

Regional Cooperation Platform (RCP)

GIZ-RECOTVET

RESEARCH REPORT

Lesson learned from the development and implementation of National Teacher Standards in ASEAN Member States and China as inputs for the development of Regional TVET Teacher Standard (P2)



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A Comparative Analysis

Lesson learned from the development and implementation of National Teacher Standards in ASEAN Member States and China as inputs for the development of Regional TVET Teacher Standard

Dr. Paryono

SEAMEO VOCTECH

Abstract

As inputs for the development of Regional Technical and Vocational Education and Training (TVET) Teacher Standard, Regional Cooperation Platform (RCP) under GIZ-RECOTVET (A German funded Platform to Improve the quality of TVET teacher in Southeast and East Asia, conducts a research project in 8 Southeast Asian countries plus China. The focus of the research is to describe the process of the development, dissemination and implementation of the national teacher standard. In addition, the research also collected respondent's expectations of the proposed Regional TVET Personnel Standard, which was focused mainly on Teacher Standard. Using mixed research methods, the data were collected using survey questionnaires, interviews, and documents analysis. A survey questionnaire was distributed to TVET teachers and administrators/principals. Interviews were carried out to national committee and selected TVET teachers and administrators. The findings showed that Indonesia, Malaysia, Philippines, and Vietnam have developed and implemented the national-level teacher standard. Thailand has developed the standard but no survey result was available. Other countries Cambodia and Lao PDR, standard for TVET teacher has been developed and soon to be implemented. Brunei Teacher Standard was developed and implemented at general schools but not at TVET schools and colleges. In China, the standard has been developed but the implementation was inconclusive, 80% of respondents perceive it as not being implemented. From the findings in can be summarized that there are similarities in the steps of developing teacher standard at the national level, but the number of steps can vary from a simple 4 steps such as in China to a long 9 steps such as in Vietnam. There are common dissemination methods practiced in these countries. The most common ones are (1) Shares in the Government websites, printed materials seminars, workshops, (2) uses mass media and magazines, (3) works with the school administrators, and (4) Issues circulars or memoranda, emails, and develops a guideline. Components in the national TVET teacher standard vary from country to country, especially in regards to terms being used and grouping the components. The findings show some common issues/problems in the development and dissemination stages. The most common issues and problems are (1) Unclear guideline, (2) Limited briefing or capacity building, (3) Resistance from some teachers, (4) The briefing and socialization did not reach all teachers, and (5) Involvement of industry was very minimum. To address the issues/problems, the respondents recommended: (1) Involvement of industry (2) conduct research or monitoring & evaluation to see its effectiveness, and (3) Dissemination process need to be improved. There were different strategies in implementing the national teacher standard. However, there are some common strategies: (1) The Central government directs the implementation supported by the departments, (2) The national body or a committee develop assessment guide and classification, and (3) Some use the standard as a self-assessment by teachers. During the

implementation, there were some issues/problems: (1) Limited time in preparation, (2) Limited briefing and capacity building, (3) Standard was not detail, no clear instruction, no division was assigned for teacher assessment. In response to the issues and problems during the implementation stage, the respondents recommended the followings: (1) Start pilot project in several areas, (2) train core lecturers, (3) Monitor & evaluate every stage of the processes. In regards to the expected Regional TVET Teacher Standard 6 countries preferred the regional standard that has few levels and 2 countries preferred 1 level. In terms of model or the main components covered in the standard, 5 countries preferred Model 2, and two countries preferred Model 1 and Model 3. Model 1 consists of Basic and common (Professional) and (Communication, problem-solving, team work, etc.) and Core/functional (teaching, learning, and assessment). Model 2 consists of Pedagogical, Personality, Social, and Professional. Model 3: Education laws and regulations; Pedagogy and pedagogical psychology, Didactic and teaching methodology, and Subject-based methodology. The most common perceived benefits from having a regional TVET teacher standard are: (1) To improve the quality of TVET overall, (2) As a benchmark among teachers in ASEAN countries and possibly increase mobility, (3) To strengthen ASEAN integration through harmonized TVET development in the region and having platform for benchmarking. The regional TVET Teacher Standard can be used (1) To review/update the existing national standard, (2) as an added reference and value of the national standard, and (3) as a reference only. There are some concerns shared of having the regional TVET teacher standard: (1) Language and cultural barriers, (2) Political influence which affects commitment, (3) Limited capacities of TVET personnel and resources in some country members, (4) Technical competency is not emphasized, (5) Lacking of Industry participation & support, and (6) Member countries have different status of TVET. In anticipation, the respondents suggested the followings: (1) The regional standard should be flexible enough for the members to adopt, (2) The standard should integrate recognition of prior learning, (3) Before full implementation, conducting a pilot and capability building programmes are necessary, (4) Include various Ministries handling TVET, (5) Provide complete and clear guideline to all teachers, and (6) Make sure that the standards shall be specific, operable, and shall be applied to all teachers

Key Words: Teacher standard, technical and vocational education and training (TVET), regional standard.

Introduction

The focus on TVET personnel standard has been identified as one of the important areas by SEAMEO VOCTECH and also by GIZ-RECOTVET considering that TVET has been a priority area at the regional and some country level. This is even more crucial knowing the quality of TVET, especially the quality of the TVET personnel is very diverse in the region. Realising that the region has been embracing ASEAN Economic Community that mobility of workers is becoming freer, having a regional standard deems very tempting and necessary.

At the regional level, SEAMEO (the Southeast Asian Ministers of Education Organisation) and ASEAN (the Association of Southeast Asian Nations) have placed TVET as a priority agenda. At SEAMEO, promoting TVET is Priority 4 of Ministers of Education. GIZ-RECOTVET has been

focusing its work on TVET personnel and has formed Working Group¹ focusing on the Development of Regional TVET Teacher Standard.

In this study, the purpose is to examine the development and implementation of national standards for TVET Teachers of ASEAN member countries and China, and to gather stakeholders' expectations on the regional TVET personnel standard. This study will be used as inputs for the development of regional standard that is being developed. By considering these inputs, the proposed Regional Standard for TVET personnel will be more relevant and applicable to all members in the Southeast Asian region and beyond.

There are 8 ASEAN member countries represented in this study: Brunei Darussalam, Cambodia, Indonesia, Lao PDR, Malaysia, Philippines, Thailand, and Vietnam. Singapore was directly participated in the study but provided some information in regards to TVET teacher standard in ITE Singapore. In addition, P.R. China was also joining the research team and using the same research blueprint to collect and analysis data. A brief overview of TVET personnel standard in the participating country will be presented below.

The current status of TVET teacher standard in Brunei Darussalam is yet to be developed. Brunei Darussalam has developed and implemented Brunei Teachers' Standard (BTS) that was officially launched in August 2014 particularly for primary and secondary school teachers. The aims of the BTS is to ensure high quality of teaching that eventually will ensure better learning outcomes for students. The development of the standard and its Teacher Performance Appraisal (TPA) System was spearheaded by the Department of Schools Inspectorate under the request of the National Education Delivery Unit (PENGGERAK) under the Prime Minister's Office together with the Ministry of Education (Department of Schools Inspectorate, MoE Brunei, 2015). Considering that the BTS is more suitable for general education, Institutions under Institute of Brunei Technical Education (IBTE) are not implementing the BTS.

In Brunei Darussalam, TVET teachers consist of expatriate and locals. For the local teachers they are mainly recruited from fresh graduates with minimum qualification of at least one level higher qualification than the taught programmes of the related field. Most of the local TVET teachers are recruited prior to acquiring their teaching qualification. Only a small proportion of the local TVET teachers have industrial experience. The training and recruitment of TVET teachers in Brunei is based on the in-service model, in which the teacher's qualification is acquired within the first few years usually probationary, phase of employment. (Chin, 2012).

In Cambodia, competency standard for TVET Teacher has been developed since 2011 but has yet to be piloted or implemented due to the lack of necessary resources, such as the curriculum contents, the experts and funding (Sothy, et al., 2017). TVET teacher education under the Ministry of Labour and Vocational Training (MoLVT) is offered at the National Technical Training Institute (NTTI) both for pre-service and in-service teacher education and training (Khemarin, 2012 as cited by Paryono, 2015).

In Indonesia, teacher standard has been developed and partly implemented. The standard, however, applies to all teachers whether those working at academic or TVET institutions.

TVET teachers for secondary vocational and technical schools are prepared by the Educational Institutions for Teaching Personnel (Lembaga Pengembangan Tenaga Kependidikan/LPTK) comprising the universities that offer vocational and technical teacher

education formerly known as Institute of Teacher Training and Education (IKIP) and Faculty of Teaching and Educational Sciences (FKIP) under universities, and private STKIPs (Colleges of Teaching and Educational Sciences). In addition, Vocational Education Development Centres, now called P4TK (Pusat Pengembangan dan Pemberdayaan Pendidik dan Tenaga Kependidikan/ Center for Development and Empowerment of Teachers and Education Personnel) are also in charge of providing in-service training for TVET teachers (Paryono, 2015).

One of the recent policies under TVET teacher education is teacher certification (Hanafi 2012). The initiative is intended to ensure that the teachers have mastered the required competencies that lead to the improvement of the quality of education in Indonesia. The programme is conducted as an in-service for teachers and is expected to produce better quality of education because the students, including vocational high school (SMK) students, are taught by certified and professional teachers. Based on this policy, the minimum educational qualification for TVET teachers at secondary vocational schools (SMK) is either Diploma 4 or Undergraduate Degree. Under the recently initiated Teacher Profession Education Programme (PPG), the graduates from D4 or Bachelor (S-1) may pursue for one to two semesters of teacher education and training. For those graduated from non-pedagogic/didactic programmes (non-kependidikan) in the areas not offered by LPTK, they may pursue teaching profession through PPG with additional one to two semesters of teacher education and training.

In Lao PDR, TVET teachers are supplied by Vocational Education Development Center (VEDC) (now Vocational Education Institute) and the National University of Lao PDR (NUOL). The Faculty of Engineering of the NUOL train TVET teachers at Bachelor level, whereas, VEDC trains TVET teachers and trainers at Higher Diploma and Bachelor. (Sisoulath, 2012 as Cited by Paryono, 2015)

Most teachers graduated from technical schools, polytechnics, colleges or universities. Currently, the VEDC and some major TVET schools conduct in-service training for TVET teachers, covering the areas of pedagogy and technical fields. A number of major issues of TVET teachers need be addressed, including lack of coordination among providers, low qualification of teachers, lack relevant pedagogical preparation, limited movement and low salary. (Soulikhamkone, 2012 as Cited by Paryono, 2015).

In Malaysia, it is expected that by the year 2020 all teachers must possess a first degree before they can join the teaching profession to ensure all teachers pass the ‘quality criteria’ before leaving the training institute (Hassan et al. 2012). There is a need for Malaysia to have new National TVET-Teacher Qualification Standards and training policies in conjunction with the transformation of the vocational education system. According to Hassan et al. (2012) there is a need to strengthen the skills accreditation programmes in order for the new models of TVET teachers to fulfil high standards of teacher’s quality and market needs.

Thailand is experiencing a lack of quantity and quality of technical and vocational teachers. The Office of Vocational Education Commission (OVEC) Thailand launched various programmes for improving vocational teachers, such as inviting foreign experts to be facilitators for foreign languages and occupational courses, improving learning management using project- or problem-based learning (PsBL), improving teachers’ occupational skills, working on research for developing instructional media (Sriboonma 2012). According to Songthanapitak (2013), a Delphi

study on policy reform found that it was necessary (1) to standardize production and development systems of vocational teachers and workplace trainers, in terms of qualification frameworks at national and regional levels and (2) to establish a system of laws and regulations to enforce efficiencies of vocational teacher education (VTE) production and development.

Based on the Songthanapitak study, the researchers recommended the government to issue laws permitting vocational teachers to be trained at industries according to the needs of teachers and institutions and to recruit industries with modern technologies as networks for developing competencies of vocational teachers and workplace trainers by providing tax levy. In order to develop a proper teaching profession, the government should (1) set up Professional Standards of vocational teachers in terms of educational science, knowledge application, particular legal professional organization for issuing of teaching licenses, (2) establish frameworks of competency-based standards for vocational teachers and workplace trainers at ASEAN regional and international level, and (3) VTE institutions must be assessed, certified and registered, and (4) issue regulations concerning remuneration system and career path of vocational teachers, similar to those in industry.

In Vietnam, Improvement in teacher training is focused on standardizing and upgrading teacher qualifications and training institution capacity and on adapting training and teacher support to the new curricula and methodologies (Huang, 2005 as cited in Hai, 2012). In addition, there is a concerted effort to upgrade the capacity and qualifications of teachers, teacher trainers, and Teacher Training Institutes (TTIs) as well as in-service training to introduce the new student curricula and methodologies to teachers (Hai 2012, as cited in Paryono, 2015).

In China, since 20th September 2013, Ministry of Education has issued ‘The Professional Standard for TVET-Teachers’. The standard covers basic requirements of the state for qualified secondary vocational school teachers; a basic norm for TVET teachers to implement educational activities and lead their professional development; a fundamental basis of secondary vocational school teachers’ developing, access, training, assessment and other work (Jiping, 2016).

Purpose

The purpose of this study is to examine the development and implementation of national standards for TVET Teachers of ASEAN member countries and China as input for the development of regional standard. By learning and considering the experiences from the participating countries, the Regional Standard for TVET Teachers, which currently being developed, will be more relevant and applicable to all members in the Southeast Asian region and beyond.

Research questions

The list of research questions are grouped into three parts: Part A. Development process of national standard for TVET personnel; Part B.

Part A. DEVELOPMENT PROCESS OF NATIONAL STANDARD FOR TVET PERSONNEL (Esp. TEACHERS)

1. The Process and the Committee

- 1.1. What were the processes involved in the development of the National Core Standards of TVET Teachers?
- 1.2. Who were involved in the development processes
- 1.3. Who assigned them
- 1.4. What is the structure/ organization of the team (composition)
2. Contents and Structure
 - 2.1. What are the contents/elements?
 - 2.2. What is the structure of the National Core Standards?
3. Dissemination
 - 3.1. What were the steps in the dissemination of the National Core Standards?
 - 3.2. Who took charge in the dissemination of National Core Standards
 - 3.3. How is it disseminated and what forms of dissemination?
4. Issues and Recommendations
 - 4.1. What issues were raised in the development and dissemination of National Core Standards?
 - 4.2. What suggestions or recommendations to improve the development and dissemination processes

Part B. IMPLEMENTATION OF NATIONAL STANDARD FOR TVET PERSONNEL (Esp. TEACHERS)

5. What are the requirements to become a training/education providers of TVET Teachers?
6. What are the education and training for TVET Teachers to meet the requirements in the Standard?
7. What are the assessments methods used to determine qualified candidates who meet the core Standard?
8. Who conducts the assessment to determine if the Teachers meet the Core Standard?
9. What are the requirements of the assessors?
10. What agency certifies the candidate who attains the Core Standard of TVET Teachers?
11. What are the challenges, issues, and recommendations in the implementation of the National Core Standard?

Part C. EXPECTATION FOR THE REGIONAL CORE STANDARDS FOR TVET PERSONNEL (Esp. TEACHERS)

12. What would be the perceived benefits of having Regional (ASEAN) Core Standard for TVET teachers?
13. What are the expected components to be included in the Regional (ASEAN) Core Standard for TVET teachers?
14. How will the country members utilize the Regional (ASEAN) Core Standard for TVET Teachers?

15. Is there any other suggestion for developing the Regional (ASEAN) Core Standard for TVET Teachers?

Methods

This study was using a mixed method design by utilising quantitative and qualitative data collection tools, analyses, and interpretations. The data collection tools comprised surveys, in-depth interviews, and document analyses. The population of the study in most countries are national level development and implementation of teacher standard comprising of documents, processes, and personnel involved. The sampling techniques were used covering convenience and stratified random sampling.

All participating research partners were using the same blueprint and data collection tools. However, not all were strictly follow the guidelines that at certain degree restricted the full adoption of comparative study. The more details about the variables, data sources, data collection tools, and analysis can be found in the following research blueprint.

RESEARCH BLUEPRINT: Development of National and Regional Standard for TVET Personnel

Part A. DEVELOPMENT PROCESS OF NATIONAL STANDARD FOR TVET PERSONNEL (Esp. TEACHERS)

Research Questions	Variable	Data Source	Data Collection Tool	Analysis
1. The Process and the Committee. 1. 1. What were the processes involved in the development of the National Core Standards of TVET Teachers? 1. 2. Who were involved in the development processes who assigned them 1.3. What is the structure/ organisation of the team (composition)	▪ Steps or processes in developing the standard. ▪ Types of individuals involved (e.g. representatives from government, association, industry, etc.). ▪ The qualifications of those involved (education, profession, professional experience). ▪ The nature of the job (position or division) of those in charge in giving assignments. ▪ Organisational structure of committee. ▪ Job description.	• Committee, Minutes of Meetings, documents. ▪ Documents and Committee and those involved ▪ Documents ▪ Assigners ▪ Documents, Members of the team or committee	• Document analysis, • Interview guide and questions • Document analysis • Interview guide and questions • Document analysis • Interview guide and questions (only if documents are not available). • Document analysis • Interview guide and questions (only if documents are not available) • Document analysis.	▪ Quantitative and qualitative. ▪ Descriptive analysis (list, percentage, central tendencies, variation).

Research Questions	Variable	Data Source	Data Collection Tool	Analysis
		▪ The Consultant (if any)	• Interview guide and questions (only if documents are not available)	
2. Contents and Structure 2.1. What are the contents/elements? 2.2. What is the structure of the National Core Standards?	▪ Main components in the competency standards (pedagogical, technical, personal competencies) ▪ Sub components of the standard ▪ Levelling of standard competencies, if any ▪ Structures of presentation	▪ Secondary source ▪ National Policies and Standards. ▪ Existing documents. ▪ Government agencies. ▪ Teacher associations ▪ The Consultant (if any) ▪ Documents ▪ Committee (if needed for clarification). ▪ The Consultant (if any)	▪ Existing documents (policies, exams, etc.) ▪ Document analysis ▪ Interview (if needed) ▪ Available documents (policies, exams, etc.) ▪ Document analysis ▪ Interview (if needed)	▪ Quantitative and qualitative. ▪ Descriptive analysis (list, percentage, central tendencies, variation).
3. Dissemination 3.1. What were the steps in the dissemination of the National Core Standards?	▪ Chronological processes of disseminating information. ▪ The position and qualification of those involved in dissemination.	▪ Existing documents, ▪ Dissemination committee ▪ Documents ▪ Dissemination Committee (if needed)	▪ Document analysis, ▪ Interview guide & questions	▪ Quantitative and qualitative.

Research Questions	Variable	Data Source	Data Collection Tool	Analysis
3.2. Who took charge in the dissemination of National Core Standards	Strategies or ways of disseminating (email, pilot, briefing, workshop).	- The Consultant (if any) - Documents, - Dissemination Committee (if needed).	- Document analysis, - Interview guide & questions	Descriptive analysis (list, percentage, central tendencies, variation).
3.3. How is it disseminated and what forms of dissemination?	Types of documents (soft or hard copy, or final printout).		- Document analysis, - Interview guide & questions	
4. Issues and Recommendations				
4.1. What issues were raised in the development and dissemination of National Core Standards?	Concerns and issues in development and dissemination processes.	- Committees. - Implementers (school principals and teachers) - The Consultant (if any)	- Interview guide and questions - Focus Group Discussion (if feasible) - Survey questionnaire	- Quantitative and qualitative. - Descriptive analysis (list, percentage, central tendencies, variation).
4.2. What suggestions or recommendations to improve the development and dissemination processes	List of recommendations.	- Committees. - Implementers (school principals and teachers)	- Interview guide and questions - Focus Group Discussion (if feasible) - Survey questionnaire	Qualitative and quantitative analysis

Part B. IMPLEMENTATION OF NATIONAL STANDARD FOR TVET PERSONNEL (Esp. TEACHERS)

Research Questions	Variable	Data Source	Data Collection Tool	Analysis
5. What are the requirements to become a training/education providers of TVET Teachers	- Type of Institutions. - Relevancy of programmes. - Status in accreditation that examine the status of financial, equipment, and infrastructure of the institutions.	- Implementation committee - The Consultant (if any) - Documentation - Website	- Interview, - Document Analysis	Qualitative and Quantitative
6. What are the education and training for TVET Teachers to meet the requirements in the standard?	- Level of Education and Training programmes. - Required courses - Duration of the education and training programme.	- Documentation - The committee - The Consultant (if any) - Lecturers who teach the future teachers	- Document Analysis - Interview	Qualitative and Quantitative
7. What are the assessments methods used to determine qualified candidates who meet the core standards?	Type of assessments	- Library - Documentation - Examiner - The Consultant (if any)	- Document Analysis - Interview guide & questions	Qualitative and Quantitative
8. Who conducts the assessment to determine if the Teachers meet the core standards?	Composition of assessors	- Documents - Assessors and assesses (if needed)	- Document Analysis - Interview guide & questions	Qualitative and Quantitative

Research Questions	Variable	Data Source	Data Collection Tool	Analysis
9.What are the requirements of the assessors	▪ Teacher qualifications ▪ Professional (technical and vocational) qualifications	▪ Documents ▪ Persons involved	▪ Document Analysis ▪ Interview guide & questions	
10.What agency certifies the candidate who attains the core standards of TVET Teachers?	• Type of recognition agency ▪ Level of achievement in accreditation (if any)	▪ Documents ▪ National Qualification agency	▪ Document Analysis ▪ Interview guide & questions (if needed)	▪ Qualitative and Quantitative
11. What are the challenges, issues, and recommendations in the implementation of the national core standards?	▪ List of challenges and issues ▪ List of recommendations	▪ Documents ▪ Personnel involved (Committee, teachers, school principals)	▪ Document Analysis ▪ Interview and Questionnaires	▪ Qualitative and Quantitative

Part C. EXPECTATION FOR THE REGIONAL CORE STANDARDS FOR TVET PERSONNEL (Esp. TEACHERS)

Research Questions	Variable	Data Source	Data Collection Tool	Analysis
12. What would be the perceived benefits of having regional (ASEAN) core standard for TVET teachers?	▪ List of perceived benefits of having regional (ASEAN) core standard for TVET teacher standards.	▪ National policymakers (including the committee of National TVET Standard) ▪ School Principals ▪ Teachers	▪ Survey questionnaire ▪ Interview	▪ Qualitative and Quantitative

Research Questions	Variable	Data Source	Data Collection Tool	Analysis
13. What are the expected components to be included in the regional (ASEAN) core standard for TVET teachers?	List of components that may comprise pedagogical, technical/vocational, personal attributes/qualifications.	- National policymakers (including the committee of National TVET Standard) - School Principals - Teachers - The Consultant (if any)	- Survey questionnaire - Interview	Qualitative and Quantitative
14. How will the country members utilise the regional (ASEAN) core standard for TVET teachers?	- Referencing/ benchmarking processes - Improvement strategies to the national TVET teacher standards	- National policymakers (including the committee of National TVET Standard) - School Principals - Teachers - The Consultant (if any)	- Survey questionnaire - Interview	Qualitative and Quantitative
15. Is there any other suggestion for developing the regional (ASEAN) core standard for TVET teachers?	List of suggestions and recommendations for developing the regional (ASEAN) core standard for TVET teachers.	- National policymakers (including the committee of National TVET Standard) - School Principals - Teachers - The Consultant (if any)	- Survey questionnaire - Interview	Qualitative and Quantitative

Synthesis of the Comparative Findings

The findings by country will be presented in chapters, while the synthesis of the comparative analysis will be presented in the following table. Considering that there are ten countries participated in the study, 9 from Southeast Asian countries and one outside the region, the presentation of findings will be grouped into two:

Group 1 comprising Brunei, Cambodia, Indonesia, Lao PDR, and Malaysia; and

Group 2 comprising Philippines, Singapore, Thailand, Vietnam, and China.

Singapore was not directly participated in the study but completed a survey on the Proposed Regional TVET Teacher Standard. Thailand used different template/research blueprint that at some points couldn't provide information listed the following table.

