

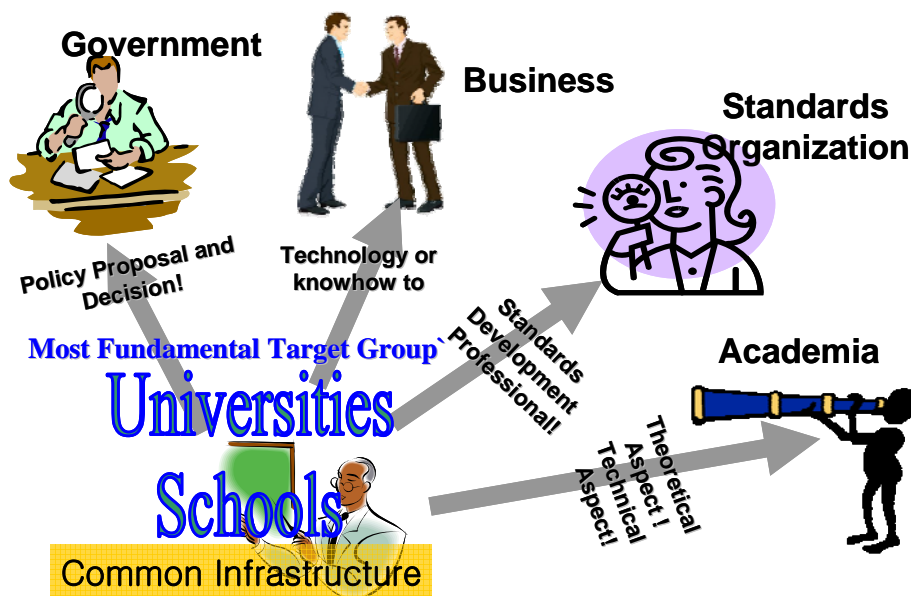
APEC SCSC Education Guideline 1

Case Studies of How to Plan and Implement Standards Education Programs and Model Curriculum Development

1. Background and objectives

It would be idealistic if students in schools or universities are educated about the fundamentals and implications of standards and conformance, and start their career in government, businesses, standards and conformance related organizations or research institutions as shown in <Figure 1>. However, majority of the just-graduates from schools or universities have hardly heard about standards and conformance in their classes; they rarely recognize its importance or impacts of standardization in real world; and unfortunately in their jobs they are not 'ready to work' when they should develop technical standards, business strategy, and trade/regulatory policy related to standards and conformance.

Education provides groundings for intellectual and professional life in a society and we put forward that standards and conformance be incorporated into education - making students 'be ready to work'. The objective of this guideline is to provide a handbook to support you in developing policy and in planning or implementing education programs about standards and conformance. This guideline is first kind of manual in the standards education by providing comprehensive factual and analytical information with case studies about past/current standards education programs worldwide and by presenting a strategic model curriculum.



<Figure 1> why do we care about education?

In terms of APEC SCSC, we started discussion about education in 2005; and the SCSC agreed to take actions to promote the education activities in the region and to initiate a project for case studies and curricula development for member economies in 2006. Here are some historical highlights of the discussions and agreements and why APEC develops this education guideline:

- In September 2005, at the APEC SCSC II meeting, the APEC member economies recognized the importance of 'standards education' as a way to build national standards infrastructure and to narrow the gap in standards infrastructure among APEC economies. The SCSC agreed to continue to share information and experience on standards education in its future meetings.
- In February 2006, at the APEC SCSC I meeting, the SCSC agreed to take actions, to promote the inclusion of Standards and Conformity Assessment and related activities in the curricula of schools and universities in the APEC region. Where relevant, this would be done in conjunction with relevant APEC forums with responsibility for educational matters. The SCSC endorsed the funding proposal in principle and asked Korea to develop the project proposal taking account of the comments from member economies.
- In November 2006, APEC Ministers instructed the importance of standards education: "*the APEC Ministers recognized the importance of standards education and encouraged members to develop reference curricula and materials to address the significance of standards and conformance to trade facilitation in the region*" at the eighteenth APEC Ministerial Meeting.
- In November 2006, noting the Ministerial instruction, APEC SCSC reviewed its Terms of References and agreed to include 'promoting standards education activities to address the significance of standards and conformance in the region' as one of its long term objectives.

APEC SCSC has recognized that the formal education on standards and conformance is at its beginning stage and that guideline for the education policy and program is useful handbook for all member economies, particularly for developing economies.

However, this guideline do not attempt to provide a perfect model suitable for all economies whose conditions are diverse, but this guideline endeavors to provide realistic and investigative systematic information and to advise desirable framework and components, primarily focusing on formal education but not limited to, you could selectively use or refer to.

2. Methodology and Definitions

2.1. Methodology of Survey and Research

A combination of survey and research has been done to conduct case studies for standards education, by project editor of Korean Standards Association (KSA). The editor collected survey inputs from sixteen APEC SCSC member economies and other additional inputs from selected experts and institutions. The original survey template is attached as Annex A and key components of the survey are summarized in <Table 1>. Additionally, after completion of the survey, a research has been done to make the case studies complementary and comprehensive.

You should note that, to get appropriate information within limited time and resources, the survey and research do not collect industry/sector specific programs already well going (e.g. ISO 9000/14000 training programs), but gather information about the education programs on standards and conformance in general.