



**Southeast Asian Ministers of Education Organisation  
Regional Centre for Vocational and Technical  
Education and Training  
Brunei Darussalam**

# **Integration of Transferable Skills in TVET Curriculum, Teaching-Learning, and Assessment**

- ❖ **BRUNEI DARUSSALAM**
- ❖ **INDONESIA**
- ❖ **MALAYSIA**
- ❖ **PHILIPPINES**
- ❖ **THAILAND**
- ❖ **VIETNAM**

Final Report of the Workshop Organised by SEAMEO VOCTECH in collaboration with  
the British Council, British High Commission Singapore, and UNESCO Bangkok  
S31 Sukhumvit Hotel, Bangkok, Thailand on 13-14 March 2014



**British  
High Commission  
Singapore**



**UNESCO Bangkok**  
Asia and Pacific Regional Bureau for Education

Compiled from the Workshop Organised by SEAMEO VOTTECH in collaboration with the British Council, British High Commission Singapore, and UNESCO Bangkok S31 Sukhumvit Hotel, Bangkok, Thailand on 13-14 March 2014

## Integration of Transferable Skills in TVET Curriculum, Teaching-Learning, and Assessment

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## *Foreword*



Transferable skills or others may call these life skills, soft skills, or life skills are very important for our current and future generation. In the context of Technical and Vocational Education and Training (TVET) where the primary goal of this type of education and training is to prepare the students for entering labour force, these transferable skills are even more crucial for them. Studies have shown that employers prefer to hire employees with excellent transferable skills.

I personally believe that in the 21<sup>st</sup> century, these kinds of skills are needed even more considering that more and more we rely on the use of technology. Some of the important components under these transferable skills are Self-Management, Planning and Organising, Communication, Working with Others, Problem Solving, Initiative and Enterprise, Applying Numeracy, Design and Technology Skills, and Learning. These are very crucial skills that every student should have. These skills are applicable and transferable in different vocational and social environment. But we learned that these skills are not easily taught and assessed.

Through the workshop organised in Bangkok, Thailand on 13-14 March 2014, we have discussed various issues, challenges, ways, and strategies to integrate transferable into TVET curriculum, teaching-learning, and assessment. We have learnt from each country representatives, facilitators from Vocational and Technical Charitable Trust (VTCT), a UK accreditation body, from partners such as UNESCO Bangkok, Pearson, FTI, QLF, RTI, and also from industry.

From the country papers and workshop, we are proud to present this report to the readers. We hope that this report can be used as a reference for administrators, teachers, employers and students in improving the integration of transferable skills in their respective working context. We wish to include all resources shared during the

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workshop, but due to limited space that we have we invite you to visit SEAMEO VOCTECH website at <http://www.voctech.org.bn> for more resources.

In this opportunity, we would like to express our appreciation to our partners and sponsors. We would like to express our appreciation to High Commissioner of Brunei to Thailand and SEAMEO Secretariat for gracing the workshop Opening and also their assistance in workshop logistics. To our partner, UNESCO Bangkok for the assistance in co-organising the workshop. To the facilitators from VTCT, Dr. Nic Robinson and Dr. Stephen Vickers, country researchers, and workshop participants, we thank you for your sharing and participation during the workshop. Finally, on behalf of SEAMEO VOCTECH management and staff and also Southeast Asian community we would like to express our gratitude to British Council and British High Commission for their contribution. The workshop and this publication would not be successful without the strong support from them by providing project fund and also technical assistance.

With the contribution from each and every one of us, I hope that this report can contribute to the improvement of technical and vocational education and training in the region, particularly on enhancing the integration of transferable skills.

“Transforming VTET in the 21<sup>st</sup> Century “  
“Together We Excel”

Yours sincerely,



HAJI MD SHARIFUDDIN HAJI MD SALLEH  
Director, SEAMEO VOCTECH

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## Overview

As one of the components in the project on ENHANCING RESEARCH NETWORK THROUGH COLLABORATIVE RESEARCH ON TRANSFERABLE SKILLS IN SIX SELECTED SOUTHEAST ASIAN COUNTRIES funded by UK-SEA Partnership Fund, SEAMEO VOCTECH in collaboration with UNESCO Bangkok organised a workshop on the Integration of Transferable Skills in TVET Curriculum, Teaching-Learning, and Assessment. This is a follow up activity of a collaborative research project spearheaded by UNESCO Bangkok, Thailand and Regional Cooperation Platform (RCP) on TVET teacher education.

The workshop was participated by 24 participants representing the six (6) Southeast Asian countries: Brunei Darussalam, Indonesia, Malaysia, the Philippines, Thailand, and Vietnam. The United Kingdom was represented by two experts on life skills from the Vocational and Technical Charitable Trust (VTCT), a UK Certification Body and also one from the British Council. UNESCO Bangkok, as the partner in organising this workshop also invited representatives from various organisations and companies/industries which include Pearson, FTI, Quality Learning Foundation (QLF), and RTI International. SEAMEO Secretariat and the Brunei Embassy in Thailand also graced and attended the workshop.

During the two-day workshop, the country researchers presented their country reports, followed by the presentations and workshops from UNESCO Bangkok and VTCT UK. The workshop started with the integration of transferable skills in the TVET curriculum, followed by the integration of transferable skills in the teaching and learning, and finally on how to monitor and assess transferable skills. Based on these presentations and workshop, SEAMEO VOCTECH produces a comparative study of transferable skills in TVET, including the models of the integration.

## Highlights

| Activity | Key points                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|----------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Opening  | <p>SEAMEO VOCTECH: Transferable skills comprising of (1) Self-Management, (2) Planning and Organising, (3) Communication, (4) Working with Others, (5) Problem Solving, (6) Initiative and Enterprise, (7) Applying Numeracy, Design and Technology Skills, and (8) Learning are very crucial skills that every student should have. These skills are applicable and transferable in different vocational and social environment. But we learned that these skills are not easily taught and assessed.</p> <p>SEAMEO Secretariat: Transferable skills are the very important skills sought after by employers from their job applicants. These skills are perceived as more crucial than the technical skills.</p> <p>Dr. Vickers: The importance of transferable skills, especially in the 21<sup>st</sup> century was not only for working but also for personal growth and quality of life was highlighted.</p> |

|                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Country papers and workshops | <p><b>Country paper presentations:</b><br/>The Ministry of Education from the six (6) participating countries from ASEAN (Brunei, Indonesia, Malaysia, Philippines, Thailand, and Vietnam) have created a framework of integrating transferable skills into their curriculum.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|                              | <p>Input and demand from industry are perceived as the most important for improving the integration of TS in TVET.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|                              | <p>In some countries, the process to integrate transferable skills also brings together the related government bodies, such as Ministry of Labour and National certification body)</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|                              | <p>Some schools have their autonomy to customise their approaches to integrating transferable skill in their curriculum, teaching-learning, and assessment.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|                              | <p>Almost all participating ASEAN countries promote student-centred method to teach Transferable Skills.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|                              | <p>There is a rising need of expertise or teachers with industry background in TVET.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|                              | <p>Assessing transferable skills is influenced by the regulation in the respected institution and the nature of the subject.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|                              | <p>Some countries (such as Brunei and Malaysia) engage industry and other related institution to assess these transferable skills.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|                              | <p>Observation is the most common assessment approach in assessing transferable skills, where it will report the descriptive analysis.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|                              | <p><b>Workshops:</b><br/>Development of models. (see the handouts for details)<br/>Integration of TS in the curriculum:<br/> <ul style="list-style-type: none"> <li>4 approaches: generic, contextualized, partial, and full</li> </ul> Integration in Teaching-learning:<br/> <ul style="list-style-type: none"> <li>Two approaches: reductionist and constructivist (Problem Based Learning, Project Based Learning, experiential learning)</li> </ul> Monitoring and Assessing TS:<br/> <ul style="list-style-type: none"> <li>Monitoring: overall programme, does not focus on individual student.</li> <li>Assessment: formative vs. summative.</li> <li>Assessment of TS may differ depending on the sector and the level of employment/position. The difference can be reflected from the components of TS and the levels of TS required to perform the jobs.</li> <li>Methods of assessment: OMA Grid, mainstream, project</li> <li>The level of TS can be described in 4 levels</li> </ul> <p>Some photos from the workshop can be found at the end of this report.</p> </p> |

### Comparative Analysis of Integrating of Transferable Skills (TS) in TVET Institutions

This section explains the similarities and differences of how transferable skills are integrated in the Technical and Vocational Education and Training (TVET) curriculum, teaching-learning and assessment based on comparative analysis of the six (6) country papers from Brunei Darussalam, Indonesia, Malaysia, Philippines, Thailand, and Vietnam. The main stream of this research was divided into three (3) categories: the integration of transferable skills in TVET curriculum, in teaching and learning process, and in assessment method. Each category is discussed in the following tables.

#### A. Integration of transferable skills in TVET Curriculum

| Indonesia                                                                                                                                                                   | Malaysia                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Vietnam                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Brunei                                                                                                                                                                                                                                                                | Philippines                                                                                                                                                                                                                                                                                                                                                    | Thailand                                                                                                                                                                                                                                                                                      |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| TS is emphasised in the new 2013 curriculum. This curriculum is divided into 3 groups of subject, where the last group contains basic competencies, which is similar to TS. | Decentralising a number of agencies under different ministries motivates the agencies to prepare their own curriculum. Hence, the TS which are developed by one agency are different from that of other agencies. Usually industrial needs and market demands are the influencing factors in developing TS in the curriculum.                                                                                                                                                                                                                                                                                                     | TS are associated with life skills and soft skills. Every school has their own power to integrate TS in their curriculum (especially in the 1st school year). Ministry of Education and Training (MOET) has deployed life skills courses in all level grades and levels of education managed by MOET. Schools develop life skills of their own, and sometimes ask their teacher/faculty to give lecture about the skills. MOET also provides the standard books related to life skills. | TS are also known as life skills, which was similar to the Australia Life Skills. There is a particular committee to coordinate and oversee the life skills integration in the school curriculum. TS are also incorporated and embedded in the subject/program guide. | Six (6) options of approaches:<br>1. Adapt the integrative education wherein the skills to be developed are employed in other learning areas.<br>2. Implement competency based curriculum.<br>3. Emphasise the collaboration.<br>4. Require the community service.<br>5. Implement on the job training.<br>6. Consider the contextualisation and localisation. | TS integration in Thailand schools are based on the government regulation. TS are engaged in the domains of learning as 'Ethical & Morale Development, Knowledge, Cognitive Skills, Interpersonal Skills, and Responsibility with Analytical & Communication Skills as the scopes of NQF: Hed |
| <b>Notable Features:</b>                                                                                                                                                    | <ol style="list-style-type: none"> <li>All ASEAN governments (particularly the Ministry of Education) create the framework of integrating transferable skills into their curriculum.</li> <li>The path in improving the curriculum and integrating TS are responding from industrial needs and market demands.</li> <li>In some countries, the process to integrate transferable skills also brings together the related government bodies, such as Ministry of Labour and National certification body).</li> <li>Some schools have their own power to customise their need of transferable skill in their curriculum.</li> </ol> |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                               |

*Note: Transferable Skills (TS)*

#### B. Integration of Transferable Skills in Teaching and Learning Process

| Indonesia                                                                                                                                                                             | Malaysia                                                                                                                                                                                                                                                                                                | Vietnam                                                                                                                                                                                                                                                                                                                                                | Brunei                                                                                                                                                                                                                                             | Philippines                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Thailand                                                                                                                                                                                                                                                                                              |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| The transfer process of TS employs the real phenomenon as learning orientation. Some teaching methodologies are: project-based learning, problem-based learning and group discussion. | Two types in implementing TS in teaching and learning process:<br>1. Embedding teaching and learning of communication skills, teamwork, critical thinking, and other skills in the classroom.<br>2. <i>Offering subjects such as</i> entrepreneurship, leadership and other skills as optional courses. | The principles of life skills (TS) teaching activities:<br>1. The content of TS teaching and learning is suitable to the learners' psychology, in accordance with Vietnamese habits and customs.<br>2. Institutions are responsible for the content and quality of life skills (TS) education.<br>3. The learners participate in the volunteer spirit. | There are different approaches to teach or inculcate TS, ranging from a student centred to teacher centred. TS employment in the teaching and learning process results in the issue of a significance need of faculty with an industry experience. | Employing some approaches as follows:<br>1. Hands on activities / experience based learning approach.<br>2. Highlighting values/ skills in all learning areas.<br>3. Utilising innovative technology.<br>4. Applying skills to real-life situation.<br>5. Engaging learners via varied instructional approaches.<br>6. Using the 4 teaching learning episodes (what to know, process, reflect and transfer).<br>7. Allowing students to discover and develop skills by themselves. | TS are employed in a dual program, (which ties apprenticeship in the industry), classroom activities, research based learning, group studies, project based learning, and extracurricular activities (i.e., sport and leisure activities, community services, leadership camp, and skill competition) |
| <b>Notable Features:</b>                                                                                                                                                              | <ol style="list-style-type: none"> <li>Almost all ASEAN countries promote student-centred method to teach Transferable Skills.</li> <li>There is a rising need of expertise or teachers with industry background in TVET.</li> </ol>                                                                    |                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                       |

*Note: Transferable Skills (TS)*

C. Transferable Skills (TS) Assessment

| Indonesia                                                                                                                                                                                                                                                                                                                                                                                                                          | Malaysia                                                                                                                                                                                                                                                                                                                                | Vietnam                                                                                                                                      | Brunei                                                                                                                                                                                                                                                           | Philippines                                                                                                                                                                                                                                                                                    | Thailand                                                                                                                                                                                                        |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Types of evaluation:<br>1. Formative and<br>2. Summative.<br><br>Transferable skills are assessed continuously.                                                                                                                                                                                                                                                                                                                    | Involved some parties, such as faculty members, co-curriculum, instructors or coaches.<br><br>Assessing TS also involve SLO3, assessment rubric to measure students' TS, which contains 70% of TS and 30% content in a whole semester.<br><br>The student will get the grades at the end of the semester (based on their achievements). | The TS subjects are evaluated according to the general regulations of the school and university and depending on the nature of the subjects. | Using holistic assessments, such as a rubric. Other instruments involve in the assessments are observations and presentations. During the internship, TS are assessed by industry. The student will get the certificate of achievement with descriptive results. | Approaches employed:<br>1. TESDA (Technical Education and Skill Development Authority) certification.<br>2. Criterion-referenced assessments (checklist, rubrics, etc).<br>3. Authentic assessment/performance test.<br>4. Teacher observation and feedback.<br>5. Client satisfaction survey. | 1. TS are assessed using authentic assessment through various tools.<br>2. TS are assessed and reported at faculty level.<br>3. TS are measured, evaluated, and reported mostly for certification and awarding. |
| Notable Features:<br><br>1. Assessing transferable skills are depend on the regulation in the respected institution and the nature of the subject.<br>2. Some countries (such as Brunei and Malaysia) engage industry and other related institution to assess these transferable skills.<br>3. Observation is the most common assessment approach in assessing transferable skills, where it will report the descriptive analysis. |                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                              |                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                 |

TRANSFERABLE SKILLS IN TVET IN BRUNEI DARUSSALAM



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Abstract

*In Brunei Darussalam, transferable skills are called life skills which were previously known as common skills. These skills have been integrated in the Technical and Vocational Education and Training (TVET) system in the country for more than 12 years. This paper explains the status of its implementation, including how these skills are perceived, addressed and integrated in teaching and learning based on a study conducted through document analyses and interviews of 25 administrators, teachers, curriculum developers, government officials, and experts. The interview investigated around their involvement and experience in integrating transferable skills in TVET according to their roles. Using content analysis, this paper highlights salient findings in response to the research questions on the current status of its implementation, issues and challenges, and areas for improvements.*

INTRODUCTION

1.1 Background, Definitions, and Scope

In Brunei Darussalam, transferable skills are called life skills, previously called common skills that have been implemented for more than 12 years. As stated in the Brunei Darussalam Technical and Vocational Education Council (BDTVEC) Guide on Life Skills Implementation and General Teaching Practice (2012) it is defined that “Life skills are defined as personal management and social skills which are necessary for adequate functioning on an independent basis.” (p.2).

The guideline stated that life skills consist of eight components: (1) Self-Management, (2) Planning and Organising, (3) Communication, (4) Working with Others, (5) Problem Solving, (6) Initiative and Enterprise, (7) Applying Numeracy, Design and Technology Skills, and (8) Learning. In addition, life skills also include attitudes and values as listed below:

Table 1.1 List of Attitudes and Values Covered Under Life Skills

|                  |                |                 |               |
|------------------|----------------|-----------------|---------------|
| Balance          | Empathy        | Patriotism      | Self-reliance |
| Care and Concern | Independence   | Piety           | Sensitivity   |
| Competition      | Integrity      | Self-Confidence | Tolerance     |
| Cooperation      | Mutual Respect | Self-esteem     | Vigilance     |



Life skills are actually considered as general and work skills which are applicable and transferable in different vocational and social environment. For example, communication skills are needed in all social interaction situations, but at the same time they are essential in any working environment.

### 1.2 Contextualising Life Skills in Brunei Darussalam

As a nation, Brunei Darussalam has its defined values. Guided by the Sultan's *titah* (official royal address) on 23<sup>rd</sup> Feb 2003 stating that, *"The National Education should provide a dynamic, forward looking educational programme to provide knowledge and skills required by the industry and services without ignoring values"*. In Brunei context, the values here refer to the inherent values in the Melayu Islam Beraja (Malay Islamic Monarchy) or MIB in short, and universal values to enable the younger generation to project their identity and image positively and appropriately so that they can live harmoniously and have competitive values that make them able to contribute to society in the midst of globalisation.

As also reflected in the vision statement of the Ministry of Education (MoE), 'Quality Education Towards a Developed, Peaceful and Prosperous Nation' and in the Mission Statement 'To Provide Holistic Education to Achieve Fullest Potential for All' (Ministry of Education Brunei Darussalam, 2012), life skills are linked to the definition of holistic education. In the MoE Strategic Plan it is also emphasised that in order to upgrade teaching and learning in schools, holistic development of the individual is one of the important aspects of education. Holistic here includes the inculcation of spiritual, moral, social, cultural, attitudes and values.

The new education system called SPN21 aims to develop the students with the required skills, knowledge and understanding with the right attitudes and values to ensure holistic development. To simplify and to easily memorise, MoE uses the following formula:

**SPN21 = Knowledge & Understanding + Essential Skills + Attitudes & Values**

- a) **Knowledge and Understanding** – Covers the content-based subject disciplines.
- b) **Essential Skills** – the essential skills when combined with relevant knowledge and inculcation of proper attitudes and values will provide the basis for lifelong learning and employability in a progressive and challenging world. These include:
  - a. Communication Skills
  - b. Numeracy Skills
  - c. ICT Skills
  - d. Thinking and Problem Solving Skills
  - e. Self-Management and Competitive Skills
  - f. Study and Work Skills
  - g. Social Skills
  - h. Physical Skills
  - i. Aesthetic Skills

- c) **Attitudes and Values** – self-confidence and self-esteem, empathy and appreciativeness, self-reliance and independence, tolerance and mutual respects, caring, concern and sensitivity, integrity, national patriotism, piousness, competitiveness, pro-activeness and vigilance.

The above statements show evidences that the concept of transferable skills is already incorporated in the vision, mission, and strategic initiatives of the Ministry of Education.

### 1.3 Guidelines for Implementing Transferable Skills

Based on Brunei Darussalam Technical and Vocational Education Council (BDTVEC) Guide, Brunei Darussalam's policy and strategy of integrating transferable skills in TVET is similar to the one in Australia (Australian Government Department of Education, Science and Training, 2006). Both countries had identified eight components as transferable skills, which are as follows:

Table 1.2 *Components of Transferable Skills in Australia and Brunei*

| Item | Australia                        | Brunei                                   |
|------|----------------------------------|------------------------------------------|
| 1    | Communication                    | Communication                            |
| 2    | Teamwork                         | Working with Others                      |
| 3    | Problem Solving                  | Problem Solving                          |
| 4    | Initiative and Enterprise Skills | Initiative and Enterprise Skills         |
| 5    | Planning and Organising          | Planning and Organising                  |
| 6    | Self-Management                  | Self -Management and Competitive         |
| 7    | Learning                         | Learning                                 |
| 8    | Technology                       | Applying Numeracy, Design and Technology |

The only difference is item 8; while both countries include 'Technology' as a component of transferable skill, in Brunei this also includes application of numeracy and design in the component known as 'Applying Numeracy, Design and Technology'.

Brunei Education defines skills quite similar to the one stated in Education for All (EFA) where there are three types of skills i.e. Foundation skills, Technical and Vocational Skills and Transferable Skills (UNESCO, 2012). The Foundation skills, e.g. numeracy and literacy skills are taught in primary and secondary schools. These foundation skills are prerequisite for entering vocational and technical institutions. Technical and Vocational skills are taught in vocational and technical institutions (VTIs) together with Transferable Skills which are embedded in the course contents.

