

APEC SURVEY ON CTE/TVET

This survey is designed to learn about APEC members' policy and reforms to improve the Career and Technical Education (CTE)/Technical and Vocational Education and Training (TVET)¹ so that trainees master 21st academic and technical competencies and skills.

The findings from this survey will be reported at the Xi'an Symposium for (Preparation Symposium for the 4th APEC Education Ministerial Meeting (AEMM), and at the 4th AEMM itself, helping Ministers to make decisions and plans for CTE/TVET development in the following four years.

This survey is the result of teamwork by experts from China and Philippines, the co-leads for the Sub-theme on CTE/TVET, with valuable input by experts from USA.

After completion, please send it to
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Basic information

Economy: _____

Name of Contact: (Mr./Ms/Miss) _____

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SECTION 1. CURRENT CTE/TVET CONTEXT

These initial questions request members to provide an overview of framework in CTE/TVET

Q1a. In your economy, are there credentials awarded in CTE/TVET? (Y/N)

Secondary level(*spans ages ___ to ___*) _____, Tertiary level(*spans ages ___ to ___*) _____

Q1b. Length of programs needed to obtain the above-mentioned credential:

¹ The survey tries to understand the vocational/technical education systems, which may not be described as specifically CTE or TVET in different member economies.

Secondary level _____ year(s) Tertiary level _____ year(s)

Q1c. Is CTE/TVET offered in general educational institutions? (Y/N)

Secondary level _____ Tertiary level _____

If yes, what is the percentage of general educational institutions offering CTE/TVET?

Secondary level _____ Tertiary level _____

Q1d. Is CTE/TVET offered in specialized CTE/TVET institutions? (Y/N)

Secondary level _____ Tertiary level _____

If yes, what is the percentage of these specialized CTE/TVET institutions among the total institutions respectively? Secondary level _____ Tertiary level _____

Q1e. No matter in general institutions or specialized CTE/TVET, what is the number of students enrolled in CTE/TVET program?

Secondary level _____ Tertiary level _____

In your economy, what is total number of students at secondary level? _____ and at tertiary level? _____

Comments, additional information or References:

Q1f. Please briefly describe:

- 1) your economy's Education System in general;
- 2) CTE/TVET's place the Education System; and
- 3) CTE/TVET system in particular:

SECTION 2. KEY POLICIES AND REFORM PRIORITIES

The following questions focus on reform of CTE/TVET among APEC members in terms of finance, standards, teacher quality and assessment.

FINANCE

Q2a. CTE/TVET program funding (%)----

	Economy/Federal Level	Local govt. level (Provincial/state)	Private firms	Individuals	Official Development Assistance (ODA)
Secondary level					
Tertiary level					

Comments or References:

STANDARDS

Q2b. In your economy, are there content standards in CTE/TVET programs:

	Industry based (Y/N)	At Economy level (Y/N)	At local level (Y/N)	Broad skills			
				Do the content standards cover : (Y/N)			
				Technical skills	Workplace skills	Employability skills	Academic knowledge
Secondary level							
Tertiary level							

	21 st Century Competencies				
	Do the content standards cover : (Y/N)				
	Creativity and innovation skills	Critical thinking /real-world problem solving	ICT skills/literacy	Communication and Collaboration Skills	Ethical and socially responsible attitudes
Secondary level					
Tertiary level					

Q2c. Does your economy have CTE standards that are linked to academic standards? (Y/N)

	Government based	Industry based
Secondary level		
Tertiary level		

Q2d. Is there a curriculum associated with each set of content standards (by area or field)? (Y/N)

	Government based	Industry based
Secondary level		
Tertiary level		

Q2e. Are CTE/TVET standards available in a document or website? If so please provide the URL or attachment.

When were the current CTE/TVET standards last revised?

