

Education Collaboration for Sustainable Development In Digital Economy

WANG YAN May 2, 2019



In Retrospect: Establishment of EDNET

- <u>the exchange of information</u>. The Ministers agreed that there is a need for exchanges of information among APEC members for the purposes of increasing mutual understanding and improving their education systems.
- the exchange of people for education-related purposes. The Ministers agreed that there is a need to promote exchanges of people directly involved in the development and delivery of education, such as education policy makers, researchers, teachers, education administrators, and students.





1

To foster strong and vibrant learning systems across APEC member economies, promote education for all, and strengthen the role of education in promoting social, individual, economic and sustainable development through cross-border education cooperation.

2

Developing global education cooperation with other relevant fora and institutions/multilateral organizations through collaborative research and publication, exchange programs, training and education.

3

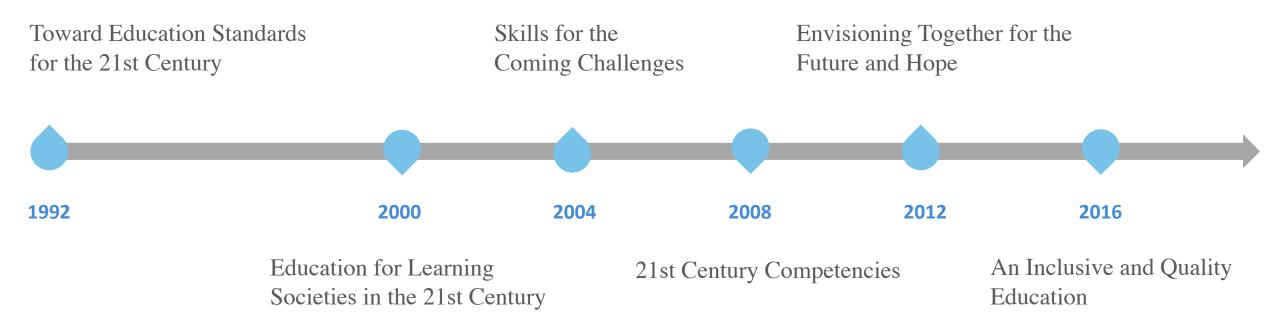
Providing appropriate opportunities and conducive environment for K-12 children and students in higher education to engage in happy and effective learning.

4

Preparing today's youth with appropriate education and training, skills, and participating in cross-border education to succeed in their local education system and compete in a globalized world.

APEC Education Ministerial Meetings: 1992-2016





Mathematics, Sustainability and Digital Economy



Japan & Thailand: A

2007

2006

Collaborative Study on Innovations for Teaching and Learning Mathematics in Different Cultures among the APEC Member Economies

Japan & Thailand:

2011

Emergency Preparedness
Education: Learning from
Experience, Science of
Disasters, and Preparing for the
Future

Japan & Thailand: Lesson

Study: Summary of 12 Years

2018

Beginning 2006



Japan & Thailand: Collaborative
Studies on Innovations for Teaching
and Learning Mathematics in
Different Cultures (II) - Lesson
Study focusing on Mathematical
Thinking

Japan & Thailand: Textbook
Development for Energy
Efficiency, Energy Security and
Energy Resiliency: A Crossborder Education Cooperation
through Lesson Study

2015

Japan, Thailand & Chile:

2019

Inclusive Mathematics for Sustainability in a Digital Economy (InMside)

Priorities for APEC Chile 2019





Relevant Projects from Fora for Digital Economy



- Indonesia: Workshop on Leveraging Digital Technology to Improve Education Quality in Rural and Remote Areas
- USA: Digital Workforce Development: Leveraging Digital and Distance-Learning Technologies to Build a 21st Century Workforce through Improved Career and Technical Education
- Republic of Korea: APEC e-Learning Training Program
- Peru: Observatory of Best Practices with ICT: proficiency standards, teaching-learning strategies in urban and rural areas, educational materials
- Australia: Quality Assurance in Online Education
- Russia: 7th APEC Conference on Cooperation in Higher Education in Asia-Pacific Region "Education in the Digital Era: Challenges for APEC"
- China: Seminars for Basic Education Reform in APEC: Experiences from PISA and TALIS

APEC Education Strategy 2016-2030





We encourage our economies to collaborate on improving education in the Asia-Pacific region under the principles established in the APEC Education Strategy. This strategy outlines a path for achieving a strong and cohesive APEC education community characterized by inclusive and quality education that supports sustainable economic growth and social well-being, enhances competencies, accelerates innovation and increases employability.

--2016 APEC Leaders' Declaration





To achieve the objective of "Enhancing and aligning competencies to the needs of individuals, societies and industries", APEC economies will

- Enhance quality assurance systems, qualification frameworks and skills recognition;
- Promote cross-border education, academic mobility and individual pathways within and across education levels;
- Advance modernization of education systems.



Three Objectives and Nine Priority Actions (Cont'd)

To achieve the objective of "Accelerate Innovation", APEC economies will

- Improve the use of educational and technological capabilities in teaching and learning processes;
- Promote Science, Technology and Innovation in education and pedagogical practices
- Promote government industry academia collaboration for R&D and Innovation.





To achieve the objective of "Increase Employability", APEC economies will

- Promote collaboration between government, higher education and TVET institutions, business and education and training stakeholders;
- Develop 21st century competencies for work and entrepreneurship;
- Smooth the transition from education to work.

Pillar 1: Enhancing and aligning competencies to the needs individuals, societies and industries



- Action 3: Modernization of education systems
- APEC economies will work together to share best practice of education systems and modernization policy processes and develop mutual understanding of best quality standards implemented at all levels. Economies will, where appropriate, share information to increase understanding and enhance the quality of new education models and innovative practices, for example expanding the use of educational technology and open education resources.
- Economies will cooperate to raise the quality of teaching and learning, including in key subjects such as STEM (Science, Technology, Engineering and Mathematics). They will work together to advance the participation of women and girls in these fields and people from disadvantaged backgrounds at all levels of education to increase their employability, better labour market outcomes and participation.





- Action 2: Promotion of Science, Technology and Innovation in education and pedagogical practices.
- The digital age is making it increasingly important for APEC economies to encourage the study of science, technology, engineering and mathematics (STEM) at all levels. A technologically literate population is vital to developing, adopting and adapting new technologies in increasingly complex and multidisciplinary economies and societies. APEC economies will work together to encourage ongoing participation in STEM studies, and to improve the teaching of STEM at all levels. Economies will strive to ensure that STEM teaching and learning is relevant to global challenges, promote the acquisition of new knowledge and supports the development of multidisciplinary approaches that relate to social sciences, humanities and creative arts to STEM.
- To encourage participation in and outcomes from STEM education, APEC economies will also share information on evidence-based good practice in STEM education and cooperation and identify specific exchange models that work at the regional level to encourage cooperation across the region.





- Action 2: Development of 21st century competencies for work and entrepreneurship.
- APEC economies will, consistent with their domestic policies, support the development of 21st century competencies by developing more interdisciplinary approaches to education that support interaction across fields. This will help build technical and soft skills, cultural and global competencies and entrepreneurship skills.

Reference and Important Documents for Further Understanding



- APEC Education Strategy
- Action Plan of APEC Education Strategy
- APEC Framework on Human Resources Development in the Digital Age
- APEC Report on Education and Economic Development
- https://www.apec.org/ednet

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Thank You!

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