take into account varying document lengths, which ranged from over 300,000 words to under 1,000 words.

Finding #1

53 per cent of the national curriculum frameworks analysed included climate change at least once; however, the depth of inclusion was usually very minimal.

Just over half of the national curriculum frameworks reviewed included at least one explicit mention of climate change (Figure 1). The depth of climate change content inclusion varied substantially across the documents (Figure 2).

Figure 1.Percentage of documents with any climate change content

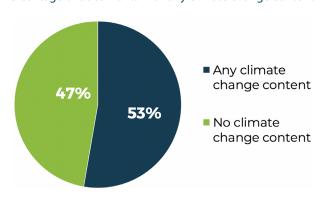
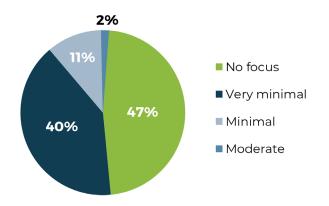


Figure 2.Percentage of documents by extent of climate change focus



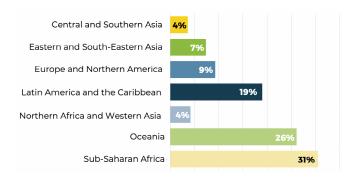
*The categories used were no focus (0 out of a million words), very minimal focus (1-300 words per million words), minimal focus (301-1,000 words per million words), or moderate focus (over 1,000 words per million words).

Finding #2

There is considerable regional variation in the extent of climate change content in national curriculum frameworks.

When looking across **UN SDG regions** and standardizing for length of documents, sub-Saharan Africa and Oceania had considerably more climate change content than other regions, with Central and Southern Asia having the least (Figure 3). This finding suggests that countries in regions most vulnerable to climate change are more likely to include climate change content in their national curriculum frameworks, as opposed to those largely responsible for the emissions causing climate change.

Figure 3. Percentage of climate change content by region

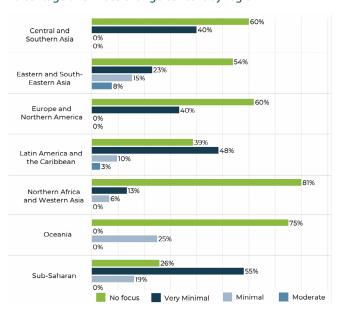


Finding #3

Only documents originating from the regions of Eastern and South-Eastern Asia and Latin America and the Caribbean included a moderate focus on climate change.

When looking across the UN SDG regions at the overall extent of climate change focus, only the regions of Eastern and South-Eastern Asia and Latin American and the Caribbean had documents that included a moderate (over 1,000 words per million words) focus on climate change (Figure 4). Documents from Northern Africa and Western Asia are least likely to include any climate change content. A high percentage of documents from Oceania also did not include any climate change content. However, when countries from the region did include climate change content, they included a greater extent of focus on climate change than other regions, which explains this region's overall extent of inclusion shown in Figure 3.

Figure 4.Percentage of climate change content by region



*Percentages for each region total 100%

The list of 100 countries reviewed

Afghanistan, Albania, Algeria, Argentina, Australia, Azerbaijan, Bangladesh, Belize, Bhutan, Plurinational State of Bolivia, Bosnia and Herzegovina, Botswana, Brazil, Burkina Faso, Cambodia, Chile, China, Colombia, Congo, Cook Islands, Costa Rica, Côte d'Ivoire, Croatia, Cuba, Cyprus, Czechia, Denmark, Dominican Republic, Democratic Republic of the Congo, Ecuador, El Salvador, Eswatini, Ethiopia, Fiji, Finland, France, Gambia, Ghana, Greece, Guatemala, Guyana, Haiti, Honduras, Hungary, Iceland, India, Indonesia, Iraq, Ireland, Japan, Jordan, Kazakhstan, Kenya, Kuwait, Kyrgyzstan, Lao People's Democratic Republic, Latvia, Lesotho, Madagascar, Malawi, Malaysia, Maldives, Malta, Mauritius, Mexico, Mongolia, Morocco, Mozambique, Myanmar, Namibia, Nauru, Nepal, New Zealand, Nicaragua, Niger, Norway, Oman, Pakistan, Papua New Guinea, Peru, Philippines, Portugal, Qatar, Republic of Korea, Rwanda, Samoa, Seychelles, Somalia, South Sudan, Spain, Sri Lanka, Sweden, Syrian Arab Republic, Thailand, Turkey, Tuvalu, Viet Nam, Yemen, Zambia, Zimbabwe

What are teachers saying about climate change in education?