Referring to the Curriculum Guidelines, life skills are incorporated in the school curriculum that clearly defines each component of self-management, planning and organizing, communicating, working with others, and problem solving. In addition, the students should also be having initiatives and enterprising, applying numeracy, designs and technology skills, and learning skills. The following are descriptions of each as stated in the curriculum.



*Self-Management.* The students are able to recognise their own strengths and weaknesses and find ways to improve their performance. It also helps students to manage their time professionally and effectively.

*Planning and Organising.* The students are able to plan, organise and perform tasks correctly and safely.

*Communicating.* The students are able to use the four language skills (listening, speaking, reading and writing), non-verbal communication and visual techniques to receive and present information effectively.

*Working with Others.* The students are able to interact harmoniously with peers and develop mutual respect and teamwork among them.

*Problem Solving.* The students are able to identify problems and solve them in creative and innovative ways.

*Initiatives and Enterprise.* It helps students to develop their ability to decide and act on their own without waiting for somebody to tell on what to do especially in difficult and challenging situation. It also helps students to create their abilities to find out the new and innovative solutions and defining the best ways to solve the problems.

*Applying Numeracy, Design and Technology Skills.* The students are able to use numeracy, design and technology skills to prepare, process and complete tasks.

*Learning.* Expose students to lifelong learning as it can be seen as an ongoing process throughout their life in order to bring overall improvement.

These are some evidences that the researchers found in the documents through document analysis. The findings from the interviews are reported separately as follows.

## FINDINGS

### 2.1 Transferable Skills in Teacher Education: Perspective From Teacher Trainers

Based on the interview with one lecturer of a university offering teacher education for TVET, it was highlighted that the lecturer has integrated transferable skills in the teaching-learning process.

“I try to provide learning opportunities for teacher candidates by allowing them to develop their creative thinking skills, collaborative skills and innovative skills through my sessions. These skills, I believe, are the transferable skills, or to some, may term it as, the 21st century skills”. (UL01)

“Following this, these teacher candidates are encouraged to design and provide learning experiences for their students - which develop students' use of higher-order and critical thinking skills to solve problems which are related to the real-world of work.” (UL01)

In the assessment, the lecturers also incorporate transferable skills concept by using holistic assessment such as rubrics. In this assessment tool all components of the 21<sup>st</sup> Century Learning Development are integrated and monitored.

In order to inculcate student-centred approach, the department is offering pre- and in-service training places as well as attaches the students in TVET institutions leveraging on the school mentor model. The department recognises that life skills are equally important as technical skills for preparing graduates to be employed. It is mandatory that teacher education students pass the life skills unit before they can graduate.

### 2.2 Transferable Skills in TVET: Perspectives from Policymakers, Government Officials and Administrators

At the national level, transferable skills or life skills are considered very important. These skills are very important not only for the students in preparing for their future career, but also for the nation to continuously develop and grow according to the national aspiration. This was reflected from the interview with one of the national bodies in charge of TVET quality assurance:

“Life skills are very valuable to everybody, not just for the students, but for adults - not only for work life, but everyday life at home outside social, anything. It is very important to country economics if we want to have a dynamic and sustainable economic (economy); we need to have labour force that is adaptable to changes, to process change or organisations changes. These life skills basically, we are trying to impart it to the students, the understanding of LS, the concept of it, and to open up their minds / adaptability of their mind to be able to adapt to working environments.” (PM/GO03)

In order to promote life skills, TVET must create an environment conducive for nurturing good habits and enhance life skills practices. This initiative should be holistic and comprehensive both at the national and at the school level. One of the policymakers emphasised that, “The whole TVET system must have the same message, *life skills are very important.*” (PM/GO06)

In terms of acknowledging the importance of life skills, one of the policymakers suggested to consider life skills as one of the important criteria for offering scholarships.

“That is why we give ten credit values for the life skills and we make it compulsory that everybody must pass all the eight life skills in order to get the full awards. Hopefully in (the) future, for (the) government to award the scholarships, they may set a criterion for those technical students. They might put this as one of the requirements in the scholarship. Skills they must achieve at least a certain criteria in order to be awarded the scholarship because it will prepare them for overseas as they will live in another part of the world” (They must achieve certain skills in the criteria in order to be awarded the scholarship to prepare them to further their study overseas.) (PM/GO03)

One of the policy makers suggested broadening the scope of life skills by encouraging the students to explore and expand their life skills from within and beyond the school setting. "Integration of life skills in the course content should not be restricted to the classroom ... any activities within the campus or even outside ... should reflect life skills". The teacher should be a role model in the application of life skills." (PM/GO05)

TVET teachers are mostly university graduates. However, many of them are lacking in technical skills and industry experience. This, together with life skills, must be addressed holistically in the teacher education, in recruitment process, and continuous capability building programmes for TVET teachers. As highlighted by one of the national policymakers:

"The current national teacher education policy is geared towards the main stream education. Most of our TVET teachers are those who completed their study overseas with limited experience and exposure to the industry. The current TVET teacher's education programme only provides pedagogical skills but not technical skills to our TVET teachers. Having said that it is very important for our future TVET teachers to have industrial experience and one of the way is to have a new scheme of service that allow us to recruit the correct TVET teachers. The current scheme favour paper qualifications." (PM/GO01)

There is a need to highlight life skills in the teacher training. "Besides teaching the technical side of the course, there is a need also to give "greater focus on life skills" so that when it comes to practical training "they will have the content of life skills". It's then that there could be incentive. (PM/GO01)

The Regional Centre for Vocational and Technical Education and Training (SEAMEO VOTEC) is also offering Continuous Professional Development for TVET teachers in Brunei that addresses the issue of transferable skills by offering various training programmes for teachers. One of them is training on life skills and also Authentic Teaching Learning and Assessment. As stated by the Director of the Centre:

"We are now offering training on Authentic Teaching Learning and Assessment or ATLAS for vocational and technical teachers in Brunei so that they create teaching-learning environment conducive for students to be more active, student-centred and relevant to industries. In Brunei, communication skills are still an issue for the students. It should start from the teachers." (PM/GO02)

The initiative to introduce transferable skills also dated back to early 2000 when MOE collaborated with Microsoft Brunei to initiate a program called P21. In this initiative, MOE planned to integrate the 21<sup>st</sup> century skills into the primary, secondary, and technical schools' curriculum.

One of the policymakers recognised the significance of assessing the students on all the eight life skills. In this way, people could see the importance of those life skills and how they were taken seriously.

"We see the important of life skills, so we would like to make it as policies where it is (reflected) in the certification and qualification process. We make these life skills where everybody has to pass all the eight skills under that life skills framework in order to get the full award of BDTVEC. We give credit values for it; that is why we assessed the students. If we do not give credit values and rewards to the students then this will affect how people perceive (these skills) and (people) may not take these seriously. Even now, we say it (life skills) must be assessed we still come across that not all are fully implemented them." (PM/GO03)

The assessment of transferable or life skills is not only important but also a challenging issue in TVET. These skills should be integrated in a way that both teachers and students are encouraged to nurture them and realise the values of having them. The assessment should be simple, but at the same time, it also can reflect different levels of competencies. One of the interviewees stated that:

"In term of certifications, if the students have not achieved it, we do not grade it as failed but as not yet achieved. All these skills (are) already embedded in the students themselves, it's just that they may not realise and bring them out. So what we want is at least the student (students) knows (know) about these skills and tries to bring them out. There is a separate transcript form where it showed (shows) all the eight skills. It should have criteria based a descriptive grading for the student rather than having (a) pass, (a) merit, (or a) distinction. But (if) we came across that we use criteria based on descriptive result in the transcript. At the moment our teachers are facing problems to write them out (up) in words. They find it easier to give a percentage marks (mark) and later on transfer (it) into a pass grade, a merit grade or a distinction grade. We do have criteria (of) what is a pass grade, (a) merit grade and (a) distinction grade. (Having) description would be the best." (PM/GO03)

The industry is also part of the team in assessing the students' life skills, especially during the industrial attachment.

"We do also asked the industry or employer (to assess) those students who are out for (the) attachment (for) six months in the past and now (for) three months job attachment. The employer will assess these skills and they will give whether (the results are) good or satisfactory in that sense and that employer's feed is one of the results that to be combined with the rest of the year life skills result and average out." (PM/GO03).

There are various ways of assessing life skills. The e-portfolio is one of the ways which complement the current assessment. This allows for the students to self assess themselves throughout the year as highlighted by one of the policymakers:

"The use (of) e-portfolio can complement the current assessment. At the beginning of the course, a student will identify and record in the electronic portfolio his/her objectives in life in relation to the course he/she is taking. Throughout the school year, the student will assess the life skills he/she learned from the learning activities in the different subjects he/she has taken and beyond the campus. The portfolio will be submitted to his/her personal tutor." (PM/GO05)

“In order to get reliable results, we expect the course team/every teacher involved with that student to give certain grading on the LS. LS based on the e-portfolio because we want to put the responsibility back to the student. When they build up their e-portfolio in the way also help them to build up with the LS.” (PM/GO03)

“Involve student by developing e-portfolio which is a good thing about LS where (during the use of) CS (common skills) (we) did not involve students. But e-portfolio contributes less to the final students marking and unsure of how LS can contribute to the final students marking too.” (T01)

Apart from the assessment, the policymakers also acknowledged the existence of the BDTVEC Professional Development Committee (PDC). They explained how this PDC operates as stated below:

“BDTVEC has PDC lead by a chair-person and co-ordinator and all the schools deputy principals as the official members. (At the school level) they also have their own individual school members. With PDC committee, they embarked all requirements policy to the members to set up their own schools based life skills committee to conduct any training or workshop or programme to support life skills. In private schools, they invited speakers and set up programmes to support life skills implementation. Every Saturday, is a personal development, activities for students to and build up the students’ skills. At the moment, up to the school levels to give guidance or monitoring. At the end, the schools to submit the result of LS.” (PM/GO03)

### 2.3 Transferable Skills in TVET: Perspective from Teachers

Nineteen teachers were interviewed for this study. Their responses are presented in a table, a narrative form as well as in direct quotes. The most common responses in terms of their perceptions of how transferable skills are integrated in TVET curriculum, teaching-learning, and assessment, including the perceived support mechanism are presented in Table 3.

Table 1.3. A Summary of Teachers’ Comments Transferable Skills/Life Skills (n=19)\*

| Variable                                                | Comment                                                                   | f |
|---------------------------------------------------------|---------------------------------------------------------------------------|---|
| I. Integration of life skills in the national curricula | 1) Integrated and embedded in the subject/programme guide                 | 8 |
|                                                         | 2) Not all the life skills are in the unit guide                          | 3 |
|                                                         | 3) Not really reflected, because life skills are embedded in the modules. | 3 |
|                                                         | 4) Doesn’t really spell out in the national curriculum.                   | 3 |
|                                                         | 5) Not sure                                                               | 3 |
|                                                         | 6) No clear indication                                                    | 1 |

|                                               |                                                                                                                                                              |   |
|-----------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------|---|
| II. Teaching methods that support life skills | 1) In general, still teacher-centred (students’ preference)                                                                                                  | 6 |
|                                               | 2) A lot of group activities are given to the students to enhance their life skills                                                                          | 4 |
|                                               | 3) It is up to the teacher to integrate these skills. No clear guideline.                                                                                    | 3 |
|                                               | 4) Not specifically mentioned in the teaching approaches used                                                                                                | 1 |
|                                               | 5) Student activities related to real life application are used in teaching                                                                                  | 1 |
|                                               | 6) Implement teacher-centred then followed by learner-centred.                                                                                               | 1 |
|                                               | 7) Implement hybrid (combination of traditional and ICT use) that encourage students to be more involved.                                                    | 1 |
|                                               | 8) It is embedded in all the teaching-learning activities of the students; such is presentation, group projects, etc.                                        | 1 |
|                                               | 9) There is no need to use special teaching method as the life skill is inherent and teachers serve as a role model for the students.                        | 1 |
|                                               | 10) Project-based learning is where the 8 transferrable skills are applied, e.g. in the final year business project.                                         | 1 |
| III. Support mechanism                        | 1) There is no formal support system in place, only refer to guideline                                                                                       | 8 |
|                                               | 2) Not sure if any.                                                                                                                                          | 7 |
|                                               | 3) Staffs are assigned to monitor the teaching of the life skills. At the beginning of the school year, the teachers are briefed on life skills integration. | 4 |
|                                               | 4) There is, but not effective                                                                                                                               | 3 |
|                                               | 5) Programme Coordinator and group coordinators are assigned to plan and monitor the implementation of life skills                                           | 2 |
|                                               | 6) PGCTE (Postgraduate Certificate in Technical Education) and training plus experience should be enough.                                                    | 1 |
|                                               | 7) There is no policy but some initiatives such as training and attachment.                                                                                  | 1 |
|                                               | 8) The implementation is already in the system, but requires the commitment of the group coordinators or unit tutors.                                        | 1 |

|                |                                                                                                                                   |    |
|----------------|-----------------------------------------------------------------------------------------------------------------------------------|----|
| IV. Assessment | 1) Not clear, need training on how to assess life skills                                                                          | 10 |
|                | 2) Assessment is done through monitoring and grading the 8 components of life skills according to the form provided twice a year. | 3  |
|                | 3) The present assessment does not really reflect a valid assessment. There is a need to simplify the assessment process.         | 3  |
|                | 4) Using a rubric and electronic portfolios are used to assess life skills.                                                       | 2  |
|                | 5) It is time consuming using the current assessment tool                                                                         | 2  |
|                | 6) Enterprise life skills are not that easy to integrate and to assess                                                            | 2  |

*Note: Some teachers' comments fall under more than one variables/categories*

In general, teachers responded positively about the integration of transferable skills or life skills in their teaching, learning and assessment. Most teachers confirmed that life skills had been integrated into the curriculum in some ways. Even though many of them were still following teacher-centred, some were moving towards learner-centred and implementing a lot of group works as their teaching approach. Most teachers felt that they had no clear ideas on how to assess students on transferable skills. More than half of the respondents shared that they needed more training on assessing the transferable skills or life skills. In terms of support mechanism for integrating life skills at the school level, most teachers did not see that there was any support given to them and even if there was, the support was not effective.

The interview also revealed interesting comments from the teachers about the needs of having a proper training on assessing life skills as mentioned by one of the teachers below:

"I think it is better if we have proper training, hands-on training (on how to integrate and assess life skills) not just a brief seminar, but a proper workshop to enable teachers to understand of what to do. Currently with life skills, (we) do not have any ideas of what to do and don't understand of how to do the assessment as well as to base on what." (T04)

Due to the lack of training, the teachers had difficulty in assessing the life skills as stated by the teacher below:

"In assessment, the teacher has to assess all eight LS components in each assessment which is done twice and its time consuming. While CS five components can be split into two semesters. LS grading is hard to give compare to CS." (T01)

"LS need to assess twice. CS has 5 competencies can be spread in the semesters meanwhile LS all has 8 components have to do in every semester. Need to simplify LS and its time consuming." (T02)

"Most teachers need to have clearer explanations (understanding) on how to assess life skills. (It is) difficult to assess life skills due to marking, not like when we used "common skills", (there is no need for marking) only checking." (T02)

Another teacher stated that for both teachers and students should be provided with guidelines. :

"It is important to provide the students with (a) guideline and assessment to improve their skills, but teachers need to be provided with (a) structure so that the teachers can teach and guide the students in their particular skills". (T06)

The curriculum did not clearly state how the life skills could be integrated. However, a separate guideline was developed to complement the curriculum. This was stated by one of the teachers, "National Curriculum does not clearly spell out in terms of how to integrate the soft skills." (T04) and another teacher also confirmed saying that "No mention of soft skills in the objective of the curriculum as it focuses more on subjects." (T05).

"Life skills in the blue book have too high expectations from the students; (they) should be implemented in a well-thought out manner (and) not just as a paper work; (they) should measure the students' development and transformation in attitudes and habits." (T13)

Teachers have their own way of "teaching" the integration of life skills. They also have their autonomy in terms of approaches used. Thus, it is perceived to be subjective in nature when it comes to teaching and assessment of life skills. As stated by one of the teachers:

"How would you tell if their (students') communication skills fail or all of the eight units fail, how you will improve upon them? It's very subjective..... Different schools have their different ways of grading or doing assessments – no conformation of doing the assessment which is good to be flexible as there is no right or wrong." (T06)

Other teacher also expressed that assessing life skills is difficult. Certain components like enterprising and innovation are difficult to assess. "Not all life skills components can be integrated in my teaching but upon assessment (I) must fill-up all eight life skills components so ends up just for the sake of filling in the blanks – ensuring the students reach passing marks/grade." (T03). Another teacher responded, "Initiative and enterprise life skills are not that easy to assess but a rubric and electronic portfolios are used to assess life skills." (T07)

On the idea of providing grades, one of the teachers was more in favour of using simple scales, instead of using number.

"(Assessing) life skills (should) be more user friendly. (I) prefer not giving marks... like (in assessing) common skills marking was based on distinction, merits or based on A B C but not number grading." (T03)

“There is no benchmark being used and not sure if the use is right or wrong. Assessment of life skills includes real life scenario type of assessment. Teachers just transfer from the marks they got and put the mark for life skill. For example if the students got 70% in overall mark therefore the students will get B for life skills. Not sure whether this is the right way of assessing the students” (T03)

Others shared some constraints in integrating life skills in teaching and assessment. Teachers find it difficult because of limited time for assessing life skills (T14). The respondent indicated that the implementation of common skills, the term used before life skills, was much better and admitted that his/her understanding of common skills was more than that of life skills.

## DISCUSSIONS

Regardless of some discrepancies between what was written in the guideline and the reality in the implementation, there are some salient points that need further elaborations and improvements. All agreed that life skills are important and having a clear guideline is needed followed by teacher training and proper support mechanism both at the national and at the school level. The guideline was perceived to be very useful but insufficient in responding to various concerns from the implementers. The TVET curriculum needs to be reviewed in order to reflect skills needed by industries, including life skills. It is advisable that TVET curriculum should be more self-directed and reflecting active development of competencies in work projects (UNESCO, 2013). Making all teachers aware that there is a support mechanism and understands how to use the Guide are also helpful for the teachers.

The findings show that there are different approaches to teaching or inculcating transferable skills to students. Some teachers started shifting from teacher-centred to learner-centred approaches by engaging students to classroom activities, stimulating students to use critical thinking, and encouraging them to use high-order thinking skills. The adoption of group activities that stimulate teamwork skills were also increasing; the adoption of project-based and problem-based teaching and learning were also observable. In addition, the idea that teachers should act as the role model is important considering that some of the transferable skills are better inculcated through examples than through traditional teaching. This is in line with UNESCO stating that transferable skills should not be taught using traditional teaching style but through consultative and more learner-centred (UNESCO, 2013). The adoption of vocation-specific projects, work-related tasks, and facilitated under real working conditions are some of the important approaches that teachers must consider (UNESCO, 2013). According to the Centre for Developing and Evaluating Lifelong Learning (2007), “teachers/lecturers/mentors need to be passionate, enthusiastic, knowledgeable, approachable and well organised in order to: (a) communicate to learners the importance of generic skills in the workplace; (b) help learners to acquire such generic skills; and (c) ensure that learners are then capable of transferring these skills to new contexts.” (p. 10). Some of the learning strategies that can be considered, among others are workplace projects, mini-companies, enquiry-based learning, problem-solving learning, and reflective learning and workplace practice. (p.13)

The most challenging and persistent issues are related on how to monitor and assess transferable skills. Most teachers expressed that they had limited knowledge on how to assess transferable skills. Observation and demonstration were clearly explained and prescribed in the guideline. Regardless of its limited use, some teachers were also introducing e-portfolio and rubrics. As suggested by UNESCO (2013), assessment should be oriented towards TVET activities and work; must be based on holistic, real or ideal type of working environment which reflect complex development of learning progress. Therefore, both formal and informal learning can be assessed equally. According to the Centre for Developing and Evaluating Lifelong Learning (2007), four basic approaches to the assessment of generic employability skills which are also similar to transferable skills may include (a) judgements by teachers or assessors; (b) portfolios created by students; (c) assessment based upon work experience; and (d) assessment using purpose built instruments. In TVET, the use of portfolio has worked well to promote the importance of transferable skills and thus also enhances learning and provides rich information. Workplace assessment is also considered working very well in assessing these skills in TVET sector (p.15-16). These approaches have value, but the assessment of transferable skills is not easy.

In the form of assessment, some preferred using categorical scale (i.e. pass/fail, or excellent/good/average/ poor, or distinction/merit/distinction) instead of using numerical grades 0 to 100. The importance of employers’ participation in assessing the transferable skills was also emphasised by respondents. As a common practice, assessment of transferable skills is usually performed by teacher. Curtis (2007) suggested inclusion of self-assessment by students themselves, where teachers will then validate student’s self-assessment through assessing students’ presentation on his/her self and the skills, in particular component of transferable skills. Assessing portfolios and work experiences can be valuable evidences to assess transferable skills.

