

Action Plan of APEC Education Strategy

2016-2030

COMPETENCIES INNOVATION EMPLOYABILITY

Executive Summary

The Action Plan of the APEC Education Strategy is a follow-up to the APEC Education Strategy endorsed by the 6th AEMM and noted in the 2016 APEC Economic Leaders' Declaration. The strategy envisions a strong and cohesive education community characterized by inclusive and quality education that supports economic growth, social wellbeing and employability of men and women in the APEC region by 2030.

Developed in consultation with all 21 APEC economies, the Action Plan details a new collaborative and strategic approach to the development and implementation of education projects and initiatives based on the three pillars of the APEC Education Strategy: (i) to enhance and align competencies to the needs of individuals, societies and economies; (ii) to accelerate innovation; and (iii) to increase employability.

There are nine targets and thirty indicators in the Action Plan; the sharing of information based on these targets and indicators would serve as useful reference for future education collaboration and policy development.

The Action Plan suggests tools and instruments that can be used for the planning and implementation of education-related APEC projects as well as economy-level projects and initiatives. Furthermore, the Action Plan includes a reporting mechanism to monitor the progress of education reform in the APEC region.

Economies can decide how they would utilize the Action Plan based on their domestic circumstances. In time to come, member economies can also amend and refine the Action Plan to meet the changing educational needs of the region.

Action Plan of APEC Education Strategy

I. Preamble

The APEC Education Strategy was endorsed by APEC Education Ministers at the 6th Ministerial Meeting in Lima, Peru in 2016. The Action Plan of the APEC Education Strategy (hereafter referred to as the Action Plan) will support APEC economies to progress projects and initiatives under the three pillars of lifting and aligning competencies, accelerating innovation and increasing employability.

The Action Plan is aligned with previous APEC Leaders' Declarations, related regional and global initiatives such as United Nations Sustainable Development Goal 4, as well as other APEC regional initiatives like the Bogor Goals.

II. Vision and Approaches

2.1 Vision

By 2030, APEC will have a strong and cohesive education community characterized by inclusive and quality education that supports sustainable economic growth, social well-being and employability of men and women in APEC economies.

2.2 Approaches

APEC economies have agreed to work collaboratively to advance actions to realise the three pillars of the APEC Education Strategy:

- 1. To enhance and align competencies to the needs of individuals, societies and economies
- 2. To accelerate innovation
- 3. To increase employability

The following approaches provide the way forward to carry out the Action Plan to realise the three pillars of APEC Education Strategy:

- Take a collaborative and strategic approach to the development and implementation of projects.
 - Identify shared priorities and opportunities for joint projects that promote economic development in the APEC region which are aligned with the three pillars
 - Encourage policy discussions and exchange and encourage sharing of good practices
- Draw upon and develop a strong evidence base to underpin education work and inform the development of policy:
 - Take stock of data collected by other international organizations such as the World Bank, UNESCO, ASEAN and OECD
 - Use and update data from the Baseline Report to gain a better understanding of education policies in the region
- Develop a consistent approach to monitor progress:
 - Identify tools and instruments to monitor progress and measure effectiveness
 - Develop a framework for transparency, benchmarking, and measurability
 - Review and update the Action Plan routinely as necessary to ensure it continues to support delivery of the APEC Education Strategy and meet the changing educational needs of the region

III. Targets and Indicators

In order to pursue the goals of the APEC Education Strategy, the Action Plan proposes substantive targets as well as measurable and achievable indicators, which economies may utilize in a manner that is consistent with their domestic contexts, to guide the planning, implementation, monitoring and reporting of education-related APEC projects and economy-level projects and initiatives. The indicators below are illustrative and not intended to limit or restrict any economy's domestic data and assessment systems.