Group 1. Brunei, Cambodia, Indonesia, Lao PDR, and Malaysia Comparison Country Reports on “TVET Teacher Standard”

1. Development of the National Standard

	Brunei	Cambodia	Indonesia	Lao PDR	Malaysia
Name of the Standard	Brunei Teacher Standard (BTS)	Competency Standard for TVET Teacher	Teacher Core Competency Standard (CS) Indonesians National Qualification Framework (KKNI) National Competency Standard (SKKNI)	Competency Standard (CS) for TVET Trainers and Teachers Standards of Teachers	Malaysian Teacher Standards (MTS) 2009 Special Certification: Vocational Training Operation (VTO) for TVET Teachers
Official Status	Developed and implemented for general school teachers, but yet to implement for TVET teachers	- Developed, soon to be implemented - Developed since 2011 but never piloted or implemented due to lack of necessary resources such as curriculum contents, experts, funding - Will continue soon to validation of competencies, develop learning and assessment packages and then put into implementation	- Implemented (2006) - KKNI for all levels of education - SKKNI Indonesian National Standard Competence for worker - (But there is no core standard specific developed for TVET personnel)	In development process, soon to be implemented LNQF is planned to be developed as well as a Competency Based Training (CBT) also National Skills Standard and assessment standard Standards of Teachers, 2010 exists already	Implemented

Perceived Status-Survey: Teacher Standard	Developed Not sure if implemented	Not yet developed	Developed (majority) Developed (majority)	Developed Partly Implemented (60%)	Developed Implemented
School/ College Principal/ Director Standard	Not sure if developed Not sure if implemented	Not sure	Not yet developed (majority) Not yet implemented (majority)	Developed Implemented/Not sure if implemented (50:50)	Developed Implemented
Trainer of trainers Standard	Not sure if developed Not sure if implemented	Not yet developed	Not yet developed (majority) Not yet developed (majority)	Developed/Not sure if developed (50:50) Not yet implemented	Developed Not sure
Industry Trainer Standard	Not sure if developed Not sure if implemented	Not sure	Developed (majority) Implemented (majority)	Not sure if developed Not yet implemented/not sure	Not sure Not sure
Responsible Ministry	MoE	NTTI & Depart. of Nat. Comp. Standard, MoLVT	MoE, Guideline from the Central Government	MoE and MoLSW	MoHR, MoE, MARA
Working Committee	Jabatan Kenaziran Sekolah-Sekolah (Department of School Inspectorate) Champion for Accountability and Performance Management, MoE	Technical supporting group, technical working group and expert panel, national and international (Philippines) consultants, facilitators. TVET teachers involved were nominated by their own school principals	National Committee	- MoE, Department of Technical and Vocational Education and Department of Higher Education - National University Laos, Faculty of Engineering - Vocational Education and Development Institute - 6 Vocational Colleges	- National Mission NPE - TEP - Teacher's Professional Conduct - MOE Work Ethics - Industries experts and practitioners - Department of Skill Development under National Occupancy Skill Standard Division - Consultants
Development Process	- Consultant hired for assisting the development of the standard (UK)	- 1 year - Workshops and meetings on occupational analysis	Not provided	Not yet provided	- Development of Standard & Curriculum = DESCUM (NOSS

	- About 20 people with minimum of Master's degree level involved - 4 years to develop and test it - Now first year implemented	- Task and duties of a teacher before, whilst and after teaching - Transforming into units of competencies and producing teaching modules - Next step: produce learning and assessment packages for implementation			development process flow chart) - 5-6 months
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2. Dissemination Process of the National Standard

	Brunei	Cambodia	Indonesia	Lao PDR	Malaysia
Process	Not yet disseminated to TVET teachers, only to GE teachers.	Not yet disseminated	- Received it through workshop, hardcopy, email - Guidelines: - 1. Government Regulation No. 20/2003 - 2. Education Ministry Regulation No 19 2005 about National Education Standard	- As soon as permitted by MoES - Want to involve headmasters of vocational schools and administrative staff in provincial educational departments in the country, best if face-to-face - Information sessions	- Standard needs to be approved by Majlis Penasihat Pembangunan Kemahiran (MPPK) - Proofreading, validation, endorsement - 6-7 months - By NOSS division (and Accredited Centres, external assessors/verifiers, instructors, managers) - Disseminated through DSD website, external verifiers, workshops, emails, CD to accredited centers and committee members for specific fields
Issues and Problems	- Unclear guideline - Limited briefing or capacity building - Resistance from some teachers		- Limited time - Unclear guideline - English speaking barriers - Did not reach all teachers - Lack of understanding of development and achievement of national education standards	- Unclear guideline - should have been reviewed yearly	- Unclear guideline - Involvement of industry was very minimum in developing the NOSS and the syllabus (interview).
Suggestions	- Reach out to all teachers, not only selective - Steering committee		- Continuous training and certification - Monitoring and mentoring	- Review first before dissemination	- More related companies/agencies should be involved in developing

	- Transparency - Start pilot project in several areas, train core lecturers as part of the project - Involvement of industry, conduct research to see effectiveness, create teacher upgrading centre, create endorsing agency and have certified assessors		- Using media for dissemination - Training for teachers - Dissemination process need to be improved - It should have sufficient preparation for the implementation - Dissemination team need more time	- Dissemination at all vocational schools and colleges.	the NOSS, Syllabus and they should be rewarded. - More training and courses to the teachers especially should be given and to inform all teachers widely. - Participation from counselling department also one of another way. (interview)
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3. Implementation Process of the National Standard

	Brunei	Cambodia	Indonesia	Lao PDR	Malaysia
Process	Not yet implemented in TVET (BTS is being implemented (first year) by assessing the teachers 5 times by school program managers)	Not yet implemented	Majority said that the Guideline was unclear. To improve the implementation process: - Socialization need to be improved - Need good preparation for the implementation in learning and teaching process - National standard teacher certification need to be more accurate - Should be a set standard of judgment indicates the level of achievement of national and regional standards - Facilities and infrastructure already exist but have not met the appropriate ratio so students need to upgrade infrastructure and facilities	- Plan to use outcomes of information sessions for good implementation - Addressing the system of higher education for vocational teachers to ensure a direct impact - Need to wait for approval of competency-based standard-curricula - Want to propose for an mentoring concept focused on different target groups working in the same institution e.g. vocational schools throughout Laos (fresh graduates & senior teachers)	3 steps to become a training centre

Issues and Problems	Limited time in preparation		- Limited time in preparation - Disconnect between quality of graduates with the labor market need - Lack of interest and spirit of teachers to implement	Limited briefing or capacity building	- Unclear guideline - Rapid changes in technology, lacking collaboration with industries, discrepancies in teaching and learning approaches and resources, learning and teaching materials not fully developed.
Suggestions	- organize regular workshops or seminars on the Standard or - develop a portal or website where Teachers can refer to later on		- Provide recognition through professional certification - Communication with business and industry about labour needs and skills - Evaluation and follow-up - Socialization needs improvement - Implementation at remote areas needs special attention. - Should be a set standard of assessment that indicates the level of achievement of national and regional standards.	Sources or website for teacher training that they know what is available for their professional development	- English language as a medium of communication

4. Components of the National Standard

	Brunei	Cambodia	Indonesia	Lao PDR	Malaysia
Components	1. Professional Knowledge and Skills 2. Professional Engagement	1. Basic competencies 2. Core competencies	1. Pedagogical 2. Personality 3. Social Competency 4. Professional Competency	Practical instructors: Basic (common, and core competencies) Trainer Qualification Level 1 to 4 Theoretical teachers: 1. Social 2. Vocational	Standard 1 Professional Teaching Standard 2 Knowledge and Understanding Standard 3 Teaching and Learning Skill

				3. Teaching 4. Assessment 5. Self prof. dev.	Each content standard is divided into 3- 8 competencies
	It is used as assessment of teacher performance in classroom by looking at impact on students' performance, learning, and teaching	- Focuses on pedagogical skills only - doesn't mention professional skill at all		- Comparative analysis of existing standards of UK, Germany, Lao, USA, Vietnam - Preferred German structure, area of competency, competency, indicator (80)	
Preferred Model (according to survey)	Model 2	Model 3	Model 2	Model 3	Model 1 and 2
Preferred Levelling (according to survey)	Few levels	One level	Few levels	Few (3) levels	Few levels
Other suggestions	All staff should start at the same level, from beginning of their career in technical education	Should include all tasks and duties a teacher must perform plus English language	-	-	(1) Professional skill and knowledge (2) Professional teaching and learning process (3) Personal and professional attributes (4) Professional industries and communities + indicators for each dimension that should be listed out with skills required for each area

5. Perceived Benefits of Having Regional Standard

	Brunei	Cambodia	Indonesia	Lao PDR	Malaysia
Highest rated benefits	To improve the quality of TVET overall Interview: It can be used a benchmark with the quality of teachers in other ASEAN countries and possibly increase mobility.	Strengthen ASEAN integration	- Harmonize TVET development in the region - Provide platform for benchmarking	To improve quality of TVET overall (60%) and to harmonize TVET development in the region (52%).	- Improve the quality of TVET overall - Provide platform for benchmarking
Other benefits	- Exchange program in teaching between ASEAN countries; shape ideas on specialisation area such as business, IT, agriculture etc. - Sharing of educational development and good practices in training between ASEAN countries		- To fulfil the needs of qualified teachers in ASEAN members - As an avenue for communication teachers in the same field - To improving the quality of vocational education - Build mutual recognition		- It can be a standard reference for TVET training approach which will be recognised by many countries in ASEAN and globally. - Preparing the skill workers with standard of ASEAN, enhance the employability of learners not only for the country but also for ASEAN.

6. The Use of the Regional Standard

	Brunei	Cambodia	Indonesia	Lao PDR	Malaysia
Highest rated usage of the Standard	To review/update national standard Benchmarking	- As an added reference and value of the National Standard and - to update/review it	- As an added reference and value of the National Standard and - to update/review it	- To update/review the National Standard (49%) - As an added reference and value of the National Standard (34%)	- To review/update the national standard - To use it as an added reference and value of the national standard
Other usage	- Measuring tool to identify and close skill gaps - Improve skills of instructors and benchmark their goals				

7. Issues/Problems/Challenges of Having Regional Standard

Brunei	Cambodia	Indonesia	Lao PDR	Malaysia
- Language and cultural barriers - Political instability which affects implementation of ideas - Small budget, low number of training available - The credibility of trainers - Location, duration, and approaches to training - Senior staff might have difficulties to accept the new Standard compared to new/junior staff	- Limited capacities of TVET personnel - Lack of teaching and learning resources - Technical competency is not emphasized - Lacking Industry participation, incentive	- Lack of productive teachers and inadequate infrastructure - Heterogeneous classes - Recognition of industry - Openness teachers	- Less practical, weak pedagogy & MIS - Lacking technical training - not all ASEAN countries can achieve same level of Standard	- The financial readiness for each country, - Qualified teachers that are ready to change the method, - Industry/company commitment, - Political influence and Infrastructure/ facilities

8. Suggestions/Future Direction for Having Regional Standard

Brunei	Cambodia	Indonesia	Lao PDR	Malaysia
- Exchange program in teaching between ASEAN countries; shape ideas on specialisation area such as business, IT, agriculture etc. - Include personnel from all over the globe, avoiding "regional competencies" - It should be flexible enough to be used by all the ASEAN countries	- Graduates from TVET Instructor Program should undergo on-job training at industries for at least one year before being nominated to work as instructor - Staff exchange program with institutions who are more experienced and qualitative higher - providing assistance in teaching, learning and equipment (e. g. better institutions)	- Develop on the basis of national work culture - Develop referring to international standards - Need to do an evaluation and follow-up - Explain teachers about challenges of globalization in the world of education - motivate teachers	- Integrate recognition of prior learning in ASEAN, - Accreditation standard for TVET in ASEAN, - Curriculum licensing in ASEAN, - Focusing on software (teacher/human resource) rather than hardware (Scholl, etc.) - Take into account that not all the ASEAN countries can achieve the same level of the standard	- To have a benchmarking through advanced countries (Singapore, Germany, Finland/etc.), - Have adequate time of training, - Give information to all teachers in the country, - Capability building and to clear information about the standard. (interview)

Group 2. Philippines, Singapore, Thailand, Vietnam, and China
Comparison Country Reports on “TVET Teacher Standard

1. Development of the National Standard

	Philippines	Singapore	Thailand	Vietnam	China
Name of the Standard	Phil. Trainer Qualification TESDA	ITE (Advanced Certificate in Technical Education Pedagogy)	National Core Standards for TVET personal Thai Qualification Framework (TQF) - for higher education - for vocational education - for basic education Thai Profession Qualification Framework (TPQF) - Thai Vocational Qualification Framework - National Occupational Skill Standard (NOSS) - National Industrial Skill Standard (NISS)	Professional Standard for Vocational Teachers	The Professional Standard for Teachers
Official Status	Implemented	Implemented	Developed and Implemented Now, 10 Faculties of Technical Education from 10 Universities try to develop the TVET teachers’ standard for TVET teacher license	Developed and Implemented (2010)	Issued on Sep 20 th , 2013
Perceived Status according to survey Teacher Standard	Developed Implemented	Not provided	Not provided	Developed Implemented	Developed Not implemented (80%)
School/Coll ege Principal/Di rector Standard	Developed Implemented	Not provided	Not yet provided	Not sure if developed Not sure if implemented	Not yet developed Not yet implemented (69%)
Trainer of trainers Standard	Developed Not sure if implemented	Not provided	Not yet provided	Not sure if developed Not sure if implemented	Not yet developed

					Not yet implemented (76%)
Industry Trainer Standard	Not sure if developed Not sure if implemented	Not provided	Not yet provided	Not sure if developed Not sure if implemented	Not yet developed Not yet implemented (79%)
Responsible Ministry	TESDA	ITE (Autonomy)	MoE, OHEC	- Ministry of Education and Training (MoET) - Ministry of Labor Invalids and Social Affairs (MOLISA): responsible for TVET - Secondary Technical and Vocational Education Department (STVED): national policies on TVET, curriculum, frameworks - also controlled by the local authorities level	Ministry of Education
Working Committee	Central office, experts from industries & the academe, TESDA board, and curriculum developers	ITE Standard was developed by ITE and for its own use	- Office of Vocational Education Commission - Office of Higher Education Commission - Thailand Professional Qualification Institute (public organization) - Department of Skill Development - Teacher Council of Thailand - Association of 9 Rajamangala University of Technology and 3 Kingmongkut's University of Technology - All authorized under Teachers and Educational Personnel Act 2003	Executive Board comprises 9 to 15 people, i.e. Chairman, experts from universities, experienced teachers.	The development was a collaborative endeavour with teachers, school principals, university experts, and policy makers.
Development Process	Consultations among the TESDA personnel, stakeholders, people from the academe,	Not provided	- Based on typical research methodology, job analysis, workshop, focus group, survey, interview, seminar, public hearing - Full-renewal every 3/5 years	Nine (9) steps: 1. Establish the Executive Board, 2. Study the legal regulations, functions and structure, and study relevant documents from some advanced countries, 3. Analyse the work of vocational teachers, 4. Determine the structure and content of the national standard for vocational	The development paths consist of four steps: Research and Draft, Expert Consultation, Open

	and from the industry. The inputs then used as the basis in formulating the national core standards.			teachers, 5. Develop the national standard, 6. Organise seminars, consultation, and review of the standard, 7. Appraise the standard, 8. Complete the national Standard and 9. Submit to the Minister. (total of 6 months)	for Comments, and Issued to the Public
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2. Dissemination Process of the National Standard

	Philippines	Singapore	Thailand	Vietnam	China
Process	- Central office issues the memorandum then distributed to the different regions for implementation. - There are personnel assigned to place the information in the TESDA website. All needed information are on the website	Not provided	Not provided	• The Circular regulating the standard is posted in government websites and send it to all divisions and then institutions. • GDVT issues a guide on assessment and classification. • Organise workshops and conferences to disseminate the standard	Published in MoE website for socialisation and comments, other websites, media (newspapers and magazines),
Issues and Problems	- Only selected few were involved in the briefing and workshop, thus made others felt left out.			Unclear guideline and limited briefing or capacity building	Limited briefing or capacity building, unclear guideline and limited time in preparation.
Suggestions				Dissemination in mass media, websites, through training, seminars, via hard and soft copy by post and email	To address the above issues/problems.

3. Implementation Process of the National Standard

	Philippines	Singapore	Thailand	Vietnam	China
Process	- Central office issues the memorandum then distributed to the different regions for implementation.	Not provided	Selection process by OVEC	GDVT directs the implementation and the Department of Vocational Training Teachers and Managers is the permanent body of GDVT. Vocational Training Division and institutions are tasked to disseminate and implement. GDVT issued assessment guide and classification.	The implementation requirement involves 4 aspects which are more concerned on the use of the standard: as foundational bases, for teacher training, for managing

	- All needed information are on the TESDA website			The results are either Meet the Standard (Excellent, Good, Average) or Do not Meet the Standard.	teachers, and for teacher self-development.
Issues and Problems	- lack of equipment - lack of training - dissemination process was only one way		Teacher Council still disagrees using the Core Standard of TVET personnel	Not yet disseminated (48.3%), Unclear guideline 27.5%, Limited briefing or capacity building (18.7%) (Teacher survey). Others: Standard was not detail, no clear instruction, no division assigned for teacher assessment.	Limited time in preparation and limited briefing or capacity building.
Suggestions	- capability building for teachers and trainers so as to upgrade skills and become competitive			Provide guidelines Design plans, standards and criteria for assessment and evaluation of implementation Design training programs for implementation in order to improve teachers' competence to achieve new standard Synchronous implementation in all TVET institutions across the country Follow up and assessment throughout all stages of implementation	

4. Components of the National Standard

	Philippines	Singapore	Thailand	Vietnam	China
Components	Trainer Qualification Level (TQL) 1 for Trainer/Assessors TQL 2 Training Designers/Developers TQL 3 Training Supervisors and Mentors TQL 4 Master Trainer All levels have basic and core competencies, which have elements and performance criteria for each item, followed by variables and range, and evidence guide	ITE focuses on pedagogical competencies Covers 11 areas of competencies and a supervised field practice (guided by mentor)	Teacher Professional Competencies - Core Competency - Functional Competency - Professional Competencies 7 Levels	The National Standard for Vocational Teachers at secondary and college level includes 4 criteria with 16 standards and 50 indicators. Criterion 1: The political and professional ethics. Criterion 2: Professional Capacity. Criterion 3: Vocational pedagogy capacity, Criterion 4: Capacity for professional development and scientific research.	3 main components: basic concepts (<u>Virtue First, Student-Centred, Based on Competencies, and Lifelong Learning</u>), main content (<u>professional philosophy & virtue, professional knowledge and professional ability</u>, which is divided into 15 areas and is subdivided into 60 entries) and implementation requirements (specific requirements on how to use 'standard' for educational administrative departments, training colleges of vocational education teachers, secondary vocational schools and the teachers)

Preferred Model	Not selected, but provides listing various components such as specific and common competencies that are generic to all technical vocational programs but on the higher level, pedagogical/teaching methodologies, personal and professional efficacies.	Not provided	Not provided	Model 2 and 1	Model 2
Preferred Levelling	Not selected	Not provided	Not provided	Few levels	One level (implied from the national standard) Few level (from survey)

5. Perceived Benefits of Having Regional Standard

	Philippines	Singapore	Thailand	Vietnam	China
Highest rated benefits	Mobility of teachers and teachers exchanges	Not provided	Not provided	Harmonize TVET development in the region (97% of teachers strongly agree and somewhat agree)	- 90% believed that the standard will facilitate mobility of human resources, strengthen ASEAN integration, and improve the quality of TVET overall - provide a platform for benchmarking, as well as harmonizing TVET development in the region
Other benefits				Strengthen ASEAN Integration, Improve the quality of TVET overall, Provide platform for benchmarking, and Facilitate mobility (each >90% of teacher strongly agree and somewhat agree).	

6. The Use of the Regional Standard

	Philippines	Singapore	Thailand	Vietnam	China
Highest rated usage of the Standard	Not provided	Not provided	Not provided	To review/ update the national standard, then as an added reference and value of the national standard.	To review/update the national standard, and to use it as an added reference and value of the national standard. More than half of teachers and principals think the standards could be used as a reference only.

7. Issues/Problems/Challenges of Having Regional Standard

Philippines	Singapore	Thailand	Vietnam	China
- Having a good representations of stake-holders in the taskforce - Variability of terms used - Language	Not provided	- If not implemented in law and strictly required in curriculum - No major agent who takes the overall responsibilities	The existing TVET system is a quite complicated with multiple agencies administering TVET institutions (MoET, MOLISA, other line ministries in the central, local authorities)	Not yet provided

8. Suggestions/Future Direction of Having Regional Standard

Philippines	Singapore	Thailand	Vietnam	China
- Need to pilot test - Need to develop a template on the monitoring and classroom observation of teachers so as to ensure uniform implementation - To organize annual meetings - Need assure the national dissemination of information before its full implementation. - Feedback mechanism must be in place - Should be a governing body that will accredit the competencies assessed and tested - National certificates should be honored in all member countries	Not provided	- Requires a unify framework, standard and qualification that can be applied to all parties and stakeholders - Determine the only one united standard and framework for competence standards for TVET teachers - Regulate TVET teachers to apply the competence standards for TVET teachers - Follow the framework of Training, Testing and Certifying	Not provided	- To ensure the quality of implementation, the implementation requirement of standard should be provided. - To use various ways of dissemination, e.g. via Internet, media, magazines, official report etc. - To provide Teacher Standard in Subject Area to explain the general standard in a subject background. - To provide more related standards such as Teacher Certification Standard, Teaching Practice Standard, Assessment Standard, and Teacher Educator Standard etc. - To stress the role of Front-line Teachers in standard setting. - To make sure the standards shall be specific, highly operable, and shall be applied to all teachers.

Summary of Findings and Recommendations

RQ1:

What was the process of development and dissemination of the national teacher standard?

From the table above, it can be summarised the status of development and implementation of the national TVET teacher standard as follows:

- (1) The countries that have developed and implemented the national TVET standard:** Indonesia, Malaysia, Philippines, Singapore (developed and implemented at the institutional level), Thailand and Vietnam (inconsistency between the findings from document analysis (DA) and survey. In DA, the standard has been developed and implemented, but from survey some respondents perceived that the standard has yet to be implemented. In the case of Indonesia, the teacher standard is very general, can be for any teacher, general school teacher or TVET teachers.
- (2) The countries that has developed but not yet implemented:** Brunei, Cambodia, Lao PDR, China. In Brunei the standard for general teachers has been developed but for TVET teachers, the standard has yet to be developed. Cambodia and Lao PDR have developed the standard but implementation hasn't taken place yet. In China, the standard has been developed but the implementation was inconclusive, 80% of respondents perceive it as not being implemented.

Common development processes

From the findings in can be summarized that there are similarities in the steps of developing teacher standard at the national level, but the number of steps can vary from a simple 4 steps such as in China to a long 9 steps such as in Vietnam.

The 4 steps adopted in China consist of: (1) Research and Draft, (2) Expert Consultation, (3) Open for Comments, and (4) Issued to the Public. The 9 steps in Vietnam covers: (1) Establish the Executive Board, (2) Study the legal regulations, functions and structure, and study relevant documents from some advanced countries, (3) Analyse the work of vocational teachers, (4) Determine the structure and content of the national standard for vocational teachers, (5) Develop the national standard, (6) Organise seminars, consultation, and review of the standard, (7) Appraise the standard, (8) Complete the national Standard and (9) Submit to the Minister.

There are common dissemination methods practiced in these countries. The most common ones are (1) Shares in the Government websites, printed materials seminars, workshops, (2) uses mass media and magazines, (3) works with the school administrators, and (4) Issues circulars or memoranda, emails, and develops a guideline.

Components in the national TVET teacher standard vary from country to country, especially in regards to terms being used and grouping the components. Brunei Teacher Standard has two main components: (1) Professional Knowledge and Skills and (2) Professional Engagement. Cambodia has two main components but using different terms: (1) Basic competencies (communication. problem-solving, teamwork etc.) and (2) Core competencies (Curriculum Development, teaching, assessment, etc.). Indonesia has 4 main components with 4 levels each: (1) Pedagogical, (2) Personality, (3) Social Competency, (4) Professional Competency.

Lao PDR grouped the teachers into two: (1) Practical Instructors and (2) Theoretical Teachers. Under Practical Instructors Standard there are basic, common, and core competencies (Qualification/level 1 to 4). Under Theoretical Teachers standard there are social, vocational, teaching, assessment, self-professional development components.

In Malaysia there are three main components: (1) Professional values within the teaching profession, (2) Knowledge & understanding of education, subject, curriculum & co-curriculum, and (3) Skills of teaching and learning. Each content standard is divided into 3- 8 competencies.

In the Philippines, there are 4 categories/levels in teaching & training profession under TESDA: (1) Trainer Qualification Level (TQL) 1 for Trainer/Assessors, (2) TQL 2 Training Designers/Developers, (3) TQL 3 Training Supervisors and Mentors, and (4) TQL 4 Master Trainer. All levels have basic and core competencies, which have elements and performance criteria for each item, followed by variables and range, and evidence guide.

In Singapore, based on ITE (Institute of Technical Education) practices, there are 11 Pedagogical Competencies, e.g. Manage & Motivate Students, Deliver & Facilitate Learning, conduct assessment, etc.; and Supervised Field Practice Guided by Mentor (Practicum). One someone pass these requirements he or she can be confirmed as an ITE teacher.

In Thailand, under Teacher Professional Competencies there are Core Competency, Functional Competency, and Professional Competency. It has 7 levels in the standard.

In Vietnam, the National Standard for Vocational Teachers at secondary and college level includes 4 criteria with 16 standards and 50 indicators. Criterion 1: The political and professional ethics. Criterion 2: Professional Capacity. Criterion 3: Vocational pedagogy capacity, and Criterion 4: Capacity for professional development and scientific research.

In China, there are 3 main components: **basic concepts** (Virtue First, Student-Centred, Based on Competencies, and Lifelong Learning), **main content** (professional philosophy & virtue, professional knowledge and professional ability, which is divided into 15 areas and is subdivided into 60 entries) and **implementation requirements** (specific requirements on how to use 'standard' for educational administrative departments, training colleges of vocational education teachers, secondary vocational schools and the teachers).

Common Issues/problems during the development and dissemination

The findings show some common issues/problems in the development and dissemination stage. The most common issues and problems are as follow: (1) Unclear guideline, (2) Limited briefing or capacity building, (3) Resistance from some teachers, (4) The briefing and socialization did not reach all teachers, and (5) Involvement of industry was very minimum.

Recommendations for improving the process during the development and dissemination

To address the above issues/problems, the respondents offered the following recommendations: (1) Involvement of industry, (2) conduct research or monitoring & evaluation to see its effectiveness, and (3) Dissemination process need to be improved.

RQ2:

How was the implementation of the national teacher standard?

Common implementation strategies

There are different strategies in implementing the national teacher standard. However, there are some common ones including: (1) The Central government directs the implementation supported by the departments, (2) The national body or a committee develop assessment guide and classification, and (3) Some use the standard as a self-assessment by teachers.

Common Issues/problems during the Implementation Stage

During the implementation, some issues/problems were roused by respondents: (1) Limited time in preparation, (2) Limited briefing and capacity building, (3) Standard was not detail, no clear instruction, no division was assigned for teacher assessment.

Recommendations to Improve Implementation of Stage

In response to the issues and problems during the implementation stage, the respondents recommended the followings: (1) Start pilot project in several areas, (2) train core lecturers, (3) Monitor & evaluate every stage of the processes.

RQ3:

What are the expectations toward the proposed regional TVET teacher standard?

Expected Regional TVET Teacher Standard

Based on the survey, it can be summarized that 6 countries preferred the regional standard that has few levels and 2 countries preferred 1 level (meet or does not meet the standard). In terms of model or the main components covered in the standard, 5 countries preferred Model 2, and two countries preferred Model 1 and Model 3.