The Centre for Developing and Evaluating Lifelong Learning (2007) suggests developing assessment systems that possess the following characteristics: (a) a clear and simple definition of the skills so that performance criteria and evidence guides are clear and easy to understand; (b) a set of clear guidelines for learners about what is required in order to achieve a successful assessment; (c) a mechanism for communicating the scope of transferable or generic skills to learners and employers; (d) a means of providing feedback to learners on their acquisition of employability skills; (e) a rich source of information about individual achievement, with supportive evidence; (f) an opportunity to undertake assessments that are authentic and occur within a work context or one that closely simulates it; (g) a summary of the performance of individuals that is readily apparent to employers; (h) a cost-effective means of collecting performance information, individually and at aggregate levels. (p.17)

## CONCLUSIONS

Based on the findings and discussions above, it can be concluded that in Brunei, transferable skills, or life skills as it is currently known as, has been integrated in the curriculum and at some degree in the teaching learning processes and assessment since 12 years ago. The formal guide book was written in 2010 that can be used as a reference by teachers. This guide book provides reference for teachers covering the rationale, definition,

the framework, list of life skills components, staff development, integration in the course content, and monitoring and verifying life skills.

There are few discrepancies between what was written in the guideline and the reality in the implementation. Most teachers were still confused about how to integrate transferable skills in teaching and how to assess these skills. The support mechanism, including the committee and guide book, seems insufficient in providing assistance to teachers to integrate transferable skills in their teaching. Consequently, teaching of transferable skills should be further reinforced in teacher training and proper support mechanism, both at national and school level, should be strengthened if successful implementation of transferable skills amongst students are to be achieved.

After having a national study on how the life skills are implemented at the classroom level, a review of the policy and guidelines will be needed to address the issues and concerns aroused. This continuous effort is very important to address one of the important components of skills development for students to be marketable upon the completion of their study.

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## INTEGRATING TRANSFERABLE SKILLS IN TVET



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#### BACKGROUND

The concept of the categorised “transferable skills” has an importance issue in Indonesian vocational education system for decades. Education actors and stakeholder have been of the awareness about the importance of the concept. Various concepts and approaches have been introduced and implemented into especially, formal education system to bridge and facilitate the acquisition of transferable skills. Despite all the concepts and approaches, the vocational education system tends not to have succeeded yet to develop a certain level of the skill which fulfils the expectation of industry sectors as users of the outcome. In the case of the graduates of vocational schools for textile technology, transferable skills are more developed, when they are already in service. They acquire most of the skills within their work places rather than during their schooling phase. This kind of in-service learning process entails inefficiency for employers due to more effort and investment they have to make.

The problem can be traced back to the basic objective of the Indonesian vocational education system. Vocational education in Indonesia<sup>1</sup> provides the youth a broader objective than that of, for instance, the German system. It does not only aim at preparing the youth for gainful work, it is also meant for preparing them for direct access to further their career in the education system and for becoming a good citizen (cf. UU SISDIKNAS No. 20/2003). The aim implies that the learning load at the vocational school in relation to the learning duration they have, which is similar to which in general school is overextended. Based on this aim therefore, the Curricula are made up of so-called normative, adaptive and productive subjects (mata pelajaran normatif, adaptif, dan produktif).

The group of normative subjects, which includes religion education; citizenship education; Indonesian language; physical, sports, and health education; as well as arts and culture, is primarily meant for educating proper citizens. The group of adaptive subjects, which includes English language, natural sciences education, social science education, information management and computer skills, as well as entrepreneurship, shall mainly provide the necessary basic knowledge and skills to be able to both, proceed to higher education, and to cope with the productive (vocational) subjects. The productive subjects are made up of subjects for basic vocational competences as well as subjects for vocational competences according to the respective area of vocational expertise.

<sup>1</sup> On the example of vocational education in upper secondary level.



The Government Regulation on Education Standards (PP 19/2005) in paragraph 13 verse 1 states that life skills education (Pendidikan Kecakapan Hidup) shall take place in the lower as well as the upper secondary education, including the vocational education. According to verse 2, life skills education includes personal, social, academic, and vocational competencies. Verse 3 further states, that life skills education can be integrated in either or each of the five learning content groups, which are defined in paragraph 6, namely a) religion and moral, b) citizenship and personality, c) science and technology, d) aesthetics, and e) body, sports, and health. Apparently the term “life skills” is meant to adopt the ideas of the United Nations Education for All (EFA) concept.

The term “life skills”, however, does not show up in Permendiknas 23/2006, the ministerial regulation on competence standards for graduates of the primary and secondary education. Instead, this regulation defines a list of 23 competences to be acquired by vocational students as shown below:

1. Behave in accordance with the religious teachings relevant to the development of adolescents.
2. Develop themselves optimally using own potentials and reducing personal shortcomings.
3. Show a self-confident attitude and assume responsibility for her/his behaviour, actions, and work.
4. Participate in the enforcement of social rules.
5. Appreciate religious diversity, nation, tribe, race, and socioeconomic groups in the global scope.
6. Build up and apply information and knowledge logically, critically, creatively, and innovatively.
7. Demonstrate logical, critical, creative, and innovative thinking in decision-making.
8. Demonstrate the ability to develop a culture of learning for self-empowerment.
9. Demonstrate sportsmanship and competitive attitude to achieve the best results.
10. Demonstrate the ability to analyze and solve complex problems.
11. Demonstrate the ability to analyze natural and social phenomena.
12. Use environmental resources productively and responsibly.
13. Participate democratically in the life of society, nation, and state in the framework of the unitary State of the Republic of Indonesia.
14. Express themselves through arts and cultural activities.
15. Appreciate works of art and culture.
16. Produce creative works, both as an individual and as a group.
17. Maintain personal health and safety, physical fitness, as well as a clean environment.
18. Communicate orally and in written in an effective and polite manner.
19. Understand own and others’ rights and obligations within the living together in the community.
20. Appreciate the existence of differences and be empathic towards other persons.
21. Show the ability to read and write a text systematically and aesthetically.
22. Demonstrate the ability to listen, read, write, and speak in Indonesian and English language.
23. Master professional and entrepreneurial competencies well to meet the demands of the world of work as well as to follow the higher education in accordance with the respective vocation.

*Source: Permendiknas 23/2006, own, non-official translation*

This list of competences for vocational school graduates is identical to the list of competences for upper secondary school graduates except for item 23. The regulation in addition includes quite a large number of partly subject-specific competence items for each of the study subjects in the groups of normative and adaptive subjects. Indonesian definition of transferable skills for the time span from 2006 to 2013 could be derived, the somehow unordered nature of the list and the lack of scholarly discussion on the issue, however, makes it difficult to identify a concise, underlying model of such transferable skills.

When looking at the list, the reader might get the impression, that the development of a self-sustained, self-confidence and critical personality is not the most important goal of vocational education. The ability to participate in shaping the world of work or the society, which in another system of vocational education like in German one considered an important goal, is not mentioned at all. Instead, the integration into value systems and into society appears to be more important.

## 1. The Integration of Transferable Skills in TVET Institution

This was a preliminary study that needed to be deepened. The study in the following chapter was written based on the content analysis of various references and documents that were relevant to the topic of the paper. Some data were obtained from qualitative observations for triangulation in order for validity to be established.

### 1.1. Curriculum 2013 - More Emphasis of Transferable Skills

The need to improve the education system in term of the development of transferable skills becomes inevitable. Furthermore, the shift of the education paradigm towards the educational concept of the 21<sup>st</sup> century, where today’s students need to get access to global knowledge and where learning should be the igniters for lifelong learning, has boosted the Indonesian government to implement a new setting of education. In order for this to happen, the government had issued a new curriculum named “Kurikulum 2013” in the mid-2013. With the new curriculum the grouping into normative, adaptive and productive subject matters apparently had been abandoned. Instead, subject matters for the vocational education had been grouped into not further specified groups A, B, and C (Permendikbud 70/2013).

Group A includes (1) Religion and manners education (Pendidikan Agama dan Budi Pekerti), (2) State philosophy<sup>2</sup> and citizenship education (Pendidikan Pancasila dan Kewarganegaraan), (3) Indonesian language (Bahasa Indonesia), (4) Mathematics (Matematika), (5) Indonesian history (Sejarah Indonesia), and (6) English language (Bahasa Inggris).

<sup>2</sup> Pancasila, the 5 principles, is the Indonesian state philosophy, set in the preamble of the Indonesian constitution.

Group B includes (1) Art and culture (Seni Budaya), (2) Physical Education, sport and health education (Pendidikan Jasmani, Olah Raga, dan Kesehatan), and (3) Crafts and entrepreneurship (Prakarya dan Kewirausahaan).

The subjects of Group A and B together make up 50% of the volume of the school programs. The content of Group A subjects is prescribed by the National Ministry, while the content of Group B subjects is subject to provincial and/or regional regulation. Group C, which makes up the other half of the curriculum, contains the vocational subjects. For some of the vocational fields, certain subjects are pre-defined, such as physics, chemistry and technical drawing for vocations of the field of technology and engineering.

The Ministerial Regulation on competence standards for graduates of the primary and secondary education (Permendikbud 54/2013) groups competences under the three headings; attitude, knowledge, and skills and defines them for the upper secondary education which includes vocational education (see Table 1.)

Table 2.1. *Competence Dimensions in the New Curriculum 2013*

| Dimension        | Abilities                                                                                                                                                                                                                                         |
|------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Attitudes</b> | Have a behaviour that reflects a faithful, noble, educated, confident and responsible attitude for interacting effectively with the social and natural environments as well as behaving as a representative of the nation in the connected world. |
| <b>Knowledge</b> | Have factual, conceptual, procedural, and meta-cognitive knowledge in science, technology, art, and culture with insight into humanity, the nation, the state, and the civilization with respect to causes and impacts of phenomena and events.   |
| <b>Skills</b>    | Having the ability to think and act effectively and creatively in abstract and concrete domains as developed by what has been learned in school                                                                                                   |

Source: Permendikbud 54/2013, own, non-official translation

The Ministerial Regulation on the basic frame and structure of the curriculum for the primary and secondary education (Permendikbud 70/2013) splits the “attitudes” dimension into spiritual and social competences, leaving the other 2 unchanged, but naming all of them “core competences” (kompetensi inti). The descriptions of these competence areas are slightly more elaborated than those given in the table above, but are quite similar in nature. The additional regulation enlists a number of “basic competences” (kompetensi dasar) for each learning subject for each grade of 10 to 12, among them can be grouped as a virtual “transferable skills” category.

From these definitions, it is even harder to deduct a concise definition of a concept of transferable skills than from the competence listing for the years 2006 to 2013. In addition, the distinction between the competences of general school and vocational school graduates is even less pronounced.

### 1.2. Integrating Transferable Skills in Learning Process

To accommodate the three categories of competence in the teaching and learning process of the new curriculum requires that learning should be organized with emphasis on

the application of a scientific approach. According to the approach learning has to be structured based on following steps:

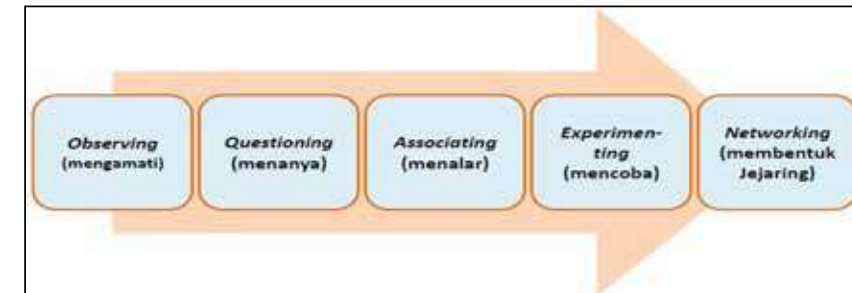


Figure 2.1. Learning Process of Transferable Skills

Source: KEMENDIKBUD 2013

The learning steps as such imply the shift of teacher-student relation. Teachers do not position themselves as a source of knowledge. Learning should orientate toward real phenomena and fact in environment and society. The learning process should activate and address the development of attitude, skills and knowledge aspects at the same time (cf. Kemendikbud, 2013).

To fulfil the learning objectives, teachers should favour the application of learning methods, which support self-reliant learning and thinking of students (cf. Ibid). The project-based and the problem-based learning as well as the group discussion are among the methods to be implemented. Through such new setting of learning it is expected that the better development of the so called transferable skills can be more integrated.

### 1.3. Assessment of Transferable Skills

The evaluation of learning process according to the new curriculum is more comprehensive and holistic. Accordingly there are two scopes to be assessed:

1. *Formative scope*. The evaluation entails the assessment based hard evidence such as completeness of learning products.
2. *Summative scope*. The evaluation entails the assessment based soft evidence such as competencies in improvement, creativity, productivity, etc. (Kemendikbud, 2013).

For the evaluation assessment rubrics, they have to be developed by the teacher. For this purpose the curriculum has provided guidelines.

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## INTEGRATING TRANSFERABLE SKILLS IN TVET—A STUDY IN TVET PROGRAMS AT UNIVERSITY OF TUN HUSSEIN ONN MALAYSIA

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### BACKGROUND

The concept and definition of transferable skills have been discussed for a number of years. However, the interest in finding the ideal concept and definition across the world is still growing. In Malaysia, other terms related to transferable skills include soft skills, generic skills, employability skills, behavioural skills, enterprise skills, key competencies, core skills, common skills, work skills, essential skills, and people skills (Esa et al., 2006; Yassin et al., 2008; Abdullah, Ramlan, & Sabran, 2012). Nevertheless, the most commonly used terminology in Malaysia is soft skills. In general, Abbas, Abdul Kadir, and Ghani Azmie (2013) defined transferable skill as having a wide variety of basic knowledge, values, and life skills that are necessary to obtain and to keep a job. In contrast, hard skills refer to the more specific, teachable skills, and are usually related to professional knowledge. Nevertheless, in the working world, soft skills complement hard skills and these include capabilities, competencies, and learning outcomes of technical procedures or practical tasks. This is in accordance with Shakir (2009) who suggested that soft and hard skills complemented each other. Similarly, a research by Salleh, Sulaiman, and Talib (2010) indicated that soft and hard skills were both demanded by the organizations and industries.

Currently, institutions in Malaysia use different types of instruments as assessment tools to evaluate students' soft skills. These include Malaysian Soft Skills Scale (MY3s), Malaysian Generic Skills Inventory (MyGSI), and Skills Inventory for Higher Education (GeSIHE). The higher education institutions use My3s as one of the tools to assess soft skills among higher institutions students. There are seven soft skills elements in My3s which comprise of communication skills; critical thinking and problem solving skills, team working, lifelong learning and information management skills, entrepreneurship skills, ethics and professional moral skills, and leadership skills. On the one hand, the development of MyGSI is based on the Malaysian Qualification Framework 2006 that includes cognitive, behaviourism, and social theories (Ariffin, Idris, & Ishak, 2010). MyGSI lists 13 skills construct consisting of social responsibility, environment appreciation, ethical morals and professionalism, spiritual, communication, leadership, teamwork, critical thinking and problem solving, information technology and communication, lifelong learning, globalization, entrepreneurship, and management. Othman et al. (2011) stated that instilling transferable skills among higher education institutions graduates will increase their employability skills and create productive and knowledgeable workers. Furthermore, employers have the opportunities to choose the best candidates for the job not only based on academic qualifications but other skills as well.

It is a fact that an increasing number of labour forces will consequently escalate the number of talents in Malaysian workforce. According to the Department of Statistic of Malaysia (2012), the total number of labour forces increased between 2008 and 2012. This is shown below in Table 3.1.

Table 3.1. *Principal Statistics on Labour Force and Unemployment (Dept of Statistics Malaysia, 2012)*

| No | Principal Statistic                            | Year     |          |          |          |          |
|----|------------------------------------------------|----------|----------|----------|----------|----------|
|    |                                                | 2008     | 2009     | 2010     | 2011     | 2012     |
| 1  | Total labour force ('000)                      | 11,028.1 | 11,315.3 | 12,303.9 | 12,675.8 | 13,119.6 |
| 2  | Number employed ('000)                         | 10,659.6 | 10,897.3 | 11,899.5 | 12,284.4 | 12,723.2 |
| 3  | Unemployment rate (%)                          | 3.3      | 3.7      | 3.3      | 3.1      | 3.0      |
| 4  | Labour force participation rates (%)           | 62.6     | 62.9     | 63.7     | 64.4     | 65.5     |
| 5  | Labour force participation rates by male (%)   | 79.0     | 78.9     | 79.3     | 79.7     | 80.5     |
| 6  | Labour force participation rates by female (%) | 45.7     | 46.4     | 46.8     | 47.9     | 49.5     |

### Guideline and Support at Institutional and National Levels

Higher Education Institutions have undergone major changes in Malaysia since the country's independence. The Ministry of Education (MOE) is a government body responsible for providing TVET at higher education institutions in Malaysia. These include public universities, private universities, college universities and colleges, polytechnics, and community colleges. In 2013, the Ministry of Higher Education (MOHE) merged with the Ministry of Education (MOE). Both ministries are now known as Ministry of Education (MOE). The merging of the ministries has streamlined the workforce, resource, and function of the new ministry. Prior to the merging, MOHE was the party responsible for matters related to higher education institutions. Even during those years, all local public universities had introduced and incorporated soft skills elements in their undergraduate syllabus. There were seven attributes of soft skills promoted by MOHE which were communicative; thinking skills and problem solving; team work force; life-long learning and information management; entrepreneurial; ethics, moral and professionalism; and leadership skills (MOHE, 2006).

### INTEGRATION OF TRANSFERABLE SKILLS IN TVET INSTITUTIONS

#### ❖ *Transferable Skills Integrated in the TVET Curriculum*

The development of TVET curriculum in Malaysia is carried out by decentralizing a number of agencies under different ministries. Most of the time, these agencies develop a curriculum based on their own capabilities and objectives. For higher education institutions, Malaysian Qualification Agency (MQA) is the agency that oversees the quality and standard of academic programs and national qualifications. Figure 3.1, illustrates the process of curriculum development and integration of transferable skills with the syllabus. The basic concepts in the

curriculum development process at higher education institutions are identification of needs, planning, development, pilot study, implementation and evaluation. Although most higher education institutions follow the concepts, development of the curriculum is based on the industrial needs and market demands.

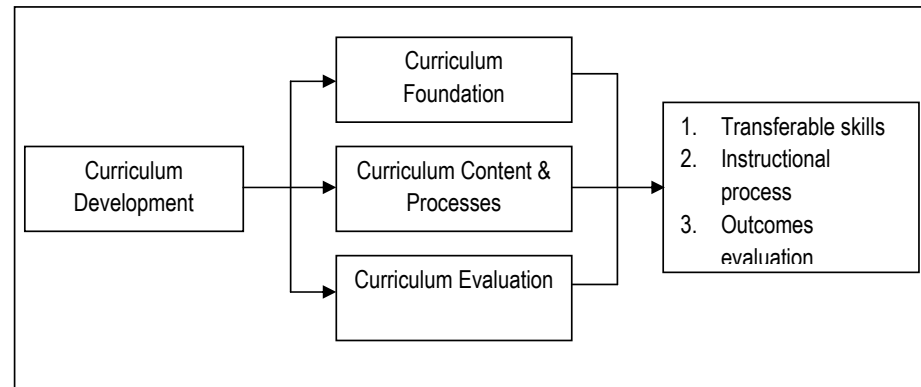


Figure 3.1. Curriculum Development Process in Malaysia (Modified from Yassin et al., 2008)

#### ❖ Transferable Skills in TVET Institutions

At present, there are two types of implementation of transferable skills at higher education institutions. The first is by embedding them in the teaching and learning and the other is by offering them as subjects in support programs. Implementation through embedment in teaching and learning sees the inculcation of the skills through learning the process such as communication skills, teamwork, critical thinking, and other skills. In contrast, implementation through support programs sees the transferable skills offered as subjects or embedded in co-curriculum programs such as entrepreneurship, leadership, and other skills. To ensure transferable skills taught will benefit students in the long term, MOE comes out with the mapping and an assessment rubric to measure the Program Outcome of the seven transferable skills elements.

#### ❖ Transferable Skills Assessments

As mentioned earlier, the transferable skills are measured by responsible parties who involve directly with the programs such as faculty members, co-curriculum instructors, or coaches. The assessments of curriculum program involve Student Learning Outcome 3 or SLO3 which include the transferable skills elements. Similarly for Co-Curriculum subjects, the assessment rubric is used to measure students' transferable skills. The assessment rubric consists of 70 percent transferable skills elements while 30 percent concerns with the content. The assessment is conducted for the whole semester. At the end of the semester, students will get grades based on their achievements.