Insights from the Learn for our planet survey of educators and experts and upcoming publication on teachers' readiness in ESD and GCED

Teachers are at the forefront of ensuring learners of all ages have the knowledge, skills, values and initiative to act to address the climate crisis.

However, a survey of educators as part of UNESCO's **Learn for our planet** report (2021)², found that over a third indicated no inclusion of environment-related content in teacher training programmes.

Sixty-two per cent of all survey respondents were teachers, and an additional 13 per cent were principals (and usually prior teachers). Overall, 36 per cent of all respondents indicated no inclusion in either pre-service or in-service training, while 30 per cent indicated that environmental issues are included in both pre- and inservice training.

Environmental themes in teacher training



The subjects viewed as most likely to include environment-related content were biology, science, and geography; the perception of inclusion in all subjects was quite low.

There is something really missing in the work done by the Ministry of Education – the training and support of the teachers [to cover new curriculum in biodiversity and climate change]... Climate change is completely new for a lot of them. It requires lots of knowledge on climate sciences, and then it requires a lot of interdisciplinarity and this is the thing that is very difficult in our school system. — Interviewee, France

Encouragingly, 35 per cent of respondents to the survey did report that young people were participating in youth action on environmental issues at least once a month.

Teachers' readiness to teach climate change³

A forthcoming UNESCO-Education International publication to be launched in November on the results of a recent global survey of teachers' readiness to integrate ESD and GCED in their teaching, has found that:

- Nearly 95 per cent of teachers believed that it is important or very important to teach about the severity of climate change and its effects but fewer than 40 per cent were confident in teaching it and only about one-third felt able to explain well the effects of climate change on their region or locality.
- About 40 per cent of teachers are confident in teaching the cognitive dimensions of climate change (e.g. the severity of climate change) but only about one-fifth can explain well how to reduce one's own carbon footprint (ie the behavioural dimension).
- When asked about the challenges of teaching climate change, 30 per cent of teachers reported that they were not familiar with suitable pedagogies, around one in five did not have the ability to choose their own subjects or the time to teach the topic, or felt they didn't have the necessary knowledge and skills.
- Experienced teachers are generally more confident in their ability to teach climate change compared to those newly entering the profession (nearly 80 per cent of those with more than 20 years of experience felt at least moderately ready to teach climate change compared with less than 60 per cent of newly recruited teachers).
- Only 55 per cent of teachers reported that they had received training – either pre-service or in-service – on climate change and sustainable lifestyles and fewer than 50 per cent reported that their school had an action plan on climate.

² https://unesdoc.unesco.org/ark:/48223/pf0000377362

³ This article is a summary based on the forthcoming publication on a global survey of 58,280 teachers from 144 countries on their readiness to integrate ESD and GCED in their teaching led by UNESCO and Education International. Please note the views presented in this report do not reflect a representative sample of teachers across the world. The full report of the study will be released by the end of 2021.



What are the examples of good country practices

on climate change education?

Country profiles on Climate Change Communication and Education

Background: climate change communication and education (CCE) matters!

The Profiles Enhancing Education Reviews (PEER) on CCE⁴, offer a comparative perspective of the progress countries are making on the realization of Article 6 of the United Nations Framework Convention on Climate Change (UNFCCC), Article 12 of the Paris Agreement, namely Action for Climate Empowerment (ACE), and SDG target 4.7. A first set of 20 country profiles is now published on the PEER website. They are available in English, French or Spanish and cover all regions of the world and income levels. A second set of up to 50 profiles will be published in 2022.