Model 1 consists of Basic and common (Professional) and (Communication, problem-solving, team work, etc.) and Core/functional (teaching, learning, and assessment).

Model 2 consists of Pedagogical, Personality, Social, and Professional

Model 3: Education laws and regulations; Pedagogy and pedagogical psychology, Didactic and teaching methodology, Subject-based methodology

Perceived Benefits of Having a Regional TVET Teacher Standard

There are few benefits from having a regional TVET teacher standard. The most common perceived benefits are: (1) To improve the quality of TVET overall, (2) As a benchmark among teachers in ASEAN countries and possibly increase mobility, (3) To strengthen ASEAN integration through harmonized TVET development in the region and having platform for benchmarking.

Usage of the Regional TVET Teacher Standard

The respondents comprising of TVET school teachers and administrators shared that the Regional TVET Teacher Standard can be used to (1) To review/update the existing national standard, (2) as an added reference and value of the national standard, and (3) As a reference only.

Common Issues/problems Anticipated in Having a Regional TVET Teacher Standard

There are some concerns that the respondents shared if the ASEAN would have the regional TVET teacher standard. The common issues and problems are (1) Language and cultural barriers, (2) Political influence which affects commitment, (3) Limited capacities of TVET personnel and resources in some country members, (4) Technical competency is not emphasized, (5) Lacking of Industry participation & support, and (6) Member countries have different status of TVET.

Recommendations for Having a Regional TVET Teacher Standard

In anticipation of the issues and problems, the respondents suggested the followings: (1) The regional standard should be flexible enough for the members to adopt, (2) The standard should integrate recognition of prior learning, (3) Before full implementation, conducting a pilot and capability building programmes are necessary, (4) Include various Ministries handling TVET, (5) Provide complete and clear guideline to all teachers, and (6) Make sure that the standards shall be specific, operable, and shall be applied to all teachers

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COUNTRY REPORT 1

BRUNEI DARUSSALAM

Lesson learned from the development and implementation of Brunei Darussalam Teacher Standard as inputs for the development of Regional TVET Teacher Standard

Organization

*SEAMEO VOCTECH Regional Centre
Jalan Pasar Baharu, Gadong BE1318, Brunei Darussalam*

Team

*Dr. Paryono
Ms. Noorashikin Haju Nawe
Ms. Nadine Nowotny*

July 31, 2016

Lesson learned from the development and implementation of Brunei Darussalam Teacher Standard as inputs for the development of Regional TVET Teacher Standard

Abstract

As inputs for the development of Regional Technical and Vocational Education and Training (TVET) Teacher Standard, Regional Cooperation Platform (RCP) under GIZ-RECOTVET (A German funded Platform to Improve the quality of TVET teacher in Southeast and East Asia, conducts a research project in 7 Southeast Asian countries, including Brunei Darussalam. The focus of the research is to describe the process of the development, dissemination and implementation of the national teacher standard. In addition, the research also collect respondent's expectations of the proposed Regional TVET Personnel Standard. Using mixed research methods, the data were collected using survey questionnaires, interviews, and documents analysis. A survey questionnaire was distributed to TVET teachers and administrators/principals. Interviews were carried out to national committee who developed BTS and also selected TVET teachers and administrators. The findings showed that Brunei Teachers' Standard (BTS) was developed and launched in 2014 and the implementation at primary and secondary schools started in 2015. So far, the standard has yet to be implemented at TVET schools and colleges.

Key Words: Teacher standard, technical and vocational education and training (TVET), regional standard.

Introduction

Brunei Teacher Standard

Brunei Darussalam has developed Brunei Teachers' Standard (BTS) that was officially launched in August 2014. The aims of the BTS is to ensure high quality of teaching that eventually will ensure better learning outcomes for students. The development of the standard and its Teacher Performance Appraisal (TPA) System was spearheaded by the Department of Schools Inspectorate under the request of the National Education Delivery Unit (PENGGERAK) under the Prime Minister's Office together with the Ministry of Education (Department of Schools Inspectorate, MoE Brunei, 2015). Even though the target usage of this teacher standard is for all teachers, up to now the standards has yet to be implemented at Technical and Vocational Education and Training (TVET) institutions.

TVET Teachers in Brunei Darussalam

TVET teachers in Brunei consist of expatriate and locals. For the local teachers they are mainly recruited from fresh graduates with minimum qualification of at least one level higher qualification than the taught programmes of the related field. Instructors teaching Diploma programmes must have at least a Higher National Diploma or Advanced Diploma to qualify them. Most of the local TVET teachers are recruited first prior to acquiring their teaching qualification. Only a small proportion of the local TVET teachers have industrial experience. The training and recruitment of TVET teachers in Brunei is based on the in-service model, in which the teacher's qualification is acquired within the first few years usually probationary, phase of employment. (Chin, 2012). Typically, the in-service model of teacher education does not take into account the respective subject matter. Instead, it is mainly focused on psychological and basic educational knowledge, and on teaching methods and techniques with some variations (Grollmann, 2008 as cited by Chin, 2012).

As of April 2016, the formal TVET institutions under the Institute of Brunei Technical Education (IBTE), Ministry of Education Brunei Darussalam has 7 (seven) campuses. Under the IBTE Central, there are 4 campuses: IBTE's Sultan Saiful Rijal Campus, Nakhoda Ragam Campus, Mechanical Campus and Business Campus. Under the IBTE Satellite, there are 3 campuses: IBTE's Jefri Bolkiah Campus, Sultan Bolkiah Campus and Agro-Technology Campus. In addition to the public TVET institutions under IBTE, there are 6 private institutions: Kemuda Institute, Laksamana College of Business, IGS College, Micronet International College, Cosmopolitan College of Commerce and Technology, and Bicpa-Ftms Accountancy Academy.

As of March 2016, the teachers at public TVET schools and colleges in Brunei Darussalam are as follow (Research and Statistics Department, IBTE, 2016).

Table 1. Number of TVET Teacher in Brunei Darussalam by Institution

No	Institution	Number of teacher
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1	Sultan Saiful Rijal Campus	96
2	Jefri Bolkiah Campus	91
3	Nakhoda Ragam Campus	87
4	Sultan Bolkiah Campus	54
5	Mechanical Campus	62
6	Business Campus	42
7	Agro-technology Campus	53
Total		485

The number of private TVET teachers was 91 in 2014 (Department of Planning, Development, and Research, 2015).

The development Brunei Teacher Standard has been an important starting point for ensuring teachers quality in Brunei Darussalam. Regardless of its limitations, especially in the implementation at TVET schools and colleges, the standard can be used as one of the references. For that reason, learning how the BTS was developed and implemented at the schools level will be useful input for the taskforce assigned to develop the regional TVET teacher standard. In addition, asking important players such as teachers and the school principals about their expectation toward Regional TVET Teacher Standard will also help the taskforce to gauge their aspirations and preferences.

Purpose

The purpose of this research is to examine the development and implementation of teacher standard in Brunei Darussalam, including the issues and challenges in those processes. In addition, this research also gathers expectations from relevant stakeholders, particularly from TVET teachers and administrators about the proposed regional TVET teacher standard.

By learning and considering the experiences from the participating countries, i.e. Brunei Darussalam, the Regional Standard for TVET Teachers which is currently being developed, will be more relevant and applicable to all members in the Southeast Asian region and beyond.

The list of research questions is as follow.

Part A. DEVELOPMENT PROCESS OF NATIONAL STANDARD FOR TVET PERSONNEL (Esp. TEACHERS)

1. The Process and the Committee
 - 1.1. What were the processes involved in the development of the National Core Standards of TVET Teachers?
 - 1.2. Who were involved in the development processes
 - 1.3. Who assigned them
 - 1.4. What is the structure/ organization of the team (composition)
2. Contents and Structure

- 2.1. What are the contents/elements?
- 2.2. What is the structure of the National Core Standards?
3. Dissemination
 - 3.1. What were the steps in the dissemination of the National Core Standards?
 - 3.2. Who took charge in the dissemination of National Core Standards
 - 3.3. How is it disseminated and what forms of dissemination?
4. Issues and Recommendations
 - 4.1. What issues were raised in the development and dissemination of National Core Standards?
 - 4.2. What suggestions or recommendations to improve the development and dissemination processes

Part B. IMPLEMENTATION OF NATIONAL STANDARD FOR TVET PERSONNEL (Esp. TEACHERS)

5. What are the requirements to become a training/education providers of TVET Teachers?
6. What are the education and training for TVET Teachers to meet the requirements in the Standard?
7. What are the assessments methods used to determine qualified candidates who meet the core Standard?
8. Who conducts the assessment to determine if the Teachers meet the Core Standard?
9. What are the requirements of the assessors?
10. What agency certifies the candidate who attains the Core Standard of TVET Teachers?
11. What are the challenges, issues, and recommendations in the implementation of the National Core Standard?

Part C. EXPECTATION FOR THE REGIONAL CORE STANDARDS FOR TVET PERSONNEL (Esp. TEACHERS)

12. What would be the perceived benefits of having Regional (ASEAN) Core Standard for TVET teachers?
13. What are the expected components to be included in the Regional (ASEAN) Core Standard for TVET teachers?
14. How will the country members utilize the Regional (ASEAN) Core Standard for TVET Teachers?
15. Is there any other suggestion for developing the Regional (ASEAN) Core Standard for TVET Teachers?

Methods

Research Design

This study is using a mixed method design by utilising quantitative and qualitative data collection tools and data analysis.

The data were collected from the important players in the development and implementation of the National Standard for TVET Teachers, namely members of the National Committee, School Principals and Teachers.

The data collection tools include surveys, in-depth interviews, and document analysis.

Data Collection

Out of 210 survey sent to teachers 172 responses received and out of 7 survey sent to school principals, 6 responses received. Interviews were carried out to two members of the National Committee, 14 teachers, and 7 principals.

School representatives from all 7 public TVET schools and colleges were included in the study, namely from Sekolah Vokasional Sultan Bolkiah (SVSB), Jefri Bolkiah College of Engineering (MKJB), Wasan Vocational School (SVW, Sekolah Perdagangan (SP), Maktab Teknik Sultan Saiful Rijal (MTSSR), Sekolah Vokasional Nakhoda Ragam Campus (SVNR), and Pusat Latihan Mekanik (PLM)

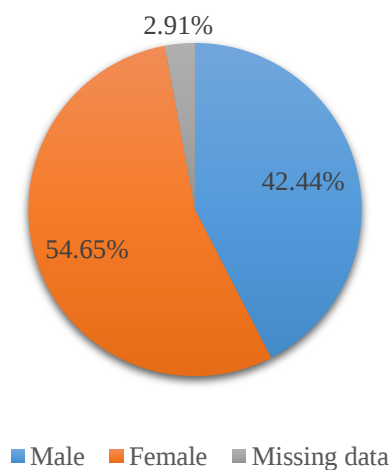
Findings and Discussions

Part 1: PERSONAL DATA

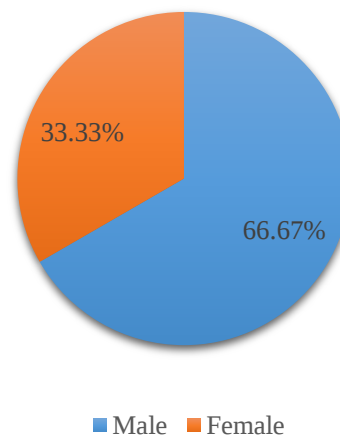
Demographic Background

Chart 1 and 2

Teachers' Gender (n = 172)



Principals' Gender (n = 6)



There is a more or less balanced number of male and female teacher responses with slightly more female Teachers. On the school principals side we have more men than women. There also needs

to be pointed out that half of the school principal respondents have been working in their current position less than one year.

Table 1

Highest qualification of Teachers (n = 166)

	<i>f</i>	%
Doctoral	4	2.41%
Higher National Diploma	35	21.08%
Diploma	6	3.61%
Master	46	27.71%
Bachelor Degree	75	45.18%
n; %	166	100,00%

As seen in Table 1, most teachers are bachelor's degree holders followed by masters, and higher national diploma.

Table 2

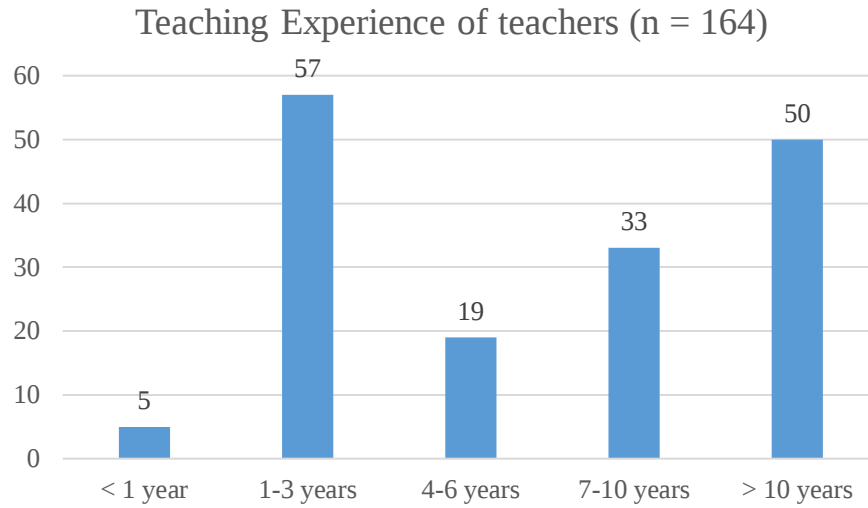
Area of specialization of Teachers (n = 167)

	<i>f</i>	%
Education	57	34.13%
Engineering	44	26.35%
ICT	15	8.98%
Mechanical	14	8.38%
Business & Admin	12	7.19%
Electrical	9	5.39%
Management	6	3.59%
Research	3	1.80%
Curriculum	1	0.60%

Notes: There were multiple responses possible.

In terms of educational background, the high percentage area of specialization of those teachers are from education followed by engineering.

Chart 3



As reflected in Chart 3, high proportion of teachers have been working for 1 to 3 years (34.76%) and more than 10 years (30.59%).

Table 3

Assessment of Teachers (n = 146)

	<i>f</i>	%
Assessed	132	90.41%
Not assessed	14	9.59%
n; %	146	100,00%

Table 4

Rating of the Assessment (n = 125)

	<i>f</i>	%
Easy	7	5.56%
Medium	108	85.71%
Difficult	11	8.73%
n; %	126	100,00%

Table 5

Assessment Methods (n = 89)

	<i>f</i>	%
Observation	49	55.06%
Evaluation	16	17.98%
Assessment	7	7.87%
Appraisal	5	5.62%
Practical	5	5.62%
Written and Oral Examination	5	5.62%
Microteaching	3	3.37%
Performance based annually	3	3.37%
Technical/ Engineering Methods	3	3.37%
Theoretical and Practical "Student Centered Approach"	3	3.37%

Notes: There were multiple responses possible.

Reflecting from the current practices, teacher respondents perceived that their teaching performance are being assessed (90.41%, see Table 3) with level of difficulty considered by majority (85.71%, see Table 4) as medium and using observation as the major perceived methods (55.06% of those responding to this question, see Table 5).

The Teachers recommend competency-based assessment methods. Introducing ethical issues was also an idea suggested by respondents. These methods could be prepared together with the teachers as a practical training for them and to ensure a fair and qualitative assessment.

Furthermore this assessment should be carried out more than once a year, because some modules are only assessed once in a semester. After the assessment process, there is a feedback required. Another idea is self-assessment via videotaping.

The assessor should be from the same field. Thus from technical background rather than pure academic assessors, as their environment, concept and way of thinking is different.

Table 6

Number of Teachers holding a Teacher Certification (n = 169)

	<i>f</i>	%
Yes	122	72.19%
No	47	27.81%
n; %	169	100,00%

Table 7

Place of Teacher Certification (n = 141)

	<i>f</i>	%
Local	103	73.05%
Overseas	43	30.50%

Countries

UK	10	23.26%
Malaysia	7	16.28%
Australia	3	6.98%

Note: There were multiple responses possible.

From Table 6, most teachers (72.19%) perceived that they have a teaching certification acquired from the university in the country (73.05%) and from overseas (33.50%), see Table 7, where they completed their pedagogical requirements.

Part 2: STATUS OF DEVELOPMENT AND IMPLEMENTATION

Table 8

Status of Development, Teachers' responses (n = 163, 159, 159, 155)

	Teacher Standard		School Principal/ Director Standard		Trainer of trainers Standard		Industry Trainer Standards	
	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%
Developed	67	41.10%	43	27.04%	46	28.93%	33	21.29%
Not yet developed	41	25.15%	40	25.16%	43	27.04%	46	29.68%
Not sure	55	33.74%	76	47.80%	70	44.03%	76	49.03%
n; %	163	100,00%	159	100,00%	159	100,00	155	100,00%

Table 9

Status of Development, Principals' responses (n = 6, 5, 5, 5)

	Teacher Standard		School Principal/ Director Standard		Trainer of trainers Standard		Industry Trainer Standards	
	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%
Developed	2	33.33%	2	40.00%	2	40.00%	3	20.00%
Not yet developed	3	50.00%	2	40.00%	1	20.00%	1	20.00%
Not sure	1	16.67%	1	20.00%	2	40.00%	1	60.00%
n; %	6	100,00%	5	100,00%	5	100,00	5	100,00%

Table 10

Status of Implementation, Teachers' responses (n = 159, 153, 153, 154)

	Teacher Standard		School Principal/ Director Standard		Trainer of trainers Standard		Industry Trainer Standards	
	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%
Implemented	48	30.19%	44	28.76%	38	24.84%	30	19.48%
Not yet implemented	35	22.01%	26	16.99%	35	22.88%	35	22.73%
Not sure	76	47.80%	83	54.25%	80	52.29%	89	57.79%
n; %	159	100,00%	153	100,00%	153	100,00%	154	100,00%

Table 11

Status of Implementation, Principals' responses (n = 6, 5, 5, 5)

	Teacher Standard		School Principal/ Director Standard		Trainer of trainers Standard		Industry Trainer Standards	
	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%
Implemented	1	20.00%	1	20.00%	2	40.00%	1	20.00%

Not yet implemented	2	40.00%	2	40.00%	1	20.00%	1	20.00%
Not sure	2	40.00%	2	40.00%	2	40.00%	3	60.00%
n; %	5	100,00%	5	100,00%	5	100,00	5	100,00%

More teachers considered that the Teacher Standard in Brunei has already been developed (41.10%) compared to those who perceived it as not being developed (25.15%). This may be a misconception, due to the fact that Brunei already has a Brunei Teacher Standard (BTS), but no Teacher Standard specifically for TVET personnel. The BTS is being only applied to general primary and secondary teachers as yet. Some TVET teachers might not be aware of this fact, or are even aware that these standards exist. Therefore, when looking at the results, we need to bear in mind the confusion of some teachers. Same with the principals' opinion, over 30 % of them think that the Teacher Standard is already developed. We don't know if they referred to the current Brunei Teacher Standard or the Standard for TVET Teachers, which is in fact not yet developed.

As for the other three Standards, there is a more or less shared opinion of uncertainty among the Teachers, of them being developed. The majority of the Principals are not sure if Industry Trainer Standards exist, and there is also a 40 % uncertainty if the Trainer of Trainers Standard is already developed or implemented. It seems to be not clear to the Principals themselves, if there is a School Principal Standard already developed or not yet.

Part 3: ISSUES AND RECOMMENDATIONS IN THE DISSEMINATION OF NATIONAL STANDARD

Table 12

Issues/Problems during the Dissemination Process (n = 101)

	<i>f</i>	%
Unclear guideline	55	54.46%
Limited briefing or capacity building	50	49.50%
Limited time	29	28.71%

Note: There were multiple responses possible.

The majority of the teachers observed the lack of a clear guideline as the main problem in the dissemination process of the national standard, referring to BTS. This opinion appeared because the dissemination BTS didn't take place at TVET schools or colleges, except few representatives were invited for sharing. But to get an overall perception of the conditions/handling of such disseminations, it can be interesting to point out some issues.

If there were guidelines, they seemed to be unclear and created confusions. The teachers also demanded more commitment as well as transparency for the dissemination process.

The teachers recommended the upgrade of the Wi-Fi network at all campuses for a better information spreading and circulating as a first important step in the dissemination process. Staff must be logged in to their Emails at all times. This is due to the opinion that teachers and all relevant individuals should be involved in the processes. Other ways of dissemination could be meeting, briefing, forum discussion, presentation and workshop. In order to carry out the process in a clear way, the disseminators should be well experienced and well trained in the TVET area. Another teacher suggested a handbook of the Teacher Standard, a list of proper requirements and expectations.

The main issue during the dissemination process in view of the principals is the limited time aspect.

Part 4: ISSUES AND RECOMMENDATIONS IN THE IMPLEMENTATION OF NATIONAL STANDARD

Table 13

Issues on the Implementation (n = 90)

	<i>f</i>	%
Unclear guideline	41	45.56%
Limited briefing or capacity building	40	44.44%
Limited time in preparation	42	46.67%

Note: There where multiple responses possible.

Again, these numbers are not indicative, as the implementation in TVET has yet to take place in Brunei. But the aspect of limited time seems to be an issue for both sides, the principals and the teachers. Furthermore there was clarity and transparency requested by the teachers. Like a dissemination guide, there should be an implementation guide given including the assessment and monitoring tools.

The challenge to the implementation of the Regional Standard for TVET Personnel, as most respondents stated, would be the time aspect. There should be a time schedule with a feasible time for preparation of the teachers.

Principals suggest to organize regular workshops or seminars on the Standard or to develop a portal or website where teachers can refer to later on.

Part 5: EXPECTATION FOR THE REGIONAL CORE STANDARDS

Table 14

Perceived benefits of Standards, Teachers' responses (n= 161, 162, 161, 161, 154)

Ran k	Item	1	2	3	4	M
1	To improve the quality of TVET overall.	0.62%	3.73%	52.17%	43.48%	3.39
2	To provide a platform for benchmarking.	0.62%	2.47%	54.94%	41.98%	3.38
3	To strengthen ASEAN integration.	0.62%	4.35%	59.01%	36.02%	3.30
4	To harmonize TVET development in the region.	1.24%	3.73%	60.25%	34.78%	3.28
5	To facilitate mobility of human resources.	0.65%	7.79%	59.74%	31.82%	3.23

Notes: The Lickert Scales 1 to 4 are interpreted as follows: 1 is *Strongly disagree*; 2 is *Somewhat disagree*; 3 is *Somewhat agree*; 4 is *Strongly agree*.

Table 15

Perceived benefits of Standards, Principals' responses (n = 6)

Ran k	Item	1	2	3	4	M
1	To provide a platform for benchmarking.	0.00%	0.00%	16.67%	83.33%	3.83
2	To strengthen ASEAN integration.	0.00%	0.00%	16.67%	83.33%	3.83
3	To improve the quality of TVET overall.	0.00%	0.00%	33.33%	66.67%	3.67
4	To harmonize TVET development in the region.	0.00%	0.00%	33.33%	66.67%	3.50
5	To facilitate mobility of human resources.	0.00%	0.00%	83.33%	16.67%	3.17

Notes: The Lickert Scales 1 to 4 are interpreted as follows: 1 is *Strongly disagree*; 2 is *Somewhat disagree*; 3 is *Somewhat agree*; 4 is *Strongly agree*.

It can be gleaned from all columns, that the majority of Teachers “Somewhat agree” to all of the suggested possible benefits of the Regional Standard. There seems to be a general positive attitude towards the upcoming Standard. The same applies for the Principals, the majority even “Strongly agrees” to all the benefits. In their opinion the biggest benefit of Regional Standard would be the

usage as a platform for benchmarking and to strengthen ASEAN integration, with 83.33% respectively.

Other perceived benefits of the Standard could be the sharing of educational development and good practices in training between ASEAN countries, according to teachers. It would improve the skills of instructors, benchmark their goals and could be used as a measuring tool to identify and close skill gaps.

Extracts from the interviews, the respondents mentioned the following benefits:

- Quality of graduates will be at par with other countries and enable mobility of skilled workers, outsource work to ASEAN countries.
- The regional standard will enhance the quality training and teaching, exchange students and staff, one community through understanding each other's country better.
- Everyone would have the same standard meaning that mobility and transfer of expertise would be easier within ASEAN.
- The teachers would be competent in teaching, better standards within the ASEAN region, and expect better teachers in the country.
- Each country would have better standards and higher expectations that lead to higher motivation.
- It would eventually develop good consensus among TVET teachers, by having guideline as reference, everyone will be clear on what the management expect and how they (staff) will perform based on their expectations

Preference model of the Regional Standard

Table 16

Component of competencies (Teachers) (n =158)

	<i>f</i>	%
Model 1		
a) Basic and common (Professional) (Communication, problem-solving, teamwork, etc.)		
b) Core/functional (teaching, learning, and assessment)	68	43.04%
Model 2		
a) Pedagogical		
b) Social		
c) Personality		
d) Professional	79	50.00%

Model 3

a) Education laws and regulations (institutional and national)		
b) Pedagogy and pedagogical psychology		
c) Didactic and teaching methodology		
d) Subject-based methodology	44	27.85%

Note: There were multiple responses possible.

Table 13 shows the possible components and how the Regional Standard could be divided in. Most teachers prefer the Competence-Based Model 2, followed by Model 1 with 43% and Model 3 with 28% roughly.

Most of the principals however prefer Model 3, with 33.33%. One suggested his or her own Model:

- i. social economic & technological
- ii. Subject based methodology
- iii. Industry skills
- iv. Transferable skills from trainers/teachers to learners

Table 17

Leveling (n = 158, 4)

	<i>Teachers</i>		<i>Principals</i>	
	<i>f</i>	<i>%</i>	<i>f</i>	<i>%</i>
One level	9	5.70%	1	25.00%
Few levels (E.g. Level 1: novice, Level 2: intermediate, Level 3: advance /expert)	88	55.70%	3	75.00%
One level with more responsibilities as career progresses	71	44.94%	0	0.00%

Note: There where multiple responses possible.