#### ❖ Models in Integrating Transferable Skills in TVET Curriculum, Teaching-Learning, and Assessment

Currently, the integration and embedment of transferable skills in TVET curriculum, teaching-learning, and assessment are still in unclear implementation and done independently by the institutions. Such a situation occurs because all TVET education and training institutions are under jurisdiction of different ministries such as Ministry of Education, Ministry of Human Resource, Ministry of Youth & Sports, Ministry of Entrepreneur & Cooperative Development, state governments, or private providers. Nevertheless, the reference model currently used at the higher education institutions since 2006 is soft skills development module (*Modul Pembangunan Kemahiran Insaniah*). Figure 3.2 illustrates the connection between teaching-learning, support programs, and campus life with transferable skills.

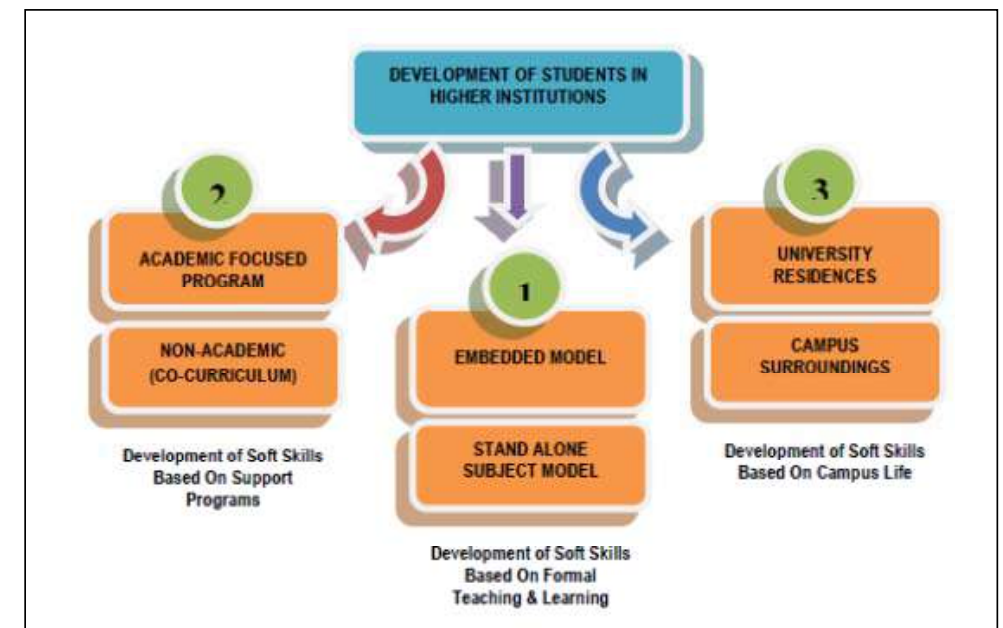


Figure 3.2. Model of Transferable Skills Development among Students of Higher Education Institutions (Abdullah et al., 2012)

## CONCLUSIONS AND RECOMMENDATIONS

It is believed that the transferable skills are as important as hard skills for Malaysian graduates before entering the work force. While the industries demand the workers to have good academic qualifications, the application of transferable skills is also important in producing quality graduates who meet the industrial needs. It is believed that transferable skills are used as deciding factors in the recruitment process in situations where job candidates have equal academic merit. Thus, it shows how important transferable skills not only to the graduates but also for the employers. As one of the public universities in



Malaysia, University of Tun Hussein Onn Malaysia is committed to implement and improve transferable skills as added values among the students. This is also to make sure the graduates become competitive when they join the workforce.

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## INTEGRATING TRANSFERABLE SKILLS IN TVET: The Case of Calabarzon Region, Philippines



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#### Abstract

*This study attempted to look into the integration of transferable skills (TS) in secondary technical-vocation education in the Calabarzon region, Philippines. Using data gathered from 21 tech-voc supervisors, school heads and curriculum specialist through an on-line open-ended questionnaire, results indicate that there is a balanced attention to transferable skills covered under the Targeting Life Skills model. In addition, varied approaches were found to be in use for integrating TS in the curriculum. Moreover, several teaching and assessment strategies are utilized in developing TS. A few good practices in TS integration have been noted as well.*

#### BACKGROUND

Most school systems around the world focus on the task of preparing youngsters to become productive participants in nation building. Beyond learning the foundational literacy and numeracy skills, youngsters are expected to possess life skills, also referred to as generic skills, necessary skills, competency skills, psychosocial competence, employability skills, and transferable skills (Sharma, 2003; Richens & McClain, 2000 in Yassin et al, 2008). Transferable skills are skills that are needed in any job and which enable people to participate in a flexible and adaptable workforce (Bennett, 2002). In other words, they refer to "those skills needed by an individual to operate effectively in society in an active and constructive way" (Edward de Bono, 1993, in Sharma, 2003).

Even if most employers prefer transferable skills over technology competencies (Richens & McClain, 2000 in Yassin et al, 2008), Bennett (2002) observes that the academic literature has not established a consensus regarding which transferable skills are most or least important. He cites a survey made by the University of Surrey in 2000 putting communication, IT, organisation, team working and interpersonal skills as the most preferred skills by employers. Yassin et al (2008) reported that soft skills or attitudes rather than technical knowledge appear to be of more interest to employers. These soft skills include leadership, communication, team building and entrepreneurial interests. In addition, skills in self-management, communication, managing people and tasks, mobilising innovation and change tend to enhance the employability of students (Evers, Rush & Berdow, 1998 in Yassin et al, 2008).

In developing transferable skills, researchers have tried various approaches. One way is to simulate professional learning practices (McKinnon & McCrae, ND). Sharma (2003)



refers to this as practical demonstrations while Sibthorp (2003) calls this experiential learning. Another tried approach is participation in extracurricular activities (Gould et al, 2006). Finally, the World Health Organization (Skills for Health, ND) recommends the following participatory teaching methods for life skills education: small group/buzz group, games and simulations, class discussion, brainstorming, role play, situation analysis and case studies, debate and story telling.

Life or transferable skills may be categorized into three: communication and interpersonal skills, decision-making and critical thinking skills, and coping and self-management (WHO, ND). Galinsky (2010) identified seven life skills as follows: focus and self-control, perspective taking, communicating, making connections, critical thinking, taking on challenges, self-directed/engaged learning. Thomburg (2002) declared that the six most wanted workforce skills are technological fluency, communication, teamwork, leadership, problem solving and creativity. The Targeting Life Skills Model of Hendricks (1998) uses the 4Hs to provide broad categories of life skills. The 4-Hs involve the head, hands, heart and health. Every H has two sub-categories. The head includes managing and thinking; hands, working and giving; heart, caring and relating; and health, living and being.

When transferable skills are not fully developed, youngsters tend to develop high risk behaviours (Sharma, 2003). On the other hand, an effective implementation of transferable skills education through school-based initiatives appears to be effective in reducing risky behaviours (Hanewinkel & Abhauer, 2004; Magnani et al, 2005). Another experiment showed that a year-long gardening program improved teamwork skills and self-understanding (Robinson & Zajicek, 2005).

### The Study Locale

The Philippines is a country of 99.2 million people with 23.8 million enrolled in public and private elementary and secondary schools. There are seventeen regional offices that provide quality assurance and technical assistance in delivering basic education services to the people. One of these regions is the CALABARZON region covering the southern Tagalog provinces of Cavite, Laguna, Batangas, Rizal and Quezon. Calabarzon has 12.5 million inhabitants, 2.87 million of whom are attending basic education in public and private schools. There are 3,392 public schools providing basic education.

The importance of Technical-Vocational education has long been recognised in the Philippines. In fact, a separate agency is in charge of providing post-secondary technical and vocational education and training (TVET) in the country. For secondary education, DepED Memorandum No. 353, s.2008 identified 280 Tech-Voc High Schools to implement the Strengthened Technical-Vocational Education Program (STVEP) using the Competency-Based Curriculum. DepED Order No. 72, s 2010 spelled out the guidelines for other schools that intend to offer the STVEP. Recently, DepED Order No. 18, s 2013 has been issued to push for the national competency and certification program among the students.

The curriculum framework of basic education in the Philippines includes an acknowledgement that life skills are important in fulfilling the needs of the nation and the global community. The complex context of every learner's experiences while in the schools

likewise covers efforts to prepare the youth for the world of work, entrepreneurship and higher education.

It is evident that efforts to develop citizens who are equipped with skills for productivity are in place. TVET in secondary schools is recognized as a significant vehicle for honing the transferable skills of every Filipino. This attempt to look into the integration of transferable skills in TVET will yield useful results in further improving the provision of the relevant learning experiences for the Filipino youngsters.

### METHODOLOGY

This research employed open-ended questions in conducting an online interview of education program supervisors in charge of technology and livelihood education, principals of tech-voc schools and a specialist from the Bureau of Secondary Education. The open-ended questions focused on transferable skills considered important, the integration approaches implemented, assessment of transferable skills, and good practices adopted. The qualitative data derived from the responses of 21 officials were analyzed by establishing common themes and categories and by comparing the common responses to an existing life skills model.

#### Transferable Skills Considered Important

Table 4.1 below indicates that three skills, namely: self-discipline, wise use of resources and marketable skills are considered highly important by the majority of the respondents. The popularity of self-discipline being considered most important suggests an overwhelming thirst of education officials to develop citizens who will behave consistent with ethical and moral standards to realize the country's goal of economic development. Resources that are wasted translate to opportunities missed. This could explain why the respondents appreciate the value of nurturing students who are wise users of time, treasures and talents. The possession of marketable skills enables a person to be more versatile and less likely to be unemployed when his/her existing skills end up no longer demanded by the economy.

Using the Targeting Life Skills Model of Hendricks (1998) as the basis for comparing the results of the study, it can be gleaned from the table that respondents have identified skills on all the aspects of the model. This suggests that, even if health, head and hands appear to be given more salience, there is a balanced concern for all the aspects of the youngsters' lives.

Table 4.1. Important Transferable Skills as Perceived by Respondents

|                                |      | Heart  |          | Hands   |        | Health |       | Head     |          |
|--------------------------------|------|--------|----------|---------|--------|--------|-------|----------|----------|
|                                | F=21 | Caring | Relating | Working | Giving | Living | Being | Managing | Thinking |
| Self-discipline                | 15   |        |          |         |        |        | /     |          |          |
| Wise use of resources          | 13   |        |          |         |        |        |       | /        |          |
| Marketable skills              | 13   |        |          | /       |        |        |       |          |          |
| Responsible citizenship        | 9    |        |          |         | /      |        |       |          |          |
| Planning/ Organising           | 9    |        |          |         |        |        |       | /        |          |
| Cooperation                    | 8    |        | /        |         |        |        |       |          |          |
| Self-motivation                | 7    |        |          | /       |        |        |       |          |          |
| Nurturing relationships        | 6    | /      |          |         |        |        |       |          |          |
| Concern for others             | 5    | /      |          |         |        |        |       |          |          |
| Critical thinking              | 3    |        |          |         |        |        |       |          | /        |
| Community service volunteering | 3    |        |          |         | /      |        |       |          |          |
| Healthy lifestyle choices      | 2    |        |          |         |        | /      |       |          |          |

#### Approaches used to Integrate Transferable Skills

Table 4.2 shows six approaches utilised by the respondents in integrating transferable skills into the Tech-Voc curriculum. The most popular approach is to adopt integrative education wherein the skills to be developed are integrated in other learning areas. This approach ensures that all other teachers are made aware of the transferable skills to be nurtured. The second approach is implementing competency-based curriculum. Since the tech-voc courses are competency-based, it is easy to identify specific competencies that can be useful in transforming the youngsters into citizens ready to enhance productivity in the society. Emphasizing collaboration while tech-voc skills are developed introduces the students to the world and work realities.

These results indicate that an integrated curriculum appears to be the most popular option for making sure that life skills are developed as well among the students of technical and vocational high schools. In fact, the new k to 12 education curriculum ensures that all learning areas have specific transferable (life) skills to be developed. The use of competency-based curriculum in tech voc also ensures that the correct competencies are honed among the learners while developing specific tech-voc skills.

Table 4.2. Approaches Used to Integrate Transferable Skills into the Curriculum

| Approaches Used to Integrate Transferable Skills                   | Frequency of Responses (N=21) |
|--------------------------------------------------------------------|-------------------------------|
| Values integration in other learning areas / integrative education | 10                            |
| Implementation of competency-based curriculum                      | 7                             |
| Emphasising collaboration                                          | 5                             |
| Requiring community service                                        | 3                             |
| On-the-job training                                                | 2                             |
| Contextualisation and localisation                                 | 2                             |

#### Teaching Transferable Skills

Seven approaches have been reported to be the preferred method of teaching transferable skills in the region. Hands on activities and highlighting values/skills in all learning areas appear to be the most popular mode of teaching transferable skills. Utilising technology in teaching transferable skills has been reported by four respondents. Table 4.3 shows the other responses.

It is noteworthy that hands on activities are the popular choice for teaching transferable skills. Hands on activities are consistent with what McKinnon & McCrae (ND), Sharma (2003), Sibthorp (2003) and (Gould et al, 2006) have pointed out as experience-based learning approaches. The value of teaching needing to highlights values and skills while teaching is likewise recognized as a valuable teaching approach for transferable skills. This indicates respondents' recognition of the importance of teachers being able to stress key messages while facilitating learning among the students.

Table 4.3. Approaches Used to Teach Transferable Skills

| Approaches in Teaching Transferable Skills                                           | Frequency of Responses (n=21) |
|--------------------------------------------------------------------------------------|-------------------------------|
| Hands on activities                                                                  | 5                             |
| Highlighting values/skills in all learning areas                                     | 5                             |
| Utilizing innovative technology                                                      | 4                             |
| Applying skills to real-life situations                                              | 3                             |
| Engaging learners via varied instructional approaches                                | 3                             |
| Using the 4 teaching-learning episodes (what to know, process, reflect and transfer) | 2                             |
| Allowing students to discover and develop skills by themselves                       | 2                             |

#### Assessing Transferable Skills

The most popular assessment used for transferable skills is via certification from the Technical Education and Skills Development Authority (TESDA). Respondents likewise acknowledge that criterion-referenced assessment such as checklists and rubrics are also useful. Moreover, authentic assessment/ performance tests are administered to determine mastery of transferable skills.

The recognition of TESDA's existing assessment system for validating skills learned while attending tech voc training activities indicates a high level of awareness among the respondents that certification mechanisms are needed to assure the quality of competencies and skills developed in the schools. The fact that other forms of assessment are used also shows that the respondents are using non-conventional assessment techniques to effectively monitor and evaluate the effectiveness of the approaches used to develop transferable skills.

Table 4.4 *Approaches Used to Assess Transferable Skills Development*

| Assessment Strategy                                                | Frequency of Responses (n=21) |
|--------------------------------------------------------------------|-------------------------------|
| <b>TESDA certification</b>                                         | 13                            |
| <b>Criterion-referenced assessments (checklists, rubrics, etc)</b> | 9                             |
| <b>Authentic assessment/ performance tests</b>                     | 6                             |
| <b>Teacher observation and feedback</b>                            | 3                             |
| <b>Client satisfaction survey</b>                                  | 2                             |

#### Success Indicators for Developing Transferable Skills

The most common indicator for determining effectiveness of the efforts to develop transferable skills is the number of students applying the skills as reported by 10 respondents. Seven respondents' use the percentage of TESDA certified graduates were their indicator while 2 respondents evaluate the impact of successful transferable skills development on the drop out rate and academic achievement levels of the learners.

Monitoring the extent of the students' application of the skills learned in their own lives further assures that respondents that indeed, transferable skills learned are put to productive use. Measuring effectiveness through percentage of passers in the TESDA certification provides the respondents with immediately verifiable data as basis for determine teaching effectiveness. Moreover, the respondents appear to recognise that transferable skills development can affect schooling outcomes such as drop out and achievement rates.

#### Good Practices in Integrating Transferable Skills

Table 4.5 indicates that showcasing talents/skills via contests and providing real-life experiences via hands on activities are considered best practices by a significant number of respondents. On the other hand, there are a few respondents who believe that implementing income-generating projects and localizing curriculum are best practices in integrating transferable skills.

Skills competitions provide an additional incentive for learners and teachers to scale up standards of performance, making sure that transferable skills developed become more enduring. Real-life experiences likewise strengthens transferable skills learned in the school because the relevance and significance of the transferable skills developed tend to be appreciated and understood more by the learners when the context for learning are clear.

Table 4.5. *Good Practices in Integrating Transferable Skills*

| Good Practices in Integrating Transferable Skills                  | Frequency of Responses (n=21) |
|--------------------------------------------------------------------|-------------------------------|
| <b>Showcasing talents / skills via contests</b>                    | 8                             |
| <b>Providing real-life experiences via hands on activities</b>     | 8                             |
| <b>Individualising teaching via modules and instruction sheets</b> | 5                             |
| <b>Capacity-building for teachers</b>                              | 4                             |
| <b>Linking with the home, academe and industry</b>                 | 3                             |
| <b>Implementing income-generating projects</b>                     | 2                             |
| <b>Localising curriculum</b>                                       | 2                             |

#### CONCLUSIONS AND RECOMMENDATIONS

The foregoing discussion and analysis of data provide sufficient basis to conclude that the respondents provide attention to life or transferable skills. In addition, utilisation of varied strategies in transferable skills integration in the curriculum, teaching and assessment have been shown by the data gathered. Best practices are evident in developing TS among the secondary TVET learners.

It can be recommended therefore that a more intensified effort be pursue in integrating TS in TVET to ensure that youngsters are able to develop the soft skills preferred by employers. In addition, it is recommended that another research looking into the perceptions of TVET classroom teachers and students on transferable skills integration be undertaken. Finally, a mechanism to scale up best practices in TS integration should be established to ensure sustained implementation.

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## INTEGRATING TRANSFERABLE SKILLS IN TVET ON VOCATIONAL TEACHER EDUCATION (VTE) PROGRAMMES



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### APPROACH AND SCOPE OF THIS STUDY

Transferable skills were defined by UNESCO (2012: 172) as essential skills to apply and to retain one's work. They require a broad range of skills that can be transferred and adapted to different work needs and environments. Transferable skills include analyzing problems and selecting appropriate solutions, communicating ideas and information effectively, being creative, showing leadership and conscientiousness, and demonstrating entrepreneurial capabilities.

In TVET institutions (RMUTT, RMUTL) Programme Specification (TQF2) also have some part of Transferable skills via Learning outcomes such as Professional Ethics, Responsibility, Life Long Learning Skill, Information and Communication Technology (ICT) Skill, Management Skill and Presenting Skill.

**Didactic for Technical Training** is chosen to be studied in this case of TVET institutions (RMUTT, RMUTL) according to criteria as follows:

1. The subjects are core subjects of a particular program.
2. The subjects are designed for VTE students to integrate technical subjects and educational subjects for preparation in teaching experience.

*Transferable skills* are valuable and their benefits are as follows:

1. Being Professional Teachers in Vocational.
2. Creative suitable learning for learners.
3. Graduates can adjust for work.

*Higher Education in Thailand has qualification frameworks (TQF.Hed.) called TQF1 in 2009. Two mains TQF are TQF1 in Bachelor of Engineering and TQF 1 in Bachelor of Education (5 years). The TQF1 in the Bachelor of Education includes the council that controls the standard of teacher in Thailand: TCT (Teacher Council of Thailand). As a result, all Education Programmes (TQF2) must follow the TCT standard.*

## THE INTEGRATION OF TRANSFERABLE SKILLS IN TVET

The RMUTL Education Programme (TQF2) in the Bachelor of Science in Technical Education combines both engineering standards from TQF 1 in the Bachelor of Engineering and education standards from TQF 1 in the Bachelor of Education. In order to control the quality of graduates, RMUTL and RMUTT have regulations in ethics, moral, social and responsibility. RMUTL Graduates are expected to have six major learning outcomes which cover **Professional Ethics, Responsibility, Life Long Learning Skill, Information and Communication Technology (ICT) Skill, Management Skill and Presenting Skill.**

The curriculum has curriculum mapping which is a good strategy to show the relationships between subjects and Transferable Skills. In the selection process, the Qualification of learners is identified and assessed against all Transferable Skills such as adding items about Transferable Skills in paper-pencil aptitude test on teaching and interviews. However, the paper-pencil aptitude test and interviews must be standardized and assessed. Beside the criteria of selection process can be reset for qualities of input of VTE programs according to the Universities' policy.

TCT legally regulates to restrict numbers of VTE candidates, but sometimes it is very difficult to limit the numbers of candidates due to many factors. One of the factors is that Transferable Skills can support VTE graduates to work in many occupations. Some of the graduates do not want to be teachers but instead they want to work in other industries.

Financial support: Allocation of VTE Financial budget relates to the quality of the production at the national level. Universities under the government's jurisdiction do not recognized the decreasing of students which relate to budget's allocation.

Educational System: The academic year in the Educational System, consists of 2 semesters of not less than 15 weeks per semester for 5 years. Some Transferable Skills, which are teamwork skills, responsibility skills, Communication skills, ICT skills, and leadership skills, can be taught both in the classroom and the workshop and in the laboratory via E-learning, internet, or any social media applications.

