## 3. Case Study of Policy and Strategy

3.1. Majority of members have standards education strategy

When starting any work, the first things to do will be setting up strategy or direction. This chapter is providing you with an overview of national strategies about standards education based on sixteen responses from APEC economies. According the responses, the majority of national strategies include the importance of education activities. (No: Australia and Brunei Darussalam)


Majory have education strategy
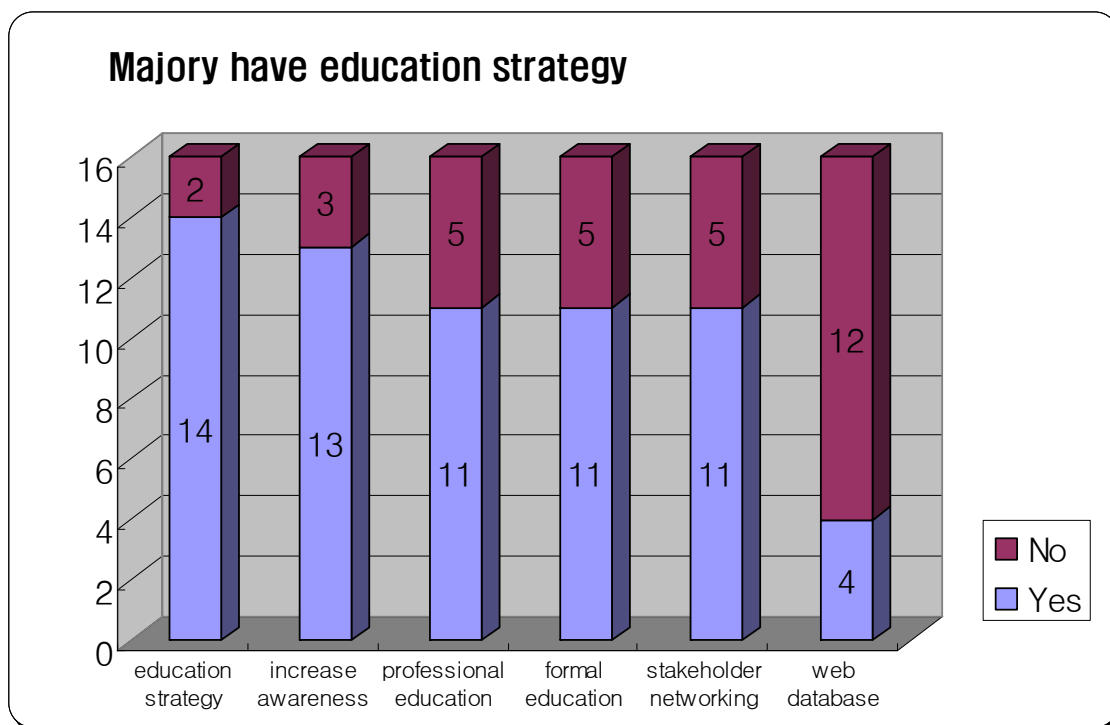
<Figure 3> Majority of members have standards education strategy

- ➢ Thirteen economies have a strategy encouraging to increase public awareness on the value of standards and conformance (in general) (No: Australia, Brunei, China)

- ➢ Eleven economies have a strategy encouraging to develop and implement education programs for policy makers, businesses, et al on standards and conformance (professional education) (No: Australia, Brunei, Canada, China, Chile)

- ➢ Eleven economies have a strategy promoting to embed the value of standards and conformance in curriculum of schools/universities (formal education) (No: Australia, Brunei, China, Chile, Malaysia)

- ➢ Eleven economies have a strategy promoting to build/enhance communication network for standards and conformance matters among academia, business, et al (networking) (No: Australia, Brunei, China, Japan, Vietnam)

- ➢ Four economies have a strategy boosting to develop database to facilitate relevant activities such as lectures, education providers, et al (database) (Yes: Philippines, Chinese Taipei, Korea, USA)

3.2. More in-depth and wide-ranging strategies to be considered

Being able to go into details of the strategies, twelve economies provided full or summary text of the education strategy attached as Annex B. (Twelve economies: Canada, Chile, China, Hong Kong, Japan, Korea, Malaysia, Singapore, Chinese Taipei, Thailand, USA, Vietnam; Also, the strategies of UK, APEC SCSC and UNECE WP6 are included for reference). Based on the text provided, further comparison analysis has been done by two viewpoints as below and the results are summarized in <Figure 4>.

➢ Level of details: Does the policy/strategy specify detailed action items?