The majority of both Principals and Teachers tend to prefer few levels of standard. It was suggested that all teachers should start at the same level at the beginning of their career in technical education. And then, those selected for administrative duties should be given specialist training and it should be taken into account later at the promotion. Some teachers request more motivation aspects for progressing to the next level in terms of promotion on position and salary. Fewer levels would give more opportunities for that, if the levels are present.

Table 18

Use of the Standard, Teachers' responses (n = 160, 161, 159, 156, 145)

Rank	Item	1	2	3	4	M
1	To review/update national standard.	0.00%	6.88%	54.38%	38.75%	3.32
2	As added reference/value of national standard.	0.00%	6.83%	62.73%	30.43%	3.24
3	To adopt it as the national standard.	0.00%	8.18%	65.41%	26.42%	3.18
4	For reference only.	1.28%	20.51%	60.26%	17.95%	2.95
5	Not going to use it.	42.07%	31.72%	22.07%	4.14%	1.88

Notes: The Lickert Scales 1 to 4 are interpreted as follows: 1 is *Strongly disagree*; 2 is *Somewhat disagree*; 3 is *Somewhat agree*; 4 is *Strongly agree*.

Table 19

Use of the Standard, Principals' responses (n = 5)

Rank	Item	1	2	3	4	M
1	To review/update national standard.	0.00%	0.00%	20.00%	80.00%	3.8
2	To adopt it as the national standard.	0.00%	0.00%	20.00%	80.00%	3.8
3	For reference only.	0.00%	20.00%	40.00%	40.00%	3.2
4	As added reference/value of national standard.	0.00%	60.00%	20.00%	0.00%	2.25
5	Not going to use it.	0.00%	0.00%	25.00%	75.00%	1.25

Notes: The Lickert Scales 1 to 4 are interpreted as follows: 1 is *Strongly disagree*; 2 is *Somewhat disagree*; 3 is *Somewhat agree*; 4 is *Strongly agree*.

Based on Table 18, from the list of usage of standard, majority of the teachers plan to use it to review/ update national standard (93.13%), to adapt it as the national standards the country that have yet to develop the national standard (93.16%), for reference only (91.83%), and as an added reference/value of national standard (78.21%)

Based on Table 19, from the list of usage of standard, majority of the school principals plan to use it to review/ update national standard (100%), to adapt it as the national standards the country that have yet to develop the national standard (100%), and for reference only (80%).

Suggestions for the development of the Regional Standard

From the survey and interview, respondents suggested the following list that may enhance the development and implementation of the regional standards:

- To ensure that all the personnel entirely understand/made understood the standard or aims that he/she has to focus on.
- To reach out to all teachers, not only selective individuals.
- To provide more 'train the trainer' training, especially based on technical and vocational subjects.
- To provide training according to modules, communication and problem solving.
- It should be flexible enough to be used by all the ASEAN countries.
- To involve those who will be doing the assessment at ground/field level, in the development process.
- To convene regional leaders (TVET) on developing standards & training of teachers to close skill gaps within the regions (ASEAN) and sharing of current standards among leaders and teachers within the regions.
- These should be covered in the standard:
 - (a) Standards of knowledge and professional experience
 - (b) Standards of work/industry practise
 - (c) Standards of conduct.
- To include personnel from all over the globe, avoiding "regional competencies".
- To consider alternatives for addressing the limitations of equipment & facilities faced by each country collectively.
- To consider international work placement.
- To offer an exchange programme in teaching between ASEAN countries and to shape ideas on specialisation area such as business, IT, agriculture etc.
- To initiate a steering committee to start pilot project in several areas and train core lecturers as part of the project.
- To ensure sufficient resources, facilities, trainer/accredited training, industrial experience of trainers, technology that meet industry standard.

Possible Challenges for the development and implementation of Regional Standards

From survey and interview, the respondents anticipates the following challenges in the development and implementation of the regional standards:

- Language and cultural barriers.
- Political instability which affects implementation of ideas.
- Small budget, low number of training available.
- The quality of the training provider and credibility of trainers.
- Location and duration of training and how the training will be conducted.
- Lack of resources: provision of facilities, materials, level of technology, etc.

- Resistance from staff/stakeholders
- The senior staff might have difficulties to accept the new Standard compared to new/junior staff

Conclusions

Development of National Standard

In Brunei Darussalam, the only standard available at this moment is Brunei Teacher Standard (BTS) which is targeted for general teachers. For TVET teacher standard, there is a plan to develop it by referring to BTS and the proposed Regional TVET teacher standard. Regardless of the absent of TVET teacher standard in Brunei, the teachers are still being assessed based on their technical and vocational and pedagogical qualifications. Teachers' performance is monitored through staff appraisal once a year. Standard for TVET Administrators, Standard for Industry Trainers, and Standard for Trainers of Trainers are yet to be developed.

Implementation

Considering that the current BTS is for general school teachers, TVET teachers have limited experience in the implementation, except for partaking in the annual appraisal processes. TVET teachers and administrators were suggesting other ways of dissemination, such as through meetings, briefings, forums/discussions, presentations, and workshops. In order to implement successfully, the disseminators should be well experienced and well trained in the TVET area. Another teacher suggested a handbook of the Teacher Standard, a list of proper requirements and expectations.

The challenge in implementing personnel standard normally related to time constraint and time schedule. Principals suggested having regular workshops or seminars on the Standard or to develop a portal or website where teachers can refer to later on.

Expectation towards Regional Standard

Majority of teachers, principals, and national committee members perceived the benefits of having the Regional Standard. The most common benefits would be the usage as a platform for benchmarking and to strengthen ASEAN integration, and for sharing educational development and good practices between ASEAN countries. In addition, the quality of graduates would be at par with other countries and enable mobility of skilled workers, outsource work to ASEAN countries. The regional standard will enhance the quality training and teaching, exchange students and staff, and strengthen one community through understanding each other's country better.

The preferred model of the standard was the Competence-Based Model 2 (comprising Pedagogical, Social, and Personality). Professional, most of the principals however preferred Model 3 (Education laws and regulations (institutional and national), Pedagogy and pedagogical psychology, Didactic and teaching methodology, and Subject-based methodology).

The majority of principals and teachers tended to prefer few levels of standard.

Majority of the teachers and principals planned to use it to review/ update national standard, to adapt it as the national standards the country that have yet to develop the national standard, to use it for reference only, and as an added reference/value of national standard.

Recommendations

During the development and implementation of the regional standards it is important to ensure that all the personnel entirely understand/made understood the standard or aims that he/she has to focus on. For more specific recommendations, the following lists are the major suggestions and recommendations:

- To reach out to all teachers, not only selective individuals.
- To provide more 'train the trainer' training, especially based on technical and vocational subjects.
- To provide training according to modules, communication and problem solving.
- It should be flexible enough to be used by all the ASEAN countries.
- To involve those who will be doing the assessment at ground/field level, in the development process.
- To convene regional leaders (TVET) on developing standards & training of teachers to close skill gaps within the regions (ASEAN) and sharing of current standards among leaders and teachers within the regions.
- These should be covered in the standard:
 - (a) Standards of knowledge and professional experience
 - (b) Standards of work/industry practise
 - (c) Standards of conduct.
- To include personnel from all over the globe, avoiding "regional competencies".
- To consider alternatives for addressing the limitations of equipment & facilities faced by each country collectively.
- To consider international work placement.
- To offer an exchange programme in teaching between ASEAN countries and to shape ideas on specialisation area such as business, IT, agriculture etc.
- To initiate a steering committee to start pilot project in several areas and train core lecturers as part of the project.
- To ensure sufficient resources, facilities, trainer/accredited training, industrial experience of trainers, technology that meet industry standard.

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COUNTRY REPORT 2

Cambodia

*Lesson learned from the development and implementation of
National TVET-Teacher Standard in Cambodia for the development of
Regional TVET-Teacher Standard*

Organization

National Technical Training Institute (NTTI) Cambodia

Team

***H.E. Dr. Yok Sothy,
Mr. Vath Uksa,
Mr. Samrith Sumpitu,
Mr. Mok Sophalika and
Mr. Chan Phakkdey***

July 31, 2016

Lesson learned from the development and implementation of National TVET-Teacher Standard in Cambodia for the development of Regional TVET-Teacher Standard

Abstract

This research aimed at developing a core standard for TVET personnel that targets all economic sectors and professions and could be applicable to all areas of TVET and identifying strategies for common implementing of the standard both on national as well as regional level and to sketch a roadmap. The study employed both quantitative and qualitative approaches, which included questionnaire distributed to and in-depth interviews with 2 officials from the Department of National Competency Standards, 15 principals of TVET institutions, and 300 TVET instructors throughout the country. These included the Department of National Competency Standards, 7 public TVET institutions, offering training courses ranging from diplomas to master's degree, 4 Regional TVET institutions, and 9 Provincial Training Centers. The study investigated the Development of the National Standards for TVET Personnel in terms of the development process, implementation, and the Development of Regional Standards for TVET Personnel to find out the expectation of the respondents for regional standards. The study found out that only the Competency Standard for TVET Teacher has been developed since 2011 but has never been piloted, or implemented due to the lack of necessary resources, such as the curriculum contents, the experts and funding. Furthermore, most of the participants expected that the components of Model 2 and 3 should be included in the Regional Standard for TVET Personnel and would use the Regional Standard as the reference to update/review the National Standards. The majority of the principals suggested that the graduates from the TVET Instructor Program undergo on-job training at the industries for at least one year before being nominated to work as an instructor.

Introduction

TVET is its infant stage of development as a different post-secondary school vocational training system after its emergence from the Ministry of Education, Youth and Sport (MOEYS) in 2005 with the establishment of the MOLVT. The present system reflects the main direction of international support to the subsector since the 1980s after the collapse of the Pol Pot's regime. The initiatives to establish large formal institutions to produce trained labor and technicians for particular, approximately guaranteed position in state-run firms originated from the initial support from the former Soviet Union, Vietnam, and Eastern European nations. By the mid-1990s, the ensured employment for TVET students ended and because of the irrelevance of programs offered in formal institutions to the labor market, the enrollment started to decline. The poverty became more widespread due to the negative effects of socio-economic disruption and the shortage of skills of the displaced returnees with disabilities, and the increasing number of women as heads of the families. To help alleviate poverty and generate supplementary income, short vocational training programs became an integral part of development assistance agenda of donor countries and NGOs.

The TVET Teacher Qualification includes the competencies that a trainee must obtain to perform teaching tasks, evaluating students, and planning. Moreover, it consists of the competency about the preparation of the teaching aid, curriculum development, and students' guidance. The TVET Teacher Competency is composed of the two main areas of competencies: basic competencies and core competencies. The former includes leading the workplace communication, problem-solving at work, team work, group task planning, the practice of occupational health, and safety, and using relevant technology. The latter consists of performing teaching work, students' evaluation, teaching aid preparation, curriculum development, students' guidance, the pursuance of professional development and the performance of co-curricular and extra-curricular activities. This research project will contribute to the improvement of national standard for TVET teachers as well as become the blueprint in the implementation of the standard.

Purpose

The research aimed to answer the following questions:

1. What were the processes involved in the development of the National Core Standards of TVET Teachers?
2. Who were involved in the development processes? And who assigned them?
3. What is the structure/ organization of the team (composition)?
4. What are the contents/elements?
5. What is the structure of the National Core Standards?
6. What were the steps in the dissemination of the National Core Standards?
7. Who took charge in the dissemination of National Core Standards?
8. How is it disseminated and what forms of dissemination?
9. What issues were raised in the development and dissemination of National Core Standards?
10. What suggestions or recommendations to improve the development and dissemination processes?
11. What are the requirements to become a training/education providers of TVET Teachers?
12. What are the education and training for TVET Teachers to meet the requirements in the standard?
13. What are the assessments methods used to determine qualified candidates who meet the core standards?
14. Who conducts the assessment to determine if the Teachers meet the core standards?
15. What are the requirements of the assessors?
16. What agency certifies the candidate who attains the core standards of TVET Teachers?
17. What are the challenges, issues, and recommendations in the implementation of the national core standards?
18. What would be the perceived benefits of having regional (ASEAN) core standard for TVET teachers?
19. What are the expected components to be included in the regional (ASEAN) core standard for TVET teachers?
20. How will the country members utilize the regional (ASEAN) core standard for TVET teachers?

21. Is there any other suggestion for developing the regional (ASEAN) core standard for TVET teachers?

This research aimed at developing a core standard for TVET personnel that targets all economic sectors and professions and could be applicable to all areas of TVET and identifying strategies for common implementing of the standard both on national as well as regional level and to sketch a roadmap.

Methods

The study employed both quantitative and qualitative approaches, which included questionnaire distributed to and in-depth interviews with 2 officials from the Department of National Competency Standards, 15 principals of TVET institutions, and 300 TVET instructors throughout the country. These included the Department of National Competency Standards, 7 public TVET institutions, offering training courses ranging from diplomas to master's degree, 4 Regional TVET institutions, and 9 Provincial Training Centers.

Table 1: The number of data gathering samples

No	TVET institutions	School Principals		TVET teachers		National Committee
		Survey	Interview	Survey	Interview	Interview
1	TVET institution in Phnom Penh	7	7	100	7	2
2	RTCs	4	4	100	8	
3	PTCs	4	4	100	8	
Total		15	15	300	23	2

1.1.Strength, weakness and limitation of the method

The data gathering tools used in this research have been sent to the right respondents who are currently working as teachers/trainers in the field of TVET throughout the country. All the data gathered and analyzed in this result provided the overall picture of what the regional standards for ASEAN would look like. However, there are still some limitations worth discussing. First, this research failed to include the teachers from the Ministry of Education, Youth and Sport, from the private TVET institutions and from the private schools. The other stakeholders, particularly the private TVET institutions, might have had a different picture of what the standard for TVET personnel would look like and might have been able to provide better recommendations, which might limit the quality of the findings.

Results

5.1 Survey with TVET teachers

Table 2: Personal data of the respondents

Personal Data					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	249	83.0	83.0	83.0
	Female	46	15.3	15.3	98.3
	No answer	5	1.7	1.7	100.0
	Total	300	100.0	100.0	

Table 2 shows that the number of the respondents are mostly male (83%) with only 15.3% are female. So, it is lack of gender equity in this survey.

Table 3: Working places of the respondents

Working at					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Secondary Technical and Vocational School	45	15.0	15.0	15.0
	Post-secondary technical and vocational College	255	85.0	85.0	100.0
	Total	300	100.0	100.0	

Table 3 shows that most of the respondents, 85 percent, are working at post-secondary technical and vocational college and only 15 percent working at secondary technical and vocational school.

Table 4: The highest qualification of the respondents

Highest Qualification					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Master	55	18.3	18.3	18.3
	Bachelor Degree	205	68.3	68.3	86.7
	High National Diploma	25	8.3	8.3	95.0
	Diploma	10	3.3	3.3	98.3
	No answer	5	1.7	1.7	100.0
	Total	300	100.0	100.0	

Table 4 shows that there are 55 respondents equal to 18.3 percent got the master degree, 205 respondents equal to 68.3 got the Bachelor Degree, 25 respondents equal to 8.3 percent got high diploma, and 10 respondents equal to 3.3 percent got diploma in terms of their highest qualification.

Table 5: The area of specialization of TVET teachers samples

No	Specialization	Quantity	Percentage
1	Education	40	13.3
2	Research	0	0
3	ICT	45	15
4	Management	5	1.7
5	Curriculum	0	0
6	Business & Admin	10	3.3
7	Engineering	55	18.3
8	Mechanical	10	3.3
9	Electrical	45	15
10	Others	70	23.3
11	No answer	20	6.7

In table 5, the area of specialization of the respondents range from others (agriculture, aquaculture, vet, etc.), 70 equal to 23.3 percent to Engineering, 55 equal to 18.3 percent, to ICT and Electricity, 45 equal to 15 percent, following by Education, 40 equal to 13.3 percent, mechanical and Business & Admin, 10 equal to 3.3 percent, and the last one is management, 5 equal to 1.7 percent. None of the respondents specialized in research and curriculum while another 20 respondents gave no answer.

Table 6:

Were your teaching competencies assessed to be a teacher?					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	290	96.7	96.7	96.7
	No answer	10	3.3	3.3	100.0
	Total	300	100.0	100.0	

Table 6 shows that 290 respondents equal to 96.7 percent replied that they were assessed to be a teacher and only 10 respondents equal to 3.3 percent replied that they haven't assessed to be a teacher.

Table 7:

How did you rate the assessment?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Easy	30	10.0	10.0	10.0
	Medium	100	33.3	33.3	43.3
	Difficult	170	56.7	56.7	100.0
	Total	300	100.0	100.0	

Table 7 indicates that most of the candidates, 170 equal to 56.7 percent, replied that the assessment process was difficult. 100 candidates replied that the assessment was medium, and only 30 candidates equal to 10 percent replied that the assessment was easy.

Table 8:

Do you have teacher certification?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	300	100.0	100.0	100.0

In table 8 and 9 all of the respondents claimed that they have teacher qualification and they got the certificate locally.

Table 9:

Where did you get your certification/qualification?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Local	300	100.0	100.0	100.0

Table 10:

Do you think the assessors well trained and knowledgeable?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	265	88.3	88.3	88.3
	No	30	10.0	10.0	98.3
	No answer	5	1.7	1.7	100.0
	Total	300	100.0	100.0	

Table 10 indicates that 265 respondents equal to 88.3 percent replied that the assessor were well trained and knowledgeable. Only 30 respondents equal to 10 percent replied no and another 5 respondent gave no answer.

Table 11: Status of development of the national standard

No	TVET personnel standard	Developed		Not yet developed		Not sure		No answer	
		Quantity	Percentage	Quantity	Percentage	Quantity	Percentage	Quantity	Percentage
1	Teacher standard	28	9.3	203	67.7	23	7.7	46	15.3
2	School/college principal/ Director Standard	4	1.3	67	22.3	94	31.3	135	45
3	Trainer of trainers standard	26	8.7	117	39	58	19.3	99	33
4	Industry trainer standard	4	1.3	71	23.7	95	31.7	130	43.3

Table 11 shows that most of the respondents replied that the national standard for TVET personnel have not been developed yet.

Table 12: Perceived benefits of having regional core standard

No	Perceived benefits of having regional (ASEAN) core standard for TVET personnel	Strongly Agree		Somewhat Agree		Somewhat Disagree		Strongly Disagree		No Answer	
		Quantity	Percent	Quantity	Percent	Quantity	Percent	Quantity	Percent	Quantity	Percent
1	Harmonize TVET development in the region	194	64.7	80	26.7	15	5	5	1.7	6	2
2	Provide platform for benchmarking	174	58	90	30	20	6.7	5	1.7	11	3.7
3	Improve the quality of TVET overall	192	64	90	30	0	0	5	1.7	13	4.3
4	Strengthen ASEAN integration	211	70.3	75	25	0	0	0	0	14	4.7
5	Facilitate mobility of human resource	204	68	70	23.3	10	3.3	0	0	16	5.3
6	Others	0	0	0	0	0	0	0	0	0	0

Table 12 shows that most of the participants are strongly agree to the perceived benefits of having regional core standard as show in the table.

Table 13: The uses of the regional core standard

No	The use of the Regional (ASEAN) Core standard for TVET teachers	Strongly Agree		Somewhat Agree		Somewhat Disagree		Strongly Disagree		No Answer	
		Quantity	Percent	Quantity	Percent	Quantity	Percent	Quantity	Percent	Quantity	Percent
1	To review/update the national standard	198	66	90	30	5	1.7	0	0	7	2.3
2	To use it as a reference only	71	23.7	114	38	85	28.3	10	3.3	20	6.7
3	To use it as an added reference and value of the national standard	106	35.3	124	41.3	25	8.3	0	0	45	15
4	To adopt it as the national standard	119	39.7	96	32	20	6.7	25	8.3	40	13.3
5	Not going to use it	16	5.3	15	5	70	23.3	168	56	31	10.3

Table 13 shows the agreement to the use of the regional core standard ranging from to review/update the national standard the most, to adopt it as the national standard, to use it as an added reference and value of the national standard, and to use it as a reference only. Only 16 respondents replied that they are not going to use it.

Table 14: expected (preferred) components to be included in the regional core standard

No	Model	Quantity	Percentage
1	Model 1: Basic and common (Professional) (Communication, problem-solving, teamwork, etc.) Core/functional (teaching, learning, and assessment)	79	26.3
2	Model 2: Pedagogical Social Personality Professional	74	24.7
3	Model 3: Education laws and regulations (institutional and national) Pedagogy and pedagogical psychology Didactic and teaching methodology Subject-based methodology	115	38.3
4	Model 4 Your proposed model:	0	0
5	NO answer	34	11.3

Table 14 shows the expected components to be included in the regional standard are Model 3 with 115 respondents, follow by Model 1 with 79 respondents, and Model 2 with 74 respondents.

Table 15: The expectation of leveling of teacher competencies in the regional standard

No	Levels	Quantity	Percentage
1	One level	141	47
2	Few levels Level 1: novice Level 2: intermediate Level 3: advance/expert	85	28.3
3	One level with more responsibility as careers progresses	35	11.7
4	Your proposed leveling	5	1.7
5	No answer	34	11.3

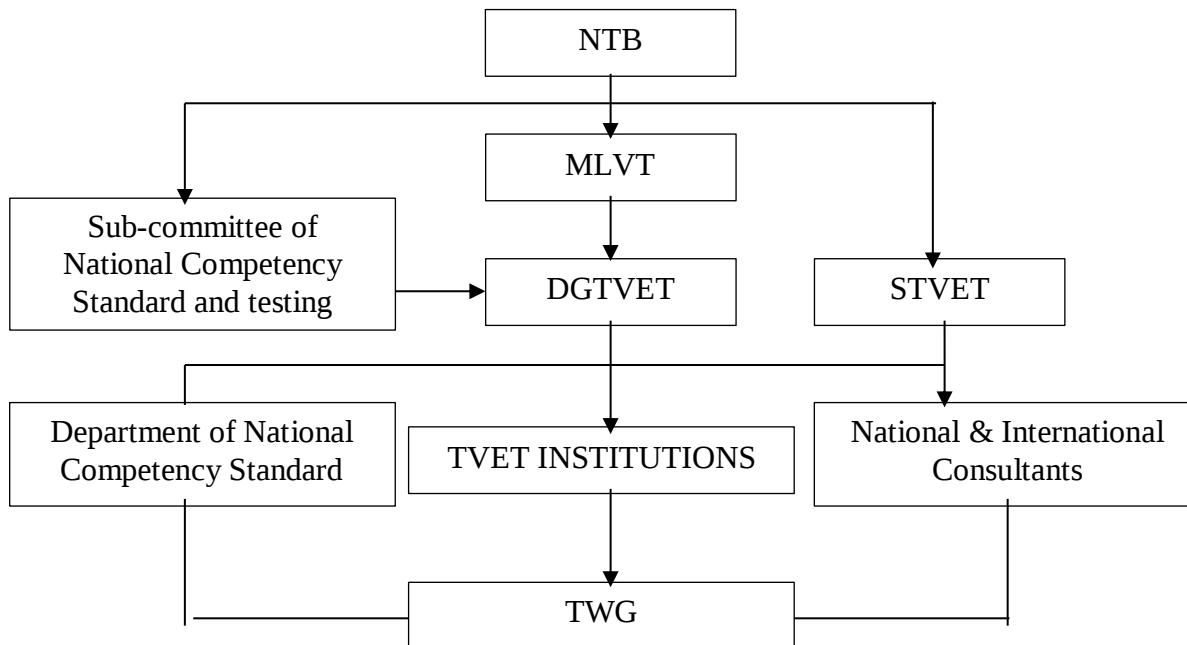
According to table 15, the most wanted leveling of the regional standard is one level with 141 respondents equal to 47 percent following by few levels with 85 respondents equal to 28.3. Other 35 respondent prefer to have one level with more responsibilities as careers progresses and 5 respondents have suggested their own level. They said that the regional

standard should have included all tasks and duties that a teacher must perform plus English language.

5.2. Interview with Department of National Competency Standard and school principals

According to the interview with representatives from department of national standard of Ministry of labour and vocational training and school principal, we found out that the National core standard for TVET teachers has already been developed. The process of the development involved the technical supporting group, technical working group and expert panel, national and international consultants (the international consultants are mostly from the Philippine), and facilitators and they were nominated by the minister of ministry of labour and vocational training and national training board. TVET teachers involved in the development process were nominated by their own school principals.

Figure1: Structure of the national competency standard development committees



The development processes took around one year consisting of many workshops and meetings. Basically, they conducted meeting to discuss and do occupational analysis regarding to the tasks and duties of a teacher. The task and duty included what are the works that a teacher needs to do before they teach, while they are teaching, and after the teaching. After they have found all of the duties and tasks, they transformed those duties and tasks into unit of competency and then they produce the teaching module.