Accreditation of Prior learning (APL): Subjects according to TCT Professional Standards cannot transfer the credits to VTE Program. As a result, some Transferable Skills, which are identified in those subjects cannot be transferred. However, some Transferable Skills in engineering subjects can be assessed and transferred into VTE Programs because they are not regulated in the TCT Professional standard.

Structure of VTE Curriculum: The total credits of the curriculum are controlled by the Ministry of Education and the TCT. The content of each subject and the objectives of VTE programs are analyzed accordingly in the TQF2 and the TCT's system and standard. The university sets a study plan which can be adjusted for students in each year.

Monitoring and Supervisory of Transferable Skills: At the end of the semester, all lecturers report the assessment to the committees of the faculty via assessment report form (TQF5). In case of Field Experience Specifications, all Transferable Skills should be

identified in TQF4 and TQF6. This includes the objectives, the development of learning outcomes, the collaboration of network, the planning, the education evaluation and the field experience evaluation, and the improvement

Quality Assurance of the VTE Program: The evaluation on the effectiveness of the teaching of all skills includes Transferable Skills. Overall the curriculum evaluates the process, revise the evaluation process and result, plan to develop the curriculum and teaching strategy on Transferable Skills.

In course syllabus (TQF3) of *Didactic for Technical Training the objectives are as follows:*

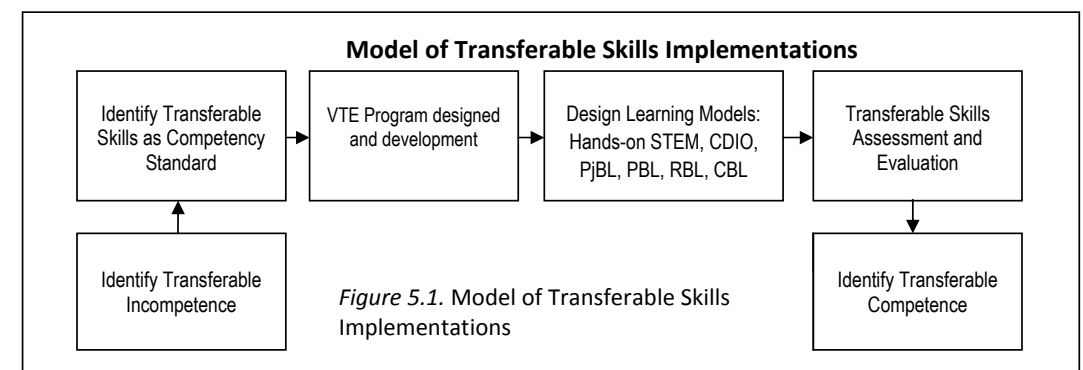
1. Understanding in Technical Teaching skill.
2. Understanding in Lesson plans, Instructional Media and materials.
3. Understanding in Teaching Methods and theory and laboratory lesson plan.
4. Understanding on how to integrate the didactics and teaching techniques with new trends in technical education.
5. Teaching practice in selected topics by using several teaching techniques. (Responsibility skills, ICT skill, Management skills, presenting skill).
6. Awareness in benefits of teaching techniques.

**TS are implemented in the classroom by:**

1. Good role models
2. Using ICT in presentations
3. Just in time in assignment topics
4. Micro-teaching
5. Group working
6. Choosing constructs and develops the instructional materials

**TS are assessed via:**

1. Ability to use the Presentation software
2. Handing in the report on time
3. Check up on details of the lesson plan
4. Teaching Assessment Check List report form
5. Classroom Attendance
6. Unwanted behaviours in the examinations
7. Accept suggestions from others



This model shows VTE students with incompetent TS can be equipped with the following the four procedures in order. The first procedure is to identify TS skills as competency standards by users of vocational teachers. The second is to develop VTE programs with integrated TS competency standards. The third procedure which is very important is to adopt TS in the classroom. It is to design and manage learning by applying and integrating effectively proper learning models to delivery TS such as Hands On, STEM, CDIO, PjBL, PBL, RBL as well as CBL. The final procedure is to assess and evaluate TS of individual learners.

By studying in details of *Didactic for Technical Training course*, it was found that:

1. The objectives of the subject are not clearly identified as Transferable skills.
2. The graduate development of learning outcomes, describes *Professional Ethics, Responsibility, Information and Communication Technology (ICT) Skill, Management Skill* and *Presenting Skill*.
3. In the details of the weekly lesson plan, no parts of the details to confirm that Transferable Skills are implemented in the classroom.
4. Assessment Plan shows that the *Responsibility* skill and *Presenting* skills are present.

### CONCLUSIONS AND RECOMMENDATIONS

#### National Level

1. National policy initiatives are not consistent.
2. VTE Program Providers have not been substantially developed at ministerial level.
3. Quality of VTE graduates should be related according to the budget system.
4. VTE Candidates decrease because of reducing birth-rate, lack of job position in vocational college, mismatch between users and providers of qualification of graduate.
5. Graduates of VTE programs can perform only in the teaching profession. The idea is not recognized at universities.
6. Competition of providers can identify survivals and qualities of providers. However, students want a degree according to social values.

#### Institutional Level

1. Conduct studies on the factors that affect students and the teaching methods with regards to Transferable Skills.
2. Course specification (TQF3) can be adopted and designed concerning Transferable Skills, which are the responsibility of lectures. So mechanism such as the budget system should be considered.
3. Transferable Skills will equip VTE graduates to reach up to the management level.
4. All Transferable Skills should be set up as subjects for assuring the effectiveness of Transferable Skills delivery. Assessment and Evaluation of Transferable Skills can be assessed and evaluated into two grades as Unsatisfactory (U) and

Satisfactory(s). This is due to the difficulty in assessing some of the Transferable Skills.

5. It is compulsory to add subjects on Transferable Skills to ensure the delivery of those skills to the students.
6. Identify all Transferable Skills in every subject is not suitable.
7. Curriculum mapping in TQF2 is the best practice of TQF section on the integration of Transferable Skills.
8. All Transferable Skills can be researched annually based on the evaluation of all VTE graduates. This can be done by studying the satisfaction levels of users, graduates, lecturers and others.

#### Classroom Level

1. Outside classroom activities and the university life can empower VTE students to be equipped with Transferable Skills.
2. Identify Transferable Skills in VTE curriculum (TQF2) it was found recently that Transferable Skills were not adopted at the classroom level. The TQF3 and TQF5 should redesign the assessment and evaluation on Transferable Skills. Transferable Skills delivery should be identified as part of the key performance indication (KPI) of lecturers.

#### Future Research

Further research should be conducted to analyse the theory of all Transferable Skills about the students and the teaching methods.

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## INTEGRATING TRANSFERABLE SKILLS IN TVET TEACHER EDUCATION AT NAMDINH UNIVERSITY OF TECHNOLOGY EDUCATION

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### Introduction of National Education System and Vocational Education System in Vietnam

According to Article 4 of the Law on Education issued in 2005, the Vietnamese national education system includes four sub-systems as follows:

- ❖ *Pre-school education*, including pre-school and kindergarten. The children at pre-schools and kindergartens are under 6 years old.
- ❖ *General education*, including primary school (5 years), lower secondary school (04 years) and upper secondary school (3 years). Pupils in this subsystem are from 6 to 18 years old. Under the Education Act, the primary and lower secondary courses are compulsory for all children. Pupils graduating from upper secondary schools can continue to attend technical secondary school, vocational school, and college or university. Pupils graduating from lower secondary schools may enrol in Vocational Secondary Schools if they do not make the transition to upper secondary school.
- ❖ *Professional education*, including Technical secondary education and Vocational training. Students at Technical secondary schools must have an upper secondary school diploma. After 2 years of studying they are eligible to get a Technical diploma. Vocational training is divided into three levels: Vocational College Training, Vocational Secondary Training and Vocational Elementary Training.
  - **Vocational Elementary Training** is conducted from 3 months to 1 year for those who have the academic level suitable for the occupation. After the course, learners are issued with a vocational elementary certificate.
  - **Vocational Secondary Training** is conducted from 1 year to 2 years for those who graduate from upper secondary school and from 3 years to 4 years for those who graduate from lower secondary school. After the course, students are issued with Vocational Secondary Diploma.
  - **Vocational College Training** is conducted from 2 to 3 years for those who graduate from upper secondary school; from 1 to 2 years for those who have a vocational secondary degree of the same occupation. After the course, students are issued with Vocational College Diploma.

In general, the age of students attending vocational education is often over 15 years old. Students graduating from Technical Secondary Schools and Vocational Secondary Schools (if they have an upper school diploma) can continue to study at the College, and students with Vocational College Diploma can continue to study at the University.

❖ *Higher education*, including college education, university education, and post-graduate education (Master degree and Doctor degree). It takes the students 3 years to finish the college course if they graduate from the upper secondary school, 2 years if they graduate from the Technical Secondary School or the Vocational Secondary School of the same major. After the college course, they are granted an Associate Diploma. Students at University level will study in 4 years if they graduate from the upper secondary school; 1 or 2 years if they graduate from a college of the same major; 2 years if they graduate from the Vocational College of the same major. After the course, they are granted a university-level Bachelors Degree.

Masters degree requires students to have a university-level Bachelors Degree and they have to study in 2 years. A Doctorate degree requires students to have a Masters degree and the minimum course duration is 4 years. However, some students who graduated from the university with excellent thesis and whose overall result of the whole course is excellent are exceptionally considered to study a Doctorate course.

### a) Vietnamese National Education System

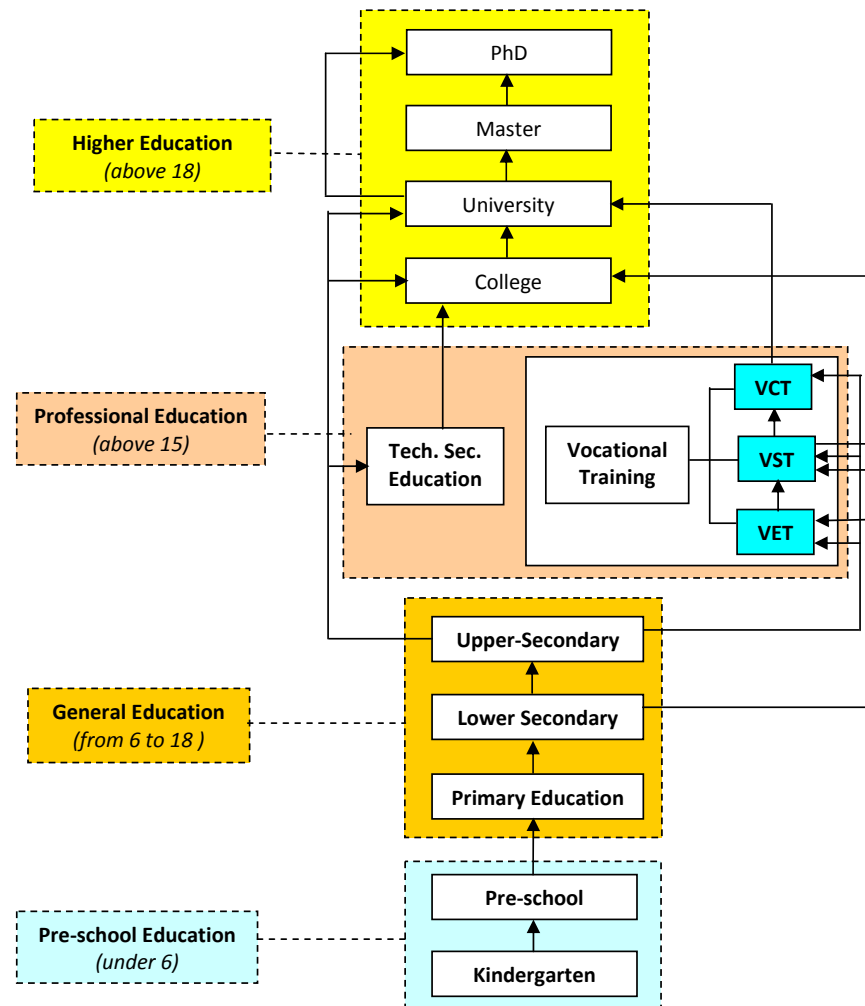


Figure 6.1. Vietnamese National Education System (VCT: Vocational College Training; VST: Vocational Secondary Training; VET: Vocational Elementary Training)

### b) Vocational Education System in Vietnam

In Vietnam, the national education system is under the control of the Government. However, the Government assigned two ministries to manage this system. The Ministry of Labour Invalids and Social Affairs (MOLISA) manages the Vocational Training part, and the Ministry of Education and Training (MOET) manages the rest of the system. In turn, the MOLISA established the General Department of Vocational Training (GDVT) to help the Ministry directly monitor the Vocational Training Sector.

According to statistics of the GDVT, the network of vocational training institutions currently managed by the MOLISA includes:

- Three (3) universities with the duty of vocational teacher training: Nam Dinh University of Technology in Education (NUTE); Vinh University of Technology Education (VUTE) and Vinh Long University of Technology Education (VLUTE).
- 126 vocational colleges (including 33 private schools, 93 public schools);
- 303 vocational secondary schools (including 94 private schools and 209 public schools);
- 810 vocational centres.

### THE INTEGRATION OF TRANSFERABLE SKILLS IN VIETNAM

#### a) The used terms have similar meaning to Transferable Skills

The term “Transferable Skills” hardly appears in official documents as well as the mass media in Vietnam. Instead, the two terms “Life Skills” and “Soft Skills” are more commonly used.

The term “Life skills” has been widely known in Vietnam since 1996 together with a project of UNICEF “*Life skill education is to protect the health and prevent HIV/AIDS for teenagers*” trained by Australian experts. However, the term “Soft Skills” has been used in Vietnam for the last ten years. They were first used in the projects of international organisations in Vietnam such as UNESCO, UNICEF, WHO.

#### Life Skills and Soft Skills

The first and most important thing to emphasise is that: “Life Skills” and “Soft Skills” are not different, and also not the same. Soft skills are a part of Life Skills, or Life Skills include Soft Skills and some other skills.

Soft Skills is a sociological term related to the use of language, the ability to integrate into society, the attitudes and behaviour applied in the communication between people. Some skills can be considered soft skills such as:

- Communication skills
- Teamwork skills
- Skills of Leading others
- Public speaking skills
- Skills of conflict resolution and reconciliation
- Skills of understanding and empathizing with others
- Negotiation skills
- Selling Skills
- Team building skills
- Influencing skills
- Listening skills
- Skills of wisely refusing

In general, Soft Skills are the skills involved in the mix, live with or interact with social, community, group or organisation.

Life Skills is a large concept, includes many different skills. Life Skills are defined as the people's competence, and ability to live healthily, safely, avoids natural disasters, earthquakes. In other places, Life Skills are defined as one's communication and reaction to the environment and other individuals, or as the orientation and problem solving of that individual. According to WHO, Life Skills are "The adaptability and positive behaviour that allows individual to efficiently deal with the demands and challenges of everyday life".

In this report, we consider that Life Skills include the above Soft Skills, plus the skills that help us respond effectively to the challenges of life, and from that we can better ourselves, such as:

- Self-respect
- Confidence
- Skills of self motivation
- Self-awareness or self-worth skills
- Awareness of your strengths and weaknesses skills
- Skills of setting goals for yourself in life
- Skill of mastering and self-evaluating yourself
- Skills of positive thinking
- Skills of Studying and self-studying
- Time Management Skills

**b) Where are the term "Life Skills" and "Soft Skills" commonly used?**

According to our observations, in Vietnam, the term "Life Skills" is often associated with school children. Because Life Skills are not too deep or complex. The Life Skills education for students includes contents which are very simple and close to the children, this is the minimum knowledge that helps them be independent in learning, entertainment and daily activities. But the term "Soft Skills" is often associated with pupils, students of Technical Schools (*vocational schools, technical secondary schools, colleges and universities*) The "Soft Skills", in this case comes with another term, that is "Hard Skills" or "Professional Skills", or "Technical Skills" to couple. "Soft skills" supports "Hard Skills", those are the main skills required in recruiting the candidates (in this case, the candidates are the graduate students).

Soft skills are mainly the skills of the human personality, not professional, intangible, not a special character skill; meanwhile, the Hard Skills, in opposite meaning, often appear in your resume, academic ability, experience and professional expertise. Hard Skills are provided through formal training courses. The time to master the Hard Skills are often very long, for decades. Because of the long and hard training process along with the examinations to demonstrate the ability to overcome certain level, Hard Skills are often invested before owning the Soft Skills in life.

Comparing the term of "Transferable Skills" used in Brunei, it seems that the term of "Life Skills" is closer than others. However, in this report, we will refer to both terms "Life Skills" and "Soft Skills" because both of them are widely used in Vietnam.

**The Importance of Life Skills**

There are four levels of life skills to help each of us to assert our own positions; those are self-awareness skills, self management skills, skills group of social awareness, and skills group of relationship management. There are also other methods of classification, according to the scholars from University of Illinois, those are skills group of Head using (thinking, management), skills group of Heart using (relationship, interest), skills group of Hands using (working, sharing and contributing) and skills group of Health (living and experience). But no matter how they are divided, there is still a truth that cannot be changed, to become a successful adult, Life Skills must be taught from the time when he/she is very young.

Educating "Life Skills" to pupils not only help them achieve higher efficiency in communication, but also help them become more confident in the collective activities, have the skills of self-protecting themselves against social issues with the risk of affecting their health and life safety such as problems identifying skills, know how to identify situations, know how to refuse, conflict management skills, decision making skills, know how to cook, take care of health.

According to a new study published by the education sector, in Vietnam over 95% of children have misconceptions about Life Skills, 77.7% of them have never been trained in Life Skills; 76.4% of them said that they need training in Life Skills knowledge. Most of them were embarrassed when they answered or did not know how to handle common situations in life. This result shows that the Life-Skills education for pupils is becoming increasingly essential and they have an important place at schools.

**The Importance of Soft Skills**

Soft Skills are proven to have huge influence in the success or failure of an individual's career and life. You have a good expertise, is it enough to help you succeed? "The fact is that for successful people, only 25% of the success are due to the expertise, the remaining 75% of the success is determined by the Soft Skills which they are equipped with" - Wikipedia. In order to achieve success in life and career, you have achieved sufficient professional skills (Hard Skills) and Soft Skills. If you master the professional Soft Skills, you will greatly contribute to the success of a business. For this reason, the employers attach much importance to Soft Skills and consider it one of the important recruitment requirements.

**d) The Guideline and Supports at National Level**

As mentioned above, in Vietnam, the MOET manages all levels: the university education, the technical secondary education (a part of professional education), the general education and the pre-school education.

At the beginning of the school year 2011-2012, the MOET has deployed Life skills courses in mass in general education institutions. In the first school years, because there was no official curriculum from the MOET, the most common method applied at schools was to integrate the education of Life Skills for students into the courses of the program.

Each school had their own integrating method, one integrated into the art, music; other schools chose the Literature and History to help students acquire knowledge better.

To overcome the shortage of standard textbooks to teach Life Skills, the MOET has issued Operation Plan No. 1088/KH-BGDDT, dated August 29<sup>th</sup>, 2013 about completing a set of educational materials on Life Skills in some subjects and educational activities at the primary, the lower and upper levels across the country. Accordingly, from the school year of 2013-2014, the textbooks for Life Skills will be available for all levels of general education, namely:

*Primary Level: the following are the textbooks, size 17cmx24cm, and materials for teachers:*

- 1) Education of Life Skills in the elementary school subjects - Grade 1, 232 pages;
- 2) Education of Life Skills in the elementary school subjects - Grade 2, 244 pages;
- 3) Education of Life Skills in the elementary school subjects - Grade 3, 200 pages;
- 4) Education of Life Skills in the elementary school subjects - Grade 4, 228 pages;
- 5) Education of Life Skills in the elementary school subjects - Grade 5, 216 pages.

*Lower Secondary Level: the following are the textbooks, size 17cmx24cm, and materials for teachers:*

- 1) Life skills education in Extra Curricular Activities - 204 pages,
- 2) Life skills education in Geography - 248 pages,
- 3) Life skills education in Citizenship - 264 pages,
- 4) Life skills education in Literature - 240 pages,
- 5) Life skills Education in Biology - 284 pages,

*Upper Secondary level: the following are the textbooks size 17cmx24cm, and materials for teachers:*

- 1) Life skills education in Extra Curricular Activities - 176 pages,
- 2) Life skills education - 228 pages
- 3) Life skills education in citizenship education - 212 pages,
- 4) Life skills education in - 224 pages,
- 5) Life skills education in Biology -256 pages.