The PEER country profiles on CCE present content on:

- 1 climate change contexts (relevant government agencies, laws, policies, and plans, terminology and budget);
- 2 climate change education (policy, curriculum, teacher education and assessment) in primary and secondary education; higher education; teacher education; TVET and adult education;
- 3 climate change communication (public awareness; public access to education; public participation); and
- 4 climate chance communication and education monitoring.

What do the profiles suggest?

The content of the profiles was mapped through 16 questions related to climate change communication and education, covering (a) country planning, implementation and monitoring contexts (e.g. Ministry of Education budget, monitoring mechanisms, ACE focal points); (b) curriculum content; and (c) legislation, policies, strategies or plans' focus on climate change education and/or communication.

The initial mapping of the first 20 profiles suggests for instance that: 95 per cent of the countries analysed have ministries of education working on climate change; 90 per cent of countries have a national climate change law, strategy, or plan that includes education content; and 85 per cent of countries have set up national monitoring mechanisms to track CCE progress.

However, only 40 per cent of national education laws and 45 per cent of education sector plans or strategies explicitly refer to CCE. References are mainly found at primary and secondary education levels (90 per cent). Fewer countries have frameworks to support CCE in TVET (70 per cent), higher education (70 per cent) and teacher training education (55 per cent). Moreover, just over a third of countries have a law, strategy, or plan specifically on CCE.

Good country practices

Yet, the analysis of the profiles suggests also that change is taking place. Some countries stand out for the progress they have made.

Italy has over 100 laws and legislative decrees that refer to climate change. Curriculum development for preprimary and primary education is guided by Decree 16 November 2012, n. 254. Climate change is included in the curriculum and students are encouraged to "assume ecologically sustainable behaviours and personal choices" (p. 78). Climate change is mentioned in the Geography and Biology curricula and is also included in the curriculum guidelines' underlying principles. Over time, a key element has been the collaboration between the Ministry of Education and the Ministry for the Ecological Transition (previously the Ministry of the Environment and Land and Sea Protection). For instance, the two ministries jointly published Guidelines

⁴ The Profiles Enhancing Education Reviews (PEER) developed by the GEM Report have the objective to promote peer learning and policy dialogue between countries on issues central to SDG 4. The PEER on CCE result from a partnership between the Global Education Monitoring (GEM) Report at UNESCO and the Monitoring and Evaluating Climate Communication and Education (MECCE) Project, hosted by the Sustainability and Education Policy Network (SEPN) and financed by the Social Sciences and Humanities Research Council of Canada. The 20 profiles are available at www.education-profiles.org and cover Azerbaijan, Bangladesh, Colombia, the Cook Islands, Costa Rica, Dominican Republic, Gambia, Indonesia, Italy, Morocco, Myanmar, New Zealand, Qatar, Republic of Korea, Rwanda, South Africa, Sweden, Tajikistan, Tuvalu and Zimbabwe.

change and state the government's intention to educate a generation of "environmental natives." Decree-Law 14 October 2019, n. 111 reformed Italy's climate laws. It established the basis for the country's achievement of the Sustainable Development Goals (SDGs) and for including climate action in Italy's schools and other education settings. In November 2019, the then Ministry of Education announced its intention to make the study of climate change compulsory in schools. As of 2020, climate change education became mandatory across Italian schools as part of civics education. Law 92/2019 introduces, in the first and second cycles of education,

the transversal teaching of civics education in schools

of all levels starting from the 2020/21 school year. Such

and understanding of the social, economic, legal, civic

On 23 June 2020, the Ministry of Education issued with

Decree no. 35 the **Guidelines** that complement this law. In September of the same year, a **brochure** about the

teaching of civics education was also published. Different

initiatives to train teachers and raise awareness of citizens

on these issues exist too.

schools and educators.

and environmental structures and profiles of society.

teaching should support the development of knowledge

for Environmental Education and Sustainable

Development in 2015. The guidelines address climate

Indonesia has also adopted an increasing number of laws and regulations related to climate change in recent years and has incorporated the issue into its development plans. Moreover, several laws and policies integrate climate change into the education and communication systems. In the same way, the development plan also links the country's various strategic plans for climate change. Moreover, Indonesia updated its National Curriculum Framework in 2013 which includes climate as a core competence (mainly for primary school students) as part of the attitudes, skills, and knowledge that students should achieve. Finally, the Ministry of Education and Culture organizes climate change events, such as the regular Climate Change **Education Forum & Expo**, which focus on climate change education topics and provides networking spaces for

