

# ASEF Classroom Network 2022 (#ASEFClassNet 2022)

Innovative Teaching & Learning, STEM Education and Education for Sustainable Development

## Project Overview



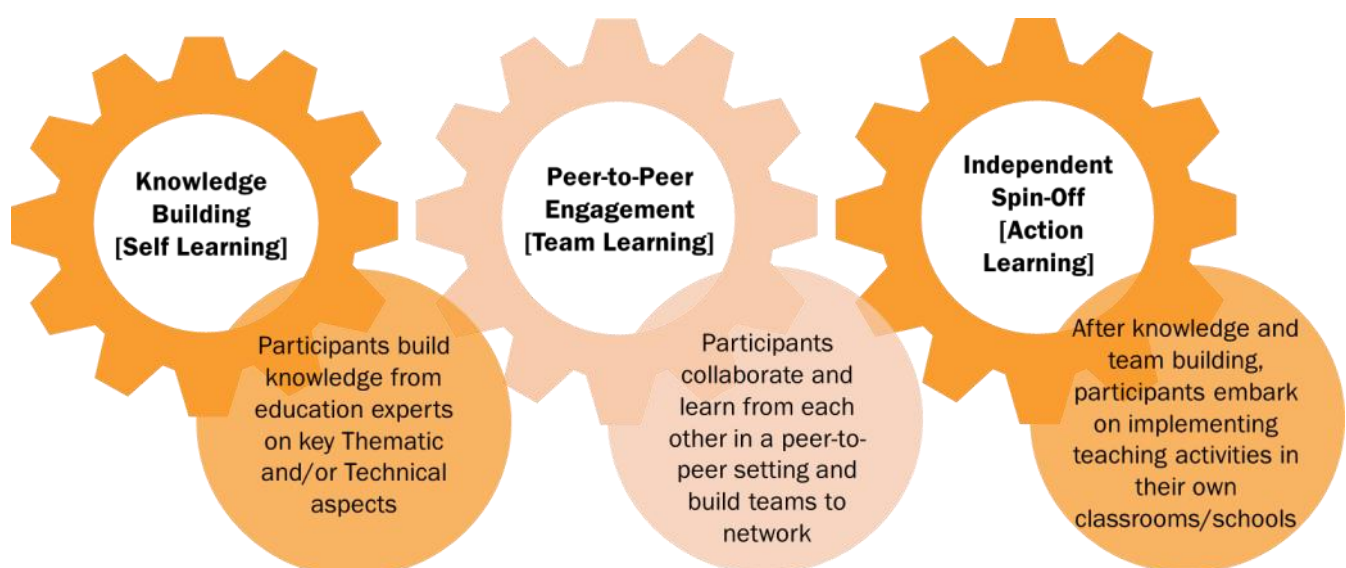
### Background

For over two decades the ASEF Classroom Network (#ASEFClassNet) has been providing capacity building opportunities for collaborative teaching and learning and a platform to explore the potential of education technology and the role of Education for Sustainable Development (ESD) in secondary, high, and vocational schools in ASEM Partner countries.

Its target group is broad, given its intergenerational & multi-stakeholder outreach which ranges from students, teachers and school leaders to teacher trainers, researchers, policy makers and EdTech experts.

Since its inception, more than 1,800 teachers from all 51 ASEM Partner countries have participated in and have become members of the ASEF ClassNet. As a result, about 35,000 students have been engaged in over 400 Asia-Europe School Collaborations and local spin-off activities.

The project activities mainly focus on the SDG4 (Quality Education) and the SDG13 (Climate Action) to help participant teachers build relevant knowledge and pedagogical capacity that contribute to their professional development for teaching in an increasingly digital teaching & learning environment. The virtual project activities in 2022 can be grouped in the following 3 key phases:



### ASEF ClassNet 2022 Project

The ASEF Classroom Network 2022 project titled “*Innovative Teaching & Learning, STEM<sup>1</sup> Education and Education for Sustainable Development*” is a 4-month long (September-December 2022) capacity building project for teachers at the secondary education level. It aims to enhance teaching & learning environments in secondary, high, and vocational schools across ASEM through diverse virtual activities. Participating teachers will have the opportunity to choose one of the following two themes:

- **School Collaboration #1**  
Holistic Learning Environments for Innovative Teaching and Learning
- **School Collaboration #2**  
Innovative STEM Education through Education for Sustainable Development (ESD)

<sup>1</sup>STEM = Science, Technology, Engineering and Mathematics

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### Key Objectives

The key objectives of the ASEF Classroom Network Project in 2022 are to:

- Raise awareness and promote meaningful discussions on the project themes among participants
- Enhance participant teachers' competencies and pedagogies for the 21st century teaching
- Provide a peer-to-peer learning platform to participant teachers to reflect on teaching practices, share experiences and perspectives
- Promote Asia-Europe cross-cultural cooperation among teachers and students at the secondary education level in ASEM
- Empower teachers to independently initiate and implement spin-off activities after the project that contribute to quality education
- Support ASEM Education leaders with relevant insights gathered from teachers to improve secondary level education scenarios in the ASEM region.



### Overview of School Collaborations

#### School Collaboration #1: Holistic Learning Environments for Innovative Teaching and Learning

For ensuring inclusive and quality education, learning scientist and scholars highlight the significance of holistic teaching approaches, especially in a time like now, when the pandemic has an adverse effect on both teachers and learners<sup>2</sup>. Holistic Education is considered as a movement in education that seeks to engage all aspects of the learner<sup>3</sup>. It encompasses all aspects of



<sup>2</sup>"The impact of COVID-19 on student equity and inclusion: Supporting vulnerable students during school closures and school re-openings" by OECD (2020): <https://www.oecd.org/coronavirus/policy-responses/the-impact-of-covid-19-on-student-equity-and-inclusion-supporting-vulnerable-students-during-school-closures-and-school-re-openings-d593b5c8/>

<sup>3</sup>Huang, Ronghuai; Kinshuk; Spector, J. Michael (2012). *Reshaping Learning: Frontiers of Learning Technology in a Global Context*. Heidelberg: Springer <sup>3</sup>Science & Business Media. p. 367. ISBN 978-3-642-32300-3. <https://link.springer.com/book/10.1007%2F978-3-642-32301-0>

<sup>4</sup>Ron Miller, *Holistic Education: An Introduction*. [http://www.holisticeducationinitiative.org/wp-content/uploads/documents/ron\\_miller\\_holistic\\_education\\_a\\_brief\\_introduction.pdf](http://www.holisticeducationinitiative.org/wp-content/uploads/documents/ron_miller_holistic_education_a_brief_introduction.pdf)

<sup>5</sup>Promoting learner happiness and wellbeing by UNESCO (2017): <https://unesdoc.unesco.org/ark:/48223/pf0000248948.locale=en>

learning that are crucial for the whole human development of a learner as well as fosters experiential learning, and places significance on "relationships and primary human values within the learning environment<sup>4</sup>".

Considering the significance of holistic education to enhance quality education, various organisations and education institutions have launched initiatives to promote holistic learning over the last decade. For example, UNESCO introduced the "Happy School Project" in 2014 to enhance learners' wellbeing and holistic development<sup>5</sup>. However, Holistic Education still is a new movement, and more discussions and capacity building opportunities are needed to integrate it fully in a school's environment.

The "Holistic Learning Environments for Innovative Teaching and Learning" aims to contribute to the existing international effort on promoting holistic learning. It aims to engage participants in a virtual peer-peer collaborative platform to discuss various aspects of holistic teaching that are crucial for innovating teaching and learning practices and ensuring quality education.

This School Collaboration will **provide pedagogical capacity building opportunities to the participant teachers on the 5 thematic areas covered in the ASEFClassNet Handbook on Holistic Teaching and Learning: 1) Relationship Building 2) Inclusion 3) Active Learning & Engagement 4) Teaching Resilience and Grit and 5) Teaching Socio-Emotional Skills (SES)**. The aim of the training will be to inform, show and support teachers across Asia and Europe to cope within their different educational & cultural contexts and ensure a holistic teaching and learning environment for their students and themselves - despite the ongoing challenges in teaching and learning.

