



Agenda 1

Introduction and Orientation to the Meeting

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**The 1st Meeting on Promoting Teacher Education for Climate Change Education
through Collaboration between Asian Centres of Excellence on
Education for Sustainable Development (ATECCE)**

17 March 2021

Academic Background

■ Climate Change at the Core of ESD themes

Climate change is inextricably linked to almost all ESD themes such as renewable energy, biodiversity, disaster risk reduction, sustainable consumption and production, poverty, peace, and international understanding.

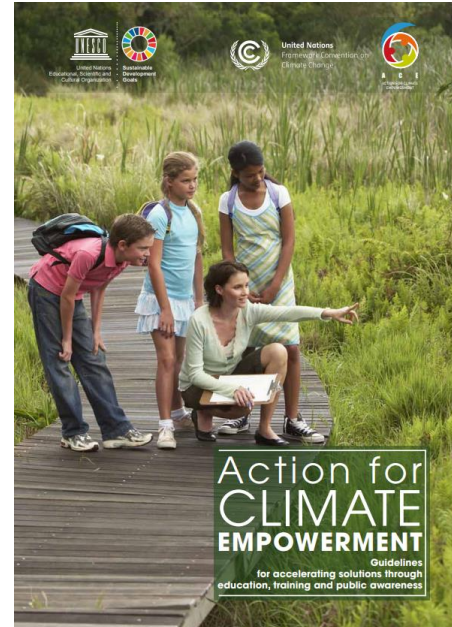


■ Urgency of Action for Climate Empowerment (UNESCO & UNFCCC, 2016)

An appropriate educational process of planning, implementation, and monitoring/evaluation/reporting is essential to encourage people to take concrete actions against climate change.

■ Learning Objectives of SDG13 Climate Action (UNESCO, 2017)

At what school level (development stage) and in what subject and area will we implement practices in line with these learning objectives?



1.2.13. SDG 13 | Climate Action | Take urgent action to combat climate change and its impacts

Table 1.2.13. Learning objectives for SDG 13 "Climate Action"

Cognitive learning objectives

1. The learner understands the greenhouse effect as a natural phenomenon caused by an insulating layer of greenhouse gases.
2. The learner understands the current climate change as an anthropogenic phenomenon resulting from increased greenhouse gas emissions.
3. The learner knows which human activities – on a global, national, local and individual level – contribute most to climate change.
4. The learner knows about the main ecological, social, cultural and economic consequences of climate change locally, nationally and globally and understands how these can themselves become catalysing, reinforcing factors for climate change.
5. The learner knows about prevention, mitigation and adaptation strategies at different levels (global to individual) and for different contexts and their connections with disaster response and disaster risk reduction.

Socio-emotional learning objectives

1. The learner is able to explain ecosystem dynamics and the environmental, social, economic and ethical impact of climate change.
2. The learner is able to encourage others to protect the climate.
3. The learner is able to collaborate with others and to develop commonly agreed-upon strategies to deal with climate change.
4. The learner is able to understand their personal impact on the world's climate, from a local to a global perspective.
5. The learner is able to recognize that the protection of the global climate is an essential task for everyone and that we need to completely re-evaluate our worldview and everyday behaviours in light of this.

Behavioural learning objectives

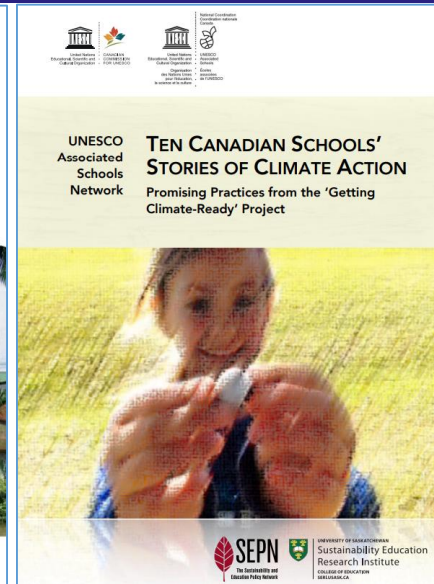
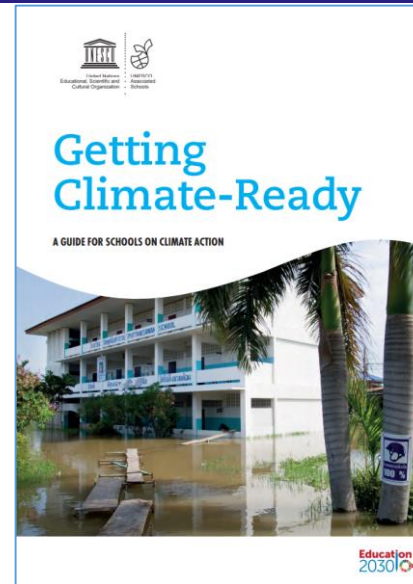
1. The learner is able to evaluate whether their private and job activities are climate friendly and – where not – to revise them.
2. The learner is able to act in favour of people threatened by climate change.
3. The learner is able to anticipate, estimate and assess the impact of personal, local and national decisions or activities on other people and world regions.
4. The learner is able to promote climate-protecting public policies.
5. The learner is able to support climate-friendly economic activities.