3.1 Enhancing Competencies

Target 1: By 2030, APEC member economies will have enhanced quality assurance systems, qualifications frameworks and skills recognition, as applicable in the context of each economy, which could be measured by:

- Number of economies that have reviewed and refined or undertaken comparability studies of their qualifications systems (including quality assurance and qualifications frameworks)
- Number of economies that have publicly available quality assurance standards and qualifications frameworks
- Number of economies with qualifications systems, including quality assurance and qualifications that acknowledge global competencies

Target 2: By 2030, APEC member economies will have enhanced cross-border education, academic mobility and individual pathways within and across education levels, which could be measured by:

- Number of higher education and TVET (Technical and Vocational Education and Training) students enrolled in mobility or exchange programs
- Number of international scholarship programs offered by APEC members
- Number of economies with government policies or initiatives that promote academic and student mobility
- Publicly available information on recognized qualifications and recognized education and training institutions

Target 3: By 2030, APEC member economies will have advanced the modernisation of education systems, which could be measured by:

- Number of students enrolled in online, blended and flexible learning qualifications
- Number of economies with government policies or initiatives that promote the development of high quality online learning

- Number of economies with government policies or initiatives that promote lifelong learning
- Number of economies with policies or initiatives for school leaders that promote good practice in school management
- Number of economies with policies or initiatives that encourage stakeholders to improve the equity in education.

3.2 Accelerating Innovation

Target 1: By 2030, APEC member economies will have improved the use of educational and technological capabilities in teaching and learning processes, which could be measured by:

- Percentage of learning institutions with internet connectivity to support the learning process
- Percentage of educators trained in the use of ICT for teaching and learning
- Adoption of education technologies to support teaching and learning

Target 2: By 2030, APEC member economies will have integrated Science, Technology and Innovation in Education and Pedagogical Practices, which could be measured by:

- Availability of STEM e-learning resources for teaching and learning
- Availability of STEM-related teacher training programmes
- Percentage of teaching students enrolled in STEM related programs, by gender and education level
- Number of economies with policies that promote women's and girls' participation in STEM-related activities

Target 3: By 2030, APEC member economies will have increased government-industry-academia collaboration for R & D and innovation, which could be measured by:

• Number of government-industry-academia collaboration projects and R&D at all education levels

• Number of R&D initiatives supported by private sectors (fund, expertise, infrastructure)

3.3 Increasing Employability

Target 1: By 2030, APEC member economies will have increased collaboration between government, higher education and TVET institutions, business and education and training stakeholders, which could be measured by:

- Number of active partnerships between government, higher education and TVET institutions, business and education and training stakeholders
- Number of collaborations between government, industry and academia to promote employment of tertiary and TVET (Technical and Vocational Education and Training) graduates

Target 2: By 2030, APEC member economies will have developed 21st century competencies for work and entrepreneurship in all levels and forms of education, which could be measured by:

- Number of academic and training programs that incorporate 21st century competencies and entrepreneurships
- Number of programs that include a study abroad experience
- Number of cross-border programs that include 21st century competencies, global competencies, or entrepreneurship components

Target 3: By 2030, students in APEC member economies have easier transition from education to work, which could be measured by:

- Percentage of employment of recent secondary and postsecondary graduates
- Number of graduates who have participated in workintegrated learning, including on-site practice and training, internships, work related study support

- Percentage of education spending on TVET or directed toward TVET initiatives
- Percentage of students enrolled in TVET programs

IV. Instruments and Tools

The following section offers guidelines, which economies may utilize in a manner that is consistent with their domestic contexts, for the planning and implementation of education-related APEC projects and economy-level projects and initiatives.

4.1 Enhancing Competencies

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

APEC member economies will work towards identifying and promoting good practice in qualifications systems consistent with their domestic contexts, including quality assurance for online delivery.

Economies will work together towards increased skills recognition in the region and build trust and confidence in the qualification systems of APEC economies.

Economies will share knowledge and practices on occupational standards to enhance global competencies.

Economies will work together to ensure the inclusion of global competencies in qualifications and skills recognition, consistent with domestic contexts.

Action 2: Promotion of Cross-Border Education, Academic Mobility and Individual Pathways within and across Education Levels

Economies will encourage recognition of educational and training institutions in each economy, in ways that are consistent with domestic contexts, such as through accessible information

on recognized educational and training institutions, where applicable.

Economies will share good practices in cross-border education, including provider, student and academic mobility and online education, in order to enhance transparency and develop and improve modes and approaches to education delivery.

Economies will develop and share strategies that support and facilitate pathways within institutions and economies and across borders.

Economies will promote academic exchanges for teachers and students as in-person and virtual exchanges, dual and joint degree programs, sandwich programs, immersion and short- and long-term study abroad programs and internships.