➢ Level of wideness: Does the policy/strategy include wide range of education from professional education to formal education?
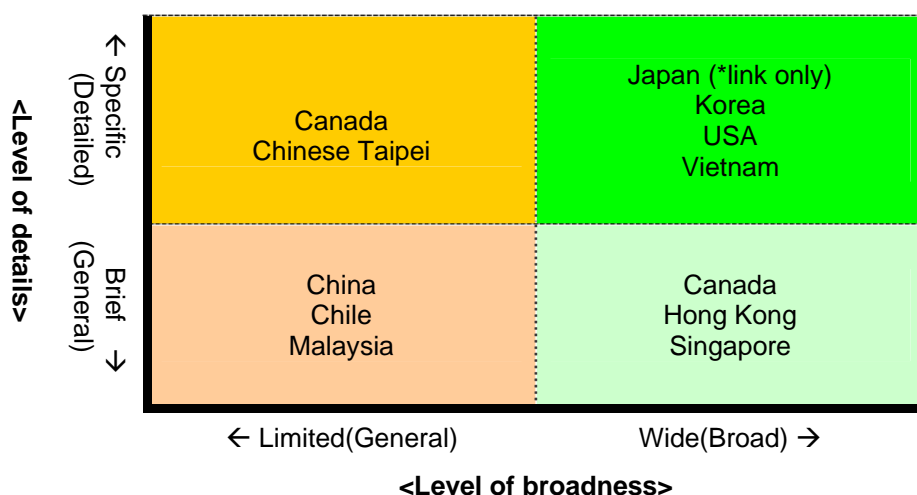
<Figure 4> Different Levels of Strategy

Good policy does not gurantee good implementation of education program, but will be able to increase the possibility of success. The strategies of Japan, USA, Vietnam and Korea show relatively in-depth and broad range of policy and deserve to be considered good practices when policy makers develop national strategies for standards education. Some sentences were excerpted from the strategies of the three economies.

→ **Selected Text from Education Strategy** ←
Establish department of standardization in universities in order to build education infrastructure. **- Annex B.6 (Korea)** Encourage universities and colleges within the United States to create standardization education programs in fields of study such as engineering, science, technology, government and public policy, business, economics and law. **- Annex B.12 (USA)** Set up and implement appropriate education/training programmes on standards and conformance in academic and professional institutions such as: universities, colleges, vocational/technical schools, etc **- Annex B.13 (Vietnam)**

## 3.3. APEC Economies' priority to Undergraduate Education

A strategic decision, after developing strategy, will be setting up priority – what to do first.

In formal education, the survey results from sixteen economies show that APEC economies give priority to undergraduate education followed by graduate education, secondary education and primary education. As shown in <Figure 5>, the order of priority order is well balanced with that of current activity. The cases of undergraduate (F3) or graduate (F4) are in Annex.D9 to D28. (The number in index in the <Figure 5> and <Figure 6> are the sum of the transformed numbers from the inputs: High-medium-low's in priority are transformed to 3-2-1 and operating–developing-planning-none are to 3/2/1/0 to understand and compare easily.)
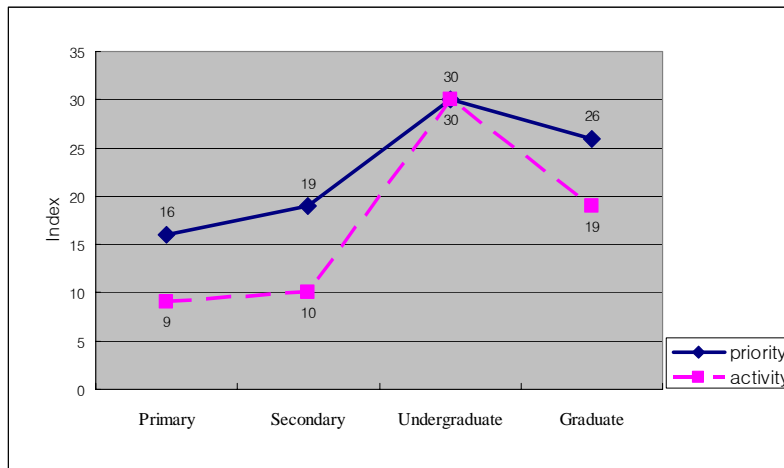
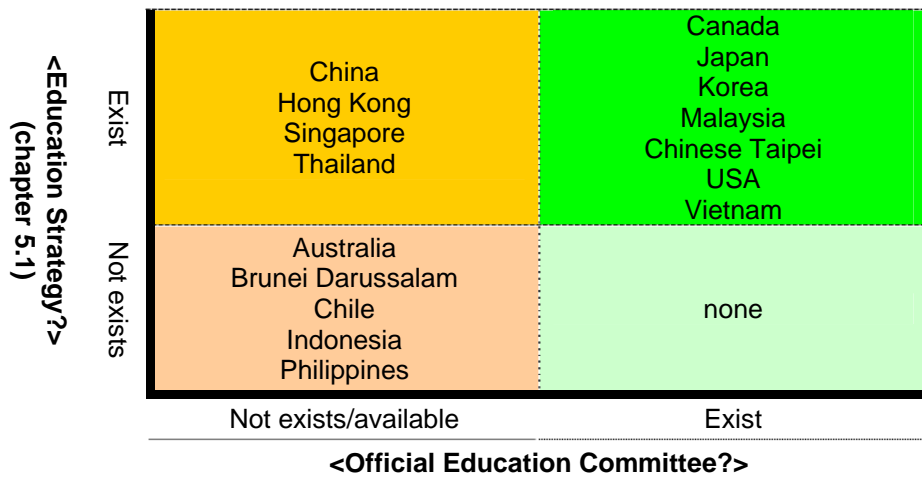**<Figure 5> Priority and Activity in Formal Education**

