



**Asia-Pacific
Economic Cooperation**

APEC Education Strategy

2016-2030

COMPETENCIES INNOVATION EMPLOYABILITY

Executive Summary

APEC Education Strategy is the first education blueprint since the inception of the APEC. The strategy reflects not only the importance given to education development and education cooperation by APEC member economies, but also the increasingly important role of education in economic growth and integration in the APEC Region. It creates a vision for education development to 2030, spells out three objectives of education development in the coming years, and proposes nine priority actions as well as implementation levers to achieve these objectives.

Why an APEC Education Strategy?

Education has been recognised as an essential area for regional cooperation since the foundation of APEC. Education supports sustainable economic growth and prosperity in Asia Pacific Region by:

- Providing the skills and knowledge people need to be highly productive and competitive in the labour market.
- Building healthy and stable societies of responsible and committed citizens enhancing wellbeing and prosperity.
- Increasing cultural understanding and promoting international engagement and people-to-people links across all walks of life by increasing mutual knowledge and understanding.

Facing with challenges posed by rapidly changing regional and global economic environments, especially the Fourth Industrial Revolution, APEC economies have reached consensus that there is a need for an overarching framework for engagement in education and training and lifelong learning among APEC economies.

Agreed upon at the 6th APEC Education Ministers' Meeting in October 2016, the strategy establishes a common vision for the region of inclusive and quality education, and sets out objectives and priority actions that will ensure continued strategic alignment between education initiatives and APEC's core objectives.

What is the vision of this Strategy?

By 2030, we envisage that APEC will have a strong and cohesive education community characterised by inclusive and quality education that supports sustainable economic growth, social wellbeing and employability of men and women in APEC economies.

Three Objectives and Nine Priority Actions

To accomplish the vision, APEC economies have agreed to work collaboratively to advance actions to realize the following three objectives and nine priority actions.

- 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.

- 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.

How to Implement the APEC Education Strategy?

When developing and implementing the annual work plans, economies will identify and work together with relevant key stakeholders in APEC and other multilateral fora, and also in their own economies, to ensure that the activities agreed upon are those that can best achieve the strategy's objectives. This will ensure that expertise and experience available is drawn on and that synergies can be leveraged.

Member economies will make effective use of existing education-related APEC initiatives, institutions and mechanisms when implementing the strategy. New initiatives and mechanisms will be developed where these are agreed on as necessary to achieve the strategy's goals.

APEC EDUCATION STRATEGY 2016-2030

Part I – Rationale

The Role of Education in Economic and Social Development

There is strong evidence that education has a significant impact on economic activity, social wellbeing and innovation and growth. Investment in education and training, regardless of gender, race, religion, or ethnic background increases the speed with which an economy develops and adopts innovative technologies, accelerates employment growth and moves economies towards more complex and value adding industries.

Education provides the skills and knowledge people need to be highly productive and competitive in the labour market. They are able to continuously improve the way they undertake their vocation and develop more effective ways to face the challenges of economies and labour markets. Education is also an important driver in building healthy and stable societies of responsible and committed citizens enhancing wellbeing and prosperity. Better educated citizens actively participate in cultural, social and economic life of society.

A better educated population is more innovative, flexible and able to adapt to structural changes in the economy as its skills can be more readily transferred across sectors. Educated workers are therefore more likely to remain employed. Greater labour market flexibility promotes collaboration and the diffusion of ideas and practices, increasing productivity and economic growth.

Participation in education increases equity, improves social cohesion, and produces better health outcomes. Increasing education outcomes, particularly among disadvantaged groups, has been shown to deliver higher social dividends and labour force participation. In particular,

increasing the education levels of women and girls, advances gender equality and contributes to better health outcomes and GDP growth for entire economies.

Education and lifelong learning also increases cultural understanding and promotes international engagement and people-to-people links across all walks of life by increasing mutual knowledge and understanding. This in turn lifts economic growth and social wellbeing.