Economies will support, where appropriate, implementation of dual-qualification programs in TVET where learners have opportunities to study abroad to broaden their technical and soft skills.

Action 3: Modernisation of Education Systems

Economies will enhance student learning by leveraging technology, such as e-learning and open courseware using student-centered education materials and innovative approaches to learning assessment, consistent with their domestic contexts.

Economies will improve its facilities in schools and training institutions to maximize student learning.

Economies will promote good practice in school management, with a focus ontraining school leaders, developing a professional profile for school leaders, and developing skills for leadership in schools.

Economies will improve equity in education through the use of technology.

Economies will enhance teachers' competencies to better serve student development, in particular, minority groups, rural students, and other underserved populations. Economies will promote lifelong learning to enable everyone to reach their full potential.

Economies will study good educational planning processes to prepare for the future of teaching and learning.

4.2 Accelerating Innovation

Action 1: Improving the use of Educational and Technological Capabilities in Teaching and Learning Processes

Economies will support frameworks, research and good practice pertaining to the innovative use of ICT in teaching and learning to equip students with skills for the future.

Economies will work together to promote the use of learning analytics to provide personalized learning paths for students.

Economies will promote language education as one way to enhance global competencies, acknowledging a significant correlation between multilingualism and creative problemsolving abilities in multicultural settings and diverse working environments.

Economies will support appropriate technological capabilities for learners at all educational levels.

Action 2: Promotion of Science, Technology and Innovation in Education and Pedagogical Practices

Economies will improve practice in the teaching profession, through enhanced technology in teacher training and appraisal, consistent with their domestic contexts.

Economies will leverage cutting-edge technologies to promote STEM literacy, by developing high quality curricula and innovative teaching strategies, with a particular focus on women and girls.

Economies will support initiatives that use digital and distance learning platforms to provide flexible learning opportunities.

Economies will leverage ICT to promote digital and distance

workforce development and to provide alternative pathways for Technical and Vocational Education and Training (TVET).

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

Economies will develop initiatives that support the expansion of partnerships among government, industry and academia to deliver greater innovation in education.

Economies will encourage sharing of information on education and research infrastructure policies to improve cross-sector and cross-border cooperation.

Economies will share good practice in collaboration with business and industry to promote educational attainment.

4.3 Increasing Employability

Action 1: Promotion of Collaboration between Government, Higher Education and TVET Institutions, Business and Education and Training Stakeholders

Economies will encourage linkages and partnerships among government, higher education and TVET institutions and business to develop policies, curriculum, job-relevant training and work-integrated learning initiatives.

Economies will encourage collaboration between the education and training sector and industry to share occupational standards in common professions, possibly through an open database of standards, to facilitate greater labor, academic and student mobility.

Economies will undertake research on employment of higher education and TVET graduates, and changes in demand for skills to identify declining and growing occupations.

Action 2: Development of 21st Century Competencies for Work and Entrepreneurship

Economies will promote public-private partnerships and policies to improve integration of 21st century skills, consistent with their domestic contexts.

Economies will implement policies and programs that not only focus on industry specific vocational training, but also on skillsets that labor markets are likely to need in the future, such as creativity, ethical and critical thinking, entrepreneurship and soft skills.

Economies will work together to build on gains made by APEC or other regional qualifications frameworks and regional quality assurance frameworks, such as the APEC Architects Project, the APEC Agreement on Engineers 'substantial equivalence' of professional competence, and the Integrated Referencing Framework for skills recognition and mobility in TVET, consistent with their domestic contexts.

Action 3: Smoothing the Transition from Education to Work

Economies will promote opportunities for students to undertake work-integrated and problem-based learning in formal and informal systems to acquire practical skills for improving employability.

Economies will promote opportunities for students/trainees to receive entrepreneurship and career planning during the course of study, and encourage lifelong learning.

Economies will encourage increased participation in TVET by raising awareness of the employment, professional, salary and career advancement benefits.

Economies will provide incentives for students to enroll in TVET, consistent with their domestic contexts.

V. Monitoring and Reporting Mechanism

Implementing the APEC Education Strategy through the Action Plan will encourage APEC member economies to work together.

In order to ensure the successful and effective implementation of the APEC Education Strategy and the Action Plan, monitoring and reporting will be conducted at an APEC level and at the economy level on a voluntary basis.

