UNESCO Regional Office for Asia and Pacific’s initiative in TVET

Dr. Eunsang Cho
Programme Specialist, UNESCO Asia and Pacific Bureau for

Future Skills Needs and Anticipation in Selected Sectors and Industries in Asia and Pacific Region

4-5 December 2017.
OVEC, Bangkok, Thailand

Dr. Eunsang Cho
(TVET Specialist, UNESCO Bangkok)
Education and training in the context of the sustainable development GOALS

SDG 4 : Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all
Education and training in the context of the sustainable development GOALS

- **A single agenda**: Education 2030 = SDG 4
- Comprehensive, holistic, ambitious, aspirational and **universal**
- **Transformative**, leaving no one behind
- **Addressing unfinished business** of Education for all (EFA) and Millennium Development Goals and current and future challenges
- Education is a **fundamental human right** and an enabling right
- **Key Features**: Access; Equity and inclusion; Gender Equality; Quality; Lifelong Learning
SDG targets related to TVET

SDG 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all

By 2030, SDG 4 calls on Member States to:

- Ensure equal access to affordable and quality TVET programmes (target 4.3)
- Substantially increase the number of youth and adults with relevant skills for employment, decent jobs and entrepreneurship (target 4.4)
- Eliminate gender disparities in education (target 4.5)
- Ensure that all learners acquire the knowledge and skills needed to promote sustainable development (target 4.7)
SDG targets related to TVET

SDG 8: Promote inclusive and sustainable economic growth, employment and decent work for all

SDG 8 calls on Member States to:
- By 2030, achieve full and productive employment and decent work for all women and men, including for young people and persons with disabilities, and equal pay for work of equal value (target 8.5)
- By 2020, substantially reduce the proportion of youth not in employment, education or training (NEET) (target 8.6)
UNESCO BANGKOK’s WORK: Skill Needs and Anticipation

• Literature Review, Concept Note and ToR
• 1\textsuperscript{st} workshop: Dec 4-5, 2017, Bangkok
• Positional paper and Labor market Research
• 2\textsuperscript{nd} workshop: Mar/Apr 2018
• Synthesis report
UNESCO BANGKOK’s WORK: Skill Needs and Anticipation

Purpose
• provide the realistic benchmarking cases of anticipation of skill needs for other member states

Main RQs
• What are the main sectors or industries?
• Can the level of demand be quantified for 3-5 years across occupations?
• How many high-skilled, middle-skilled and low-skilled will be required?
• What kind of skills are demanded?
Focus

The demand for the occupations in sectors/industries at different skill levels will be assessed on data sets available.

Methodology

A balance between quantitative data on occupations and qualitative info on skills.
Conceptual framework of modelling the D for and S of skills
Skill Analysis

- Skill analysis can take place at some levels such as macroeconomic, sectoral, occupational and skills, and training and education

- Quantitative Qs: No of Jobs in total, No of occupations, No of people trained or educated

- Qualitative Qs: Changes in occupations, specific skill requirements, types of education and training required
Skill Analysis

• How many jobs are involved, now and into the future?
  - direct, indirect and induced employment (quantitative)
• What skills are required, now and into the future?
  - How many people in each occupation? (quantitative)
  - What is the resulting demand for skills? (quantitative)
  - changing need for existing occupations, changing occupations, newly emerging occupations, new skill needs across occupations
  what skills and competencies?
  How do these relate to occupations (qualitative)
• What training and education is required, now and into the future?
  - what sources of skills are available?
  What types of training are needed? How can they be provided?
Link between Level of Qualifications and Occupations

- Level of qualification: Degree, Diploma, Certificate I-III
- Occupations requiring HE (BA/BS): managers, engineers
- Occupations requiring some college/Diploma: technicians, first-line supervisors, clerks
- Occupations requiring high school or less: agro workers, assemblers, janitors, CS, retail salespersons, shipping clerks
- Occupations requiring vocational education (Certificate I-III): carpenters, electricians, machinists, bus/truck drivers, construction workers
A choice of methodologies

- A key issue in choosing methodologies is the scope of the info and of existing models already available.
- It is important to strike a balance between hard data on occupations and qualitative info on skills.
- If labor force survey coded to ISCO 4 digit level is available, it is possible to emphasize quantitative occupational analysis, while emphasizing mainly what is new in skills in qualitative analysis.
- In case occupational data is unavailable or available at a highly aggregated level, it is better to focus on qualitative aspects of skills.
Studies at sector level

• Bottom-up approach: individual sectoral studies are combined to yield a composite picture

• A balanced approach: sectoral studies focused on sectors are embedded within a well developed macro model

• It should be founded both on a strong qualitative analysis of the sector and on quantitative data from the available statistical sources
Qualitative Research

3 Questions

1. What skills will be increasingly in demand? What are the new skills needed now and in future? What combinations of skills will be most needed?

2. What are the key occupations for IT sector, for example?
   Which occupations are changing? Which occupations will be most in demand? Are there newly emerging occupations?

3. Are current training offers meeting the skills demand? Which existing courses need to change? Are new initial or continuing training offers needed?
Qualitative Research

Main qualitative methodological approaches

- Secondary research
- Statistical analysis
- Informed opinion and specialist knowledge
- Case studies
- Enterprise surveys
- Scenarios
Qualitative Research

More important in developing countries than the developed countries because of more gaps in the data available, relatively old data, and data at the high levels of aggregation.
Main Questions of Positional Paper

• Skill definitions
• Main methods of skill needs assessment
• Classifications used (Examples: ISCED, ISCO) at different skill assessment
• Occupations in selected industries
• Data sources and quality
• Output of skill assessment
• Process of skill assessment
• Target group of skill assessment
Table of Contents for synthesis report (tentative)

1. International context
   a. UNESCO, SDGs and renewed interest in TVET
   b. Regional interest; maturing Asian economies need to compete on more than price
   c. Globalisation crises and innovation; economic forces requiring more anticipation
   d. Changes in skills; upskilling, de-skilling, digital economy

2. Methodologies for skills forecasting
   a. Labour force projections
   b. Business surveys
   c. Economic models
   d. General issues/problems; manpower planning, handling economic uncertainty, varied
c      development pathways

3. Summaries of national approaches
   a. A few pages per country

4. Integrating the different perspectives; Government, Employer, Trainer and Student
   a. Need for collaboration and co-operation
   b. An overall model
   c. Policy considerations; what is needed to encourage collaboration?

5. Conclusions
   a. Summing up country studies
   b. Re-examining Asian perspective in the light of chapters 1-4
   c. Policy Recommendations
Thank you

Learn more: http://www.unescobkk.org/education/tvet/

Dr Eunsang Cho
UNESCO Bangkok
e.cho@unesco.org