ASEF ClassNet2020
Education for Sustainable Development (ESD) and Artificial Intelligence (AI)

Concept Note
1. About ASEF ClassNet

Launched in 1998, the ASEF Classroom Network (ASEF ClassNet) fosters collaborations among secondary and high school teachers and students in Asia and Europe, while harnessing the potential and opportunities of technology in education. To-date, more than 1,700 teachers from all 51 ASEM Partner countries have joined the ASEF Classroom Network. In addition, more than 34,849 students have been engaged in 425 school-to-school collaborations since 2001.

2. ASEF ClassNet 2020 Topic Overview: ESD and AI

Education is the most powerful means to raise awareness and knowledge about pressing global challenges that concern sustainability, amongst them climate change and global warming, environmental degradation, or demographic changes.

For more than two decades, UNESCO has been promoting Education for Sustainable Development (ESD) to ensure that generations of today and tomorrow grow up with the mindset to value and practice the habit of living sustainably from an early age on. ESD envisions “a world where everyone has the opportunity to benefit from quality education and learn the values, behaviour and lifestyles required for a sustainable future and for positive societal transformation. ESD is a process of learning to make decisions that consider the long-term futures of the economy, ecology, and the equitable development of all communities.”

Building up on the achievements of the ESD Decade (2005-2014), UNESCO introduced the Global Action Programme (GAP) to continue its crucial initiatives and work on sustainable development. Two of the top priorities of GAP are:

1) transforming learning and training environments and
2) building capacities of educators and trainers.

Secondary-level education is an important stage for learners to develop relevant life skills and values as emphasised in ESD and the GAP initiative. As UNESCO highlights: “Secondary-level education needs to be much more than skills training or civics: it should be concerned with the holistic development and empowerment of the total human person in a societal context.” This however requires teachers to innovate the learning process in a way that is learner-centred, enquiry-based, real-world driven, more creative and that allows the students’ engagement with local communities.

While the United Nations (UN) urge the integration of learning objectives of ESD into the school curricula, educators and education institutions also face the responsibility to prepare learners with the digital skills needed to succeed in today’s rapidly transforming and highly connected digital societies. To strive for this balance, education policy makers and learning experts suggest that latest EdTech tools could assist teachers to create timely relevant learning environments that incorporate a strong understanding of ESD and teaching digital skills at the same time. In this context, emerging Artificial Intelligence (AI) technologies are considered as the forefront EdTech tools that hold the power to profoundly reshape teaching and learning. However, the use of AI in education involves both benefits and risks that not many teachers and education leaders are aware of. With the rapid development of AI, it is crucial to rethink the changing role of teachers and the use of AI in classrooms and beyond at all levels of education, especially at secondary-level education.

Embracing the significance and relevance of both ESD and the potential of AI today, the ASEF ClassNet 2020 (ASEFClassNet2020) project activities will address the topic, “Education for Sustainable Development and AI.” In particular, considering the challenges imposed on teachers and students and other relevant secondary education stakeholders by the COVID-19 Pandemic, 1 leading school collaboration activity is dedicated on the “SDG 3: Good Health & Wellbeing.”

3. Key ASEF ClassNet 2020 Project Activities

In 2020 the ASEF ClassNet project will conduct various activities under three themes. A brief summary of the notable activities is given below:
3.1 Network & Collaboration: School Collaborations in 2020

- **Category 1: Capacity Building – Education & SDG3 (Good Health & Wellbeing)**
  “A New Education Scenario: Well-being of Teachers & Students”
  
  Coordinated by 2 Asian and 1 European Teachers
  
  The ongoing disruptions in the education sector caused by the Covid-19 pandemic heavily affect teachers, students, and parents likewise. With temporary school closures across the world and the increased move to full home-based learning, diverse teaching & learning challenge arose, and many educators, learners and caretakers are still in stressful and uncertain positions. Without doubt, the most affected group are students. Many of them have been suffering a great deal due to the lack of social engagement and opportunities for building soft skills and knowledge in a conducive and thoroughly prepared teaching & learning environment. This project is addressed to teachers and students and focuses on their well-being in the current unpredictable and challenging circumstances. The objective is to establish a peer-to-peer learning and support network through various means of communication, platforms, and concrete activities.

- **Category 2: Capacity Building - Education and SDG 5 (Gender Equality)**
  “Gender-equitable AI and AI for Gender Equality”
  
  Coordinated by 1 Asian and 1 European Schools
  
  In the context of sustainable development, a main challenge of developing and using AI applications are gender biases and gender gaps in digital skills. This project engages teachers & students to critically reflect on existing dilemmas and develop new ideas on how, already at a school level, gender-equitable AI can be better integrated and promoted in our societies. The project invites both creative and factual writers – teachers and students – and contributions will be compiled in an Asia-Europe blog and published on ASEF’s social media channels.