For Technical Secondary Schools, the MOET issued Circular No. 66/2011/TT-BGDĐT, dated December 30<sup>th</sup>, 2011 about the course curriculum on **Communication Skills** in the training program at the technical secondary level. Therefore, the course program in Communication Skills has been taught in Technical Secondary Schools since the school year 2012-2013 as the elective subject with 2 credits. Based on the objectives of the course, curriculum content is structured into 3 chapters: Chapter 1 (6 periods) includes an overview of communication and communication skills; Chapter 2 (12 periods) includes a number of communication skills such as making the acquaintance skills, listening skills, public speaking skills, conflicts solving skills, and skills to overcome difficulties in communication; Chapter 3 (12 periods) refers to the application of communication skills in job finding and in the workplace.

Most recently, on February 28<sup>th</sup>, 2014 MOET had issued Circular No. 04/2014/TT-BGDDT regulating the management of Life Skills Education and education activities outside the curricular time. The Circular states that:

- i. Life skills are taught at all education grades and levels managed by the MOET like the kindergartens, groups of children; nursery schools, preschools; primary schools, lower secondary schools, upper secondary schools, technical secondary schools, colleges and universities. In addition, it is also taught at the centres, businesses with the registration of education activities.
- ii. The activity of Life Skills education in this regulation can be understood as education activities to help students shape and develop habits, behaviour, positive and healthy attitudes in different behaving situations in their personal lives and participate in social life, thereby complete the personality and orientate and better develop themselves based on the value of life.

#### **1) Principles of life skills teaching activities:**

- i. The activity of Life Skills education helps reinforce, enhance the knowledge, skills, personality education for students, with the content that is suitable for the learners' psychology, in accordance with Vietnamese traditions and customs.
- ii. Institutions of education are responsible for the content of education, the quality of life skills education.
- iii. The learners participate in the volunteer spirit.

#### **2) This document also regulates:**

- i. Conditions of material facilities to teach life skills;
- ii. Requirements for teachers;
- iii. Requirements for textbooks, materials;
- iv. Who is licensed to teach life skills;
- v. Responsibilities of related parties for life skills education: such as the People's Committee, Department of Education and Training, Education and Training room and other training institutions and entities.
- vi. Regulation on finance for life skills education;
- vii. Inspections and dealing with the violations in the activities of life skills education.

Unfortunately, for the field of vocational training managed by the MOLISA, up to now, there is no any formal written guidance or direction regarding teaching of Soft Skills (or a particular skill) to students in the vocational training institutions. If there is any training of Soft Skills for students in vocational training institutions, it comes from the perceptions of school leaders.

### **THE INTEGRATION OF TRANSFERABLE SKILLS IN TVET TEACHER EDUCATION AT NUTE**

#### **Brief Introduction of NUTE**

NUTE is located at Phu Nghia street, Loc Ha Ward, Nam Dinh city. It is 90 km from Hanoi to the south-east. NUTE is a public foundation of undergraduate education, under the MOLISA

with the function of vocational teachers training at university level; training university and college levels of technical specialties, technology and economics; vocational training at college levels.

*Vocational Teacher, Engineers and Associate Programs in:*

- 1) Information Technology
- 2) Computer Science
- 3) Automotive Technology
- 4) Mechanical Engineering
- 5) Welding Technology
- 6) Electrical and Electronic Engineering
- 7) Electrical Engineering
- 8) Control Engineering and Automation
- 9) Accounting
- 10) Business Administration

*Vocational College Training Programs in:*

- 1) Metal Cutting
- 2) Welding
- 3) Automotive Technology
- 4) Industrial Electricity
- 5) Cooling Technique and Air-conditioning
- 6) Electrical Installation and Industrial Control
- 7) Industrial Electronic
- 8) Household Electronic
- 9) Computer Programming
- 10) Network Administration
- 11) Computer Graphics
- 12) Accounting

**How are the transferable skills integrated in the TVET curriculum?**

Firstly, it must be said that, NUTE has been aware of the importance of Soft Skills training for students in the university. The University has declared this in the **Learning Outcome Standards**. In the Learning Outcome Standards of the university, besides the requirements of specialized competence, foreign language, computing, the following soft skills have been committed to be achieved by the students when they graduate.

Table 6.1. *Description of Transferable Skills*

| Transferable Skills    | Descriptions                                                                                                                                                                                          | Means of Achieving                                                                                                      |
|------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------|
| Work management skills | Know how to organize and manage production groups; production practice group in the business. Have a good working style; ensure industrial safety and hygiene; to obey the request of the profession. | Through the courses of practice at practice rooms of the university (18 credits) and practice in enterprises (3 months) |
| Soft Skills            | Soft skills certified under the program of NUTE, including: skills of self- management, jobs finding, self-employment, teamwork, and communicating with partners.                                     | Studying the course "Soft Skills"                                                                                       |

|                                                           |                                                                                                                                                                   |                                                                                                                  |
|-----------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------|
| Self-study, self-practice and scientific research ability | Have the ability to actively approach, update information, scientific knowledge and modern technologies; self-assess and self-adjust the professional competence. | Through the implementation of students' scientific research                                                      |
| Cooperation with colleagues                               | Have the ability to propose, exchange ideas, make working plans and coordinate with colleagues to carry out the plans; have the ability to work in groups.        | Through group discussions, practice activities at the university workshop and practice in enterprises (3 months) |

Besides, the students of the university study the subject "Soft Skills", some subjects have content that may be regarded as Life Skills or Soft Skills, as shown below:

Table 6.2. *Description of Subjects Related to Transferable Skills*

| Subject                                                                                              | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Soft Skills<br>(02 credits = 45 leaning units)<br>- Attribute: Certificate                           | <p><b>Objectives:</b></p> <ul style="list-style-type: none"> <li>- Master the way to conduct presentations, work in groups, persuade and negotiate effectively, answer job interviews to increase work efficiency.</li> <li>- Have training activities to achieve goals.</li> <li>- Promote the flexibility, self-management and carefulness.</li> </ul> <p><b>Module description:</b></p> <p>This module provides students with the following units of knowledge:</p> <ul style="list-style-type: none"> <li>- Presentation Skills</li> <li>- Group work Skills</li> <li>- Persuasion Skills</li> <li>- Skills to answer job interviews</li> <li>- Negotiation Skills</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Introduction to communication science<br>(2 credits = 30 leaning units)<br>- Attribute: Elective     | <p><b>Course objectives:</b></p> <p>After the course, the students are able to acquire:</p> <ul style="list-style-type: none"> <li>- Knowledge: present the most fundamental issues in communication science such as the definition, the role, the function, the means, the style and the skills of basic communication.</li> <li>- Skills: effectively use the means of communication; train and gain communication skills in listening, speaking, reading and writing; establish, consolidate and develop the necessary relationships in life and career.</li> <li>- Attitudes: realize the importance of becoming a good communicator. On that basis, the students have the right attitude towards the subject as well as for training the communication quality in career and life.</li> </ul> <p><b>Course description</b></p> <p>The course corresponds to 2 credits, there is one mid-term test, including the following contents:</p> <ul style="list-style-type: none"> <li>- An overview of communication science;</li> <li>- Means and styles of communication;</li> <li>- The basic communication skills</li> </ul> |
| Pedagogical communication and behaviour<br>(2 credits = 30 leaning units)<br>- Attribute: Compulsory | <p><b>Course objectives:</b></p> <p>By the end of the course, students should be able to acquire:</p> <ul style="list-style-type: none"> <li>- Knowledge: analyze the system of basic knowledge of pedagogical communication and behaviour.</li> <li>- Skills: carry out pedagogical communication and behaviour activities, ensure formality, and make contribution to the realization of educational purposes.</li> <li>- Attitude: be active, independent and flexible to apply knowledge and skills</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |

equipped to pedagogical communication and behaviour.

**Course description**

The course corresponds to 2 credits and there is a mid-term test. The course contains the following contents:

- General introduction to pedagogical communication and behaviour.
- Pedagogical communication.
- Pedagogical behaviour.

Pedagogical practice 1  
(3 credits = 3 weeks =  
03 x 06 day x 06  
learning unit/day)

**Course objectives:**

- Knowledge: present the objectives, contents, methods and forms of organization and ensuring conditions to carry out some regular and basic and typical work of vocational teachers at vocational training institutions.
- Skills: carry out activities to solve some regular and basic and typical work of vocational teachers
- Attitude: positively train, cultivate qualities, capacities and develop carer ideal for them.

**Course description**

The course corresponds to 3 credits, and is carried out in 3 weeks, including the following contents:

- An overview of pedagogical practice.
- Learning vocational schools
- Teaching preparation
- The work of being homeroom teachers and comprehensive educational activities.

**Pedagogical practice 2**  
(01 credits = 01 weeks  
= 01 x 06 days x 06  
learning units/day = 36  
learning unit)  
Attribute: Compulsory

**Course objectives:**

- Knowledge: present the objectives, contents, methods and forms of organization and ensuring conditions to carry out some regular and basic and typical work of vocational teachers at vocational training institutions.
- Skills: carry out activities to solve some regular, basic and typical work of vocational teachers
- Attitude: positively train, cultivate qualities, capacities and develop carer ideal for themselves.

**Course description**

The course corresponds to 1 credit, and is carried out in 1 week, students have changed to give lecture for vocational learners, the score of giving lecturing is considered as the result of the final course exam.

In addition, a number of subjects in a training program that integrates a number of soft skills training, such as Vocational education science, Vocational training skills and methods:

Table 6.3. Description of Subjects in Training Programmes

| Subject                                                                | Description                                                                                                                                                                                                                                                                                                                                     |
|------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Vocational Education Science</b><br>(2 credits = 30 learning units) | In chapter 2 of this subject, there are 05 periods of teaching the topics related to Soft Skills, namely:<br>2.5. Teaching methods<br>2.5.1. Notion<br>2.5.1.1. Definition<br>2.5.1.2. Properties<br>2.5.2. Teaching methods<br>2.5.2.1. Teaching methods using language<br>a. Presentation<br>b. Speaking<br>c. Instruction of using materials |

| Subject                                                                          | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|----------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                  | 2.5.2.2. Intuitive teaching methods<br>a. Observation<br>b. Intuitive presentation<br>2.5.2.3. Practice teaching methods<br>a. Modelling<br>b. Training<br>2.5.2.4. New teaching methods<br>a. Problem-solving<br>b. Algoritation<br>c. Programming<br><br>In chapter 3 of this subject, there are 2 periods of teaching the topic related to Soft Skills, namely:<br><br>3.4.2. Educational methods system<br>3.4.2.1. Persuasive methods<br>a. Counselling<br>b. Debating<br>c. Pointing out good examples<br>3.4.2.2. Activities organization methods<br>a. Training<br>b. Giving an opportunity to take part in social activities<br>3.4.2.3. Behaviour stimulating methods<br>a. Emulation<br>b. Praise and reward<br>c. Punishment |
| <b>Vocational Training Skills and Methods</b><br>(3 credits = 45 learning units) | In chapter 2 of this subject, there are 2 periods of teaching the topic related to Soft Skills, namely:<br><br>2.1. Stabilizing the class<br>2.2. Using the teaching panel<br>2.3. Using the handouts<br>2.4. Opening a lecture or a problem<br>2.5. Providing objectives of the lesson<br>2.6. Illustrated talking, asking questions, giving and receiving information<br>2.7. Teaching the concepts, structure, principles and materials<br>2.8. Teaching the design, fabrication, installation, operation, repair, maintenance<br>2.9. Demonstrating sample (sampling)<br>2.10. Managing the group activities<br>2.11. Reinforcing the lecture<br>2.12. Guiding self-study<br>2.13. Managing the class                                |

## 2.1. How are transferable skills taught in TVET teacher education at NUTE?

Soft skills or life skills are taught in NUTE in two forms: as curricular subjects and as extra-curricular subjects.



For curricular subjects, students learn and are graded according to the training program. Subject names and accumulated points are all in the students' academic transcript when they graduate. These subjects are required or selective. For examples:

- 1) Vocational Education Science(Compulsory)
- 2) Vocational Training skills and methods (Compulsory)
- 3) Pedagogical Practice 1 (Compulsory)
- 4) Pedagogical Practice 2 (Compulsory)
- 5) Introduction to communication science (Elective)
- 6) Pedagogical communication and behaviour (Elective).

Extra-curricular subjects are Soft Skills. This is a required subjects where the students must attend these courses outside of class hours. At the end of the courses, students are granted the certificate "Course Completed". Students are confirmed graduation only when they have these certificates. The subjects of Soft Skills have been taught at NUTE since 2012. In 2012, there were 29 classes with 960 students. In 2013, there were 30 classes with 950 students. In total, after two years of implementing, there were 1910 students trained Soft Skills, as follows:

Table 6.4. Number of Students in Soft Skills Classes

| 2012 |         |                    |                       | 2013 |         |                    |                       |
|------|---------|--------------------|-----------------------|------|---------|--------------------|-----------------------|
| No   | Class   | Number of students | Time                  | No   | Class   | Number of students | Time                  |
| 1    | ĐK3.01  | 25                 | 26/3/2012 - 29/4/2012 | 1    | K3 - 01 | 32                 | 18/3/2013 - 23/4/2013 |
| 2    | ĐK3.02  | 36                 |                       | 2    | K3 - 02 | 33                 |                       |
| 3    | ĐK3.03  | 33                 |                       | 3    | K3 - 03 | 33                 |                       |
| 4    | ĐK3.04  | 34                 |                       | 4    | K3 - 04 | 33                 |                       |
| 5    | ĐK3.05  | 35                 | 5/4/2012 - 10/5/2012  | 5    | K3 - 05 | 32                 | 6/5/2013 - 9/6/2013   |
| 6    | ĐK3.06  | 28                 |                       | 6    | K3 - 06 | 33                 |                       |
| 7    | ĐK3.07  | 35                 |                       | 7    | K3 - 07 | 35                 |                       |
| 8    | ĐK3.08  | 35                 |                       | 8    | K3 - 08 | 32                 |                       |
| 9    | ĐK3.09  | 37                 |                       | 9    | K3 - 09 | 31                 |                       |
| 10   | ĐK3.10  | 37                 |                       | 10   | K3 - 10 | 31                 |                       |
| 11   | ĐK3.11  | 38                 |                       | 11   | K3 - 11 | 31                 |                       |
| 12   | ĐK3.12  | 33                 |                       | 12   | K3 - 12 | 31                 |                       |
| 13   | ĐK3.13  | 32                 |                       | 13   | K3 - 13 | 31                 |                       |
| 14   | ĐK3.14  | 32                 |                       | 14   | K3 - 14 | 32                 |                       |
| 15   | K2 - 01 | 26                 | 8/10/2012 -           | 15   | K3 - 15 | 31                 | 9/9/2013 - 15/10/2013 |
| 16   | K2 - 02 | 27                 | 06/11/2012            | 16   | K3 - 16 | 32                 |                       |
| 17   | K2 - 03 | 30                 | 22/10/2012 -          | 17   | K4 - 01 | 34                 |                       |
| 18   | K2 - 04 | 34                 |                       | 18   | K4 - 02 | 34                 |                       |
| 19   | K2 - 05 | 33                 | 22/11/2012            | 19   | K4 - 03 | 32                 | 13/9/2013 - 6/12/2013 |
| 20   | K2 - 06 | 31                 | 12/11/2012 -          | 20   | K4 - 04 | 32                 |                       |
| 21   | K2 - 07 | 37                 |                       | 21   | K4 - 05 | 30                 |                       |
| 22   | K2 - 08 | 37                 |                       | 22   | K4 - 06 | 30                 |                       |
| 23   | K2 - 09 | 37                 |                       | 23   | K4 - 07 | 31                 |                       |
| 24   | K2 - 10 | 33                 |                       | 24   | K4 - 08 | 31                 |                       |
| 25   | K2 - 11 | 33                 |                       | 25   | K4 - 09 | 30                 |                       |
| 26   | K2 - 12 | 33                 |                       | 26   | K4 - 10 | 30                 |                       |
| 27   | K2 - 13 | 33                 |                       | 27   | K4 - 11 | 30                 |                       |

|       |         |     |       |         |     |
|-------|---------|-----|-------|---------|-----|
| 28    | K2 - 14 | 33  | 28    | K4 - 12 | 29  |
| 29    | K2 - 15 | 33  | 29    | K4 - 13 | 30  |
|       |         |     | 30    | K4 - 14 | 34  |
| Total |         | 960 | Total |         | 950 |

#### How are these skills assessed?

The subjects related to Soft Skills and Life Skills in particular, and the subjects in general at the university are evaluated according to the general regulations of the university and depending on the nature of the subject. The overall average grade of the course includes the following components:

- 1) Attendance: Students who attend at least 80% of the periods are rated for the subject
- 2) For purely theoretical subjects: students must do a mid-term test (accounting for 40%) and final exam (accounting for 60%). The mid-term test is written and evaluated by the teacher of that subject. The final exam is taken randomly from the question bank for examination and implemented by the Department of Educational Testing and Quality Assurance.
- 3) For practical subjects: Each practical exercise is assessed in grade in number by the teacher scores. The overall grade is the average point of the lessons.
- 4) For subjects including theory and practice: the point for theory accounts for 50%, and the practice accounts for 50%.

The overall average grade of the subject is calculated on the scale of 10, and then it is changed into grade in letter of 5 levels:

Table 6.5. Grading of Transferable Skills

| No | Level        | Grade in Number | Grade in Letter |
|----|--------------|-----------------|-----------------|
| 1  | Excellent    | From 8,5 to 10  | A               |
| 2  | Good         | From 7,0 to 8,4 | B               |
| 3  | Average      | From 5,5 to 6,9 | C               |
| 4  | Weak average | From 4,0 to 5,4 | D               |
| 5  | Poor         | Below 4,0       | F               |

#### CONCLUSIONS AND RECOMMENDATIONS

To make the teaching of Soft Skills in TVET become a regular and effective activity, the parties involved needs to be aware of the importance of Soft Skills and responsibly participate in training these Soft Skills, namely:

- 1) MOLISA should soon issue regulations on soft skills training activities (like MOET issued these regulations in Circular No. 04). Besides that, MOLISA should promulgate the standard documents about teaching soft skills to students.
- 2) The vocational institutions, in addition to providing students with Hard Skills, need to equip students with Soft Skills so that they can confidently enter life. Help them

not only easily find a job, but also quickly integrate into the work environment at workplace.

- 3) The training institutions firstly need to actively build programs, curriculum, preparation for staff and material facilities to teach Soft Skills to the students in their schools and towards the external school objects.
- 4) The teachers whenteaching professional subjects must try to integrate soft skills so that students not only learn the hard skills, but also learn soft skills through teacher's teaching methods; for example, teaching in groups, teaching of raise issues, project teaching.
- 5) The organizations such as Student Union and Youth Union need to organize the extra-curricular activities using soft skills to train their members about Life Skills and Soft Skills.
- 6) Besides attending training courses on soft skills by the schools and mass organizations, students need to self-study, self-improve, and train Life Skills, Soft Skills for themselves.

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Operation Plan No. 1088/KH-BGDDT, dated 29 August 2013 by the Ministry of Education and Training for the completing the set of materials training Life Skills in a number of courses and activities at primary, lower, and high level throughout the country.

## WORKSHOP ON THE INTEGRATION OF TRANSFERABLE SKILLS IN TVET CURRICULUM, TEACHING-LEARNING AND ASSESSMENT

### Overview

Transferable skills or in other countries called life skills or soft skills or employability skills have been the focus of discussion in the last few years considering that many employers view these skills as important or even more than the technical skills. Considering the importance of this topic in TVET in Southeast Asian region, SEAMEO VOTECTH conducted a follow up study and a workshop on the integration of transferable skills in TVET curriculum, teaching-learning, and assessment. The outputs of this workshop can be used as guidelines for teacher in enhancing their practices.

To produce the expected outputs, the workshop adopted the workshop design below.

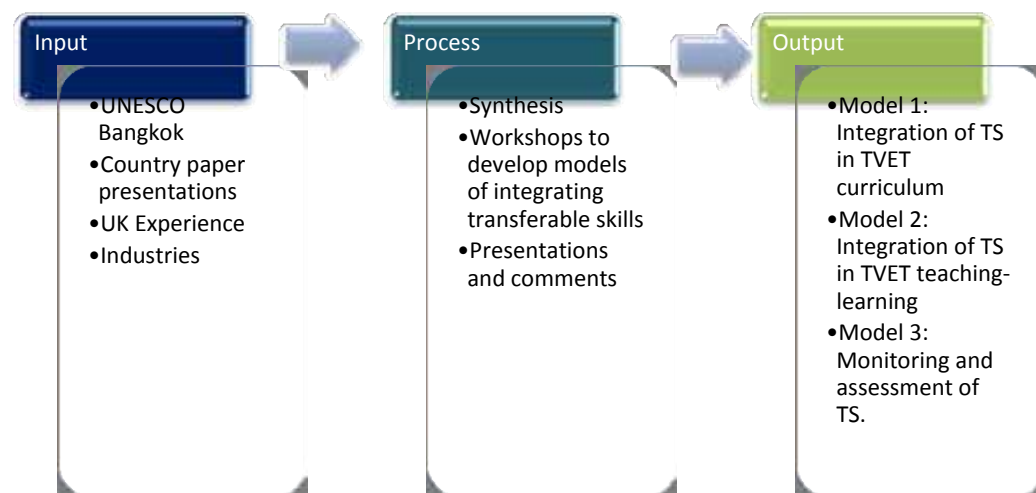


Figure 7.1. Workshop Expected Outputs.