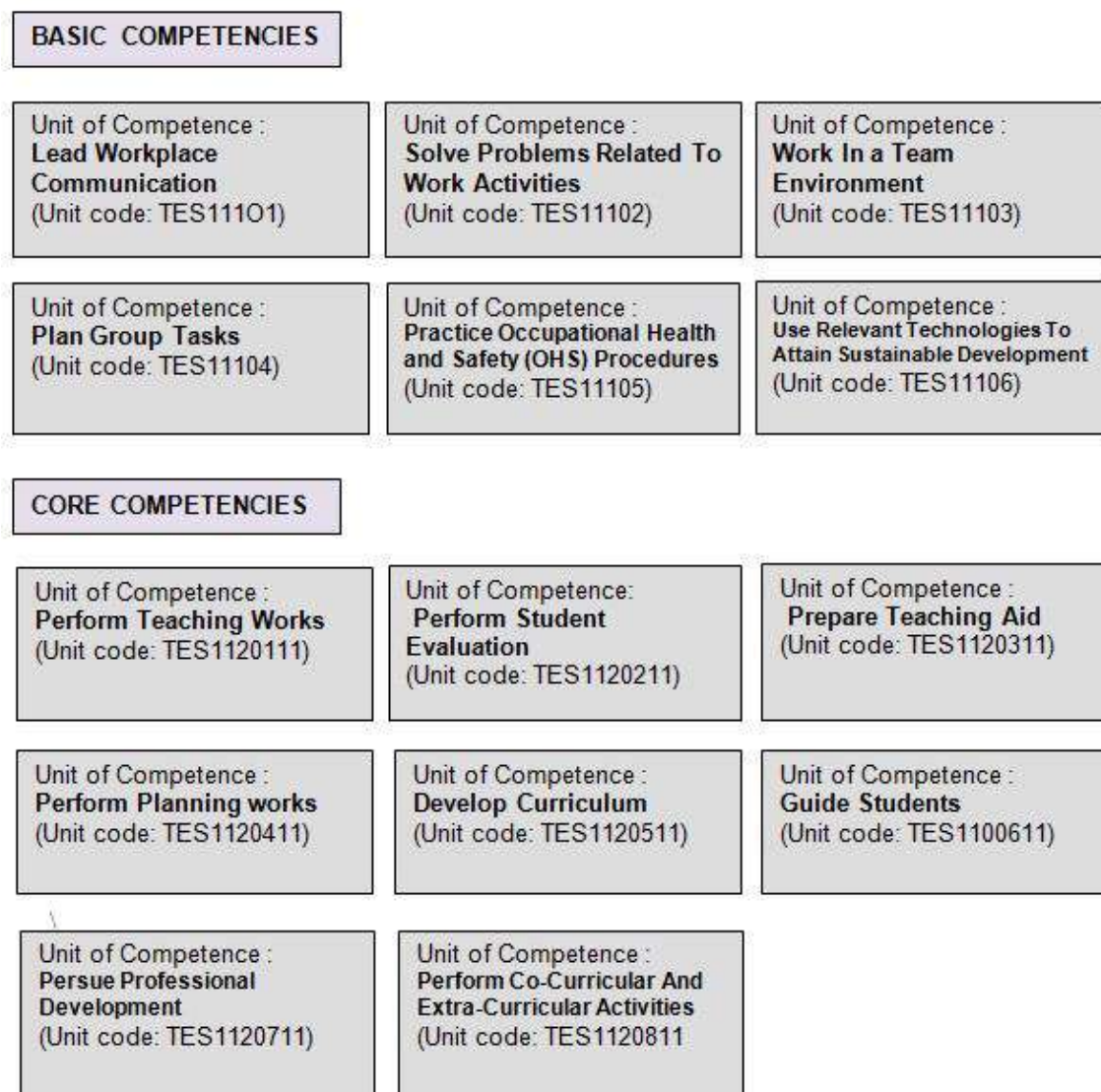
As a result, the National Competency for TVET teachers has two main components, Basic and core competencies. The basic competency consisting of many skills, mostly refers to as soft skills, such as lead workplace communication, solve problems related to work activities, work in

a team environment, plan group tasks, practice occupational health and safety procedure, and use relevant technologies to attain sustainable development. The core competencies included perform teaching works, perform student evaluation, prepare teaching aid, perform planning works, develop curriculum, guide students, pursue professional development, and perform co-curricular and extra-curricular activities. In addition, in each unit of the competency of the national competency standard for TVET teachers have included detail elements, range of variables, and clear evidence guide. It can be concluded that, the national competency standard for TVET teachers in Cambodia focuses on the pedagogical skills only since it doesn't mention about the professional skill at all.

Figure 2: Format of the Competency Standard

UNIT TITLE: The title of the general area of competency (must be 100 characters or less)	UNIT CODE:
UNIT DESCRIPTOR: Assist with clarifying the unit title and notes in any relationship with other industry units	
ELEMENTS AND PERFORMANCE CRITERIA MATRIX (Terms in the performance criteria that written in <u>Bold and Underlined</u> are detailed in the range of variable)	
ELEMENTS: Describe outcome which contribute to	PERFORMANCE CRITERIA: Specify the required level of performance
RANGE OF VARIABLE: Range of context and condition to which the performance criteria apply	
EVIDENCE GUIDE: Assist with interpretation and assessment of unit	

Figure 3: Competency map



By this time, the committee has defined all of the competencies profile in the national standard for TVET teachers. Next step, the committee will soon propose the workshop in order to validate the competencies with qualified and experienced TVET teachers. Then, they will produce learning package and assessment package to be ready for the implementation of the standard.

Conclusion

The national competency for TVET teacher in Cambodia has already been developed by a committee consisting of many members such as the national and international expert and consultant. The development process has produced the completed competencies profile for TVET teacher and later on it was paused due to some technical

problem. The development committee claimed that the process will be continue soon to the validation of the competencies, develop learning and assessment packages and then put the standard into implementation as soon as possible.

To improve the quality of TVET teacher, the majority of the principals suggested that the graduates from the TVET Instructor Program undergo on-job training at the industries for at least one year before being nominated to work as instructors. The final outcome of the research will contribute to the development of the Regional Standard for TVET Personnel, which in turn leads to the improvement of quality of the training courses offered at the TVET institutions in Cambodia, as well as the TVET personnel, whose capacities and competency will be recognized within the region. It may lead to the development of the agreement within the ASEAN countries to allow the flow of the labor force, particularly the TVET personnel, among them.

The challenges to the implementation of the Regional Standard for TVET Personnel, as most respondents stated, would be the limited capacities of the TVET personnel, who are well-known for the lack of both technical and soft skills. Another obstacle to successful implementation of the standard would be the lack of teaching and learning resources as well as the laboratory equipment. Most TVET institutions lack modern textbooks, and teaching aids and modern laboratory equipment, which are considered one of the factors affecting the quality of instruction and training as a whole.

The suggestions for the successful implementation would be the staff exchange program; that is the vocational and technical education and training institutions who are more experienced and widely recognized for the quality of training delivery should offer technical assistance to those which are not. Furthermore, the more developed TVET institutions should provide some assistance in terms of teaching and learning as well as laboratory materials and equipment to the less-developed ones. Additionally, staff exchange within the region should be well promoted so that the less experienced staff would be able to gain new knowledge, experience and skills for the professional development.

Reference

Competency Standard for TVET teacher handbook, Department of National

COUNTRY REPORT 3

Indonesia

*Lesson learned from the development and implementation of
National TVET-Teacher Standard in Indonesia for the development of
Regional TVET-Teacher Standard Development of National and
Regional Standard for TVET Personnel*

Organizations/Institutions

***Universitas Negeri Surabaya
Universitas Negeri Yogyakarta***

Team

*Prof. Dr. Ekohariadi
Dr. M. Bruri Triyono
Dr. Lilik Anifah, S.T., M.T.
Dr. B. Sentot Wijanarka, M.T.
Ari Wardhono, S.T., M.T., Ph. D.
Dr. Ratna Wardani
Lutfiyah Hidayati, S.Pd., M.Pd.
Yeni Anistyasari, S.Pd., M.Kom.
Dewi Eka Murniati, S.E., M.M.
Wahyu Dwi Kurniawan, S.Pd., M.Pd*

January-September 2016

Introduction

1.1. Overview of The Country

Indonesia consists of hundreds native ethnic and linguistic groups. Indonesia is often referred to as the world's largest archipelago, a name which aptly represents its 17,000 or so islands which span more than 5000 km (around 3,200 miles) eastward from Sabang in northern Sumatra to Merauke in Irian Jaya. If you superimpose a map of Indonesia over one of Europe, you will find that it stretches from Ireland to Iran; compared to the United States, it covers the area from California to Bermuda.

There are eight major islands or island groups in this enormous chain. The largest landmasses consist of Sumatra, Java, Kalimantan (Borneo), Sulawesi (Celebes) and Irian Jaya (the western half of Papua New Guinea).

Education in Indonesia falls under the responsibility of the Ministry of Education and Culture/MoEC (Kementerian Pendidikan dan Kebudayaan or Kemdikbud) and the Ministry of Religious Affairs (Kementerian Agama or Kemenag). In Indonesia, all citizens must undertake nine years of compulsory education which consists of six years at elementary level and three in secondary level. Islamic schools are under the responsibility of the Ministry of Religious Affairs.

The school year is divided into two semesters. The first commences in July and ends in December while the latter commences in January and ends in June.

Table 1. Education Level/Grade and typical age in Indonesia

Level/Grade	Typical age
Preschool	
Pre-school playgroup	3-4
Kindergarten	4-6
Primary School	
1st Grade	6-7
2nd Grade	7-8
3rd Grade	8-9
4th Grade	9-10
5th Grade	10-11
6th Grade	11-12
Middle School	
7th Grade	12-13
8th Grade	13-14

Level/Grade	Typical age
9th Grade	14-15
High School/Vocational Education High School	
10th Grade	15-16
11th Grade	16-17
12th Grade	17-18
Post-secondary education	
(College or University)	Ages vary (usually four years, referred to as Freshman, Sophomore, Junior and Senior years)
Graduate education	
Adult education	

1.2.TVET and TVET Personnel Standard in The Country

Vocational education defined as a curriculum which requires the individual to “understand and apply various levels of mathematics and science appropriate to the occupation. The science and mathematics requirement is more advanced than that required for a middle-type craft or skilled-trades occupation [1].

The challenges for TVET are its contribution to the development of a network for information and technology transfer, empowering the schools and strengthening the training curriculum and program development. Indonesia moves toward the era of economic globalization, the economy requires that TVET provides the skills and knowledge for graduates to become a cadre of productive workforce.

Future development of TVET in Indonesia is anchored on 3 government pillars: (1) to improve the quality and relevancy of TVET; (2) to extend access to vocational education; and, (3) to implement good governance in managing TVET schools. Pursuing these goals, is necessary because of the structural shift of the Indonesian economy, which changes the characteristic of the labour force and the demand for science and work skills. This policy shift affected the manner by which TVET is managed, which requires the active involvement of industry in the setting of standards, the development of the curriculum and in the overall management of the TVET system [2].

Indonesia has developed the Indonesian Qualifications Framework (IQF). The IQF holds a legal endorsement in the form of Presidential Decree no. 8/2012. This policy applies to all levels of education from elementary through college. Based on this reality, the Indonesian standard for Vocational Teachers need to be developed considering vocational school teachers has its own characteristics.

1.3.How this Research Contribute to The Development or Improvement of TVET Personnel in The Country

This research is useful to give a real picture of TVET in Indonesia, on the perception of TVET personnel, policy, and how to make improvements and to determine next steps. In addition, Indonesia is a vast country, each region has its own peculiarities. This causes the policy should be made flexible by considering local knowledge and local potential of each region. For example, conditions in Kalimantan Island is not the same as in Java, the development of TVET should consider this.

Currently, Indonesia has a National Qualification Framework but this rule refers to all levels of education, so it is necessary to have specific regulations on personal TVET teachers. This research is useful contribute to provide input on the development of TVET personnel in Indonesia (especially for Vocational Teachers). Based on the survey results and interviews, there are also constructive suggestions for the development and implementation of TVET personal standards in Indonesia.

Research Questions

Part A. DEVELOPMENT PROCESS OF NATIONAL STANDARD FOR TVET PERSONNEL (Esp. TEACHERS)

1. The Process and the Committee. 1. 1. What were the processes involved in the development of the National Core Standards of TVET Teachers? 1. 2. Who were involved in the development processes who assigned them 1.3. What is the structure/ organisation of the team (composition)
2. Contents and Structure 2.1. What are the contents/elements? 2.2. What is the structure of the National Core Standards?
3. Dissemination 3.1. What were the steps in the dissemination of the National Core Standards? 3.2. Who took charge in the dissemination of National Core Standards 3.3. How is it disseminated and what forms of dissemination?
4. Issues and Recommendations 4.1. What issues were raised in the development and dissemination of National Core Standards? 4.2. What suggestions or recommendations to improve the development and dissemination processes

Part B. IMPLEMENTATION OF NATIONAL STANDARD FOR TVET PERSONNEL (Esp. TEACHERS)

5. What are the requirements to become a training/education providers of TVET Teachers 6. What are the education and training for TVET Teachers to meet the requirements in the standard?
8. What are the assessments methods used to determine qualified candidates who meet the core standards?
8. Who conducts the assessment to determine if the Teachers meet the core standards? 9.What are the requirements of the assessors

- | |
|--|
| 10. What agency certifies the candidate who attains the core standards of TVET Teachers? |
| 11. What are the challenges, issues, and recommendations in the implementation of the national core standards? |

Part C. EXPECTATION FOR THE REGIONAL CORE STANDARDS FOR TVET PERSONNEL (Esp. TEACHERS)

- | |
|--|
| 12. What would be the perceived benefits of having regional (ASEAN) core standard for TVET teachers? |
| 13. What are the expected components to be included in the regional (ASEAN) core standard for TVET teachers? |
| 14. How will the country members utilise the regional (ASEAN) core standard for TVET teachers? |
| 15. Is there any other suggestion for developing the regional (ASEAN) core standard for TVET teachers? |

Methods

3.1. Study Design

This research using Qualitative and Quantitative methods, whereas qualitative methods using questionnaires and document analysis. While the qualitative use of questionnaires, interviews, and document analysis. Data were collected by sampling based on the economic level of each province and school accreditation. So it is expected the data can be representative

3.2. Data Sources/Collection

(See Blueprint in the Comparative Analysis Part 1)

Results

4.1 Outcomes

4.1.1. Teacher Survey

PART 1 - PERSONAL DATA

1.1. Name (Optional)

.....

1.2. Name of school/college :

Schools surveyed is derived from three economic levels in Indonesia. Each area is represented by school that has accreditation A, B, and C (it contain public and private school). And every school come from a wide variety of majors.

School that already surveyed are:

- SMKN 2 LUMAJANG East Java

- SMKN 6 SURABAYA East Java
- SMK PGRI 1 Gresik East Java
- SMK SEMEN Gresik East Java
- SMKN 3 Bontang, East Kalimantan
- SMKN Trowulan I Mojokerto East Java
- SMKS PUTRA BANGSA Bontang East Kalimantan
- SMKN 1 Bangkalan
- SMK Bina Dirgantara Solo
- SMK Negeri 1 Nglipar Gunung Kidul Yogyakarta
- SMK Maarif Wonosari Gunung Kidul Yogyakarta
- SMKN 1 Nanggulan
- SMK Leonardo Klaten, Jawa Tengah
- SMK Negeri 3 UKUI, Riau, Sumatera
- SMK Muhammadiyah 1 Sleman Yogyakarta
- SMK Muhammadiyah Prambanan
- SMKN 2 Kebumen
- SMK Warga Surakarta
- SMK N 6 YK
- SMK Bhineka Karya Surakarta
- SMK Muhammadiyah 3 Yogyakarta
- SMKN 1 SEI Kanan
- SMKN1 P. Kerinci
- SMKN 1 Kerumutan
- SMKN 2 Pengasih
- SMK N Babirik Kalimantan Selatan
- SMKN 1 Pangkalan Lesung
- SMK 1 Pamekasan Madura

1.3. Gender

Of the 256 analyzed the data, there are 89 women and 167 men.

14. The respondents are working at:

Of the 256 data taken entirely worked as a teacher TVET.

1.5. Under which Ministry is your school represent:

Of the 256 data all working under the Ministry of Education and Culture.

1.6. Highest Qualification:

Based on the data, there are 48 teachers who educated Master background ,206 Bachelor Degree, Diploma IV 1 teacher, and Diploma III 1 teacher.

1.7. Area of Specialisation: (in progress)

Expertise	Education	111
	Research	2

	ICT	25
	Management	7
	Curriculum	0
	Electrical Engineering	8
	Bisnis & Administration	15
	Engineering	72
	Mechanical	3
	Others	25

1.8a.No. of Years of Work Related Experience: 8 months-33 years but average 15 years 1.8b.

1.9a. Were your teaching competencies assessed to be a teacher?

254 the respondents has teaching competencies assessed to be a teacher.

1.9b.How did you rate the assessment?

11 respondents difficult doing assessment, 181 answer medium, and 62 easy doing assessment.

1.9c. Methods used: portofolio, psycomotoric test, cognitive test, individual test, project based

1.11. Where did you get your certificate/qualification?

155 respondents get their certificate from local

1 from international certificate

100 teachers do not have certificate yet

1.12. Do you think the assessors well trained and knowledgeable? 177 respondents answer the assessors well trained and knowledgeable

1.13. Do you have any recommendation for the assessment process? Please specify

Assessment process standardized by the Department of Education in the district policy
The assessment should include aspects of knowledge, skills, and attitudes, during the process from start to finish learning
Profession tests conducted in each department
Assessment should be done with more detail
Assessment should also by making the relevant modules

PART 2 - STATUS OF DEVELOPMENT AND IMPLEMENTATION OF NATIONAL STANDARDS FOR TVET PERSONNEL

2.1. Status of development of national standard for TVET personnel.

Out of 256 respondents 59.375% respondents answered that teacher standard has been developed, not yet developed (35.9375% respondents), and not sure (4.6875% respondents). The rests were missing data not answered the questions.

Out of 256 respondents 7.8125% respondents answered that School/college Principal/Director Standard has been developed, not yet developed (23.045% respondents), and unsure (69.14% respondents).

Out of 256 respondents 13.28% respondents answered that trainer of trainers standard has been developed, not yet developed (17.97% respondents), and unsure (68.75% respondents).

Out of 256 respondents 23.83% respondents answered that industry trainer standard has been developed and 5.47% respondents answered not yet developed, and 70.7% respondents answer not sure.

2.2. Status of implementation of national standard for TVET personnel.(in progress)

Out of 256 respondents 60.54% respondents answered that teacher standard has been implemented, 31.64% respondents answered not yet implemented, and 7.81% respondents answered not sure.

Out of 256 respondents 13.28% respondents answered that School/college Principal/Director Standard has been implemented, 25% respondents answered not yet implemented, and 61.72% respondents answered not sure.

Out of 256 respondents 11.33% respondents answered that trainer of trainers standard has already been implemented, 15.625% respondents answered not yet implemented and 73.05% respondents answered not sure.

Out of 256 respondents 20.3125% respondents answered that industry trainer standard has already been implemented and 4.3% respondents answered not yet implemented, and 75.39% respondents answered not sure.

PART 3 - ISSUES AND RECOMMENDATIONS IN THE DISSEMINATION OF NATIONAL STANDARD

3.1. In the case that the national standard, especially for TVET teachers has been implemented, what were the issues/problems encountered during the dissemination of the national standard for TVET Personnel, particularly for Teacher Standard? *(If the standard is yet to implement, skip to Part 5)*

Limited time	Unclear guideline	Limited briefing or capacity building	Others, please specify and elaborate
71	77	46	Not really understand lack of socialization

3.2. What would you recommend to improve the dissemination process of the national standard for TVET Personnel, particularly for Teacher Standard?

- Using media for dissemination
- Development of teacher standards need to be more encouragement
- Training for teachers
- Dissemination process need to be improved
- It should be a good preparation for the implementation
- Dissemination team need more time
- Development of teacher standards need to be improved and increased
- Communication, English speaking barriers;
- Uneven competencies among teachers from country to country
- There is a need for more specific technical guidelines for the field of expertise nationally and regionally

PART 4 - ISSUES AND RECOMMENDATIONS IN THE IMPLEMENTATION OF NATIONAL STANDARD

4.1. In the case that the national standard, especially for TVET teachers has been implemented, what were the issues/problems encountered during the implementation of the national standard for TVET Personnel, particularly for Teacher Standard?

Limited time in preparation	Unclear guideline	Limited briefing or capacity building	Others, please specify and elaborate
67	76	37	--

4.2. What would you recommend to improve the implementation process of the national standard for TVET Personnel, particularly for Teacher Standard?

- Socialization need to be improved
- Need good preparation for the implementation in learning and teaching process
- National standard teacher certification more accurately
- Should be a set standard of judgment indicates the level of achievement of national and regional standards
- Facilities and infrastructure already exist but have not met the appropriate ratio so students need to upgrade infrastructure and facilities
- Need more training and socialization for teachers
- clearly need socialization

PART 5 - EXPECTATION FOR THE REGIONAL CORE STANDARDS FOR TVET PERSONNEL

5.1. What are your perceived benefits of having regional (ASEAN) core standards for TVET personnel?

Having regional standards for TVET personnel will	Strongly Agree 4	Somewhat Agree 3	Somewhat Disagree 2	Strongly Disagree 1
1. Harmonize TVET development in the region	77	67	7	--
2. Provide platform for benchmarking	69	94	9	--
3. Improve the quality of TVET overall	83	78	--	--
4. Strengthen ASEAN integration	83	93	2	--
5. Facilitate mobility of human resources	79	97	2	--
6. Others (please specify):				

Having regional standards for TVET personnel will	Strongly Agree 4	Somewhat Agree 3	Somewhat Disagree 2	Strongly Disagree 1

Others:

- Add teachers among ASEAN Community
- Establish communication teachers in the same field
- Adds cooperation
- Improving the quality of vocational education Build mutual recognition
- Build mutual recognition
- Ensuring the quality of schools

5.2. What are the expected (preferred) components to be included in the regional (ASEAN) core standard for TVET teachers?

model 1 Basic and common (Professional) (Communication, problem-solving, teamwork, etc.) Core/functional (teaching, learning, and assessment)	model 2 Basic and common (Professional) (Communication, problem-solving, teamwork, etc.) Core/functional (teaching, learning, and assessment)	model 3 Education laws and regulations (institutional and national) Pedagogy and pedagogical psychology Didactic and teaching methodology Subject-based methodology	model 4 Pedagogic, Social, Character building, Professiona l, Religion
54	150	31	1

5.3. In terms of leveling of teacher competencies, what would you prefer the regional (ASEAN) core standard for TVET teachers to have?

One level	Few levels (E.g. Level1: novice, Level 2:intermediate, Level 3: advance/expert)	One level with more responsibilities as career progresses*	Proposed leveling Level (According teacher competence)
42	149	50	3

5.4. How will you use the regional (ASEAN) core standard for TVET teachers in your country/school?

The use of the regional (ASEAN) core standard for TVET teachers	Strongly Agree 4	Somewhat Agree 3	Somewhat Disagree 2	Strongly Disagree 1
1. To review/update the national standard	61	93	--	--
2. To use it as a reference only	11	71	73	46
3. To use it as an added reference and value of the national standard	63	105	27	--
4. To adopt it as the national standard	50	100	26	--
5. Not going to use it	--	17	60	92
6. Others (please specify):				

5.4. Please list any suggestions for developing the regional (ASEAN) core standard for TVET personnel, if any.

- Implemented into remote areas
- Dissemination to all teachers
- Improving regional communication
- Socialized to a vocational school in every district of the city;
- TVET program is realized in every vocational school in all area
- Socialized to vocational school through the Department of Education
- Developed on the basis of national work culture
- Development refers to international standards
- Engage users graduates
- The need for control; not only urban areas are used as guidelines
- The addition of adequate facilities for students

Teacher Interview (presentation in the report can be improved)

General questions	
1. Do you already have the National Core Standards for TVET Teachers in your Country/Institution?	42 teachers answer already have the National Core Standards for TVET and 28 have not the National Core Standards for TVET Teachers yet
2. Since when do you have them?	1997 2011 Since became a teacher 2006

Part A. DEVELOPMENT PROCESS OF NATIONAL STANDARD FOR TVET PERSONNEL (Esp. TEACHERS)

3. How did you receive the National Core Standards for TVET Teachers? (Email, Hardcopy, Workshop) 4. Was there a guideline? 5. Was there need for more clarification on your side? 6. What concerns and issues did you raise in the development and dissemination process? 7. What suggestions or recommendations to improve the development and dissemination process can you give?	workshop, hardcopy, Email, and softcopy yes (1)Government Regulation No. 20/2003 (2) Education Ministry Regulation No 19 2005 about National Education Standard National Instructors Ada, Musyawarah Kerja Kepala Sekolah (MKKS) By KTSP Curriculum socialization – Confusing with the curriculum 13 – Curriculum change has not been fixed – inequality between theory in the implementation based conditions of student input – can not reach all teachers – Lack of understanding of the development and the achievement of national education standards – The socialization of teachers – The increase in aid from the government and Training – Education and training to the lowest level – More intensive training – More workshops and curriculum development
B. IMPLEMENTATION OF NATIONAL STANDARD FOR TVET PERSONNEL (Esp. TEACHERS)	
8. What are your challenges and issues in the implementation of the National Core Standards for TVET Teachers?	– the ability of teacher competence is limited – limited facilities

a. How have you managed and addressed these challenges? b. How could these challenges have been avoided? 9. Do you have any recommendations for the implementation of the Regional (ASEAN) Core Standards for TVET Teachers?	– up to date information continuously and thorough socialization – Its base is still too wide so that the necessary adjustments, try to meet the standards with an emphasis on certain points – lack of training and practice in vocational education – less disjointed quality of graduates with the labor market needs – provide recognition through professional certification – Communication with business and industry about labor needs and skills – The Government will facilitate TVET teachers – Facilities and infrastructure to improve the competency of teachers need to be increased – There needs to be a technical manual that is easy to understand – Standards of education personnel who have a vocational competence certificate, diploma of professional certification other than linear with the subject they teach in school
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Part C. EXPECTATION FOR THE REGIONAL CORE STANDARDS FOR TVET PERSONNEL (Esp. TEACHERS)

10. What are your expected components to be included in the Regional (ASEAN) Core Standards for TVET Teachers? • Anything that may compromise pedagogical, technical/vocational, personal attributes? 11. Which structure would you recommend for the Regional (ASEAN) Core Standards for TVET Teachers?	– Functional core, pedagogical abilities, personal competence, social competence and competence – 8 standard education – (1) The establishment of the working culture (2) Strengthening of teamwork (3) Innovative (4) people entrepreneurship – Standards of education personnel who have a vocational
--	--

12. How will you use the Regional (ASEAN) Core Standards for TVET teachers? a. Could the new standards be used as a referencing/benchmarking/strategic tool to improve the National Core Standards for TVET Teachers?) b. Are there other strategies that may be relevant?	competence certificate, diploma of professional certification other than linear with the subject they teach Pedagogic, Social Character, Professional Life skills education (life skills) as well as the benefits of local, national and global can be focused The new standard can be applied to improve the National Core Standards, required continuous monitoring and evaluation As a reference value-added
13. What would be the perceived benefits of having Regional (ASEAN) Core Standards for TVET Teachers? 14. Where do you see possible challenges? 15. Do you have any other suggestion for developing the Regional (ASEAN) Core Standards for TVET Teachers?	– To obtain the expected goals relating to MEA – uniformity in vision and mission – For teaching guidelines – Monitoring, and reporting the results of national education standards – Lack of productive teachers and inadequate infrastructure – Heterogeneous classes – The application of highly depending on the circumstances – Competency standards and acceptable in the job market Increased competence of productive teachers and the infrastructure Always follow the development of science and technology development of life skills education, local excellence and entrepreneurial

Principal Survey

P A R T 1 - PERSONAL DATA (can be kept by the researchers confidentially, no need to report personal details)

Name: (optional)	Institution Name and Country:	Position:
_____	SMKN 2 LUMAJANG	School Principal of SMKN 2 LUMAJANG
_____	SMKN 6 SURABAYA	School Principal of SMKN 6 SURABAYA
Drs. Arief Susanto, M.Pd.	SMK PGRI 1 Gresik	School Principal of SMK PGRI 1 Gresik
Setiyo Budi	SMK SEMEN Gresik	School Principal of SMK SEMEN Gresik
Achmad Badrus, M.Pd	SMKN 3 Bontang, Indonesia	School Principal of SMKN 3 Bontang
Siti Fatimah, S.Pd.	SMKN Trowulan I Mojokerto	School Principal of SMKN Trowulan I Mojokerto

Gender:		
_____	SMKN 2 LUMAJANG	F
_____	SMKN 6 SURABAYA	M
Drs. Arief Susanto, M.Pd.	SMK PGRI 1 Gresik	M
Setiyo Budi	SMK SEMEN Gresik	M
Achmad Badrus, M.Pd	SMKN 3 Bontang, Indonesia	M
Siti Fatimah, S.Pd.	SMKN Trowulan I Mojokerto	F

Started working in current position or duration (in years): average already as a school principal for 3 years

Area Specification:

_____	SMKN 2 LUMAJANG	Bisnis & Administrasi
_____	SMKN 6 SURABAYA	Education
Drs. Arief Susanto, M.Pd.	SMK PGRI 1 Gresik	Education

Setiyo Budi	SMK SEMEN Gresik	Education
Achmad Badrus, M.Pd	SMKN 3 Bontang, Indonesia	Education
Siti Fatimah, S.Pd.	SMKN Trowulan I Mojokerto	Education

PART 2 - STATUS OF DEVELOPMENT AND IMPLEMENTATION OF NATIONAL STANDARDS FOR TVET PERSONNEL

2.1. Status of development of national standard for TVET personnel.

Status	Teacher standard	School/college Principal/Director Standard	Trainer of trainers standard	Industry trainer standard
Developed	6	6	1	1
Not yet developed			3	3
Not sure			2	2

2.2. Status of implementation of national standard for TVET personnel.

Status	Teacher standard	School/college Principal/Director Standard	Trainer of trainers standard	Industry trainer standard
Implemented	6	6	1	1
Not yet implemented			3	3
Not sure			2	2

PART 3 - ISSUES AND RECOMMENDATIONS IN THE DISSEMINATION OF NATIONAL STANDARD

3.1. In the case that the national standard, especially for TVET teachers has been implemented, what were the issues/problems encountered during the dissemination of the national standard for TVET Personnel, particularly for Teacher Standard? *(If the standard is yet to implement, skip to Part 5)*

Limited time	Unclear guideline	Limited briefing or capacity building	Others, please specify and elaborate
4	2	2	

3.2. What would you recommend to improve the dissemination process of the national standard for TVET Personnel, particularly for Teacher Standard?