	Government based	Industry based
Secondary level		
Tertiary level		

Comments, additional information or References:

ASSESSMENT

Q2f. Does your educational system have CTE/TVET performance assessments or other tests of accomplishment at the end of these levels? (Y/N)

	Government based	Industry based
Secondary level		
Tertiary level		

Q2g. Do the above-mentioned assessments cover the aspects listed below?

	Aspects	Secondary level (%)		Tertiary level (%)	
		Government	Industry based	Government	Industry based
Broad skills	Technical skills				
	Workplace skills				
	Employability skills				
	Academic knowledge				
21 st Century Competencies	Creativity and innovation skills				
	Critical thinking/real-world problem solving				
	ICT skills/literacy				
	Communication and Collaboration Skills				
	Ethical and socially responsible attitudes				

Comments, additional information or References:

CREDENTIALS

Q2h. Do program completers have to pass an assessment to get a CTE/TVET credential? (Y/N)

	Government based	Industry based
Secondary level		
Tertiary level		

Q2i. Are CTE/TVET credentials---- (all/some/none/never)

	Secondary level	Tertiary level
Recognized by other educational institutes for transfer/enrollment		
Recognized by employers		
Necessary qualification to secure employment		

Q2j. Do the following sectors lead/participate the development of CTE/TVET standards and assessments? (Overwhelming role/major role/ordinary participation/minor role/no role)

Sectors	Secondary level	Tertiary level
public agency		
private businesses, industries or organizations		
labor or trade unions		
professional organizations or associations		

Comments, additional information or References:

TEACHER TRAINING AND PROFESSIONAL DEVELOPMENT

Q2k. Must CTE/TVET teachers or instructors acquire credentials (e.g. license) in order to be hired?
 ___(Y/N)

	Government based (Y/N)	Industry based (Y/N)
Secondary level		
Tertiary level		

If yes, do they have the same credentials as those in the general educational institutions? (Y/N)

	Government based	Industry based
Secondary level		
Tertiary level		

Q2l. Do CTE/TVET teachers or instructors receive pre-service training on the CTE/TVET content standards? (Y/N)

Secondary level ___ Tertiary level ___

Do CTE/TVET teachers or instructors receive professional development (in-service) training on the CTE/TVET content standards? (Y/N)

Secondary level ___ Tertiary level ___

Comments, additional information or References:

SECTION3. SETTING STANDARDS IN SOME INDUSTRIES

Q3a. Does your economy have content standards in the subjects of

	Government-issued		Industry Based	
	Secondary	Tertiary	Secondary	Tertiary
IT/ICT				
Tourism				
Electronics				

Q3b. Does your economy have CTE/TVET assessments in the subjects of

	Government-issued	Industry Based

	Secondary	Tertiary	Secondary	Tertiary
IT/ICT				
Tourism				
Electronics				

Q3c. How long does it take to obtain the base-level credential in the subjects of

	Government-issued		Industry Based	
	Secondary	Tertiary	Secondary	Tertiary
IT/ICT				
Tourism				
Electronics				

Q3d. Are mathematics courses required to complete CTE programs in IT/ICT? Yes ___ No ___

If Yes, the percentage it takes in the whole program? ____

If available, please fill out the table below

Mathematics Courses	Required to complete a CTE IT/ICT programs		Percent of program completers completing Course If Not compulsory	
	Secondary	Tertiary	Secondary	Tertiary
• Algebra first year				
• Algebra second year				
• Linear Algebra				
• Geometry (plain)				
• Geometry (analytic)				
• Statistics				
•				
•				

Q3e. Are science courses required to complete CTE programs in IT/ICT? Yes ___ No ___

If Yes, the percentage it takes in the whole program? ____

If available, please fill out the table below

Science Courses	Required to complete a CTE IT/ICT program		Percent of program completers completing course If Not compulsory	
	Secondary	Tertiary	Secondary	Tertiary
• Comprehensive/General Science				
• Biology				
• Physics				
• Chemistry				
• Earth Science				