This workshop has the following objectives:

- To share the findings from country research reports on the integration of transferable skills in TVET curriculum, teaching-learning, and assessment based on the study in six countries namely, Brunei, Indonesia, Malaysia, Philippines, Thailand, and Vietnam.
- To learn from the experiences of other countries outside the region, especially from the United Kingdom.
- To develop models of integrating transferable skills in curriculum and in teaching, learning, and assessment through a workshop.

### Definition

Based on the presentations and workshop lead by Dr. Nic Robinson and Dr. Stephen Vickers from VTCT, transferable skills can be defined as soft skills, which are personal attributes that enhance an individual's interactions, job performance and career prospects. Having these skills may enhance employability and career progression. Transferable skills are *behavioural* competencies and are sometimes described as emotional intelligence. These skills are transferable between contexts, job roles etc.

Transferable skills or soft skills covers various attributes associated with someone's competencies in learning, understanding self and others, and work environment. This can be represented in the following diagram.

Qualification and Curriculum Authority (QCA) of United Kingdom identified three wider key skills: (1) Working with Others (WWO), (2) Improving Own Learning and Performance (IOLP), and (3) Problem Solving (PS). These could be termed: WWO – Teamwork, IOLP – Study skills, planning, organising, and PS – Facing or meeting challenges.



Figure 7.2. Components of Soft Skills.

Based on the UK experience, transferable skills or soft skills are learned, recognised, and assessed at the institutional level/training centre's level, while examination, assurance, and accreditation are performed by awarding bodies (see the following diagram).



Figure 7.3. Role of Training Centres and Awarding Bodies in Imparting, Assessing, and Accrediting Soft Skills in UK system.

### Why transferable skills are important

According to some employers, transferable skills are among the important skills being assessed for recruiting new employees. Below are some quotes from employers.

*“Key skills are at the heart of what we do in business – we all have to work in teams, strive to improve performance and we are regularly faced with problems that call for a systematic approach if they are to be solved efficiently and effectively. As an employer, we look for key skills when we recruit and promote people. We also recognise their importance in personal life as they support skills in self-organisation, money management, information handling and the essential skill of getting on with other people.”*

#### Operations Training Manager, Coca Cola Enterprises

*“Each year Rolls-Royce plc receives more than 11,000 applications from well qualified, bright graduates wishing to join the company, as well as many applications for its Modern Apprentice and undergraduate schemes. What makes the difference is an applicant’s ability to demonstrate what are now widely referred to as key skills, such as working as a member of a team, communication and interpersonal skills, problem solving, and planning and taking responsibility for one’s own learning and development. These are the skills that differentiate the great from the good. They enable new recruits to settle quickly into the world of work, to make an early contribution to our company, and to ensure that they remain equipped to meet the*

*ever-changing challenges and opportunities of a career with a successful business like Rolls-Royce plc.”*

#### Jon Cook, Head of Early Career Development, Rolls-Royce plc

*“There are a real variety of skills that you need to do any job. The main ones that we look for in applicants are thinking ability, whether they can work with numbers, and their ability to analyse problems. But the ability to influence people and communicate with them is really the two key ones.”*

#### Graduate Recruitment Manager, Mars

### Integration of Transferable Skills in TVET Curriculum

To integrate transferable skills into the curriculum, it was suggested to be done via “mapping” and evidence. Through the integration via mapping, we can see which transferable skills are offered in particular semester and at what level or degree of emphasis. This was a good practice and favoured the retention of separately assessed qualifications in all cases. Based on the UK case, evidence may be drawn from work undertaken within GCSE, GCE, NVQ Qualifications; ASDAN programmes; work experience; employment; and voluntary or youth work. The evidence must show how the candidate’s skills developed and grew as a result of being involved in a learning activity and responding to problems. The evidence must:

- **be holistic.** It must show the whole process, following through the components of the unit.
- **show development over time.** Process skills take time to demonstrate. At level 3, the substantial activity would be expected to take at least 3 months.
- **demonstrate individual performance.** It must show what the candidate did as an individual and what contribution they made.

Approaches to learning and assessing soft skills can be grouped into four categories:

#### 1. Generic

Assessment is generic even when learning is integrated or contextual i.e. assessment is common regardless of the vocational area.

#### 2. Contextualised

- a. Learning and/or assessment tasks are set in the context of the vocational area but not integrated into the vocational curriculum and/or assessment of the vocational qualification.

#### 3. Partial integration

- a. Learning and assessment of soft skills are integrated into the vocational learning and assessment but recording and accreditation is separate.

#### 4. Full integration

- Soft skills are inherent in the structure of the vocational learning outcomes and essential to achieving the vocational qualification

To provide illustrations for the above approaches, few case studies were presented. Case study 1 which is based on the area of Functional Skills, the assessment is generic but learning may be contextualised.

In courses such as English, Mathematic, and ICT, the curriculum prescribed generically, often taught in contextual way, and the assessment was done through generic exams.

In case study 2 on the area of Key Skills, learning and assessment are integrated but accreditation is separated. In assessing Core Skills, such as Communications, Application of Number, and ICT, there is a generic test and also a portfolio of evidence gathered from vocational area. For Wider Key Skills, such as Managing own Learning, Problem Solving, and Working with others, assessment can be done through *portfolio of evidence from vocational area – Integrated but separately assessed and accredited*.

In case study 3, the issuance of certificate of excellence, learning and assessment are integrated but accreditation is separated. This certificate recognises a set of behavioural capacities such as excellence in customer service, excellence in teamwork, outstanding work ethic, excellence in sales and aftercare, and outstanding technical skills. These skills are identified with employers as characteristics that they value. These skills are drawn from students’ portfolio and work placement. The very best learners and potential employees will receive a certificate and a medal.

In case study 4, Personal Learning and Thinking Skills (PLTS) are fully integrated in learning, assessment, and accreditation of the vocational qualification, in this case VTCT Principal Learning in Hair and Beauty Studies. There is a framework to recognise a range of soft skills such as independent enquirers, creative thinkers, reflective learners, team workers, self-managers, and effective participators. In these skills underpin progression and employability.

Based on the four approaches to learning and assessing soft skills, the participants identified the advantages and disadvantages of each. The summary can be found in the following table.

Table 7.1. Four Approaches to learning and assessing soft skills, the advantages and disadvantages

|         | Advantages                                                                                                                                                                                             | Disadvantages                                                                                                                                  |
|---------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------|
| Generic | Teacher has more control<br>Clarity and transferability<br>Easier to adopt rapidly<br>Assessment on specific lessons may makes students value assessment more.<br>Rigor of assessment, standardisation | Difficult to assess across age groups<br>Less applied/useful: less authentic<br>Vocational teachers may not have the skills<br>Less motivating |

|                     |                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                             |
|---------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                     |                                                                                                                                                                                                                                                                                                                                                                                                                      | More time consuming<br>More expensive- cost of fee for assessment                                                                                                                                                                                                                           |
| Contextualised      | Higher learner interest as compared to the generic<br>More realistic<br>More motivating<br>More room for teacher innovation<br>Definite syllabus. Well-defined                                                                                                                                                                                                                                                       | Lacks power of full integration<br>Artificial (somewhat)<br>(Costly)- especially to develop examinations/awarding/etc.<br>More discrepancies between teachers due to flexibility. Variable quality<br>Not as transferrable (with contextual teaching as functional skills).                 |
| Partial integration | More activities for students<br>Closer to reality<br>More permanent learning- better learning<br>More holistic<br>Good for institutions in transition<br>Less cost needed<br>Most transferrable- making aware of skills they can take to other contexts while still part of course. Better student recognition of the skills.<br>No additional classes.                                                              | Testing bias or lacking of reliability.<br>Higher teacher competency/training requirements<br>More costly than full integration (in terms of separate assessment)<br>Need constant up skilling of education & assessment.<br>Slower implementation/higher requirements than #1 and #2       |
| Full integration    | Closer to reality.<br>More permanent learning- better learning<br>More holistic.<br>Good for institutions in transition.<br>Less cost (separate/discrete).<br>Lets skills flourish naturally.<br>Less possibility of suppression.<br>More efficient in teacher time. May be more helpful to less confident teacher.<br>No additional classes or tests.<br>More assurance that everybody who obtains has soft skills. | Less transferability to new contexts.<br>Less recognition by the learner of the skills they have demonstrated.<br>Risks of hard skills over ruling soft skills.<br>Risk of setting the hurdle too high.<br>Slow in implementations as compared to the previous.<br>More rigorous or robust. |

To summarise the integration of transferable skills in TVET curriculum, Paryono and Liyushiana proposed a model that can be seen in Figure 7.4.



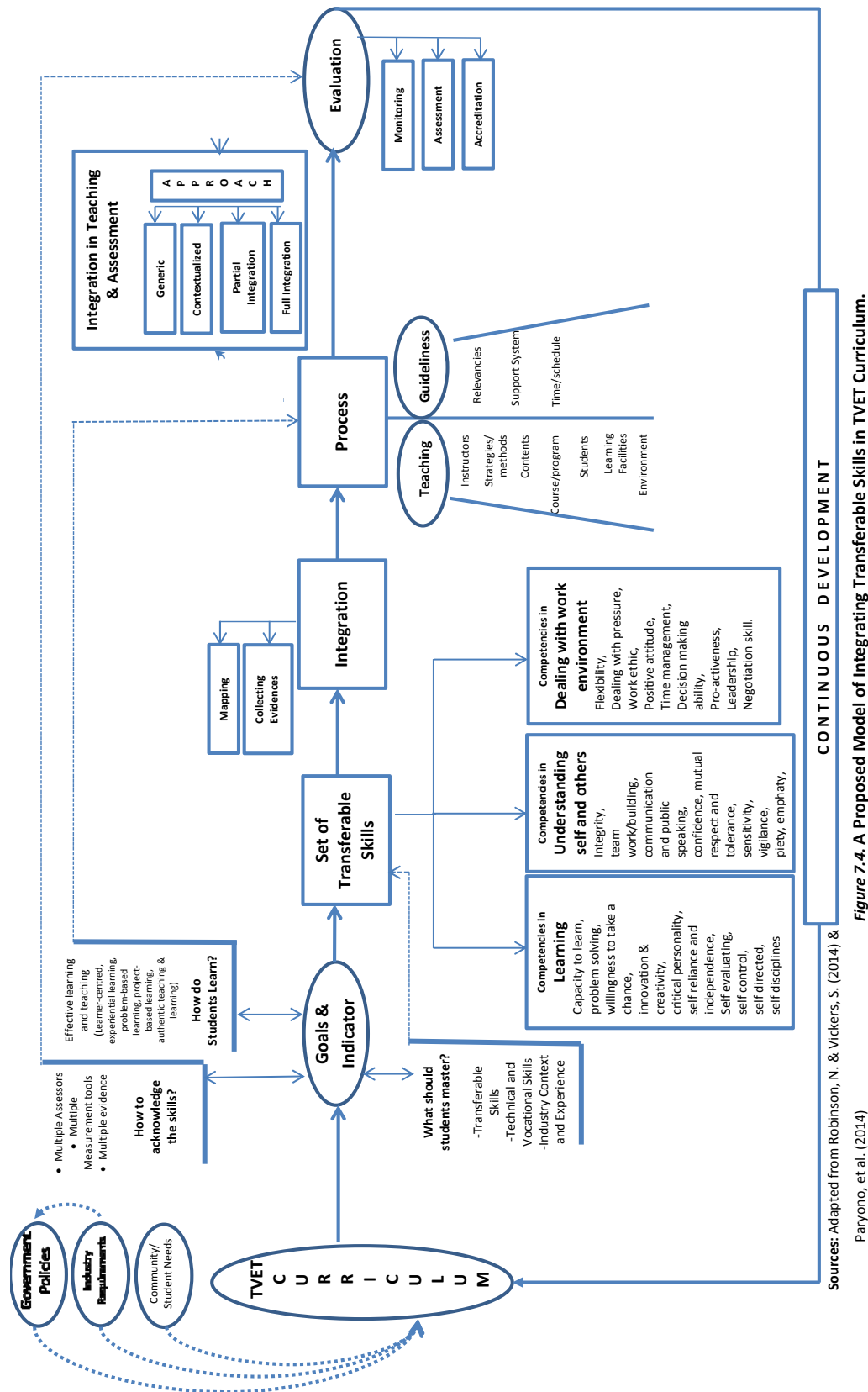


Figure 7.4. A Proposed Model of Integrating Transferable Skills in TVET Curriculum.

### Integration of Transferable Skills in Teaching and Learning

#### i) Reductionist

Two approaches of teaching and learning were shared during the workshop: reductionist and constructivist. Reductionist approach perceives that the whole is the sum of the parts; knowledge can be broken down into elementary units. Learning can be seen as a sequential process, programmed learning. In the reductionist approach teaching is a didactic transmission of knowledge, presented in a fixed sequence to the learner, there is no scope for experimentation and errors are to be avoided, the emphasis on the individual to absorb the knowledge as presented.

#### ii) Constructivist

In constructivist approach, learning the whole is greater than the sum of the parts, thus it is more holistic view of learning. Interpretation of existing knowledge is changed by learning new knowledge. Learning is done through exploring, interacting with and applying knowledge. Mistakes are seen as learning opportunities and learning can take place in a social context.

The common approach is experiential learning illustrated by Kolb. In the Kolb's learning cycle, learning is a circular process, from having concrete experience or simulation, thinking or reflecting what they have experienced, conceptualising the experience, theorising, predicting and hypothesising, and active in the experimentation to test the hypotheses.

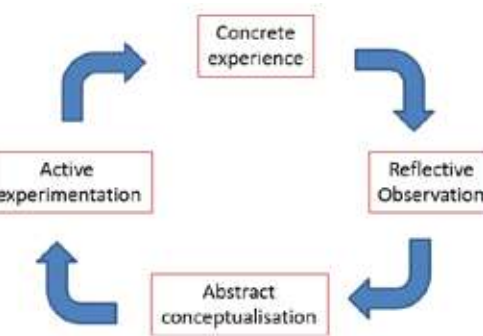


Figure 7.5. Kolb's Learning Cycle

A simpler model of experiential learning derived from this learning cycle is The PDR cycle, plan, do and review. The following diagram demonstrates how this simple learning cycle provides opportunities for learning transferable skills (personal learning and thinking Skills).



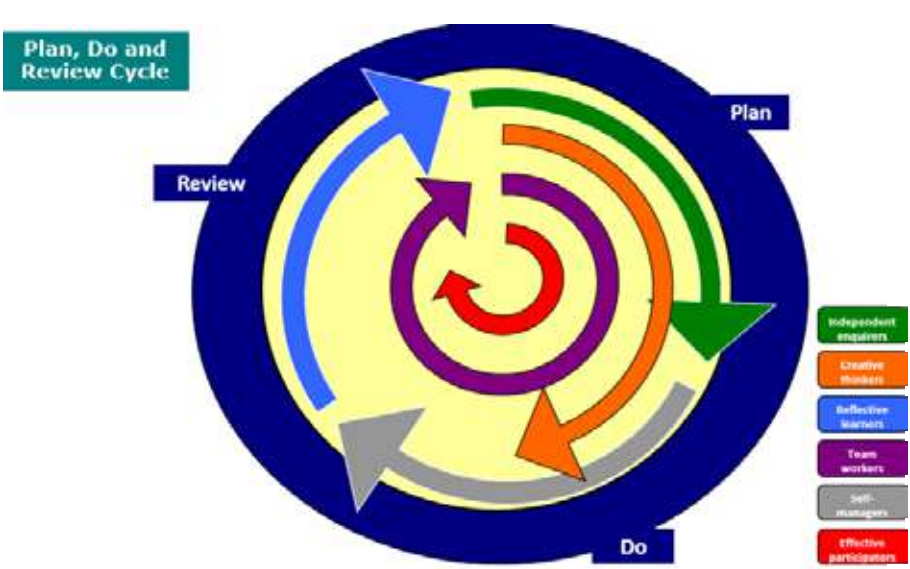


Figure 7.6. Plan, Do, and Review Learning Process. Copyright VTCT

To summarise the integration of transferable skills in TVET teaching and learning, Paryono and Liyushiana proposed a model that can be seen in Figure 7.7.

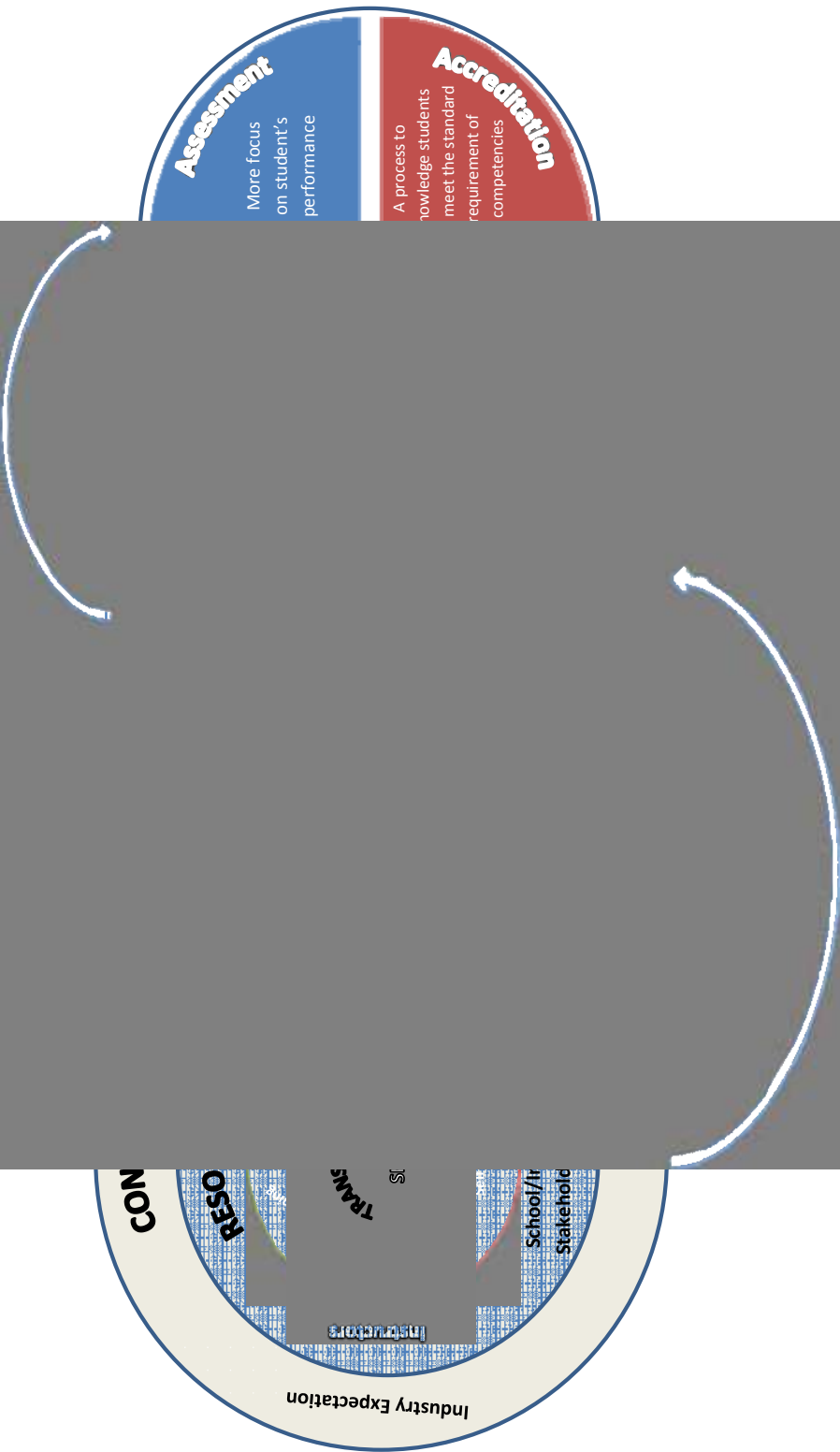


Figure 7.7. A Proposed Model of Integrating Transferable Skills in TVET Teaching and Learning.

Monitoring and Assessing Transferable Skills

*Monitoring.* It is difficult to monitor a large number of discrete transferable skills which are woven through a TVET subject, thus effective mapping when designing the curriculum is key. It enables one to design in-class monitoring instruments to test the transferable skill in such a way as to draw it out and yet contribute to the main qualification.

Things to consider. Some transferable skills are inherent in the main qualification, e.g. most engineering and construction students will have a high level of Maths in their TVET qualification requirements. Yet others, e.g. Maths, can be in everything. Skilled people need to calculate quantities and prices. Even Hairdressers can calculate ratios for the dilution of colorants.