- Training
- Accompaniment
- Evaluation and follow-up
- Continuous Training

PART 4 - ISSUES AND RECOMMENDATIONS IN THE IMPLEMENTATION OF NATIONAL STANDARD

4.1. In the case that the national standard, especially for TVET teachers has been implemented, what were the issues/problems encountered during the implementation of the national standard for TVET Personnel, particularly for Teacher Standard?

Limited time	Unclear guideline	Limited briefing or capacity building	Others, please specify and elaborate
4	2	2	

4.2. What would you recommend to improve the implementation process of the national standard for TVET Personnel, particularly for Teacher Standard?

- Increasing the number of assessors
- Training
- Accompaniment
- Evaluation and follow-up
- Extra teaching hours set out in the curriculum structure

PART 5 - EXPECTATION FOR THE REGIONAL CORE STANDARDS FOR TVET PERSONNEL

5.1. What are your perceived benefits of having regional (ASEAN) core standards for TVET personnel?

Having regional standards for TVET personnel will	Strongly Agree 4	Somewhat Agree 3	Somewhat Disagree 2	Strongly Disagree 1
1. Harmonize TVET development in the region	6			
2. Provide platform for benchmarking	6			
3. Improve the quality of TVET overall	6			
4. Strengthen ASEAN integration	6			
5. Facilitate mobility of human resources	6			
6. Others (please specify): _____				

ASEAN competitiveness to face global competition
Improving competitiveness

5.2. What are the expected (preferred) components to be included in the regional (ASEAN) core standard for TVET teachers?

Model 1	Model 2	Model 3	Model 4 Your proposed model
1	6	1	

5.3. In terms of leveling of teacher competencies, what would you prefer the regional (ASEAN) core standard for TVET teachers to have?

One level	Few levels (E.g. Level1: novice, Level 2: intermediate, Level 3: advance /expert)	One level with more responsibilities as career progresses*	Your proposed leveling
	5	1	

5.4. How will you use the regional (ASEAN) core standard for TVET teachers in your country/school?

The use of the regional (ASEAN) core standard for TVET teachers	Strongly Agree 4	Somewhat Agree 3	Somewhat Disagree 2	Strongly Disagree 1
1. To review/update the national standard	6	--	--	--
2. To use it as a reference only	1	--	--	5
3. To use it as an added reference and value of the national standard	5	--	--	1
4. To adopt it as the national standard	2	--	--	4
5. Not going to use it	5	--	--	1
6. Others (please specify): _____		--	--	--

Untuk referen si pengambilan kebijakan

5.4. Please list any suggestions for developing the regional (ASEAN) core standard for TVET personnel, if any.

- a) Pedagogic competence, social, professional and personable improved

Principal Interview

1. What is the current status of development of the National Core Standard for TVET Personnel? Is the Teacher Standard already developed/implemented/yet to implement?

It has been developed in part by referring to SKKNI - It

 - has been developed and applied but not maximized
 - Already implemented
2. In the case that the national standard, especially for TVET teachers, has been implemented, since when do you implement it in your institution?
 - Some teachers have had professional certificate and a certificate of competency assessors (BNSP)
 - Approximately 2006 For the LSP 2016
 - Approximately 2006
3. How did you receive the National Core Standards for TVET Teachers? (Email, Hardcopy, Workshop)
By Email, Hardcopy, Workshop
4. Was there a guideline? Did you develop a guideline for your teachers?
 - From the central government (BNSP)
 - From the central government (Ministry of Education)
5. Was there need for more clarification on your side?
 - No, because everything is governed from government
 - Remarks refers to the guidelines from government
6. How did you disseminate the Teacher Standard in your institution?
 - The workshop / coordination
 - Teachers have been trained to disseminate and implement in teaching learning process
 - Description obtained from the Department of education and LPMP through workshops
7. What concerns and issues did you raise in the development and dissemination process?
 - Less systematic
 - There are different perception of the standard of competence in implementation
 - Lack of intent and spirit of teachers to implement the standards of competence
 - For the LSP program is feared resumption of the program.
 - Concerns / problems regarding the absorption of teachers vary, causing uneven development of national standards
8. What suggestions or recommendations to improve the development and dissemination process can you give?
 - Should be done in a systematic, structured through the existing path (Dispendik)
 - With continuous training, certification, followed by continuing education programs
 - monitoring and mentoring continuously is very important

9. What are the requirements to become a training provider of TVET teachers?
 - There is an organizational structure,
 - office,
 - work programs, supported by documentation.
 - Having a certificate as instructors and assessors
10. What type of institution does it need to be?
 - The Ministry of Education,
 - Department of Education,
 - Schools,
 - LSP
 - Universities,
 - LPMP
 - LSP-P1
11. What is the needed status in accreditation that examines the status of financial, equipment, and infrastructure of the institutions? (if apply)

Independent

12. What are your challenges and issues in the implementation of the National Core Standards for TVET Teachers?
 - c. How have you managed and addressed these challenges?
 - d. How could these challenges have been avoided?
 - Financial problems by seeking alternative funding
 - Problems with the training process because it held many times
 - Recognition of industry
 - Openness teachers
 - Teachers perceptions sometime different
 - The ability of teachers to implement standard core competencies
 - Explaining / feedback to teachers about the challenges of globalization in the world of education, it is to motivate teachers
 - Provide mentoring and guidance
13. Do you have any recommendations for the implementation of the Regional (ASEAN) Core Standards for TVET Teachers?
 - By giving understanding to all lines from the center to the school, either through the Internet, workshops, seminars and so on.
 - Need to do an evaluation and follow-up programmed
14. What are your expected components to be included in the Regional (ASEAN) Core Standards for TVET Teachers? Anything that may compromise pedagogical, technical/vocational, personal attributes?

- Learning the character corresponding values embraced ASEAN community. This is useful so that no etiquette and maintain harmony among ASEAN countries, particularly in the field of education
 - For vocational education / vocational must be recognition of vocational competencies (skills), so it is not enough just professional.
 - It is contain four standard component of teacher competence
15. Which structure would you recommend for the Regional (ASEAN) Core Standards for TVET Teachers?
- Referring to the teacher competency standards in Indonesia plus vocational competencies (skills)
 - Four of the teacher competency without leaving vocational skill
16. How will you use the Regional (ASEAN) Core Standards for TVET teachers?
- Could the new standards be used as a referencing/benchmarking/strategic tool to improve the National Core Standards for TVET Teachers?
 - Are there other strategies that may be relevant?
 - As a strategic tool and a major reference, so there is recognition of the competence of teachers in Indonesia on regional level
 - For reference and enrichment of national standards of competency of teachers in Indonesia
17. What would be the perceived benefits of having Regional (ASEAN) Core Standards for TVET Teachers?
- The existence of common standards between the ASEAN countries so that Indonesia does not fall behind and become a victim of the MEA.
 - Minimal has an equivalent standard of competence at the regional level
18. Where do you see possible challenges?
- From the principle of free market and MEA
 - In the implementation of the ASEAN Economic Community
19. Do you have any other suggestion for developing the Regional (ASEAN) Core Standards for TVET Teachers?
- Regional core standards should accommodate the opinions and suggestions from all ASEAN member countries. And discuss it with good.
 - Reference of the ASEAN level also need attention /scrutiny.

4.2 Discussion

Based on the survey results of 106 respondents said that TVET Standard cores have been developed, 75 respondents answer not yet developed, and 2 respondent answer not sure. It is reasonable for those who answered have been developed because:

- There is a document that states about KKNi (Qualification Standardization of National Framework) from The Ministry of Education and Culture.

- The existence of socialization of SKKNI from The Ministry of Department of Labor.
- There is some level of professional certification for professionals.

Indonesia has developed the Indonesian Qualifications Framework (IQF). The IQF holds a legal endorsement in the form of Presidential Decree no. 8/2012, and addresses schooling from Year 9 to TVET and Higher Education. The stages of the IQF's implementation are currently being designed.

The Ministry of Education and Culture has produced a key strategic document on the IQF (Directorate General of Higher Education, n.d.). According to the Minister of Higher Education, the IQF is 'one of the national standards in the education sector from which graduates, education and training institutions under the authority of the Ministry of Education and Culture could assess their learning outcomes or certificates' proficiency in conjunction with one of the relevant qualification levels specified in the IQF' (Directorate General of Higher Education, n.d, p. 3).

The Government of Indonesia sees the legal endorsement of the IQF in the context of other laws and regulations: for example Law no. 13/2003 pertaining to manpower development, Government Regulation no. 31/2006 regarding the National Job Training System, and Law no. 20/2003 concerning the National Education System. The IQF is also inline with existing regulations endorsed by other ministries and authorized institutions, concerning manpower quality and development and competence certification (Ministry of Education and Culture, 2013).

The IQF consists of 9 levels characterized by both learning outcomes and job-specific competences. Descriptors at each level specify the learning outcomes or competences that can be demonstrated by an individual at that level. Descriptors are divided into two categories: general and specific. The general descriptors cover personality, working attitude and ethics, and are applicable to every Indonesian citizen at every level. The specific descriptors describe the knowledge and skills mastered by the individual, and are level-specific.

Table 2. Academic Qualifications and Indonesian IQF level

Academic Qualifications	IQF	Technical and Vocational Education and Training	
S3	9	S3 (Applied)	Specialist
S2	8	S2 (Applied)	
	7		Profession
S1	6	D IV D III D II D I	
	5		
	4		
	3		
General High School	2	Vocational High School Junior High School	
Junior High School	1		

Table above illustrates the referencing scheme between the learning outcomes of different education streams and IQF qualification levels. This scheme will make it easier to ensure that graduates of educational programmes possess the right competences at the right level.

Indonesia has developed a standard of vocational education but still applies to all levels of formal and nonformal vocational education including vocational High School education, university, polytechnic and training. Unfortunately specific for vocational High School teachers standard are still not developed and now is in the development stage.

Based on interviews with experts in the Vocational Education states that the competencies required of vocational teachers must have three competencies, professional competence, pedagogical (to be able to teach and give examples to students), and the competence of assessing the results of the students' work. Based on the above, now Indonesia develops standards of Vocational High School teacher that the members of its committee (Badan Standar Nasional Pendidikan/BSNP) from universities and industry professionals. Later Vocational High School teachers in Indonesia is expected to have a minimum standard that applies to all areas.

Professional Teacher Education (PPG) is a higher education after undergraduate program that prepares students to have a job with a particular expertise in the requirements to become a teacher. Education teaching profession must be taken for 1-2 years after a candidate graduating from undergraduate educational program and non education undergraduate. Previous PPG is done for all levels of teachers from elementary, junior high, high school, or vocational high school. Starting next year, PPG held specifically for vocational school teachers that are expected to meet competence of vocational teachers according to standards that have been set.

We recommend that the university as a producer of vocational high teachers involved in the Policy Dialogue on TVET, not only of vocational and polytechnic teachers. Consider the university very important role in improving the quality of TVET personnel in Indonesia.

4.4 Significance

The research study could provide information about status of development and implementation of national standards for TVET personel, issues and recommendation in the dissemination of national standard, issues and recommendation in the implementation of national standard, and expectation for the regional core standards for TVET personel.

This study would be beneficial to Indonesian government to give a real picture of TVET in Indonesia, on the perception of TVET personnel, policy, and how to make improvements and to determine next steps. Indonesia is currently developing standards for Vocational High School teachers, because National Framework Indonesia still does not accommodate standard competencies that must be owned by a vocational school teachers whereas competency required of vocational teachers must have three competencies, professional competence, pedagogical (to be able to teach and give examples to students), and the competence of assessing the results of the students' work.

4.5 Implications

This research has provided an overview of development and implementation of national standards for TVET personel, issues and recommendation in the dissemination of national standard, issues and recommendation in the implementation of national standard, and expectation for the regional core standards for TVET personel beneficial Indonesian government to give a real picture of TVET in Indonesia, on the perception of TVET personnel, policy, and how to make improvements and to determine next steps.

Expectations with the standard of vocational teachers in Indonesia then all vocational teachers already have the required competence professional competence, pedagogical (to be able to teach and give examples to students), and the competence of assessing the results of the students'

work. This will have implications for the quality of vocational graduates in Indonesia have better skills and be able to compete in ASEAN.

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REPORT 4

Lao PDR

Lesson learned from the development and implementation of National TVET-Teacher Standard in Lao PDR for the development of Regional TVET-Teacher Standard

Organizations/Institutions

*National University of Lao (NUoL)
Faculty of Engineering (FEN)/Vocational Teacher Education Department (VTED)*

Team

*Assoc. Prof. Dr. Bounseng Khammounty
Prof. Dr. Boualinh Soysouvanh
Assoc. Prof. Dr. Khamphui Soutthisombath*

Assistance Team:

*Mr. Phannavong Bounphasouk
Ms. Ketdavanh Soysouvanh*

January-September 2016

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Abstract

Developing vocational education is an important strategy in current Lao education. However, vocational teachers are in a shortage and there isn't a sound system of training and cultivating these teachers. Especially, there hasn't formed any effective standard of vocational teachers. These three factors are the main reasons to hinder the development and increase of its quality and level. Therefore, establishing national standard of vocational teacher training is becoming very necessary. The purpose of this study was to explore the standard and system of vocational teacher training from two aspects, namely, grasping professional skills and professional teaching competence. Aside from the legal framework and education policy, the research team also considered two further aspects in developing the required standards, the specifics of vocational education and the results of an analysis of already existing standards.

The results revealed the development process of standards for vocational teachers at bachelor level in Lao PDR, based on the current situation of the national education sector. In order to emphasize the practical relevance of the study, it forwards a proposal of national standards for vocational teachers at bachelor level and recommends a strategy for how to implement these standards. For this, the study shows the necessity and the meaningfulness of standard development, the theoretical basis of standards, and the results and conclusions of a comparative analysis of currently existing standards, which have been incorporated into the development process.

The results also indicated that the teachers should know and do as specified in teaching standards. Teaching standards articulate sound principles of teaching practice. They describe in terms meaningful to teachers what they do and the challenging educational aims they are trying to achieve. Standards apply to the different contexts in which teachers work. Standards prescribe the standards to be met, not how they are met. Measures of the quality of teaching concentrate on and what teachers should know and be able to do and the quality of the opportunities they provide their students for learning.

The principal conclusion was that National standard of vocational teacher training will become a basis for vocational teacher qualification. According to this standard, vocational teacher qualification curriculum will be built and implemented by vocational educational institutions. The results of the survey are a common understanding of the necessary skills and competencies of TVET personnel and that TVET teacher training in particular differs significantly in the ASEAN member states. Common core standards for TVET personnel have the potential to lead to a better understanding. Clear, regionally accepted criteria for TVET teachers will serve as a guideline for

national teacher training curricula, can improve the comparability of TVET teacher qualifications and lead to increased acceptance for TVET personnel. In this regard, a commonly identified TVET teacher standard will eventually lead to increased employability of TVET graduates and better harmonised TVET systems in the region.

Introduction

Lao PDR still belongs to the group of least developed countries despite a strongly growing economy over the last several years. In 2010 the gross domestic product has grown by 8.3 % (cp. U.S. Department of State) and from 2011 to 2015 an average growth of at least 8.0 % is assumed (cp. MPI 2010, p. 11). Apart from this solely economic development, the Lao government is continuing to meet its poverty-related Millennium Development Goals to be achieved by 2015 and is striving to leave its status as a least developed country by 2020.

One of the most challenging tasks for this ambitious timeline is the development of the Technical Vocational Education and Training (TVET) sector. On one hand it must absorb an increasing number of young girls and boys, leaving school [“population in working age (15-64 years) will increase from 3.76 million people in year 2011 to 4.10 million in 2015” (MPI 2010, p. 12)] and on the other this sector has to provide enterprises with the required labour force. “In the year 2015, there will be a demand of 3.26 million workers, but the workforce supply will be only 3.17 million (including 276,828 new workers, average 55,365 workers per year)” (MPI 2010, p. 16).

At the moment the TVET sector in Lao PDR cannot meet with the expectations of the labour market in terms of both supply and demand. According to the Asian Development Bank, “The sector and labour market assessments indicate that

- TVET enrolments are declining in high-demand skill areas and where skill shortages are greatest (e.g., construction), and
- only a small proportion of companies recruit workers directly from TVET institutions and few companies have any relationship with TVET institutions” (ADB 2010a, p.5).

Furthermore, the aforementioned assessments reveal, that “employer and trade association interviews indicated a strong negative image of TVET. It was repeatedly stressed that TVET graduates at all levels have to be trained again by the economic units. The training currently being provided in TVET institutions was considered to be exclusively theoretical, and delivered by teachers (sometimes graduates from the TVET school) who do not have the necessary work experience or real skills” (ADB 2010a, p. 4). In the light of these reports it becomes all the more essential to separate the education of vocational teachers from their alma mater colleges in order to enable quality and evaluation at an academic level. Only then the vicious cycle can be interrupted in which poorly trained students stay at the same college to become poorly qualified vocational teachers to continue the insufficient training of a new generation of vocational students both perpetuating and even worsening the cycle.

A further difficulty is that vocational education, provided by the TVET-sector, increasingly falls short of the demand of the labour market. The labour market assessment identified “five major sectors of current and apparently likely continuing skills shortages” (ADB 2010b, p. 4): furniture, construction, construction sub-trades (masonry, carpentry, electrical, plumbing etc.), tourism and hospitality, mechanical maintenance and repair trades. The sobering forecast, identified by the

assessment, is justified by the fact that the number of skilled workers required (certificate level), trained by public TVET institutions, and has dropped in recent years.

A reverse in this trend cannot be expected in the near future. On the one hand, training in these trades is not attractive for young people, because it has a bad image, on the other, the schools are not keen on offering sufficient training, because it is too expensive, too difficult and has a bad reputation socially that reflects on them too. By contrast, higher diploma programmes (IT, business administration etc.) have become the fastest growing component of TVET, despite an even faster growing surplus of graduates. It can be expected, therefore, that skilled workers must still be recruited from neighbouring countries, from Vietnam in particular, to fill the gap.

In summary it can be said that the TVET-sector of Lao PDR suffers from a bad image, due to its inability to cater to labour market needs and a lack of adjusting to market supply and demand - particularly regarding skill levels and the significant lack in the sectors where training is most needed - and an insufficient number of vocational teachers, whose qualifications are anyway considered less than sufficient for the market needs.

In the light of these aforementioned shortcomings and in its endeavour to pave the way for building a skilful labour force, the Government of Lao has made great efforts to reform the national education system as committed by the National Education System Reform Strategy (NESRS) 2006–2015. Four key focus action areas have emerged (cp. MoE 2008, p. 10):

- increase the length of general education to 12 years,
- access expansion and a quality and relevance improvement programme,
- implementation of teacher education strategy and action,
- the expansion of technical schools and vocational training.

Within the framework of NESRS 2006-2015 and the Education Sector Development Plan (ESDP) 2011-2015, TVET in Lao PDR is regarded as an integral and crucial part in prepare employment by training its labour force and technicians at various levels of the economy to be equipped with the necessary knowledge, ability, skills and attitude. This will contribute to the socio-economic development of the country, especially the 7th National Socio-Economic Development Plan (NSED) 2011-2015. TVET plays a crucial role in providing learning–teaching on the technical–vocational aspects in vocational education based on the levels and courses that can create a Lao workforce with the knowledge, skills, and attitude necessary for working entrepreneurially with the capability of running a business by oneself as required by the labour market.

At the moment 21 technical and vocational schools and/or colleges under the supervision of the Ministry of Education and Sports (MoES) are in charge of providing vocational education in Lao PDR. Vocational schools under the supervision of the MoES offer vocational qualifications at different levels (Certificate, Certificate Vocational, Diploma, Higher Diploma and Higher Diploma Continuous) and in different professions, ranging from Accounting to Welding & Plumbing. An additional number of public TVET facilities under the aegis of other ministries,

mass organizations or administrations offer vocational education as well, not forgetting 321 Community Learning Centres and numerous private schools/colleges. Unfortunately comparable data is not available for all of these institutions. Furthermore, it must be considered that the table below (Fig. 2) does not clearly distinguish between academic and vocational education offers. Altogether the training facilities educate more than 50,000 vocational students per year.

According to the amended education law 2013, TVET consists of following levels:

- **Basic Vocational Education** at certificate level is vocational education comprising a training period of 6 months to 3 years for graduates of lower secondary school or the equivalent.
- **Diploma level is technical education** for graduates of certificate level through a continuing programme over a period of 1-2 years, whereas the regular programme covers a period of 2-3 years for a graduate of upper secondary school or the equivalent.
- **Higher diploma level** is technical education for diploma graduates over a period of 1-2 years of a continuing programme, whereas the regular programme is over 2-3 years for graduates of the upper secondary school or equivalent.

To enforce the education law as well as the labour law, the MoLSW and MoES have modified the Lao TVET system according to the Prime Minister's Decree on TVET and Skills Development as follows (PMO 2010, Art. 13) and displayed in Fig. 3:

1. Basic vocational education is vocational education for those graduated in lower secondary school, divided into regular and continuous or linkage courses and programmes as follows:
 - i. Regular courses and programmes for the lower level requires 3 years of learning;
 - ii. Continuous courses and programmes for the lower level applies an integrated form of vocational training, divided into 4 levels such as certificate 1, certificate 2; certificate 3 as a semi-skilled worker, and certificate 4 designates a skilled worker.
2. Middle vocational education is technical and vocational education for those, graduated from upper secondary school, divided into two different courses and programmes such as regular and continuous or linkage courses and programs as follows:
 - i. Regular courses and programmes require 2–3 years of learning for those who have completed upper secondary school or the equivalent based on the specialized courses and programmes;
 - ii. Continuous or linkage courses and programmes require 1–2 years for those who have completed lower grade 4 or skilled vocational education based on the specialized courses and programmes;
3. Higher vocational education is technical–vocational education for those who have completed secondary school or equivalent and is divided into two different courses and programmes such as regular and continuous or linkage courses and programs as follows:

- i. Regular courses and programmes for high level requires 2 – 3 years of learning for those who have completed secondary school based on the specialized courses and programmes;
- ii. Continuous or linkage courses and programmes for high level requires 1 – 2 years for those who have graduated from all types of medium vocational education based on the specialized courses and programmes;

Aside from TVET in the high vocational education, it can also be taken on through the higher continuous or linkage courses and programmes.

At the same time, an integrated approach of TVE was adopted. The Integrated Vocational Education and Training (IVET) refers to a technical and vocational sub-system, dealing with different types of education and training such as TVET, basic VET and basic skills training as a whole. In addition, the dual cooperative training approach has been developed and is in the process of pilot testing.