Academic Background (continued)

■ Expansion of Climate Change Education (CCE) at UNESCO Associated Schools

(for example, UNESCO, 2016; Sustainability and Education Policy Network, 2018)

- Introduced whole-school approaches to climate action, specifically school reforms in four areas: school governance, teaching and learning, facilities and operations, and community partnership.
- Participated in by approximately 10 schools in each of the participating 25 countries worldwide.
- Involves identifying good practices and accumulating cases in each country.



■ Development of CCE Research and Practice, for example, in the Field of Science Education

- Many discussions about CCE teaching and learning in science education for children (for example, Torkar, 2013)
- Progress in introducing CCE learning contents into curriculum standards in national and state level (for example, NGSS Lead States, 2013)
- Accumulation of research and practice on CCE for science teachers (for example, Hestness et al., 2014)

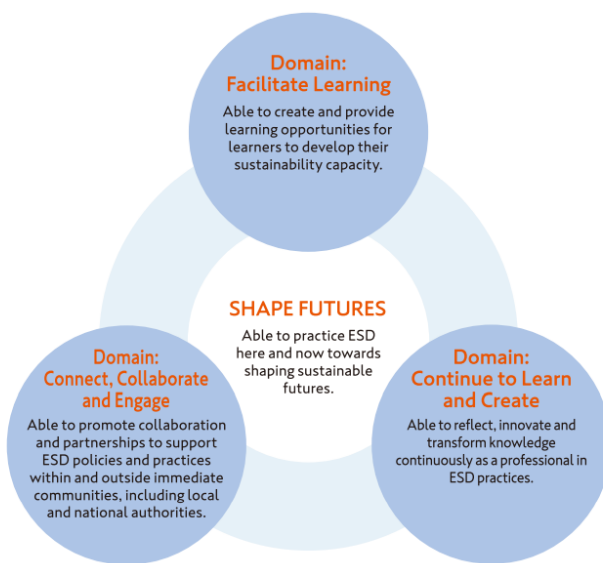
CCE in teacher education is limited to the development of teaching materials and classes, and the development of systematic educational programmes has made little progress in response to global calls for CCE.



Academic Background (continued)

- FY 2017-2019 Japan Society for the Promotion of Science (JSPS) Core-to-Core Programme
“Formation of International Centre of Excellence to Promote Teacher Education for ESD”
- FY 2018-2019 Japanese Official Development Assistance (ODA) Grants for UNESCO Activities
“Development of the Asia-Pacific ESD Teacher Competency Framework”,
in collaboration with 34 institutions in 16 countries

- Output 1 Developed the Asia-Pacific ESD Teacher Competency Framework and its Dissemination Guide**
This was the world's first international framework for ESD teacher competency. There is great significance for what has been achieved in the Asia-Pacific region with a remarkable diversity of nature, society and culture.
- Output 2 Build Centres of Excellence for ESD Research and Education and their network in Asia Pacific**
- Output 3 Fostered the Next Generation of Young Researchers**
The majority of researchers who participated in these projects were young researchers.



Project Reports and Conference Book of the 2019 Global Conference on Teacher Education for Education for Sustainable Development, held in Okayama, Japan