APEC Level Monitoring and Reporting

In the context of the Action Plan, economies will collect data on a selection of indicators to provide APEC and relevant stakeholders with indications of the extent of progress toward the achievement of the goals and objectives of the APEC Education Strategy. Economies will also assess achievements against the indicators and objectives that have been agreed and will be reported to the APEC HRDWG. HRDWG and EDNET meetings will be used as platforms to highlight progress and good practices, including deliberation on issues, challenges and ways forward. EDNET will aggregate the indicators at the HRDWG level and will report the overall progress on implementing the APEC Education Strategy to the APEC Education Ministerial Meeting in 2020.

Economy Level Monitoring and Reporting

At the economy level, members may develop their own monitoring and reporting system, conduct baseline studies and set economy specific targets, to contribute to the APEC Education Strategy's objectives on a voluntary basis. Economies may refer to the Action Plan to develop their own initiatives and are encouraged to align, integrate and harmonize the Action Plan's targets and indicators and their economy's plans and initiatives.

Project or Initiative Level Monitoring and Reporting

Economies are encouraged to consider the APEC indicators when undertaking new economy level projects or initiatives and economies are encouraged to harmonize or adapt the APEC indicators with existing projects or initiatives where possible. Monitoring and reporting of projects and initiatives will not only ensure that the indicators are met, but also provide economies with useful information to:

- Assess effectiveness in achieving objectives or impact of projects/initiatives
- Improve internal learning and decision making about project design, operations and implementation
- Contribute to evidence-based decisions/reports
- Promote more effective and efficient evidence-based policymaking
- Ensure accountability
- Influence government policy
- Empower and motivate volunteers and supporters
- Share learning with other communities and promote wider movement

ANNEX

GLOSSARY

These definitions are to provide clarity within the Action Plan of the APEC Education Strategy and are not intended to replace or affect any economy's interpretation such terms within their domestic concepts.

21st Century Competencies: Competencies that enable learners to meet the needs of the future. They are dimensions of expertise that are intertwined with specific competencies in a particular field and can include: cognitive competencies such as creativity, interpersonal competencies such as work ethics and interpersonal competencies such as team work.

Competencies: The combination of knowledge, skills and personal, social abilities, that are applied in work or study situations and in professional and personal development. Adapted from the European Communities. (2008). The European Qualifications Framework for Lifelong Learning (EQF). Luxemburg: Office for Official Publications of the European Communities.

Employability: Possession of a set of competencies that enable a person to obtain and maintain employment in his or her chosen occupation.

Global Competencies: Competencies that enable people to think innovatively, and effectively communicate and interact respectfully with people from diverse backgrounds and cultures.

Innovation: Policy or action aimed at improvement of existing mechanisms or imposed measures with the use of good practices and advanced technologies that help to progress and overcome problems and challenges.

Occupational Standards: Statements of activities and tasks related to a specific job and to its practice.

Qualification: An official document (for example: a certificate, diploma or degree) issued by a responsible body to recognize that an individual has been assessed as achieving competencies to the standard specified. A qualification confers official recognition of value in further education and training and in the labour market. Adapted from Organisation for Economic Cooperation and Development. (2007). Qualifications Systems: Bridges to Lifelong Learning. Paris, France: OECD.

Qualification Framework: An instrument for development and classification of qualifications at national or education/training sector levels according to a set of criteria, such as using descriptors applicable to specified levels of learning.

Qualification System: All aspects of an economy's activity that result in a recognition of learning. Qualifications systems include quality assurance processes related to programme design and qualifications policy, institutional arrangements, assessment and awarding processes, and skills recognition and other mechanisms that link education and training to the labour market and civil society. A qualification system may include an explicit qualifications framework.

Quality Assurance system: All aspects of an economy's activity related to assuring the quality of education and training.

Regional Qualification Framework: A framework that enables comparisons of levels of qualifications and therefore qualifications across member economies. *Adapted from European Centre for the Development of Vocational Training (Cedefop). (2011). Glossary: Quality in education and training. Luxembourg: Office of the European Union.*

Regional Quality Assurance Framework: A common set of principles and standards to guide the application of quality assurance activities across the economies. Adapted from European Centre for the Development of Vocational Training (Cedefop). (2011). Glossary: Quality in education and training. Luxembourg: Office of the European Union.