Why an APEC Education Strategy?

Since the foundation of APEC as a forum, education and training has been recognised as an essential area for regional cooperation. Education brings people together, helping them develop their full potential and, therefore creates better conditions for economies in the region to engage in more effective economic and social development activities. It reduces barriers to trade and investment and promotes the free flow of goods, services and capital in achieving the 1994 Bogor Goals of free and open trade in the APEC region.

With recognition that education is a human right and is essential for the development of peaceful, prosperous and sustainable societies, we acknowledge the importance of public investment on education, aligned with the *2015 Incheon Declaration* and the 2030 Sustainable Development Agenda, as well as the need for using and allocating resources effectively in order to achieve inclusive and equitable quality education for all.

For APEC economies, education is an important driver in preparing a population with the technical and soft skills to be highly productive and capable of facing the challenges posed by rapidly changing regional and global economic environments. Lifting participation since early childhood through higher education and lifelong learning, especially those from disadvantaged groups, will enable APEC's citizens to adapt to the structural changes taking place in member economies. Workforce participation and productivity will be

enhanced by a better match between people's skills and employment opportunities of economic contexts.

APEC member economies have undertaken a wide range of joint education and training activities through the Human Resources Development Working Group (HRDWG), in particular, Education Network (EDNET). These projects have addressed cross-border education cooperation and student, researcher and provider mobility; skills development, technical and vocational education and training (TVET) and qualification frameworks; quality of education, system-wide improvements and higher education. This work has advanced the objective of fostering strong and vibrant learning systems across APEC, promoting education for all and strengthening the role of education in promoting social, individual, economic and sustainable development.

Greater education cooperation will help APEC economies lift the participation of their populations in education and lifelong learning, better match education outcomes with the workforce, as well as social and economic development needs, and promote the prosperity of APEC citizens. This will increase economic cooperation in the region, lift trade and investment and lead to sustainable and inclusive economic growth, social cohesion and wellbeing.

Previous APEC statements, including the 2015 APEC Leaders' Statement, have emphasized the importance of investment in human capital through the development of skills that industry needs to effectively contribute to the next phase of the region's economic growth.

The convergence of rapid technological developments and a global economy in transition makes APEC's commitment to cross-border education cooperation increasingly important for ensuring that the region's population has the skills and competencies to meet labour market needs and for continued productivity growth. Innovation in the delivery of education continues to open new possibilities for both learners and institutions to strengthen cross-border exchange and

cooperation. APEC members face new opportunities to promote high quality, open and transparent education systems and support student, researcher and provider mobility across the APEC region. With these opportunities come fresh challenges for APEC economies in assuring the quality, outcomes and mobility of education and training qualifications.

In an increasingly interconnected and globally competitive environment, there is a need for an overarching framework for engagement in education and training and lifelong learning to help APEC economies share information and best practices, address common challenges and leverage regional expertise to best effect.

The APEC Education Strategy establishes a common vision for the region of inclusive and quality education that lifts the participation rates of disadvantaged and underrepresented groups and aligns with the needs of individuals, societies and the labour markets. The strategy sets out objectives and priority actions that will ensure continued strategic alignment between education initiatives and APEC's core objectives.

With the Bogor Goals to be reviewed in 2020, the strategy builds on previous Leaders' Declarations and Joint Ministerial Statements. Agreed upon at the 6th APEC Education Ministerial Meeting in October 2016, the strategy informs the development of annual workplans for the HRDWG Networks and provides economies with a strategic approach to regional engagement in education, research and training.

Part II – APEC Education Strategy

The strategy has been informed by research and analysis. Consultations have also been held with stakeholders. The strategy recognises key multilateral agreements relevant to APEC's work.¹

Vision

¹For example UN SDG 2030 and UNESCO Education 2030

By 2030, we envisage that APEC will have a strong and cohesive education community characterised by inclusive and quality education that supports sustainable economic growth, social wellbeing and employability of men and women in APEC economies.