It is important to consider at what level are required in a sector. Some of the key points include:

- 1) Design clear Attainment Targets and Assessment Criteria at each level from Beginner to Advanced Practitioner (in the UK, Levels 1-4). Involve industry or employers to find what economy needs
- 2) Set an appropriate level for each transferable skill according to the needs of the profession or job role the successful learner will follow.
- 3) E.g. A Level 3 bricklayer may only need Level 2 Functional English or Maths, perhaps Level 3 Working with Others and only Level 1 ICT.
- 4) Do not over specify; not all your students are Einstein's, a skilled workforce is about maximising participation and appropriate skills.

Monitoring differs from assessment. Some of the differences are in finality and sometimes in exactitude (depends on skill). Monitoring is more concerned on the whole programme and processes than individual performance. Test what they can expect to have heard. It can be done by other students, and can be mutual (Working with Others, Communication). Monitoring can be performed by mapping, recognising Individual Learning Plans, and recording.

*Assessment.* The types of assessment can be categorised into two: formative and summative. Formative is more focused on improvement while summative is more on providing judgment and input for making decision. Formative is normally conducted during the programme while summative is usually conducted at the end.

In assessment few key points must be considered. Those are validity, rigor, reliability, and manageability. Validity is addressing accuracy meaning that that the tools used will measure what we intended to measure. Rigor is more on assessing high quality and meaningful learning. Reliability is more about consistency in assessing learning outcomes, regardless of when, how and by whom the assessment is to be conducted. Manageability of assessment is more about do ability. We know that there are many excellent approaches of assessment but some may require efforts and resources that we

cannot afford. A typical learning and assessment model can be seen in the following diagram.



Figure 7.8. A Typical Learning and Assessment Model by Nick Robinson

Normally, assessment of transferable skills can refer to objectives and mark allocation grids. Please see the following table to illustrate how to use mark allocation grid.

Table 7.2. The Use of Mark Allocation Grid

|  |
|--|
|  |
|--|

Another consideration for assessing transferable skills is the design mainstream assessment instruments so as to impart skills which can then be unravelled. “The Project” can be assessed for, in addition to content, Planning and Organising, Communication,

Working with Others, Design, Maths, Use of ICT, entrepreneurship, etc. Definition of the project is essential.

**Accreditation.** This is a process in which certification of competency, authority, or credibility is presented. In the discussion about accreditation, the group addressed qualifications, quality assurance, passports, and motivation. Qualification explains capacity, knowledge, or skill that matches or suits an occasion, or makes someone eligible for a duty, office, position, privilege, or status. In relation to transferable skills, the group discussed different types and levels of qualifications. Quality assurance is a systematic review of educational programmes to ensure that acceptable standards of education assured. Accreditation and quality assurance is normally performed by external body. An accredited qualification in the form of certificate can be used as a passport to enter labour force and thus improves learner motivation to pursue at higher level or to use it for employment.

Following the presentations and discussions, the participants worked in group to address questions prepared by Barbara Trzmiel from UNESCO Bangkok. The questions prepared include:

- 1) Is there/ what is the difference between assessment of transferable/ transversal skills in general education and TVET?
- 2) Are/how are transferable/transversal skills assessed in TVET in your country?
- 3) If so, what methods are being used to assess transferable/transversal skills in TVET?
- 4) What are the challenges in assessing transferable/transversal skills in TVET?
- 5) What factors might impede assessment of transferable/transversal skills in TVET?
- 6) What kind of support is needed in assessment for transferable/transversal skills? Who should provide the support? Who should receive the support?

To provide guidance, UNESCO Bangkok also prepared an assessment framework as follow.

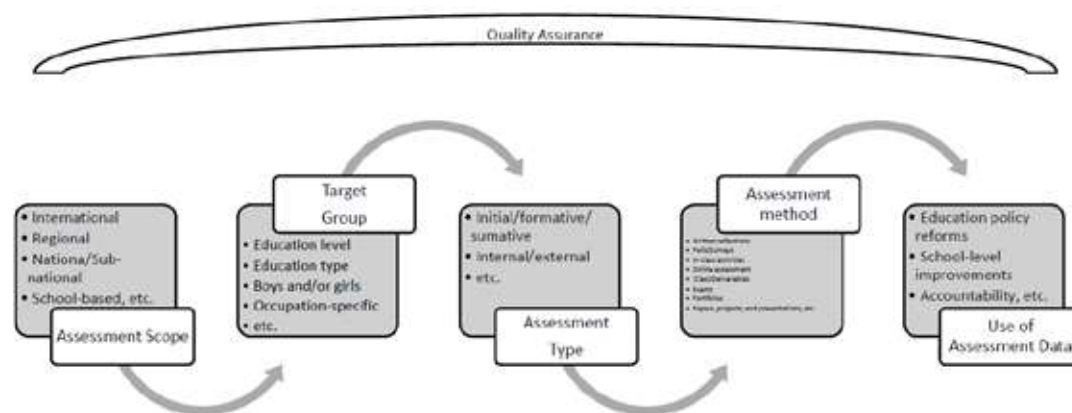


Figure 7.9. Assessment Framework

Based on the responses from the group exercises, the following are the responses from the participants.

**1) Is there/ what is the difference between assessment of transferable/ transversal skills in general education and TVET?**

In principal, the assessment is similar. The only different may be on the emphasis of the components of transferable skills and also the level of mastery. For example, in TVET assessment is usually performance or outcome based. Engineering students may be required to have stronger numeracy than those in services disciplines. Those who are promoted to higher managerial position will be required to have stronger managerial and leadership skills than as normal employees. But the assessment methods are still similar.

**2) Are/how are transferable/transversal skills assessed in TVET in your country? If so, what methods are being used to assess transferable/transversal skills in TVET?**

The followings are some ideas of assessing transferable skills in the 6 countries involved:

- i. Base Testing.
- ii. Evaluation.
- iii. Behaviour based.
- iv. Reflexion.
- v. Question of Fairness.
- vi. Repetition of Behaviour.
- vii. Importance of value of soft skills.
- viii. Recording and storing of assessment.
- ix. Several assessors.
- x. Assessment for a period of time.

**3) What are the challenges in assessing transferable/transversal skills in TVET?**

Here are some of the challenges shared by participants:

- i. Lacking competencies of assessors.
- ii. Not priority of school.
- iii. Teachers don't know how successful they are due to no clear reference.

**4) What factors might impede assessment of transferable/transversal skills in TVET?**

- i. Quality of assessment tool.
- ii. Teachers' personal qualities. Teachers as role models.
- iii. Difficulty to assess transferable skills as a whole.
- iv. Cultural context and influences.
- v. Standardise assessment tools.
- vi. Recognition and assessment different between company and school.

**5) What kind of support is needed in assessment for transferable/transversal skills?**

- i. Support at school level.
- ii. Financial support.
- iii. Consultations staff, clarification providing.
- iv. System which develops ownership.
- v. Coaching and mentoring for teachers.

- vi. Toolkits for assessment.
- vii. Teacher training.
- viii. Capacity building.

**6) Who should provide the support?**

- i. Management, administrators of schools.
- ii. The Ministry.

**7) Who should receive the support?**

- i. Implementors, teachers.
- ii. Students.

**8) What research topics are relevant to be conducted at regional level on transferable skills?**

- i. Experiences of implementation of models.
- ii. Are transferable skills covered in VTE.
- iii. Difference in assessment at different levels.
- iv. Technical faculties in implementing transferable skills.
- v. Longitudinal study on student job destination and progression.
- vi. Research on assessment through observation.
- vii. Transferable skills in ASEAN.

**Mapping Transferable Skills in the Curriculum**

Based on the workshop, the participants practiced completing a table that represents the transferable skills relevant for various occupations including the appropriate level of each. Table 7.3 represents the skills and the level for a skilled employee while Table 7.4 represents the qualification for managerial level position.

Table 7.3. *Proposed components of transferable skills in various occupations and the suggested level for a skilled worker*

|                    | C<br>Group 1 | BT<br>Group 2 | C<br>Group 3 | C<br>Group 4 |
|--------------------|--------------|---------------|--------------|--------------|
| Communication      | 2            | 3             | 3            | 1            |
| Numeracy           | 3            | 1             | 3            | 3            |
| ICT Skills         | 1            | 1             | 2            | 1            |
| Patriotism         | -            | 1             | 2            | 1            |
| Teamwork           | 3            | 2             | 3            | 2            |
| Integrity          | 3            | 2             | 3            | 2            |
| Safety Awareness   | 3            | 3             | 3            | 3            |
| Self-presentation  | 1            | 3             | 2            | 1            |
| Planning           | 2            | 3             | 3            | 3            |
| Entrepreneurship   | 2            | 1             | 2            | 2            |
| Leadership         |              |               |              |              |
| TVET               |              |               |              |              |
| Negotiation Skills |              |               |              |              |

Notes: C= Carpenter, BT= Beauty Therapy

Table 7.4. *Proposed components of transferable skills in various occupations and the suggested level for a manager*

|                    | C<br>1 | BT<br>2 | C<br>3 | C<br>4 |
|--------------------|--------|---------|--------|--------|
| Communication      | 4      | 3       | 4      | 4      |
| Numeracy           | 3      | 3       | 3      | 3      |
| ICT Skills         | 3      | 2       | 3      | 3      |
| Patriotism         | -      | 1       | 2      | 2      |
| Teamwork           | 2      | 3       | 3      | 3      |
| Integrity          | 3      | 3       | 3      | 3      |
| Safety Awareness   | 4      | 3       | 3      | 3      |
| Self-presentation  | 3      | 3       | 3      | 3      |
| Planning           | 4      | 3       | 4      | 4      |
| Entrepreneurship   | 4      | 4       | 4      | 4      |
| Leadership         |        |         | 4      |        |
| TVET               |        |         |        |        |
| Negotiation Skills |        |         |        |        |

Notes: C= Carpenter, BT= Beauty Therapy

To summarise the monitoring, assessment, and accreditation of transferable skills in TVET, Paryono and Liyushiana proposed a model that can be seen in Figure 7.10. This model was developed based on and is very similar to the model developed by Dr. Vickers & Dr. Robinson (2014).



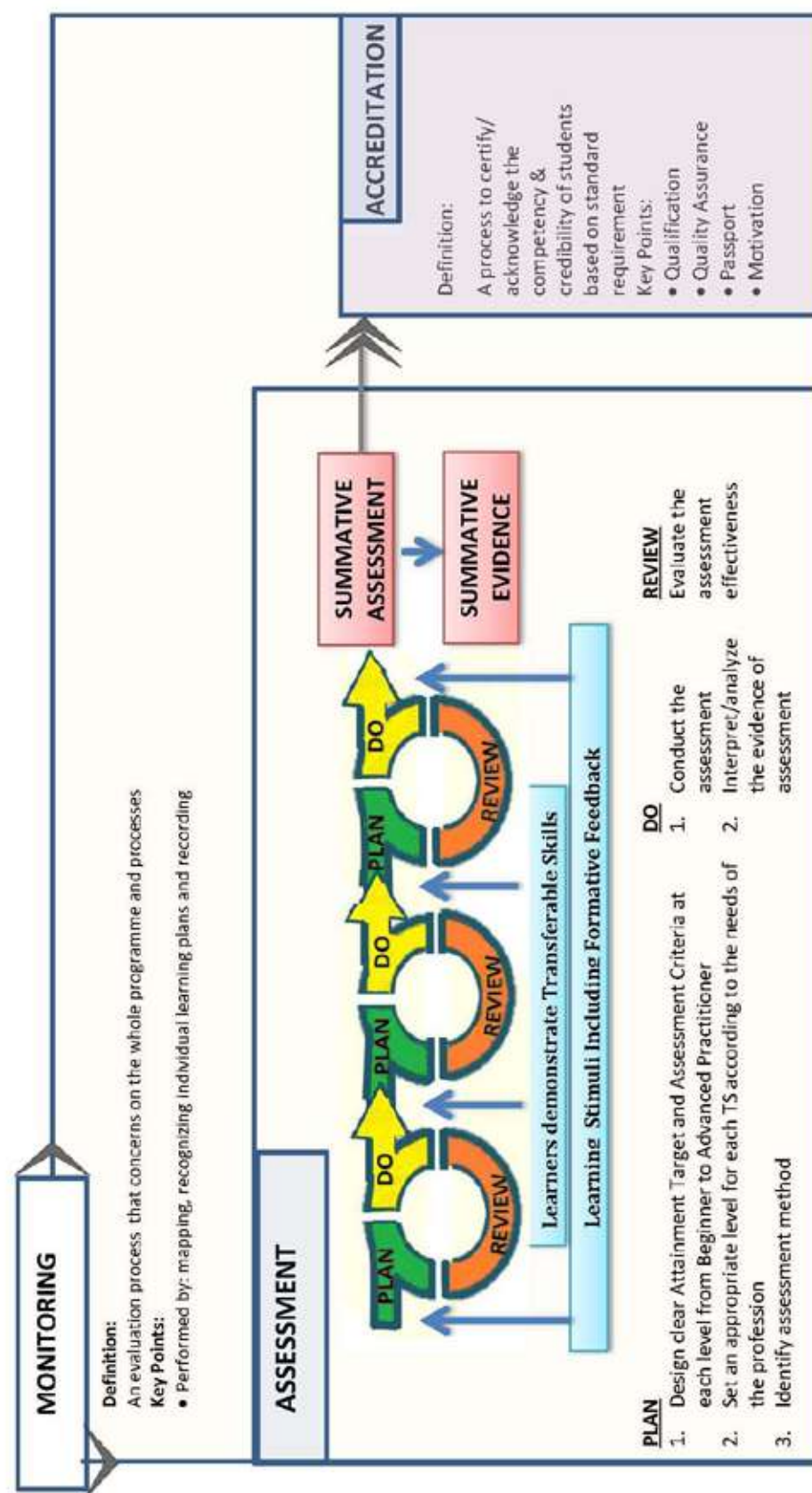


Figure 7.10. A Proposed Model of Monitoring, Assessment, and Accreditation of Transferable Skills in TVET.  
Adapted from Robinson, N. & Vickers, S. (2014)

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## Workshop Group Photo



Group photo during the Opening of the Workshop in Bangkok, Thailand, 13-14 March 2014

**Front row left to right:** Dr. Paryono (SEAMEO VOCTECH), Emma Whitehead (British Council, UK), Dr. Stephen Vickers (VTCT, UK), Dr. Handoko (SEAMEO Secretariat), Hj Ali Husaini Hj. Mohd. Diah (SEAMEO VOCTECH), Dr. Cheol Hee Kim (UNESCO Bangkok), Nur Faezah Hj. Mohamad Aus (Brunei Embassy in Thailand).

**Back row left to right:** UNESCO Bangkok representative, Diosdado M. San Antonio (the Philippines), Manas Sunun (RMUTL Thailand), Anusorn Raothao (RMUTL Thailand), Asst. Prof. Direk Maneewan (RMUTL Thailand), Dr. Kahirol bin Mohd. Salleh (Malaysia), Asst. Prof. Nipon Lertmanakol (RMUTL Thailand), Dr. Nic Robinson (VTCT, UK), Marylyn Loke (Industry representative, Pearson), Dr. Ha Xuan Hung (Vietnam), Barbara Trzmiel (UNESCO Bangkok), Thantida Wongprasong (Industry representative), Dr. Dadang Kurnia (Indonesia), Asst Prof. Panpetch Chinninthorn (Thailand), Arnauld De Nadaillac (Consultant), Noraarney Apoh (SEAMEO VOCTECH)



## Activities During The Workshop

### During the Opening...



Deputy Director for Administration of SEAMEO VOTTECH, Hj Ali Husain Hj Mohd. Diah, delivered welcoming remarks during the opening.



Deputy Director for the Programme from SEAMEO Secretariat, Dr. Handoko delivered an opening address.



Dr. Stephen Vickers from VTCT UK offered his opening remarks.



Deputy Director for Professional Affairs of SEAMEO VOTTECH, Dr. Paryono, delivered an overview of the expectations from the workshop.



...During the Opening

### VTCT Led the Workshop...



Dr. Nic Robinson (left) and Dr. Stephen Vickers (right) from VTCT UK led the workshop



...Part of workshop participants

### During the Discussions...





## Certificates Presentation...



## Plaques Presentation...



## GLOSSARY

|                                                            |                                                                                                                                                                                                                                 |
|------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Accreditation:</b>                                      | <b>A process to acknowledge the competency of students based on standard requirement.</b>                                                                                                                                       |
| <b>Assessment:</b>                                         | A process to evaluate students performance. It also defines as an act of judging or deciding the amount, value, quality, or importance of teaching and learning outcomes.                                                       |
| <b>ATLAS (Authentic Teaching Learning and Assessment):</b> | An approach for teaching and learning in Brunei Darussalam to create conducive teaching-learning environment for students, student-centred and relevant to industries.                                                          |
| <b>Constructivist Approach:</b>                            | An approach which perceives that learning the whole is greater than the sum of the parts, thus it is more holistic view of learning.                                                                                            |
| <b>Contextualized Approach:</b>                            | An approach of learning and assessment when learning and/or assessment tasks are set in the context of the vocational area but not integrated into the vocational curriculum and/or assessment of the vocational qualification. |
| <b>Core Skills:</b>                                        | a group of skills that are key to learning and working in today's world.                                                                                                                                                        |
| <b>Curriculum:</b>                                         | the planned interaction of students with instructional content, materials, resources, and processes for evaluating the attainment of educational objectives.                                                                    |
| <b>Experiential Learning:</b>                              | is referred as learning through action where created by grasping and transforming students' experiences.                                                                                                                        |
| <b>Formative Assessment:</b>                               | The evaluation entails the assessment based hard evidence such as completeness of learning products. It more focused on improvement, and normally conducted during the program.                                                 |
| <b>Full Integration Approach:</b>                          | An approach when transferable skills are inherent in the structure of the vocational learning outcomes and essential to achieving the vocational qualification.                                                                 |
| <b>Generic Approach:</b>                                   | An approach of learning and assessment when learning is integrated or contextual i.e assessment is common regardless of the vocational area.                                                                                    |
| <b>Hands-on Method:</b>                                    | A teaching-learning method that require active participation of students. This is a type of student-centred approach.                                                                                                           |
| <b>Life Skills:</b>                                        | A set of skills of personal management and social skills which are necessary for adequate functioning on an independent basis.                                                                                                  |

|                                             |                                                                                                                                                                                                                                                        |
|---------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Manageability:</b>                       | A key point to be considered to ensure the doability of an assessment.                                                                                                                                                                                 |
| <b>Monitoring:</b>                          | A process to examine the whole programme and processes of teaching, learning and assessment. It can be performed by mapping, recognising individual learning plans, and recording.                                                                     |
| <b>Partial Integration Approach:</b>        | An approach when learning and assessment of transferable skills are integrated into vocational learning and assessment but recording and accreditation is separated.                                                                                   |
| <b>Problem Based Learning:</b>              | a student-centered pedagogy in which students learn about a subject through the experience of problem solving. This method of teaching and learning provides students' experience to learn both thinking strategies and also domain knowledge.         |
| <b>Project-based Learning:</b>              | a learning by doing teaching strategy that integrated knowing and doing, where students learn knowledge and elements of the core curriculum, but also apply what they know to solve authentic problems and produce results that matter.                |
| <b>Qualification:</b>                       | Quality assurance: a systematic review of educational programmes to ensure that acceptable standards of education assured.                                                                                                                             |
| <b>Recognition of Prior Learning (RPL):</b> | a process used by institution (especially vocational education institution) to evaluate skills and knowledge acquired outside the current classroom for the purpose of recognizing competence against a given set of standards or learning objectives. |
| <b>Reductionist Approach:</b>               | An approach of teaching and learning which perceives that the whole is the sum of the parts; knowledge can be broken down into elementary units.                                                                                                       |
| <b>Reliability:</b>                         | A process to find the consistency in assessing learning outcomes, regardless of when, how and by whom the assessment is to be conducted.                                                                                                               |
| <b>Rigor:</b>                               | A process to assess high quality and meaningful learning.                                                                                                                                                                                              |
| <b>Role Model:</b>                          | Those who possess the qualities that students would like to have and those with behavior, example, or success is or can be emulated by students                                                                                                        |
| <b>Summative Assessment:</b>                | The evaluation entails the assessment based soft evidence such as competencies in improvement, creativity, and productivity. It more focused on providing judgment and input for making decision, and normally conducted at the end.                   |

|                                                                |                                                                                                                                                                            |
|----------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Transferable Skills:</b>                                    | Personal attributes that enhance an individual's interactions, job performance and career prospects.                                                                       |
| <b>TVET (Technical and Vocational Education and Training):</b> | A stream of institution with the primary goal to prepare students for entering laborforce by providing them a learning process to master a set of skills and competencies. |
| <b>Validity:</b>                                               | A process to address the accuracy meaning that the tools used will measure what we intended to measure.                                                                    |