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### School Collaboration #2: STEM Education through Education for Sustainable Development (ESD)



The world is currently driven by innovation and rapid technological advancement. At the same time, it is dealing with various socio, economic, political, and environmental challenges. Educators are advised to constantly innovate their teaching practices to prepare all students for such a world with the timely skills and knowledge needed for thriving both professionally and personally.<sup>6</sup> They are advised particularly to transform teaching STEM subjects as they have the potential to generate innovative solutions for solving contemporary global challenge.<sup>7</sup> Education experts emphasise that transformative STEM teaching at the secondary education level should not only cover the subject knowledge and content of the specific STEM field but also must address issues such as Climate Change and Global Warming. Scholars in a recent study claim that if only 16% of high school students from all over the world learned about climate change, it could contribute to reducing massive amounts of carbon dioxide.<sup>8</sup> However, as recently reported by UNESCO, the majority of the schools and education systems around the world do not address the gravity of Climate Change and how significant Climate Change Education is for ensuring a sustainable planet.<sup>9</sup>

Connecting STEM Education with ESD learning objectives could be a first step to include Climate Change Education in the secondary school curriculum. ESD requires transforming the process of how a student not only learns but practically applies the knowledge learned. Hence, integrating ESD into STEM subjects can help educators achieve important education goals: delivering the ESD learning objectives and innovating STEM teaching to meet the contemporary teaching demands.

This School Collaboration will empower participants to innovate STEM teaching and learning through the lens of ESD learning objectives with a particular focus on “SDG 13, Climate Change.” The Collaboration will show participants how they can connect Climate Change Education with the STEM subjects they teach through real-world driven climate challenges.



### Programme and Learning Domains

Both ASEFClassNet School Collaborations in 2022 consist of different programme elements which include thematic and/or technical training, peer-to-peer web sessions and discussions, as well as various assignments and spin-off activities:

- The **thematic and/or technical webinars** (online lectures followed by discussions with subject experts) will provide participants with a solid knowledge foundation on the topic.
- Following the webinars, **peer-to-peer meetings** will give participants a safe, engaging, and informal space to follow up on the lessons learnt in the webinars and to share their personal perspectives and experiences.
- Complementing the training and peer-to-peer sessions, participants will take part in **independent spin-off activities** (individual and/or team) to ensure that they gain a deeper understanding of the topic, develop self-awareness and pedagogical capacities and capable of implementing innovative teaching activities upon successfully completing the training.

The detailed planned activities will be available for all selected participants in Programme Overview Document before the School Collaboration commences in September 2022.

<sup>6</sup>The Future of Education and Skills by OECD (2018): [https://www.oecd.org/education/2030/E2030%20Position%20Paper%20\(05.04.2018\).pdf](https://www.oecd.org/education/2030/E2030%20Position%20Paper%20(05.04.2018).pdf)

<sup>7</sup>Masterson, Victoria (2021). These are the skills young people will need for the green jobs of the future. World Economic Forum. <https://www.weforum.org/agenda/2021/08/these-are-the-skills-young-people-will-need-for-the-green-jobs-of-the-future/>

<sup>8</sup>Cordero, E.C., Centeno, D., & Todd, A. M. (2020). The role of climate change education on individual lifetime carbon emissions: <https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0206266>

<sup>9</sup>“Only half of the national curricula in the world have a reference to climate change UNESCO warns” by UNESCO (2021): <https://en.unesco.org/news/only-half-national-curricula-world-have-reference-climate-change-unesco-warns>

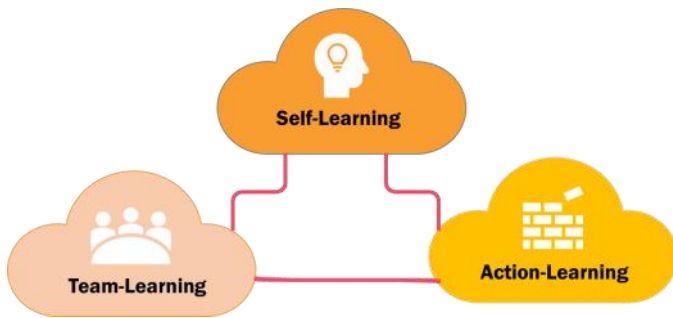


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The Learning Domains of both ASEFClassNet School Collaborations in 2022 reflects the programme elements and consists of 3 key domains:



**(1) Self-Learning:** At first, participants will learn from and interact with experts on the thematic/technical areas to build relevant knowledge on the project themes to improve their knowledge and understanding. They will take part in self-reflective exercises to finish them in their own time and pace on the lessons learned from thematic and/or technical sessions.