• Environmental Science				
•				
•				
•				
•				

Q3f. Are foreign language courses required to complete CTE programs in IT/ICT? Yes ____ No ____

If Yes, the percentage it takes in the whole program? ____

If available, please fill out the table below

Foreign Language Courses	Required to complete a CTE IT/ICT program		Percent of program completers completing course If Not compulsory	
	Secondary	Tertiary	Secondary	Tertiary
• English				
• Chinese				
•				
•				
•				

Q3g. Are mathematics courses required to complete CTE programs in electronics? Yes ____ No ____

If Yes, the percentage it takes in the whole program? ____

If available, please fill out the table below

Mathematics Courses	Required to complete a CTE electronics programs		Percent of program completers completing Course If Not compulsory	
	Secondary	Tertiary	Secondary	Tertiary
• Algebra first year				
• Algebra second year				
• Linear Algebra				
• Geometry (plain)				
• Geometry (analytic)				
• Statistics				
• Trigonometry				
•				
•				

Q3h. Are science courses required to complete CTE programs in electronics? Yes ____ No ____

If Yes, the percentage it takes in the whole program? ____

If available, please fill out the table below

Science Courses	Required to complete a CTE electronics program		Percent of program completers completing course If Not compulsory	
	Secondary	Tertiary	Secondary	Tertiary
• Comprehensive/General Science				
• Biology				
• Physics				
• Chemistry				
• Earth Science				
• Environmental Science				
•				
•				
•				
•				

Q3i. Are foreign language courses required to complete CTE programs in electronics? Yes ____ No ____

If Yes, the percentage it takes in the whole program? ____

If available, please fill out the table below

Foreign Language Courses	Required to complete a CTE electronics program		Percent of program completers completing course If Not compulsory	
	Secondary	Tertiary	Secondary	Tertiary
• English				
• Chinese				
•				
•				
•				

Q3j. Are mathematics courses required to complete CTE programs in tourism? Yes ____ No ____

If Yes, the percentage it takes in the whole program? ____

If available, please fill out the table below

Mathematics Courses	Required to complete a CTE tourism programs		Percent of program completers completing Course If Not compulsory	
	Secondary	Tertiary	Secondary	Tertiary
• Algebra first year				
• Algebra second year				
• Linear Algebra				
• Geometry (plain)				

• Geometry (analytic)				
• Statistics				
•				
•				

Q3k. Are foreign language courses required to complete CTE programs in tourism? Yes ____ No ____

If Yes, the percentage it takes in the whole program? ____

If available, please fill out the table below

Foreign Language Courses	Required to complete a CTE tourism program		Percent of program completers completing course If Not compulsory	
	Secondary	Tertiary	Secondary	Tertiary
• English				
• Chinese				
•				
•				
•				

SECTION4. PROBLEMS AND COUNTERMEASURES

Q4a. What are the major government and industry based programs, if any, to support CTE/TVET development in your economy in the last 5 years?

Q4b. Are there some reforms or new strategies taken in the last 5 years? Are they effective? Why or why not?

Q4c. What are the challenges or difficulties facing your economy in CTE/TVET?

Please 1) mark (✓) the factors existing in your economy, and 2) list all the challenging items in sequence (from the most challenging to the less challenging)

(e.g. : 2 1 4 3 5 6): ____ ____ ____ ____ ____ ____

1	Traditional mindset and discrimination held by society towards CTE/TVET	
2	Lack of strong govt. support or policy backup	
3	Funding difficulties	
4	Shortage of qualified teachers and trainers	
5	Difficulties for the CTE/TVET graduates to get employed	
6	Curricula do not match industry needs, reform direly needed	
7	Other factors?	
8	Other factiors?	

Q4d. What are the countermeasures is your economy going to take to meet the above-mentioned

challenges or difficulties?

Web URL address in English or in native language providing more information about the CTE/TVET development in your economy:

1. _____
2. _____
3. _____

Thank you for your time!

Should you have any questions or inquires concerning completing this survey, please contact:

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