- **Category 3: Capacity Building - Digital Competence**
  “STEM Learning through Internet of Things (IoT)?”
  
  Coordinated by 1 Asian and 1 European School (ASEFEdu teacher alumni to be confirmed, to be selected through an Open Call)
  
  Teachers and students require more capacity building opportunities to enhance their digital competences in order to contribute to innovation in education. The activity connects schools across ASEM by creating a network of weather stations and internal monitoring devices. By collecting and analysing environmental data and the integration of IoT Technology, Big Data and AI in daily curricula & extracurricular activities, teachers and students in these schools will be able to: 1) build their digital competence & expertise; 2) explore and create 21st century teaching & learning settings in classrooms; 3) collaborate through peer-to-peer exchanges; and, especially for students 4) train innovation & entrepreneurial skills, as well as soft & intercultural skills such as global citizenship, critical thinking & creativity. The activity will bridge schools with diverse levels of digital infrastructure and enable joint collaboration through resource sharing. At the initial stage, 20 schools from Asia and Europe are invited to join.

3.2 Research & Policy

Considering the significance of the topics, Education for Sustainable Development (ESD) and Artificial Intelligence (AI) in Education, the ASEF ClassNet has launched an ASEM-wide survey in November 2019 to map out the relevant issues that concern teachers and students at the secondary education level across 51 ASEM countries. Over 1600 educators and 1800 students participated in this survey that provided insights into important areas such as:

- digital infrastructure of schools
- perception towards ESD and AI in education, and AI in general
- availability of resources and national strategy on ESD and AI
- status of the integration of ESD into school curriculum
- status of the use AI tools across ASEM countries

Currently, a policy review report is being developed based on this surveys that will be published in 2021.
3.3 Communication & Outreach

As part of the strategy to increase visibility and outreach of the ASEF ClassNet project activities as well as documentation of ongoing activities, 3 types of communication activities have been taking place since the beginning of 2020 that are still ongoing:

- **Videos Series** on Education for Sustainable Development and Artificial Intelligence in Education based on the recorded interviews of participant teachers and speakers of the ASEF ClassNet15 conference.
- **AI Essay Series on ASEFEdu Medium Blog** written by the participants of the ASEFClassNet15 conference on the topic “Will AI Replace Teachers? that highlight teachers’ views towards AI in Education.
- **School Collaboration Highlight Series on ASEFEdu Medium Blog** that consists of essays and interviews that highlight the ongoing activities of the ASEF ClassNet School Collaboration across ASEM countries.

All of these 3 types of communication activities will also be shared across ASEFEdu’s social media channels on a weekly/bi-weekly basis. In addition, regular social media posts are created to promote ASEFClassNet project’s activities as well as activities of its alumni and partners.

All in all, the above-mentioned activities of the ASEF ClassNet2020 project will promote a deeper discussion on ESD within the context of COVID-19 Pandemic and on issues and trends related to AI technologies in education. The activities will facilitate a robust action-oriented dialogue on ESD, AI and the education scenario during the COVID-19 Pandemic by providing a multi stakeholder and peer-peer support platform for secondary/high schools and vocational schoolteachers, researchers, policy makers and EdTech leaders to:

- Support teachers, students, parents, and other relevant secondary education stakeholders during the COVID-19 Pandemic
- Raise awareness on educational challenges during the COVID-19 pandemic
- Raise awareness and create knowledge of the topic “Education for Sustainable Development and AI” as an integrative element in teaching and learning in secondary, high, and vocational school education;
- Contribute to teacher professionalisation by building capacity through training;
- Encourage schools to join an active Asia-Europe network of schools and support each other for creating holistic and timely relevant future learning environments;
- Gather feedback from students, and deeply analysed feedback collected from teachers during the ASEFClassNet15 Open Call Survey on ESD and AI to suggest policy recommendations to education policy makers and governments to integrate ESD into the school curriculum with the help of AI tools.
Themes and Framework for the ASEFClassNet Project Activities in 2020 (ASEFClassNet2020)

1 See ASEM Partners List: [https://www.aseminfoboard.org/about/partners](https://www.aseminfoboard.org/about/partners)
4 See the UNESCO article on GAP: [https://en.unesco.org/gap/priority-action-areas](https://en.unesco.org/gap/priority-action-areas)
5 See pg. 13, the UNESCO report on Secondary Education Reform: Towards a Convergence of Knowledge Acquisition and Skills Development: [http://www.unesco.org/education/posit_paper.PDF](http://www.unesco.org/education/posit_paper.PDF)