Objectives

To accomplish the vision, APEC economies² have agreed to work collaboratively to advance actions to realise the following three objectives:

1. Enhance and align competencies to the needs of individuals, societies and economies
2. Accelerate innovation
3. Increase employability

Priority Actions

Objective 1: Enhance and align competencies to the needs of individuals, societies and industries

Education is a lifelong process. Economies aim to successfully build quality and inclusive educational pathways from early childhood education through secondary and higher education and all life long to deliver the competencies needed to actively participate in economies and societies. Economies recognise that this is essential for inclusive and sustainable growth.

It is increasingly important that education and training deliver competencies that reflect the current and future needs of the regional labour market and that these competencies be commonly understood and recognised across borders and systems. The APEC region will enhance and align competencies to the development needs of

²APEC economies encompass domestic institutions responsible for education, including those at the regional and local level.

individuals, societies and industries by focusing on the following actions.

Action 1: Enhancement of Quality Assurance Systems, Qualification Frameworks and Skills Recognition.

Improved connections and coherence among occupational standards, quality assurance, qualifications frameworks and recognition practices, in accordance with domestic education systems, have the potential to enhance participation and productivity, both domestically and regionally by easing barriers to innovation, encouraging lifelong learning and ensuring positive labour market outcomes. Economies will share information as appropriate and work together to develop a common understanding of this complex policy space to take advantage of new opportunities in mobility and cooperation. Greater transparency consistency in application of occupational standards, quality assurance, qualifications frameworks and recognition policies and practices, in accordance with domestic educational systems will help build trust and confidence in APEC economies' education and training outcomes and support labour mobility and mobility of goods, services and trade. To support this, APEC economies will explore the development and implementation of outcomes-based occupational standards, appropriate mechanisms for quality assurance of educational institutions, qualifications frameworks and skills recognition arrangements, supported by indicators and evidence, while taking into account the specific circumstances of each APEC economy. APEC economies will explore ways to share information on school standards, where appropriate, as well as existing higher education programs. These actions aim to produce strong education and training systems, enhance quality and learning outcomes, increase institutional partnerships and expand the mobility of students, researchers, academics and professionals and technicians.

Action 2: Promotion of cross-border education, academic mobility and individual pathways within and across education levels.

Recalling the 2015 Leaders' Statement, which underscored the synergy between our ambition to improve human capital development and our goals to improve people-to-people connectivity and continue the promotion of cross-border cooperation in education engagement, APEC economies will continue their commitment to enhancing cross-border education, including through developing new modes and approaches to education delivery.

The global education landscape is creating new opportunities for economies to strengthen cross-border education cooperation including through innovations in technology. Actions that support both physical and virtual forms of student, academic, researcher, professional and provider mobility will foster inclusive and innovative growth across APEC.

APEC economies will, consistent with their domestic policies, promote the regional mobility of providers, students, academics, researchers and professionals, through support arrangements such as scholarships, work-integrated learning, and by reducing barriers to mobility. This may include actions such as increasing awareness about mobility opportunities, understanding economies' arrangements for assuring the quality and integrity of education, training and research and enhancing cultural and global competencies including cultural and language training centers.

APEC economies will work together to promote the internationalization of education and research institutions and support network collaboration between these institutions through information sharing. APEC economies will also explore ways to promote opportunities for institutions to establish cross-border mobility, including through dual and joint degree programs, sandwich programs, immersion and short-term study abroad programs and internships.

Action 3: Modernization of education systems

In modernizing their education systems, APEC economies will focus on providing high quality, inclusive education that is accessible for all. By fostering lifelong learning opportunities from early childhood onwards, modernized systems can lift participation rates and outcomes among disadvantaged groups and ensure that individuals have the opportunity to reach their full potential.

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.

APEC economies will, consistent with their domestic policies, continue enhancing and supporting the teaching profession, including pre-service and in-service training in line with increasing social diversity and complexity and encouraging support for the professional development of teachers and school leaders to improve their quality and effectiveness. Economies will also share information and evidence-based good practice to reform and improve standards and pedagogical methods, and to effectively monitor and evaluate outcomes.