Aside from VTED two further institutions are in charge of the education of the vocational teacher. The Vocational Education Development Institute (VEDI) has been educating vocational teachers since 1999, albeit at the non-academic level of the Higher Diploma. Unfortunately, despite noteworthy national and international efforts and good progress, neither VTED nor VEDI are able to supply a sufficient number of well-trained teachers (less than 50/year). To alleviate the lack of well-trained teachers, not only VEDI but also several vocational colleges/schools, have been authorized by decree (MoES) to train vocational teachers up to bachelor level (continuing education) as well. Despite being authorized by the Ministry, these approaches have evolved in an uncoordinated manner disregarding commonly recognized standards.

In demand-driven vocational education systems, educational institutions receive signals as to which qualifications are in demand from enterprises and/or administrations and to what level an educated labour force is required. Regrettably Lao PDR does not offer an effective labour market information system. “The study noted that a critical weakness in the Lao PDR . . . [is] the absence of up-to-date market information, so that it acted as a constraint to economic planning and to the effective operation of the Technical Vocational Education and Training (TVET) system.” (Nam news Network 2010) Even within the responsible ministries reliable information is rarely available. What this implies is illustrated by the following example. For the school year 2008/09 the MoES officially reported a 1,065 teachers, working at vocational schools. For the same period a MoES-internal calculation counted 1,206 vocational teachers, a discrepancy revealing 13 % more than officially reported.

Nevertheless a survey in close cooperation with VEDI had been conducted in 2007, using these numbers to calculate teacher-student ratios. This survey revealed that on average one single teacher had to teach about 13.69 students in the 2006/07 school year. “Taking the student-teacher ratio into account it becomes obvious that the schools [in school year 2006/07] in general rely on a sufficient number of teaching staff. With the exception of TVS Champasak, TVS Luang Prabang, TVS Savannaket, and TS Vientiane Province, one teacher counts for less than 15 students, which is a quite an agreeable ratio.” (Sisoulath et al. 2007, p. 37) Three years later, in school year 2009/10, the teacher-student ratio on average remains comparable (14.20).

Just recently, the abovementioned figures were confirmed:

“According to reported figures, the student-teacher ratio at vocational schools looks like the following: There is one teacher teaching 33 students at Polytechnic College, one teacher teaching 30 students at Pakpasak Technical College, one teacher teaching 8 students at Lao - German Technical School, one teacher teaching 3 - 4 students at Houaphan Integrated Vocational Education School and so on. The ratio between teachers and students is not balanced and this

problem is difficult to solve. Standards, describing the required qualification of vocational teachers, are not available yet. These standards are crucial in terms of educating skilled workers, according to the demands of the national and regional labour markets. (cp. Thongdaeng Sihalath 2012, p 1).

Until now there has been no specification of a target ratio of students to teachers for vocational education in Laos. In 2007 the World Bank in conjunction with the MoES formulated the following numbers applicable to general education: “The Teacher Education Strategy for 2006-2015 and the Teacher Education Action Plan for 2006-2010 (TESAP) lay out specific targets in the area of ensuring adequate teacher supply and training. Among these are student-teacher ratios of 20:1, 30:1, and 27:1 in pre-school, primary and secondary respectively.” (Benveniste 2007, p. 102) Since April 2012 the Prime Minister’s Decree No. 177 specifies the number of students per teacher for the following kinds of educational institutes (cp. PMO 2012, Art. 11):

- | | |
|---------------------------|------|
| • Pre-school | 15:1 |
| • Primary School | 34:1 |
| • Lower secondary school | 30:1 |
| • Higher secondary school | 25:1 |
| • Vocational school | 20:1 |
| • University | 30:1 |

On average, vocational schools in Laos have already achieved this goal, even if a few schools are above these targets. Obviously the teacher-student ratio in general reflects a quite unequal distribution than any severe shortage of teaching staff in general. It can be assumed that the rural exodus, which is also an issue in Laos, is noticeable in vocational schools as well.

BACKGROUND AND PROBLEMS

Although its economy has grown remarkably in recent years, Lao PDR is still one of the least developed countries in the world. As a consequence, the Lao government has set the goal of shaking of this status by 2020. Human resource development is the second of four main strategic development plans agreed at the IX Communist Party Congress (cp. Lao People’s Revolutionary Party 2011, p. 42). There is a persisting lack of skilled workers in Lao. Thus one of the most vital challenges here lies in the development of the vocational education sector, which currently simply does not meet the standards and requirements of its growing economy.

An important precondition for increasing the number of qualified workers is the availability of well-trained teachers. Previous studies have shown, however, that teachers at vocational schools remain insufficiently qualified at the moment (cp. Soysouvanh et al. 2011, p. 13-27). It is imperative therefore to improve vocational teachers’ training and qualification to attain the goal of providing the labour market with sufficient skilled workers to feed the growing economy. One important approach to improve the quality of education systems is to develop quality standards and to implement them.

In his speech to lecturers of the National University of Laos, given at a university meeting on 5th April 2012, Mr Samane Viyaket, former president of the National Assembly of Laos, emphasized the importance of improving the training of teachers for the development of Laos explicitly: "In order to develop the country, human resource has to be developed, but first teachers must be developed." Consequently, the teacher is the centre point around which education quality is improved. Moreover, teachers do not merely act as agents of knowledge transfer, they are vital people who advise, train and give good moral guidance to students.

The Strategic Plan for the Development of Technical and Vocational Education and training 2006–2020 lists the numerous weaknesses and the causes creating the low performance in the TVET system. One of the important reasons for the weakness of the TVET system and the quality of teachers described by the plan is as follows: "The quality of TVET teachers remains mostly very low; teachers lack practical experiences, because they have not been employed in companies or enterprises and/or trained in the pedagogical field before." (MoE 2007, p. 8).

As a result, the Departments of Technical and Vocational Training (DTVE) and Higher Education (DHE) of the Ministry of Education and Sports (MoES), articulated the goal for vocational teachers to be achieved by 2020: "Building up vocational teachers for different subjects (technical and pedagogical) at different levels within the country and abroad in order to provide teachers for all TVET institutions sufficiently according to their demand; upgrading teachers for technical and pedagogical subjects and upgrading TVET managers and administrative personnel continuously in order to enable them to follow the ICT development." (MoE 2007, p. 11-12).

Improvement of the quality and quantity of the education of the vocational teacher is all-important. The topic of this study is to create vocational teacher standards at bachelor level. In addition, the study deals with the implementation and evaluation of the results for the purpose of improving the implementation system in the future.

Nowadays, the initial and further education of vocational teachers in Lao PDR does not take place in a systematic manner. Some vocational education institutes (public and private) are permitted to conduct teacher education confined to their capacity and their own needs. If this is to continue, neither the country's needs for a skilled workforce will be met, nor the living conditions of the population improved. (cp. Singthilath 2012, p. 2).

To improve the quality of vocational teachers the study's main goals are:

- Firstly, to develop standards of vocational teachers at bachelor level in Lao PDR.
- Secondly to describe how these standards should be implemented.

Based on the study results a proposal will be submitted to the Ministry of Education and Sports for the approval of standards that will facilitate the implementation.

To achieve these goals, the Gesellschaft fuer Internationale Zusammenarbeit (GIZ) GmbH has encouraged the efforts of the Lao partners. In particular, within the framework of the Regional

Cooperation Platform (RCP)¹, GIZ has supported the research team both financially and organizationally, and in so doing has enabled this study to take place from the outset.

ISSUES AND CHALLENGES

At the moment, an overall National Qualification Framework (NQF) in Laos that relates to all levels of education, training and qualification and that identifies the pathways between them is not available. In some cases not even frameworks for the programmes of single providers or authorities exist. However, the Department of Technical and Vocational Education (DTVE) has made a strong effort to develop the Lao Vocational Qualification Framework (LVQF) that is considered as the fundamental document for the introduction of a Competency Based Training (CBT) –Approach as well as the development of National Skills Standards, curricula, training packages and an assessment standard.

Despite greater efforts made by the government for strengthening TVET, the TVET-quality of Lao PDR remains low compared to its neighbouring countries. In addition, TVET is not yet fully accessible for the poor people, especially in rural and remote areas. The National Education System has not yet been able to respond to the socio-economic structure of the country. Furthermore, the reputation of TVET – as described above – is very low. As a consequence too many people choose an academic education, regardless of the fact that TVET has already been considered to be one of the most crucial preconditions for economic development and poverty reduction.

To implement the framework the MoES and the MoLSW in close cooperation with international organizations and donors e.g. ILO, ADB, German Development Cooperation, etc. get to the stage whereby they can create instruments and classify qualifications according to a set of criteria for levels of learning outcomes.

The development of NQF will help Lao PDR to reform the TVET system in a way that the content of education and training is no longer determined by the training providers but by the needs of the industrial stakeholders. This intended change requires standard-based learning outcomes and different forms of quality assurance. Simultaneously it will create better opportunities for recognizing previously acquired knowledge, regardless whether acquired in a formal, non-formal or informal way.

At the moment Lao PDR is in the process of transition from a ‘central planned economy’ to a ‘market oriented economy’, and faces the great challenges of becoming more and more integrated into the ASEAN community. The successful implementation of ESDP in general and the TVET Strategic Plan 2006-2020 combined with the Master Plan of 2008-2015 in particular, will make essential contributions to the ‘breaking-through’ policy of the party and the government. The latter

¹ RCP is a network that serves mainly universities involved in Vocational Teacher Education (VTE) within the ASEAN region and China. Founded in 2009 by Gesellschaft fuer Internationale Zusammenarbeit (GIZ) GmbH, the platform incorporates presently VTE and Technical and Vocational Education and Training (TVET) in the region through the exchange of experiences, the development of programs and the accomplishment of common research projects. Further information available at <http://www.rcp-platform.com/>.

is designed to radically implement human resource development and reduce poverty, by industrialising and modernising the country, finally enabling Laos to cast off its status of a least developed country by 2020.

Research Questions and Purpose

To develop teacher standard it is worthwhile not only to think about a theoretical foundation of standards, but also to take into account already existing standards (cp. Wilbers 2010, p. 33).

From the issues and aspects presented in this chapter, criteria in the form of questions can be derived from which one can compare and analyse already existing teacher standards. The following main questions are considered in the next chapter:

Formal Structure

- What is the formal structure of the standards?
- What is the number of standard items?
- Which conceptual elements can be adopted, which have to be modified, which are not appropriate?

Target groups

- What is the target group? (e.g. all teachers, general education teachers, vocational teachers, teacher education institutions, etc.)

Purpose

- What is the purpose of the analysed standards? (i.e. certification, quality assurance, quality development?)
- Do the goals and purposes of the analysed standards coincide with the standards, which has to be developed?
- Does the theoretical and practical foundation of the analysed standards coincide with the development objective?

The main objective of TVET-Teacher Standard should be improve the quality of vocational teachers, serve as a crucial element in maintaining and improving educational quality also perceive them as a basis for the development of teacher education curricula and the regular evaluation of teacher education (cp. KMK 2004, p. 1).

In England uses its standards primarily as a “framework for a teacher’s career” (TDA 2007, p. 2) and a tool to plan his/her future development towards the next higher qualification level, connected with a commensurately higher salary.

With the implementation of its updated standards InTASC pursues a new vision: “The updating of the core teaching standards was driven not only by new understandings of learners and learning but also by the new imperative that every student can and must achieve to high standards. These standards embrace this new emphasis and describe what effective teaching that leads to improved student achievement looks like” (CCSSO 2011, p.3). A further purpose of these standards “is to serve as a resource for states, districts, professional organizations, teacher education programs, teachers, and others as they develop policies and programs to prepare, license, support, evaluate, and reward today’s teachers” (CCSSO 2011, p. 5).

In summary one can state, that the hoped-for improvement of educational quality in general seems to be the most outstanding motive for developing standards to:

1. Harmonize TVET development in the region
2. Provide platform for benchmarking
3. Improve the quality of TVET overall
4. Strengthen ASEAN integration
5. Facilitate mobility of human resources

Methods

On the theoretical side, a permanent literature study, analysis of existing standards and workshops has been carried out. This is done to take account of the current state of scientific research. Many stakeholders were involved in the research process. Firstly it was necessary to use the experiences of the persons involved and secondly to strengthen acceptance of the standards developed.

To gain information and develop this research the authors used the following methods regarding the theoretical aspects:

- The analysis of literature provided the research team with knowledge on the theoretical foundation of standards, which has to be considered in the development process. In this context five already existing national standards could be identified. These standards will be described and analysed for their adequacy as a resource for the development of standards for vocational teachers in Lao PDR. The analysis has been conducted using specific criteria to find out which characteristics are absolutely crucial and which of the analysed standards may serve as a role model.
- Analysis of existing standards:

In order to broaden the view of the research team and to take part in the results collated by others thus avoiding mistakes made in the past, the decision was made to carry out a comparative analysis of already existing standards to develop the standard for vocational teachers in Lao PDR:

- England: Professional Standards for Teachers, issued in 2007 (TDA 2007)
- Germany: Standards für die Lehrerbildung: Bildungswissenschaften, issued in 2004 (KMK 2004).
- Lao PDR: Standards of Teachers, issued in 2010 (MoE 2010)
- USA: Model Core Teaching Standards (InTASC), issued as updated version in 2011 (CCSSO 2011).
- SR Vietnam: Professional Standard Regulation for Vocational Lecturers, Teachers, issued in 2010 (MoLISA 2010).
- For the development of standards of TVET teachers and especially to ensure the acceptance of these standards it was clearly essential to involve the relevant stakeholders in Lao PDR in the process right from the beginning. The Lao stakeholders were chosen to be involved as the target groups in the development process for their significance in practical, political and academic terms and because these institutions represented either the demand or supply side of vocational teacher education:
 - Ministry of Education and Sport (Department of Technical and Vocational Education and Department of Higher Education).
 - National University of Laos (Faculty of Education and Faculty of Engineering)
 - Vocational Education and Development Institute
 - Sixes Vocational Colleges in Vientiane Capital (Lao-German Technical College, Pakpasak Technical College, Polytechnic College, Vientiane-Hanoi Vocational School and Vientiane Province Vocational School).
 - To learn from the experiences of other countries that is to say institutions in South East Asia and benefit from their expertise, the following target group consisting of “Members of the RCP-Platform” have also been involved in the development process: IBB/Tongji University (China), Universitas Pendidikan Indonesia (Indonesia), Burapha University (Thailand), Rajamangala University of Technology Thanyaburi (Thailand), General Department of Vocational Training / Ministry of Labour (Vietnam), Namdinh University of Technology Education (Vietnam).
- In different stages of the research project workshops were conducted with the involvement of the two target groups mentioned above. These workshops will be described briefly in chronological order.

In this last step the decision was made to correlate the standards evolved so far using two supranational standard frameworks as benchmarks; the UNESCO ICT–Competency Framework for Teachers and the SEAMEO INNOTECH Teaching Competency Standards in Southeast Asian Countries. What were the reasons behind this correlation? Firstly the very existence of these supranational frameworks to some extent forced the team to consider them when drafting the standards. Secondly the institutions, entrusted with the design of these supranational frameworks, understand them as benchmarks for standard development. SIREP stated that the intention of the SEAMEO INNOTECH Teaching Competency Standards is, “to assist the (. . .) member states in

benchmarking and developing their own teaching competency standards” (SIREP 2010, p. 7). UNESCO underlines the intention of the ICT Competency Framework for Teachers in a similar way. This framework is not only “intended, to inform educational policy makers, teacher-educators (. . .) on the role of ICT in educational reform” (UNESCO 2011, p. 3), but also “specifies the competencies which teachers need in all aspects of their work” (UNESCO 2011, p. 8). Thirdly, when supporting the development process within the countries in general, the two frameworks could be considered as an important statement on how teacher-education, particularly in developing countries, can increase the effectiveness of teachers” (UNESCO 2011, p. 5) Therefore this correlation must serve to further improve the quality of the drafted standards. Amongst other things the correlation process was determined in particular by the following questions:

- Did the development process follow the right objectives?
- Have regional specifications been taken into account sufficiently?
- Are the standards developed appropriate for the 21st century? Can it be assumed that they have long-term significance?
- Are there further aspects that have not been taken into account in the development process?

The theoretical work – the foundation of educational standards and the analysis of existing standards – and the carrying out of the workshops have alternated. The results of this cyclic process are now described in this study.

The lesson learned from the development and implementation of National TVET-Teacher Standard in Lao PDR for the development of Regional TVET-Teacher Standard, we have to collect and analyze the data from directors of vocational school and vocational teachers to improve the “National TVET-Teacher Standard in Lao PDR” and these data should be for the development of Regional TVET-Teacher Standard according to the questionnaires from SEAMEO VOCTECH and research partners under Regional Cooperation Platform (RCP) of GIZ-RECOTVET.

Research target population:

- Department of Technical and Vocational Education and Department of Higher Education at Ministry of Education and Sport (MoES).
- Faculty of Engineering (FEN/NUoL)
- Vocational Education Development Institute (VEDI)
- Selection of relevant 5 vocational schools in Vientiane Capital.

Focusing of target group:

- Directors of vocational school and vocational teachers.
- Data collection and analysis:
- Questionnaires and conducting interviews with directors of vocational school and vocational teachers.

- Conclusions of the results concerning the curriculum for vocational teacher at bachelor level in Lao PDR.
- These data should be for the development of Regional TVET-Teacher Standard.

Results

PART 1 – GENERAL DATA

Teacher certification:

- About 80% of TVET teacher in Laos have pedagogical certificate.

Assessors will be well a trainer and knowledgeable:

- 76% Assessors are well trained and knowledgeable, because they were a teacher before.

Recommendation for the assessment process:

- Develop methodology of assessment relative to TVET
- Assessment or knowledgeable are goods and give exponents for teaching and others
- The questionnaire should be answered by the real TVET teacher to get enthusiastic data
- The assessor should allow the learner to pick their favorite subject/topic for the made teaching/assessor should have rubric and inform the learner the areas that they would be assessed
- The assessment process should have to be combining between course work and other component beside pauper assessment.
- In practical training delivery
- In theoretical instruction
- We need to access every month and on the real situation in teaching process.

PART 2 – STATUS OF DEVELOPMENT AND IMPLEMENTATION OF NATIONAL STANDARDS FOR TVET PERSONNEL

Status of development of national standard for TVET personnel:

- In Laos has developed National Standard for TVET Teacher practice and theory in 2013 and named Standard of Vocational Teacher bachelor level.

Status of implementation of national standard for TVET personnel:

- Around 66% was implemented Standard for TVET Teacher practice and theory at Vocational Institutes in country wide.

PART 3 – ISSUES AND RECOMMENDATIONS IN THE DISSEMINATION OF NATIONAL STANDARD

3.1. In the case that the national standard, especially for TVET teachers has been implemented, what were the issues/problems encountered during the dissemination of the national standard for TVET Personnel, particularly for Teacher Standard?

- The issues/problems was unclear guideline 27,3%

3.2. What would you recommend to improve the dissemination process of the national standard for TVET Personnel, particularly for Teacher Standard?

- Disseminate direct to the TVET Teacher country wide.
- Integrate the standard of Vocational Teacher into curriculum of Pre- and In-Service TVET Teacher Education and Training
- Must to have the community during the process.
- Have to provide a workshop for all teachers to understand and clear to use the standard of vocational Teacher.

PART 4 - ISSUES AND RECOMMENDATIONS IN THE IMPLEMENTATION OF NATIONAL STANDARD

4.1 In the case that the national standard, especially for TVET teachers has been implemented, what were the issues/problems encountered during the implementation of the national standard for TVET Personnel, particularly for Teacher Standard?

- The issue/problem was limited briefing 36,4%.

4.2. What would you recommend to improve the implementation process of the national standard for TVET Personnel, particularly for Teacher Standard?

- Improve knowledge, skill and attitude for TVET Teacher
- Teacher qualification and knowledge should be matching with the national standard.
- Sources or website for teacher training this would help teacher to know what available for their professional development.
- Dissemination, implementation and evaluation the standard of vocational teacher every two years
- Need to have training for TVET teachers
- Have to distributed information to all vocational teachers.

PART 5–EXPECTATION FOR THE REGIONAL CORE STANDARDS FOR TVET PERSONNEL

5.1. What are your perceived benefits of having regional (ASEAN) core standards for TVET personnel?

- The most of benefits for having regional (ASEAN) core standards for TVET personnel to Improve the quality of TVET overall (60%) and harmonize TVET development in the region (52%).

5.2 What are the expected (preferred) components to be included in the regional (ASEAN) core standard for TVET teachers?

- 37% of TEVTE Teacher in Laos recommend for Model 3.

5.3 In terms of leveling of teacher competencies, what would you prefer the regional (ASEAN) core standard for TVET teachers to have?

- **40% of TEVTE Teacher in Laos recommend for 3 level:**
 1. Level1: novice,
 2. Level 2: intermediate,
 3. Level 3: advance/expert/senior)

5.4 How will you use the regional (ASEAN) core standard for TVET teachers in your country/school?

- 49% recommend review/update the national standard and 34% to use it as an added reference and value of the national standard.

5.5 Please list any suggestions for developing the regional (ASEAN) core standard for TVET personnel, if any.

- Precognition of prior learning in ASEAN,
- Accreditation standard for TVET in ASEAN,
- Curriculum licensing ASEAN,
- Closing the skill gap (student production) is the urgent need for ASEAN,
- Focusing on software (teacher/human resource) rather than hardware (Scholl, etc.)
- Take into account that not all the ASEAN countries can achieve the same level of the standard.
- English speaking as a base for students in region to exchange knowledge
- Should develop it as referencing framework
- Capacity building for professional of each country
- TVET teachers need to be trained regularly.

The results of the analysis proved it pertinent to structure Laotian vocational standards into three stages, identifying and highlighting important aspects of the teacher's profession and focusing on vocational teachers at bachelor level. The Laotian stakeholders were most convinced by the clear formal and content-related structure of the German standards and were prepared to take it on, supplemented by an additional competency area, dubbed 'Competency Area of Acting in an exemplary Manner'.² Following the German structure Laos named the first stage 'Area of Competency' and the second stage 'Competency'. However, rather than the term 'Standard' for the third stage, the term 'Indicator' has been chosen, as the word indicator describes the stage or level of something. Here it refers to the level of competency a vocational teacher has to achieve. Furthermore 'Indicator' emphasises that standards must be formulated – when possible – in a measurable way. The German approach, to distinguish between an academic and a practical phase, has not been taken on. This specific approach was deemed ineligible for Laos simply because the Laotian teacher education system doesn't provide this kind of structure.

The newly developed standards provide 80 indicators in total, describing the requirements imposed on the acting of Laotian vocational teachers. This number of indicators mirrors the attempt to find a balance between comprehensibility and complexity, between completeness and clarity, between remaining realistic and focusing on the future, between being factual as much as possible and being abstract as long as it is necessary.

The target group was clearly defined by the Ministry of Education and Sports for the research team. Standards of vocational teachers have to be developed. However, these standards must not only apply to vocational teachers, but all teachers, who work in public and private institutions of technical and vocational education i.e. vocational schools, colleges, skills development centres etc. In contrast to Vietnam these standards are not limited to a specific group of teachers but focused to specific educational institutions. This ensures that at one institution all teachers are working in compliance with the same standard.

To ensure that the standards not only meet regional and international requirements but also consider the challenges of the 21st century, the research team has decided, to correlate the draft of the standards in a final step with two supranational standard frameworks.

For implementation of Standards of TVET Teacher Education described before, there is a lack of well-qualified vocational teachers and the standards are established for the purpose of improving the quality of teachers and teaching at vocational schools in Lao PDR.

The development of the standards will only be useful if the standards are actually applied. Therefore it is absolutely essential to continue the work of developing standards and to ensure the implementation with emphasis. For implementation we propose three key elements:

- the appropriate dissemination of the standards.

² This decision has been made during the Capacity-Building- / Continuing Research-Workshop, which took place on 24th/25th May 2012 in Thalut.

- the development of standard-based curricula and the accomplishment of these curricula at the university.
- the establishment of a concept of mentoring at the vocational schools.

The appropriate dissemination of the standards is the first crucial point. If the standards are permitted by the MoES it is important, not only to announce the standards, but to inform a good number of the key actors in vocational education throughout the whole country. For the acceptance of the standards two groups – aside from the stakeholders already involved - are crucial: these are the headmasters of vocational schools, and the administrative staff in provincial educational departments in Lao PDR.

Similarly, as with the participation of relevant stakeholders in the development process of the standards, it would be most appropriate to inform these actors in a personal way, face-to-face. The goals of the standards and the process of development should be put forward in information sessions and how exactly to reach these standards can be discussed. The outcome of these sessions and talks can result in more advice and hints on how to strengthen standards implementation.

The second and more institutional way to implement the standards addresses the system of higher education for vocational teachers. The developed standards for the vocational teacher at bachelor level should have a direct impact on the education of these teachers. It is necessary to develop competency base standard-curricula. The MoES, in charge of the approval of new curricula in higher education, should agree to such curricula, only when it is clear just how the standards are being taken into account. The curricula must be considered as national curricula, mandatory for all institutions educating vocational teachers at bachelor level.

To apply competency base standard-curricula the academic institutions must be supported. We propose coaching for lecturers in vocational education at the National University of Laos as a proper means to strengthen their work process knowledge and improve the quality of their lessons.

The development of curricula described above is necessary for the improvement of the educative quality of vocational teachers. But this is still not enough. For this we propose establishing a mentoring concept, accomplishing the standards at the vocational schools. This mentoring concept is to be focused on different target groups working in the same institution i.e. vocational schools throughout Lao PDR. The first group consists of “fresh” graduates, who need qualified support in the process of transition from university to professional life at their vocational school. The second group consists of “old” teachers, who need to be upgraded, in line with the standards.

Experienced teachers act as mentors but they must always remain open to new developments. Suitable candidates should be nominated by their own schools. They will need to be prepared by mentorship training to carry out this work.