Colombia is also among the countries that assign a key role to the Ministry of Education in CCE. This Ministry is responsible for development projects, including the Environmental School Projects (PRAE) and the University Environmental Projects (PRAU). The Ministry of Education and the Ministry of Environment and Sustainable Development have also created the **Interinstitutional**

Technical Committees of Environmental Education

(CIDEA), which implement national environmental policies and environmental education according to local guidelines for each region. In addition, the country has also been able to adopt a strong legal and policy framework to support CCE. In this regard, it adopted the National Climate Change Policy in 2017, which sets out five strategies addressing information dissemination on science and technology, education, training and public awareness and climate change management planning and financing. The policy also includes objectives to increase capacity and mainstream climate change into the formal education system. However, the country goes further. It is among those that adopted a National Strategy for Climate Change Education, Training and Public Awareness in 2010, which aims to strengthen learners' adaptive capacity and understanding of climate change issues. Finally, the country also stands out for the space offered to citizens to participate in decisionmaking on climate change. For instance, the Ministry of the Environment and Sustainable Development has proposed a Citizen Participation Plan, in which citizens are encouraged to contribute to decision-making processes through public hearings and consultations.

The **Republic of Korea** has adopted several noteworthy practices and initiatives in its governance of CCE. For example, it adopted the Framework Act on Low Carbon **Green Growth** in 2010 which explains the government's responsibility on CCE. A decade later, the country published its Third Masterplan on Environmental Education (2020), with has a strong focus on climate change. In addition, this Masterplan outlines the total budget for the Ministry of Environment's environmental education projects for 2021-25 - amounting to USD 15.5 million – which is an essential practice to ensure predictable, stable and adequate funding. Moreover, the National Curriculum Frameworks integrate climate change education at all levels since 2007, including at the preschool level. Indeed, in the National Curriculum Framework of Pre-Primary Education (2015) climate change education is part of a unit called "scientific exploration". The curriculum for four-year-olds encourages children to have an interest in weather and climate change and five-year-old children learn about regularities of climate. Finally, the National Curriculum Frameworks are also rooted in the Environmental Education Promotion Act, which aims to contribute to sustainable development by instilling the knowledge and capacity to prevent and address environmental problems, including climate change in students at all levels.

What does inter-ministerial collaboration on climate

change education look like?

As part of a recent UNESCO and UNEP collaboration, these are some of the promising and innovative practices that countries are undertaking in order to strengthen ESD and climate change education through inter-ministerial collaboration. Several successful cases have been mentioned in the country profiles earlier. These range from strong collaborative platforms (i.e. networks, commissions, working groups, etc.), coordinated programmes for mainstreaming of ESD delivery (Colombia, Hungary, Morocco, Uruguay), to institutional and human resource development (Dominican Republic, Kenya, Peru, South Africa).

National platforms

One of the modes of collaboration is the creation of national platforms that assist in clearly articulating collaboration and implementation. Costa Rica has developed an ESD cooperation management model within its ESD Policy Action Plan. This aims to promote ESD and environmental mangement in education centres through the generation of a sustainability work platform based on cooperation between various ministries and external stakeholders. In Japan, the creation of a national ESD resource centre, with the collaboration and support of 8 regional ESD resource centres, effectively coordinates the engagement of various ministerial partners, as well as external stakeholders, to work together on various ESD related projects. In **Hungary**, the Green Kindergarten Network and the Eco-School Network are excellent examples of the whole-institution approach to ESD. Hungary's aim is to further expand the two networks, including the greater involvement of technical and vocational education and training institutions.