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.

Objective 2: Accelerate Innovation

Innovation in education is providing new opportunities for education design and delivery that can help overcome barriers to access and

mobility. Technological change as a result of the fourth industrial revolution is transforming how economies and societies live, work, communicate and pursue ideas. Every day, new technologies and challenges to an inclusive society are presented. It is important to teach the young generation, as well as the general population about how to meet such challenges by building creativity within each individual and society. Learning how to address challenges in creative ways will impact society to positively adapt to new driving forces. In particular, creating new products, processes and models will support students, educators, researchers, communities and societies to adapt to rapidly changing economic and social conditions. The APEC region will lead on innovation in education by focusing on the following actions.

Action 1: Improving the use of educational and technological capabilities in teaching and learning processes.

Improved use of educational and technological capabilities in teaching and learning processes will be vital for maximising participation in education and lifelong learning, and for delivering high quality outcomes that meet the needs of APEC's economies and societies. This would enable APEC citizens to truly enjoy the benefits from their inclusive societies (by equipping them with the skills of the future) which would empower the people to grasp the infinite opportunities towards the future.

Better use of modern ICT in education and teaching will improve the quality and equity of education delivery. APEC economies will, subject to domestic policies, support the development of new, and scaling up of existing, ICT-based education and training to improve outcomes for learners. APEC economies will share information and experiences to increase understanding of the use of ICT in education and learning and to modernize education and training in STEM and ICT to improve the links between education and economic development in a technology-intensive world.

APEC economies will, consistent with their domestic policies, work together to better take advantage of ICT to increase participation by rural and remote communities and by allowing studies to be undertaken in ways that are tailored to the work and lifestyle needs of learners. This, coupled with cooperation by APEC economies to strengthen the management of education at all levels, will help make education and training policies, practices and systems more effective, leading to improved outcomes.

Action 2: Promotion of Science, Technology and Innovation in education and pedagogical practices.

The rapid growth in learning outside of the classroom opens new teaching and learning opportunities while also giving rise to a clear need to rethink the style and scope of pedagogy, as the digital age continues to introduce new technology-driven challenges.

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. In collaboration with the Policy Partnership on Women and the Economy (PPWE), economies will

also share information and best practices on encouraging the education of women and girls in STEM-related fields.

Action 3: Promotion of Government – Industry – Academia Collaboration for R&D and Innovation.

Innovation stems from a complementary relationship between government, industry and academia. This complex interaction contributes to policy, processes, services and research and development. Government and industry funding interacts with academia through research and development processes that result in innovation and technological advancement. APEC economies will encourage and foster government-industry-academia links.

APEC economies through the HRDWG and its networks, in particular EDNET, will share information on education, research and research infrastructure policies, practices and systems and foster education, research and industry cross-sector collaboration and good practice.

APEC's HRDWG networks will work closely with other regional forums and regional partners to identify regional models for innovation that address common concerns and ensure a consistent approach to matters relevant to education, training, research and innovation policy. Examples may include collaboration with the Policy Partnerships on Science, Technology and Innovation (PPSTI), the Committee on Trade and Investment (CTI), the Intellectual Property Rights Experts Group (IPEG), the Economic Committee, the APEC Study Centers, and the Association of Pacific Rim Universities (APRU).

Objective 3: Increase Employability

Globalisation and changes in technology are reshaping demand for knowledge and skills and the way in which work is organised. Global markets are more complex and dynamic and demand more globally competent workers. The mismatch between labour market demand and supply of available skills and labour is becoming more evident.

And, this struggle is shared by both employers seeking to fill mission critical positions, and workers who seek to adapt to the changing nature of work. There have been growing calls to improve the responsiveness of the education system to labour market needs and to ensure that students and workers acquire the skills they need to be competitive and productive in the evolving labour market. Through the APEC Education Strategy, economies will progress a range of constructive policies and initiatives to increase the employability of their citizens and mitigate impending skills shortages. The APEC region will increase employability by focusing on the following actions.