**(2) Team-Learning:** During the 2nd phase of the project, peer-to-peer engagement, participants exchange ideas, critically reflects on relevant issues in teams and learns from their peer through informal discussion. They work and reflect in teams so that they can strengthen their knowledge and pedagogical practices not only by learning from each other but also by empowering each other through sharing their knowledge and best practices

**(3) Action-Learning:** As a final step of the project, participants embark on an "Action Learning" journey to create Spin-Off activities of the ASEFClassNet2022 project. They will participant in an independent "Pedagogical Innovation Challenge" that enable them to explore and apply the knowledge and lessons learned through self and team reflections. They will design an innovative pedagogical practice in areas of their own choice either to implement in their own classroom/s or in the whole school environment that contributes to improving the quality of learning for their students.



### Expected Outcomes (Tangible & Intangible)

#### Tangible Outcomes

- 1 Handbook and 1 Survey Report to advance discussions and resources for improving quality education at the secondary education level in ASEM region
- 2 ASEF e-learning module for resources documentation and future resource sharing
- A series of capacity building sessions for teachers to improve their pedagogical competence and knowledge on the relevant topic
- Up to 10 Spin-off Activities
- Social media outreach to at least half million online users via different virtual platforms of ASEF to increase visibility of the project topic among ASEF stakeholders and followers

#### Intangible Outcomes

- Increased knowledge and pedagogical competencies of participants to teach about and raise awareness on Holistic Learning Environments, STEM Education and Education for Sustainable Development
- Increased understanding and knowledge of teaching practices that contribute towards the SDGs in ASEM countries
- Increased promotion of the project topic among Asian and European secondary school communities
- New and meaningful networking opportunities and possible partnerships among participants
- Increased awareness and capacity building of ASEM secondary education stakeholders to improve secondary education practices and learning environments
- Enhanced knowledge among the participants about ASEM, ASEF and ASEFEdu.

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### Expected Impact

The expected impact of the ASEFClassNet 2022 project is to strengthen capacity, dialogue, and connectivity among secondary education stakeholders, mainly teachers, in the ASEM Region by:

- Promotion of real-world driven and problem-solving based teaching practices in secondary schools in ASEM
- 2 ASEF e-learning Increased awareness and engagement of the secondary education stakeholders to advance SDG-4 and SDG-13
- Exchange of good practices and networking among participants
- Intellectual contribution through knowledge production (e.g., Handbook, Survey Insights) for secondary education stakeholders on project themes.



### Expected Contribution from Participants

- Full participation in ca. 9 sessions (1 introductory, 1 closing and 5 thematic/technical, 2 peer-to-peer sessions). The duration for each session will be approximately 1-2 hours.
- Implement an individual/group spin-off activity on collaboration theme
- Complete an online feedback/evaluation form will be distributed to all the participating teachers and facilitators, including a joint virtual session with all participants

For more information about the ASEF Classroom Network, please visit <https://www.classnet.asef.org/>.

## ORGANISED BY



ASEF is an intergovernmental not-for-profit organisation located in Singapore. Founded in 1997, it is the only institution of the Asia-Europe Meeting (ASEM). ASEF promotes understanding, strengthens relationships, and facilitates cooperation among the people, institutions and organisations of Asia and Europe. ASEF enhances dialogue, enables exchanges and encourages collaboration across the thematic areas of culture, education, governance, sustainable development, economy, public health, and media. The work of ASEF's Education Department (ASEFEdu) focuses on the themes digitalisation & inclusion, and hence, contributes with its projects to the achievement of the UN 2030 Agenda and the 17 Sustainable Development Goals (SDGs), especially to Goal4: ensuring inclusive and equitable quality education and promoting lifelong learning opportunities for all. For more information, please visit [www.ASEF.org](http://www.ASEF.org).