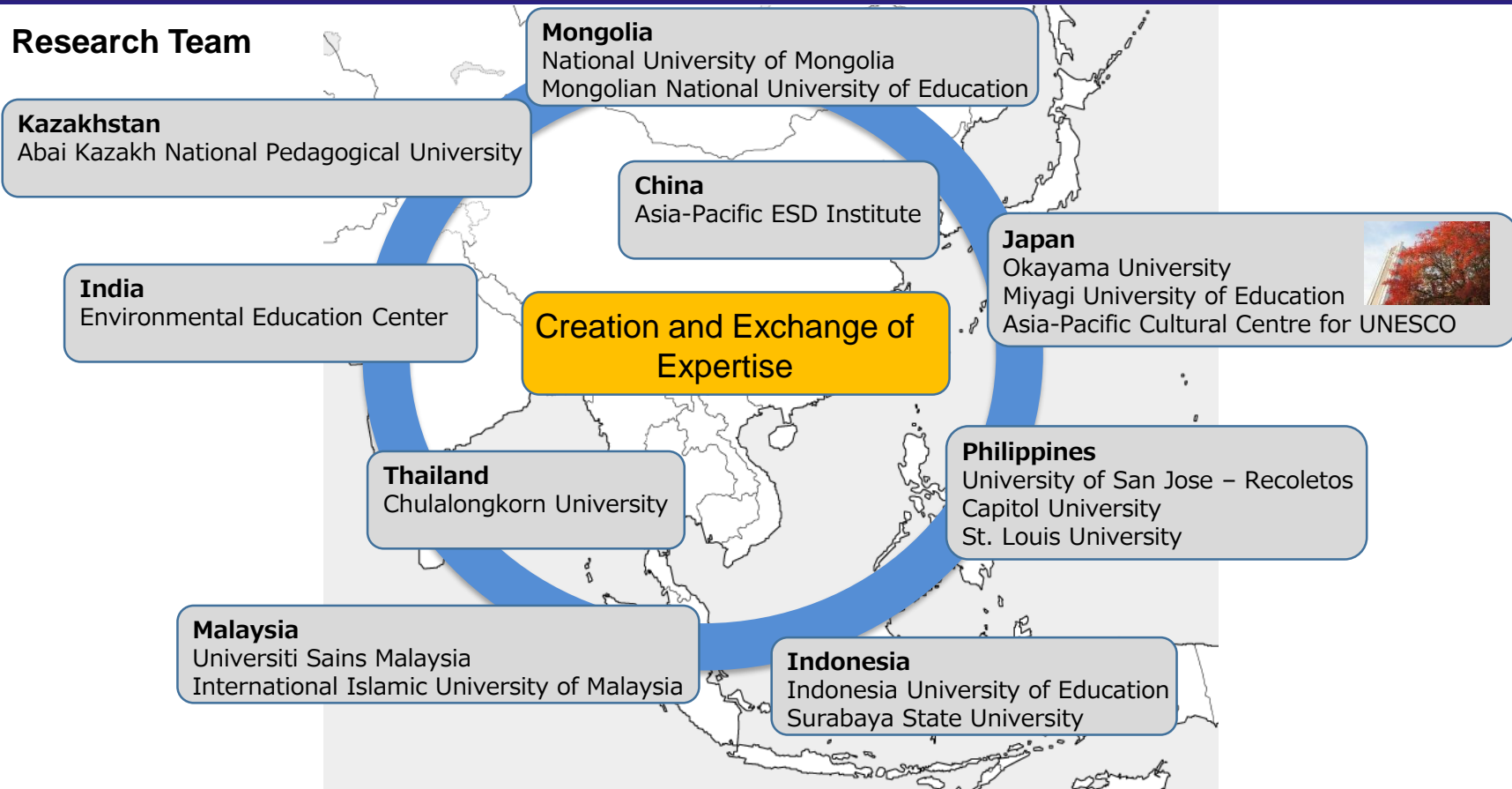
Reached the stage where a teacher education programme framework for Climate Change Education can be developed based on the Asia-Pacific ESD Teacher Competency Framework

Figure 1. Overview of the Asia-Pacific ESD Teacher Competency Framework

<http://ceteesd.ed.okayama-u.ac.jp/pdf/200511.pdf>

Participating Institutions and Research Purposes

Research Team



Research Purposes

- R-1 Developing an “Asian Framework for the Teacher Education Programme for Climate Change Education”** ➡ Create the world's first framework of teacher education for climate change education
- R-2 Developing a dissemination guide for an “Asian Framework for the Teacher Education Programme for Climate Change Education”** ➡ Accelerate CCE teacher education through ongoing collaboration between Asian teacher education institutions, UNESCO regional offices, and ministries of education in each country.

Research Process

March 2021 to September 2021

- Review and systematize teacher education programmes for CCE in each institution

October 2021 to September 2023

- Implementation and evaluation of the developed teacher education programmes for CCE in each institution

October 2023 to March 2024

- Developing an “Asian Framework for the Teacher Education Programmes for Climate Change Education” and its dissemination guide based on the experience of all institutions

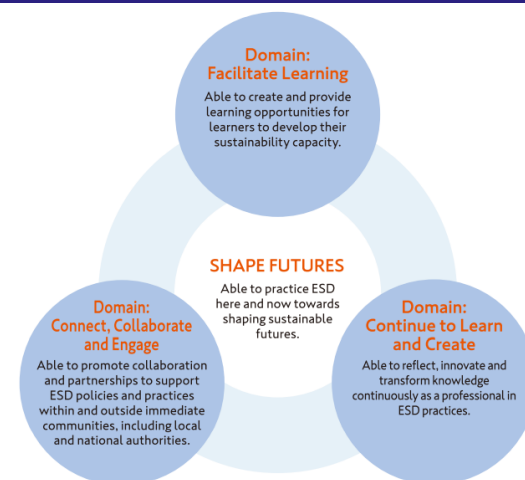


Figure 1. Overview of the Asia-Pacific ESD Teacher Competency Framework

Approximately three years of programme development, implementation, and evaluation experiences will be aggregated to create a programme framework for CCE teacher education in Asia.

Curriculum Analysis and Baseline Survey

- Identification of existing courses and programmes related to CCE teacher education
- Pre- and in-service teachers' understanding and needs of CCE

Monitoring Programme

- Monitoring the implementation of CCE teacher education programmes and clarification of its improvements in each institution

Workshop

- Examination of the validity of the developed CCE teacher education programme before the implementation
- Discussion of the evaluation results of the implemented programme

This ATECCE project will bear all costs related to the project conducted by all participating institutions. For details, please consult with Japanese researchers.

References

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