Coordination in line with national policies is also possible. In **Colombia**, the Ministry of National Education and the Ministry of Environment, formulate the National Policy for Environmental Education in order to provide conceptual and structural elements of environmental education at the national level. In **Peru**, the Framework Law on Climate Change, establishes

that the Ministry of Education and regional and local governments, in coordination with the Ministry of Environment, the Ministry of Culture and the Ministry of Women and Vulnerable Populations, design communication and awareness strategies to promote environmental values among citizens and economic agents depending on the impacts and risks to climate change, as well as the cultural and linguistic specificities of the locality. In **Uruguay**, the creation of the National System for Response to Climate Change and Variability provides horizontal coordination involving public and private institutions working on climate change issues or affected by them. Its objective is to coordinate and plan the necessary actions for risk prevention, mitigation and adaptation to climate change. The Ministry of Education and Culture is a guest member of the coordinating group and is part of the Education, Communication and Awareness Working Group.

Pilot projects and mainstreaming ESD in curricula

Other countries have shown inter-ministerial collaboration on the mainstreaming of ESD in the curriculum, or on specific pilot projects aimed at introducing ESD initiatives. These are seen in the examples of Colombia and Morocco.

In **Colombia**, environmental education and climate change migration project promotes pedagogical and social mobilization strategies that, based on the development of scientific, civic and socio-emotional competencies, strengthen harmonious relationships and care for children and young people, promote sustainable development, strengthen School Environmental Educational Projects and contribute to the formulation, implementation and review of the national policy. In **Morocco**, the implementation of the Integrated Programme for the Promotion of Environmental Education and Sustainable Development has allowed the realization of pilot projects in ecological facilities at schools.

Teacher training and institutional development

One of the areas that needs significant attention is building the capacity of educators to ensure that ESD and environmental education content is effectively introduced in the various subjects, courses, and grade levels. Apart from teacher training, several countries also work and collaborate to ensure that school infrastructure were following the national priorities in ESD. The improvement of school buildings and 'greening' of schools was common, including as part of the School Garden projects in the Dominican Republic and Kenya.

In **Kenya**, efforts have been focused on the development of ESD guidelines for primary, secondary, TVET and universities. This has included the training of teachers to enhance capacity on ESD as well as establishing model schools on ESD through monitoring and awarding of best institutions on ESD practices. In **Peru** the training programme Learning for Environmental Action, the Ministry of the Environment works closely with the Ministry of Education, through the National Youth Secretariat, to implement services related to the National Youth Policy. Specifically it has created a training programme in environmental education in which it trains young people from youth environmental organizations recognized by the Peruvian State. In South Africa, the ESD Programme is primarily focused on teacher professional development (Fundisa for Change), in order to better teach the ESD content. In addition, the programme aims to develop ESD materials for schools and communities, as well as build the capacity of communities to initiate and implement ESD projects. And in **Uruguay**, there is a course on Environmental Education for Climate Change: a didactic approach

to community participation within the framework of the Gender Equality and Environmental Education as Transversal Axes of Climate Change. This course is carried out by the Ministry of Environment of Chile and the Ministry of Education and Culture of Uruguay. Among its objectives are to provide a virtual course to strengthen teachers and technicians to address climate change, from an environmental education didactic perspective, through citizen participation processes.

In **Costa Rica**, Blue Flag Ecological Programme presents an award annually, which rewards the efforts and voluntary work of citizens who seek to mitigate and adapt to climate change. In the **Dominican Republic**, the School Gardens programme is carried out with the collaboration of the Ministry of Agriculture, which provides schools with the resources, materials and guidance needed to improve their gardens. The objective of the programme is to create in students a respect and care for nature.

Impact of these initiatives

One of the largest stated impacts of these projects and of the collaborations that underpin them has been the significant efforts to integrate ESD directly into the school curriculum. Several countries (Costa Rica, Hungary, Japan, Jordan, Morocco, Peru, South Africa, Uganda, and Uruguay) also noted the impact these efforts have had on the awareness and participation of all stakeholders in the promotion of ESD and environmental education. Lastly, these efforts have also had an impact on the physical infrastructure, with countries also noting that these efforts have significantly contributed to 'greening' learning institutes.