In professional education, the survey results show that APEC economies give priority to government officials followed by participating experts in standardization, chair/secretariat of relevant committees, biz executives/managers, and biz working level staff. However, the activities surveyed do not well match with the priority in <Figure 6>, and this data needs to be improved in future study. What we could raise herewith is that high the priority to the education for government official is, but low activity is. Please take a look at the cases in Annex.D31, D47, and D78, when you consider education programs for government officials (P3).
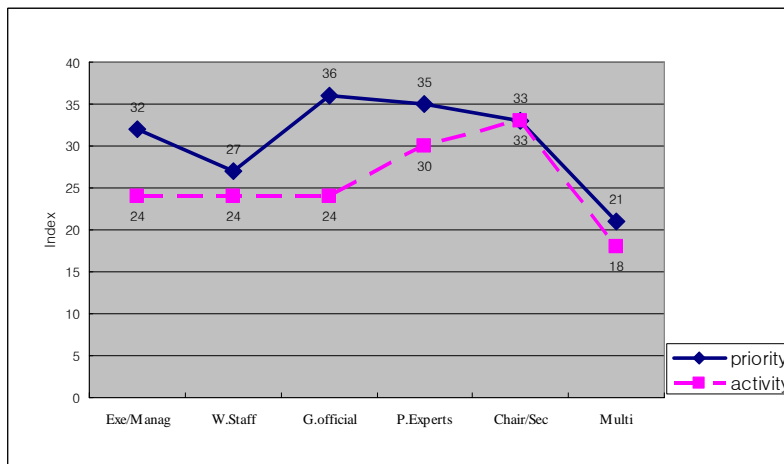
<Figure 6> Priority and Activity in Professional Education

3.4. Education Committee Will be Useful

It is common for the people in standardization arena to organize a committee to deal with a new issue. Seven economies responded they have an official committee as shown in <Figure 7>; all of them have been reported to have official education strategy in an earlier chapter These committees are mainly to support and implement relevant education strategies

		Not exists/available	Exist
<Education Strategy?> (chapter 5.1)	Exist	China Hong Kong Singapore Thailand	Canada Japan Korea Malaysia Chinese Taipei USA Vietnam
	Not exists	Australia Brunei Darussalam Chile Indonesia Philippines	none

<Official Education Committee?>

<Figure 7> Do we need an Education Committee?

All the seven economies provided both the objectives and contact information of those committees as well. The contact information is included in Annex F, and the sentences excerpted from the objectives of the education objectives are displayed below.

→   Selected Objectives of Education Committee   ←

The purpose of the committee is to introduce the basics of standards and the process of standardization to university students.
 - *CSA Committee on Standards and Education(Canada) -*

To embark on activities to enhance awareness and promote the importance of those standards among consumers; and to ensure that consumers are given adequate and timely information, knowledge and awareness on standards
 - Malaysian Association of Standard Users (Malaysia) -

 Advising KSA in developing strategy for and in implementing the university edustandardization program on standards (UEPS).
 - KSA committee for University Education Promotion on Standardization (Korea) -

Support the implementation of Goal 10 of the current United States Standards Strategy to "Establish standards education as a high priority within the United States private, public and academic sectors."
 - ANSI Committee on Education (USA) -

Development of training programmes; Organization of preparation of curricula, teaching materials and references; Implementation of training courses; Training of trainers; International cooperation in the field of MSTQ Training/Education
 - STAMEQ training center (Vietnam) -