Action 1: Promotion of collaboration between government, higher education and TVET institutions, business and education and training stakeholders.

Strengthening partnerships between government, higher education and TVET institutions, business and education and training stakeholders will ensure better linkages between education and training systems and the labour market, both in terms of the competencies delivered and through the supply and demand relationship of workers in the labour market. This will provide the foundations of, and pathway towards, better employment outcomes and promote more sustainable and inclusive economic growth across the region.

APEC economies will work together to find ways in which government, business and the community can be more deeply and meaningfully integrated into education and training consultations, as well as in policy and program development and implementation.

Member economies will support partnerships between education and training providers and local businesses to improve the employability of students and meet the labour market needs of local industries.

Action 2: Development of 21st century competencies for work and entrepreneurship.

The changing nature of the labour market has resulted in demand for a new set of skills, including soft skills, which workers increasingly require to enhance their employability and competitiveness in the 21st century. Building the capacity of education systems will develop workers with competencies that industry and society needs.

APEC economies will look to find appropriate means and ways to reinforce educational systems and support the development of 21st century competencies, taking into consideration domestic and global circumstances. Teaching staff will be provided with the necessary skills and resources to ensure that their students develop the competencies needed for the labour market now and into the future.

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.

Economies will also encourage greater engagement of industry in technical vocational education and training to ensure students develop the skills needed in the workplace. Ongoing labour market research, including analysis of fields of jobs and professions that will diminish and grow as a result of changes in technology will also be undertaken.

Action 3: Smoothing the transition from education to work.

According to global projections, in the next 20 to 30 years labour markets will continue to experience rapid shifts in skills demand. Whilst traditional forms of education will continue to play an important role in building core skills, support for lifelong learning will smooth the transition from education to work, promote ongoing education and training engagement and increase the uptake of different jobs through re-skilling and upskilling.

APEC economies will, consistent with their domestic policies, promote lifelong learning or continuous capability development through employment-tailored programs to enhance career mobility and employment opportunities. This will help build pathways to re-skilling and adaptability to changing labour market needs. Economies will also be encouraged to promote work integrated learning (work experience undertaken during an education and training program) to ensure that learners possess the competencies that will make them ‘work ready’.

APEC economies will also collaborate on creating opportunities for students to obtain work experiences through cross-border youth mobility programs such as supporting internships and co-operative work placements.

Economies will develop and maintain labour market information systems to better inform students about labour market needs, help higher education and TVET institutions plan and develop labour-relevant programs linked to industry, and assist industry and government in workforce planning.

Part III – Implementing the APEC Education Strategy

APEC member economies will work together to implement the strategy. HRDWG and its networks will develop, agree to implement work plans to enhance and align competencies to the needs of individuals, societies and economies, accelerate innovation and increase employability. Economies will collect and use data and other evidence to help support and monitor progress with achieving all of the above objectives.

When developing and implementing the annual workplans, economies will identify and work together with relevant key stakeholders in APEC and other multilateral fora, and also in their own economies, to ensure that the activities agreed upon are those that can best achieve the strategy’s objectives. This will ensure that expertise and experience available is drawn on and that synergies can be leveraged.

Member economies will make effective use of existing education-related APEC initiatives, institutions and mechanisms when implementing the strategy. New initiatives and mechanisms will be developed where these are agreed on as necessary to achieve the strategy's goals.

Implementation of the annual workplan and progress in achieving the strategy's goals will be monitored by the HRDWG and its networks and reported to the HRDWG each year at the annual meeting, while respecting the individual context of the member economies' education systems.

Progress on implementing the APEC Education Strategy will be reported to the APEC Education Ministerial Meeting. The report will include any revisions that maybe required in the event of changes to the economic, social or education and training environment as the implementation of the strategy progresses.