Recommendations

- 1 Climate change education should be a core curriculum component in every country: Only 53 per cent of the national curriculum frameworks of 100 countries reviewed included any mention of climate change content. A further 40 per cent included only a very minimal level of content. Knowledge, skills, values and action on climate change need to be integrated across areas and levels of learning. Let's get every curriculum and every school climate-ready!
- 2 Greater focus on climate change content is needed in the curricula of countries most responsible for climate change: Currently, the countries most likely to include climate change content are those in regions most vulnerable to the impacts of climate change, as opposed to those largely responsible for the emissions causing climate change. Climate change education should not be sidelined as a feel-good topic, but should be actively placed at the centre of what we teach and learn, especially in those countries that are more heavily responsible for this crisis, so that education can lead to the urgently needed transformation of our societies.
- **3 Climate change education should be integrated across all levels and disciplines of learning:** The findings from 20 country profiles indicate that among those countries that have climate change education, it was mostly found in primary and secondary levels and much less in TVET (70 per cent), higher education (70 per cent) and teacher training education (55 per cent). Ecological transition of our societies needs everyone's contribution and it cannot be achieved without the engagement of all sectors of our societies.
- 4 Teachers and school leaders need to be prepared to teach climate change: The results of the teachers' survey show that fewer than 40 per cent were confident in teaching about the severity of climate change but only about one-third of the teachers felt able to explain well the effects of climate change in their local context. Climate change education should be integrated into pre-service and in-service teacher training in all subjects and at all levels of education. Knowledge, effective pedagogies and tools should be provided to encourage a whole-school approach to climate education.
- 5 Climate change education must equally focus on 'head', 'heart' and 'hands' and teachers need to be ready: Many teachers and experts interviewed emphasized the crucial importance of action-focused learning. However, while about 40 per cent of teachers are confident in teaching the cognitive dimensions of climate change only about one-fifth can explain well how to take action. Teachers need to be ready to engage 'head', 'heart' and 'hands' through holistic curricula and pedagogies to ensure learners are knowledgeable, competent, hopeful and engaged.
- 6 Climate change education should be woven into diverse aspects of countries' policies and programmes: Review of country profiles suggests positive changes are taking place in countries on climate change communication and/or education. The examples of good country practices indicate that climate change should be integrated across country education policies and programmes, including legislation, policies and strategies as well as curriculum content to bring about meaningful transformation in education systems.
- 7 Ministries of Education and Environment can and should work together to boost climate change education: Many good practice examples from across the world that are shown in this document indicate that bigger impact is created when Ministries responsible for education, environment and sustainable development collaborate to promote climate change education. With no time to lose, we must breakdown silos and make every effort possible to ensure all learners and people are prepared to face the gravest challenge of our time.

Further reading

- Education for sustainable development: a roadmap
- <u>Integrating action for climate empowerment into nationally determined contributions: a short guide</u> for countries
- Getting climate-ready: a guide for schools on climate action
- Teaching and learning transformative engagement
- Trash hack action learning for sustainable development: a teacher's guide
- Education for Sustainable Development Goals: learning objectives





Getting every school climate-ready

How countries are integrating climate change issues in education

This document summarizes the findings of selected studies by UNESCO and its partners on how climate change issues are integrated in education. These findings shed light on four key questions: where do we stand on climate change education; what do teachers say; what are the examples of country good practices on climate change education; and what does inter-ministerial collaboration on education for sustainable development look like?

It includes findings from UNESCO's review of national curriculum frameworks of 100 countries on their integration of climate change education, as well as summary of its recent report Learn for our planet (2021). The document also takes a preview of three forthcoming studies: a joint UNESCO and Education International global survey of teachers' readiness to integrate ESD and GCED in their teaching; a review of results from a series of country profiles on Climate Change Education and Communication by the UNESCO Global Education Monitoring (GEM) Report and Monitoring and Evaluating Climate Communication and Education (MECCE) project; and a joint UNESCO and UNEP review of good practices in inter-ministerial collaboration on education for sustainable development and environmental education.

The collective insights from these five studies are aimed at informing the discussions at the Climate Change COP26 in Glasgow in November 2021. More broadly, they contribute to countries' efforts on mainstreaming climate change education in education policy and practice as a part of UNESCO's initiative to get every curriculum, every school climate-ready under its global framework on Education for Sustainable Development 'ESD for 2030'.

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