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REPORT 5

Malaysia

*Lesson learned from the development and implementation of National
TVET-Teacher Standard in Malaysia for the development of
Regional TVET-Teacher Standard*

Organizations/Institutions

Universiti Tun Hussein Onn Malaysia

Team

***Assoc. Prof. Dr Razali Hassan
Dr Affero Ismail
Assoc. Prof. Dr Mimi Mohaffyza Mohammed
Dr D'oria Islamiah Rosli***

January-September 2016

The development and implementation of National Teacher Standard in Malaysia towards the development of Regional TVET Teacher Standard

Abstract

This study centered on the implementation of national core standard for TVET personnel especially teachers in Malaysian TVET institution. Descriptive and open ended survey method was adopted for the study and structured interview was used to collect data from TVET institutions in Malaysia. The findings showed that Malaysia has a special certification called Vocational Training Operation (VTO) purposely for TVET teacher. However, there are certain issues need to be taken into account to propose this certification as a requirement for a TVET teacher. It was recommended that government, TVET institutions and other stakeholders should give more recognition to the national core standard for TVET teachers as the main criteria to select a qualified TVET teacher.

Keywords: National Core Standard, TVET personnel, VTO, TVET teacher.

Introduction

Teaching standards are understood as a normative or evaluative basis upon which the actions of teachers as professionals are judged as to their performance. Underpinning this idea of teaching standards within literature on teacher education is the idea of teacher competence [1]. Research in teacher education has shown that teacher competence is a pre requisite to effective teaching and learning because of its relationship to students learning outcomes be it academic or others. The teaching skills or competency of a teacher often becomes a major concern. A study by Ali, Kaprawi and Razally [2] comprising a ninety-eight competencies that were identified from both the literature review and the focus group discussion method are the competencies reflected the range of attitudes, attributes, knowledge, and strategic and tactical skills that were required by electrical instructors.

The Malaysian Teaching Standard is based on this assumption that is improving teacher competence will ensure high standards of education are achieved not only academically but also in other areas of development. The question is whether improving teaching competence alone is enough to achieve educational excellence. More importantly, is it right to expect teacher's competency to create world class students. This question then forms the backdrop within which this paper is framed and the concerns raised through critical observation of the MTS framework.

Based on Malaysian Teacher Standard (MTS), there are three major component which are: (1) Professional Teaching; (2) Knowledge and Understanding; and (3) Teaching and Learning Skill. In standard 1, there are three domain which are personal, profession and social. As for standard 2, a teacher must be knowledgeable in the objective of the education, the subject's content, Information and Communication Technology (ICT), teaching strategy and the assessment. While standard 3 covers the aspect of teaching preparation, skill to deliver the teaching and learning, assessment skill to increase student achievement and skill to handle the class. An enhancement to this standard could be made by more emphasis on skills and vocational aspect for TVET teachers.

The objective of education is to prepare a candidate to become independent and to increase their employability skill so that they will get accepted in the industry. Many parents are hoping that their children get accepted to universities because they believe that university gives higher chance of getting hired. At the end, there are many graduates are unemployed because of the number of graduates are exceed the labor needs from the universities. Some countries reported that they are experiencing huge challenges to train workers that involve in dangerous, difficult and dirty jobs [3]. Thus, major changes are taking place in all TVET ASEAN countries and the world as well

Purpose

To identify the practices of Malaysia in developing and implementing their national core standard for TVET personnel which will be used as inputs in developing a regional common core standards.

Objective

1. Identify the development of the national TVET personnel core standards of Malaysia.
2. Identify the implementation of the national TVET personnel core standards of Malaysia.

Research Questions

A. Development of the Core Standards

1. Who are the participants in the development of the national core standard for TVET personnel?

2. What are qualifications of the participants in the development of the core standard for TVET personnel?
3. How are they selected?
4. What are the methods used in identifying the core standards for TVET personnel?
5. How are the core standards stated (e.g., competency statement, subject/topic, etc.)?
6. Is there a leveling of the core standards statement for TVET personnel?
7. What are the elements of the core standards document for TVET personnel (e.g. qualifications and qualification packaging, assessment guidelines, training provider requirements, qualifications of faculty, etc.)?
8. What agency promulgates the core standard for TVET personnel?
9. What are the qualifications provided by the core standard for TVET personnel?
10. How do they package the qualifications for TVET personnel?
11. Is there a time frame for the review or moderation of the core standard for TVET personnel?
12. What are the challenges and issues in the development of the core standard for TVET personnel?

B. Implementation of the Core Standards

1. Is there any requirement for the institutions that prepare TVET personnel?
2. What are the requirements to become a training provider of TVET personnel?
3. What are the education and training for TVET personnel being conducted to meet the requirements qualified TVET personnel?
4. What are the assessment methods used to determine who will be certified or meet the core standards?
5. Who conduct the assessment to determine if a personnel meets the core standards?
6. What are the qualifications of the assessors?
7. What agency certifies the candidate who attains the core standard of TVET personnel?
8. What are the challenges and issues in the implementation of the core standard?

Scope of the study

This project is a study on the development and implementation of the national core standards for TVET personnel in Malaysia. There are four groups of TVET personnel: teachers in schools/colleges, school principals/directors, industry trainers, and trainers of trainers. The focus of this study, however, will be on the first two, teachers and school principals/directors.

Methods

There are three approaches being used in this study which are survey questionnaire, interviews and document analysis. Survey was deployed to teachers in TVET institutions. While interviews have been conducted to teachers, school principal and committee of national teacher standard. Document analysis was implemented to Vocational Training Operation document for additional data gathering. The sample for this study was focused to only three (3) main TVET providers in Malaysia which are Ministry of Education, Ministry of Human Resources and Majlis Amanah Rakyat (MARA). The tabulation for the sample is shown in Table 1.

No.	Ministry	TVET Institution	Malaysia
1	Ministry of Human Resource	1. Pusat Latihan Pengajar dan Kemahiran Lanjutan (CIASD)	1
		2. Pusat Latihan Teknologi Tinggi (ADTEC)	8
		3. Institut Latihan Perindustrian (ILP)	24
2	Ministry of Education	1. Kolej Komuniti	82
		2. Politeknik	34
		3. Kolej Vokasional	79
3	Majlis Amanah Rakyat (MARA)	1. GiatMara	205
		2. Kolej Kemahiran Tinggi Mara (KKTm)	10
		3. Institut Kemahiran Mara (IKM)	13

Table 1: Sample of the Study

300 survey was sent to the respondents from selected institution of the three Ministries. As for the interview, 10 principals, 10 teachers and 3 national committees for TVET trainer standard were selected for data collection. The document for the development of Vocational Training Operation (VTO) was studied as well.

Literature Review

In order to provide best education and training, TVET institutions should be prepared with this challenging technology and economic world. They must be prepared that their students could be able to cope with the environment and presenting good performance in industry. In preparation of overcoming these challenges, there is a need for the committee to restructure their program to be in line with the industry's needs [4]. It is suggested that the teaching and learning is focusing on the outcome based education and competency based training in terms of the skills, knowledge and attitudes.

Currently, as TVET being more diverse according to the changes in the labor market, it should be able to integrate the youth into the working world [5]. Given the dominant economic trend, UNESCO [6] for example identified the two major objectives of TVET as the urgent need to train the workforce for self-employment and the necessity to raise the productivity of the informal sector. TVET as a form of education could attract many youngsters to join as it prepares them for a real industry training. It is necessary for a TVET center to provide good facility and equipment during the program. In terms of teachers' role, the need to be adhered to the current system such as assisting the technical or professional learning processes of graduates, preparation of students for work through the support of learning processes, assessment and evaluation, administrative tasks and counselling functions [7].

The terminology of process knowledge of vocational education was introduced by Gerds [8] in accordance with the term 'work process knowledge' [9]. The function of this term is to explain the domains of knowledge needed by a TVET teacher. Thus, the process of up-skilling the teachers covers not only the knowledge but also the professionalism.

Boreham, Fischer and Samurcay [9] have defined the quality of teachers in two parts: i) the quality of teachers with regard to their level of education, their formal status and similar

variables and ii) a conceptualization of the quality of teachers by focusing on their professional tasks and current and future practical challenges. As teachers are the vital for meeting training standards, standards in terms of quality, orientation, design and consequences are important elements to be configured. In quality management of a TVET institution, there are instructions that need to follow as in Figure 1. One of the major elements is the role of the teacher. Therefore, there is a need to focus on teacher's competency.

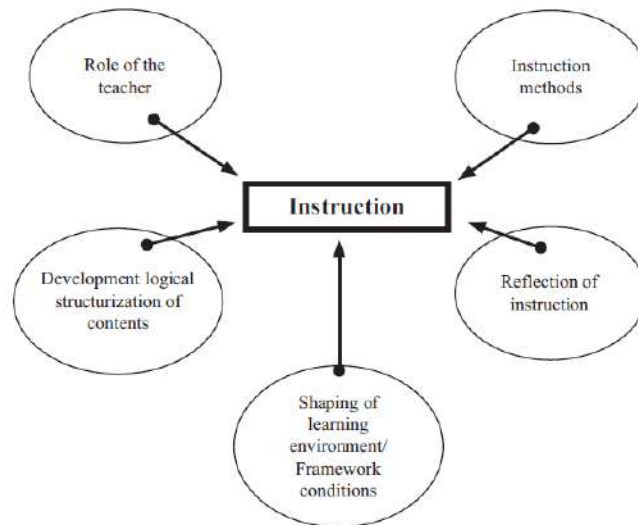


Fig 1: Element for a quality management for instruction [10]

Research on teacher's competence frequently focuses on many components but still encompass three key aspects: subject knowledge, pedagogical knowledge and concerned with a variety of professional characteristics [11, 12].

Results

i) Teacher Survey

The respondents for this study were selected from three main ministries that providing TVET training. The details for the respondents is shown in Table 1. Most of them are from education background with specific vocational skill.

Table 1. Demography Profile

Ministry of Education	Ministry of Human Resource	Majlis Amanah Rakyat
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Institution	(MARA)			
	51	19	31	
Gender	Male	Female		
	51	50		
Working Experience	Less than 5 years	6 to 10 years	11 to 20 years	More than 21 years
	30	34	11	26
Specialization	Education	Electrical	Engineering	Mechanical
	86	2	9	3
				1
				others

There are many standards recommended for each of the TVET personnel such as teacher, school principal, trainer of trainer and the industry trainer. Table 2 shows the respondents information regarding the development and implementation of TVET personnel.

Table 2. Status of the development and implementation of TVET Personnel

Status	Teacher standards	School/college/Principle Director Standard	Trainer of trainers standard	Industry Trainer standard
	Percentage (%)			
Developed	75	76	57	32
Not yet	3	8	15	18
Not sure	22	16	28	50

There are issues of dissemination of these standards to the providers and stakeholders. This is important so that they will understand the criteria and the requirement for their competency.

Table 3 and Table 4 explains the issue and the problem during the process.

Table 3. Issues/problem during dissemination

Issue	Percentage (%)
1. Limited time	11
2. Unclear guideline	62
3. Limited briefing/capacity building	19
4. Others	9

Table 4: Issues/problem during implementation

Issue	Percentage (%)
1. Limited time	32
2. Unclear guideline	47
3. Limited briefing/capacity building	16
4. Others	6

By having a single standard that acts as umbrella to TVET personnel could enhance the system that we currently have. Respondent were asked about their opinion as in Table 5.

Table 5: What are the benefits of having national core standards for TVET personnel?

	Harmonize TVET development in the region	Provide platform for benchmarking	Improve the quality the TVET overall	Strengthen TVET Provider Integration	Facilitate mobility of human resources
	Percentage (%)				
Strongly Agree	57	62	68	58	51
Somewhat Agree	36	36	29	36	39
Somewhat Disagree	7	2	3	3	10
Strongly Disagree	0	0	0	3	0

Some of the current standards in TVET consist of a few levels such as beginner, intermediate and advance. In Vocational Training Operation (VTO) certification offered by the Department of Skill Development consist of 2 levels: (1) Vocational Training Operation and (2) Vocational Training Management. Table 6 show the suggested or preferred level for TVET teacher standard.

Level	Percentage (%)
1	9
2	60
3	33

Table 6: Levelling competencies: Suggested level for the core standard.

The study then focused on the model of the core standard. The components for each of the model were asked whether it is possible to be employed as in Table 7.

Table 7: The Preferred Model of the core standard.

Level	Percentage (%)
Model 1 i) Basic and common (Professional) (Communication, problem solving, teamwork, etc.) ii) Core/functional (teaching, learning and assessment)	44
Model 2 i) Pedagogical ii) Social iii) Personality iv) Professional	44
Model 3 i) Educational laws and regulations (institutional and nationa) ii) Pedagogy and pedagogical psychology iii) Didactic and teaching methodology iv) Subject-based methodology	36

Respondents were asked about how they will use the national core standard in their institutions. Sometimes, the effort make to develop and build a single standard become useless if the people don't make use of it. The response can be studied in Table 8.

Table 8: How will you use the national core standard for TVET teachers in your institutions?

	To review/update the national standard	To use it as a reference only	To use it as an added reference and value of the national standard	To adopt it as the national standard	Not going to use it
	Percentage (%)				
Strongly Agree	53	25	49	42	14
Somewhat Agree	47	49	48	50	27
Somewhat Disagree	1	27	4	8	34
Strongly Disagree	0	0	0	0	26

The national core standard allows for the establishment of a mechanism and process that signifies professional competence or formal and full entry to the profession. The standard explains the competency that should be complied by a teacher. Professionally competent teachers have demonstrated successful teaching experience. They effectively monitor, evaluate and plan for learning and are able to tailor teaching programs to meet the needs of individuals and groups within the class. Professionally competent teachers have a record of effective and ongoing professional learning. They work collegially and in teams to further enhance their professional practice, and take greater responsibility in collaboration with others for identifying and addressing their own learning needs. They are effective members of a school and its broader community and interact effectively with stakeholders.

TVET teachers often assume that trainees will be able to apply what have been taught to them (Feldon, 2007), without realize that they actually lack of skill in gaining the student's attention. Therefore, an effective model of TVET Teachers's Standard must be created to be used nationally as a reference. The trainers for TVET teachers, which are the Ministry of Education / Higher Education and the Ministry of Human Resources should mapping these criterias that were found in this study in their syllabus or course content.

ii) Qualitative Analysis (Interview)

Interviews were conducted with 9 teachers and 4 principals of TVET centers.

a) Interview with the teachers

Only 8 of them already have the National Core Standards for TVET Teachers in your Malaysia since 2012. They receive the information of National Core Standards for TVET Teachers through Email, Hardcopy and Workshop. The guideline was there but not clear. All agree that they need for more clarification on their side.

The concerns and issues that are raised in development and dissemination process are the involvement of industry is very minimum in developing the NOSS and the syllabus. One of the respondent stated that there is not enough training and explanation and lack of information or unsure guideline.

In terms of suggestions and recommendations to improve the development and dissemination process, they suggested that more related companies/agency involved in developing the NOSS, Syllabus and they should be rewarded. More training and courses to the teachers especially should be given and to inform all teacher widely. Participation from counselling department also one of another way.

The challenges and issues in the implementation of the National Core Standards for TVET Teachers are to have industry attachment, having a good mentor, students are not ready to learn new knowledge and knowledge on the latest technology. Shortage of qualified teacher also reported in the interview.

In terms of recommendations for the implementation of the Regional (ASEAN) Core Standards for TVET Teachers, they proposed to have a benchmarking through advanced countries (Singapore, Germany, Finland/etc), the adequate time of training, give information to all teachers in the country, capability building and to clear information about the standard.

The expected components to be included in the Regional (ASEAN) Core Standards for TVET Teachers would be the area of training must be based on skills, and pedagogical approach. More

knowledge should be given to the teachers. Facilities and skill for teachers must fulfil the competency and the knowledge about new technology.

They recommended to have practical and internship related to their major subject as well as to the vocational education to be the structure for the Regional (ASEAN) Core Standards for TVET Teachers and the subject related to the new technology.

They are all agreed that the Regional (ASEAN) core standards for TVET teachers will be used as a referencing/benchmarking/strategic tool to improve the National Core Standards for TVET Teachers, in terms of exchange programme for teachers within ASEAN Country, Strategic tools, fundamental and methodology.

To talk about the benefits of having Regional (ASEAN) Core Standards for TVET Teachers, it can be a standard reference for TVET training approach & which will be recognised by the many countries in ASEAN Region & global, Preparing the skill worker with the NOSS, produce standard ASEAN skill workers, enhance the employability of learners, to enhance the capability of skills and sharing of new technologies can be developed together in ASEAN.

The possible challenges might be the financial readiness for each country, qualified teachers that are ready to change the method, Industry/company commitment, Politician influence and Infrastructure/ facilities.

In developing the Regional (ASEAN) Core Standards for TVET Teachers, they suggested to provide more discussion, conference with ASEAN countries and to involve more TVET management / representatives. Singapore should be referred as this country got a better TVET training approach in ASEAN Region (Adoption from Germany). Standard evaluation skill for students of ASEAN to meet the skills standard. Integrating Core work skills into TVET system and to employ TVET teachers exchange expertise in the field of TVET in ASEAN.

b. Interview with the Principals

The Teacher standard has already implemented such as VTO/VTE/VTM + PPD + DKM/SKM/DLKM or equivalent qualification related to the area of teaching/training. The

standard was completed since 2005. It is required for new officer to complete VTO training and certification for position confirmation

The teacher / Instructor must have at least equivalent qualification In skills certification that was started around 2005/2006.

The National Core Standards for TVET Teachers was received through Email, Hardcopy and Workshop.

The guideline for the teachers was developed from NOSS (DSD), transferred to syllabus (JTM) and the RPK (teaching material). CIIAST develop the guideline and conduct VTO training.

To become a training provider for TVET teachers a person must possessed a SKM of minimum level of 3 or 4 or Diploma in Engineering/Degree or Master in Engineering or equivalent qualification in related skill area of training. Another criteria are experience and skills in current technology For a TVET Center, it must be a registered business, have complete trainer, Compliance facilities, good training manual & material and the Administration.

It need to be a TVET Center that provides Pedagogical, Actual exposure to industry based, Job attachment and coaching programs.

The status of financial, equipment, and infrastructure of the institutions to be accredited DSD (JPK) Accreditation Centre and Approval of training through Ministry of Education (at first stage of operation enforced by MOE & MOF).

The challenges and issues in the implementation of the National Core Standards for TVET Teachers basically encompass the Technology changes, lack of equipment and New technical skills to be trained to meet present industry need. The syllabus need to be revised frequently to produce students with full of skill and knowledge and marketable.

Beside conducting training, the trainer/teacher also doing administrative work like store keeping, development of curriculum, development of question which is a burden to them. Job rotation among the trainer/teacher is an alternative way. There is a shortage of teacher as well.

During implementation of the Regional (ASEAN) Core Standards for TVET Teachers, a benchmarking should be done, trainers need to be equipped with professional certificate which recognised by the authorised body of the Tasks/Area and exposed the lecturer to industry through Smart partnership and MOU.

The components to be included in the Regional (ASEAN) Core Standards for TVET Teachers includes pedagogical approach, skills standard, standard assessment, no compromise on pedagogical, technical/vocational personal attributes to ensure the quality of students, professional and personal etiquette and new teacher must have related qualification in skills when first appointed.

The structure that is recommended for the Regional (ASEAN) Core Standards for TVET Teachers is Basic or VTO Level 3 that can be used as a referencing/benchmarking/strategic tool to improve the National Core Standards for TVET Teachers. The strategies that may relevant such as the MARA encourage their staff taking part on skill competition at ASEAN region and country to enhance current qualification of the teachers.

The perceive benefits of having Regional (ASEAN) Core Standards for TVET Teachers are to be the reference for TVET training approach that will be recognised by the many countries in ASEAN Region and globally. Besides, it could improve the quality of technical education as a guidance for teachers on ethics, implementation of teaching and gain knowledge on new technology. The possible challenges includes financial readiness for each country, qualified teachers ready to change the method, industry/company commitment, politician influence and facilities.

Suggestion for developing the Regional (ASEAN) Core Standards for TVET Teachers, we could provide more discussion, conference with ASEAN countries and involve more TVET management.

iii) Document analysis and Interview with the Committee of National TVET Teacher Standard

This section will discuss the function of a certification system called Vocational Training Operation (VTO) in educating the TVET teachers. The component and the elements of this certification will be explained through deep interview with the committee. In this study, the interview with the committee of the program called Vocational Training Operation (VTO) was conducted together with the VTO document. This session was successfully conducted and the clarification of the unclear statement in the document can be resolved instantly. The discussion will be divided into two: (1) The development of the VTO and (2) The implementation of the VTO.

Level	Percentage (%)
Model 1	44

iii)	Basic and common (Professional) (Communication, problem solving, teamwork, etc.)	
iv)	Core/functional (teaching, learning and assessment)	
Model 2		44
v)	Pedagogical	
vi)	Social	
vii)	Personality	
viii)	Professional	
Model 3		36
v)	Educational laws and regulations (institutional and national)	
vi)	Pedagogy and pedagogical psychology	
vii)	Didactic and teaching methodology	
viii)	Subject-based methodology	

Table 9: Preferred Model of the Core Standard

There are three main topics in the development process which are the process and committee, contents and structure and the dissemination. The process involved in developing VTO is called Development of Standard & Curriculum (DESCUM). It takes around 5 to 6 months. Industries experts and practitioners who are directly involved in the specified occupation involved in the development. They have both practical and teaching experience. Department of Skill Development under the NOSS division and the DESCUM facilitators have been given the authority to delegate the assignment to the experts. First, the NOSS (National Occupancy Skill Standard) Division under DSD will assign the duties and task to team (facilitator and expert). Then, they will work on the assigned job. Consultants were also hired under the department of tender and internal expertise, NOSS development and Industry Lead Body (ILB) to accomplish the program. There are two levels of certification which are VTO and Vocational Training Management (VTM). The performance indicator is underlined under the performance standard based on the NOSS development structure. In terms of dissemination process, the standard needs to be approved by Skills Development Advisor Council or Majlis Penasihat Pembangunan Kemahiran (MPPK). This can be referred to the NOSS development process flow chart. The activities involved are proofreading and validation, and endorsement. It takes about 6-7 months to disseminate the standard by the NOSS division. There is also involvement of other parties in this process such as Accredited Centre, external assessor/ verifiers and those who are related to the program especially instructors and managers. Only the standard is disseminated through DSD website, external verifiers, workshops and emails in the form of soft copy or CD to accredited Centre's and committee members for specific fields.

The discussion now will be focusing on the implementation of the standard. To become a training provider, a Centre must be: (i) Legally registered as training provider; (ii) have adequate with training facilities, tools and equipment; and (3) Have qualified and competence trainers. The institution is not necessary be any specific center as long the institution fulfills all the requirement in KAPPA document. The needed status in accreditation that examine the status of financial, equipment, and infrastructure of the institutions should follow the regulation by MOSQ (JPK) and NASDA (652 Act). A qualified teacher must possess level 5 of Advanced Diploma in Vocational Training. This includes both technical and vocational courses. The course duration is depending on the level and type of the training program but normally from 6 months to 3 years. There are a list of type of assessment methods to determine qualified candidates who meet the standard such as:

- i. Case study
- ii. Project
- iii. Simulation
- iv. Role play
- v. Knowledge assessment
- vi. Performance assessment
- vii. Self-assessment
- viii. Peer assessment

The assessment will be conducted by internal assessor and endorsed by internal verifier for internal assessment and external assessor and endorsed by external verifier for external assessment. This assessment would take around 1-2 weeks. The requirement qualifications for personnel and professional assessor are: (i) Having VTO, (ii) Technical certificate SKM 1-5, and (iii) experience 2 years and above. DSD and MPPPK will certify those who have VTO. Nevertheless, there are a few challenges in the implementation of this standard arise such as rapid changes in technology, collaboration with industries, teaching and learning approach and methodology not equivalent, learning and teaching materials not fully developed and managing the training resources. It is recommended that English language becomes as a medium of communication and to respect individual differences among trainers / instructor for regional standards.

The existence of solely National Core Standard for TVET teachers allow the establishment of professional competency based on the specific profession that will foster the teaching and learning including training in TVET institutions. Thus, the image of TVET will be enhanced and therefore bring the public openness to choose TVET as their options for higher education.

Conclusion

From the study, vocational teacher standard is important to be followed by the TVET teachers including pedagogical approach social competency. It is suggested that a teacher must possess teaching and learning skill, professional attributes, industry relation and practical skills. A model by German System defines TVET teaching competencies as an integrated set of technical, learning and methodological, and social competency that are needed for effective performance in various teaching contexts and didactic approached [13]. Supervisory elements also should be integrated into the standard that a teacher should have [14]. Therefore, a mechanism should be made to ensure that the TVET teachers comply the requirement stated in the standard. Vocational Training Operation (VTO) certification offered by the Department of Skill Development (DSD) is a good recommendation in developing national core standard.

As a result, hereby we would like to suggest that a TVET teacher should comply the mentioned dimension as below:

- (1) Professional skill and knowledge,
- (2) Professional teaching and learning process,
- (3) Personal and professional attributes, and
- (4) Professional industries and communities

Further, it is recommended that there are indicators for each of the dimension that should be listed out with skills required for each area.

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Appendix A: Malaysian Teacher Standard

There are three major component which are: (1) Professional Teaching; (2) Knowledge and Understanding; and (3) Teaching and Learning Skill.



Figure A: Malaysian Teacher Standard

1. Professional Teaching Values

The Core values in S1 based on:

- ✓ Seven culture dimension in Teacher Institution (IPGM)
- ✓ Teaching Profession Ethics
- ✓ Good values in school curriculum
- ✓ Main Values in Public Service Social
- ✓ Main Principles of Work Ethics Profession
- ✓ The Twelve Pillars (Tonggak 12) Individual Community
- ✓ Main principle of the Ministry of Education Work Ethic Nationality

By practicing all domains in Standard Practice Teaching Professionalism value:

- Teachers have goals, objectives, and clear educational vision.
- Teachers have strong ideals and capable of making changes and can be proactive.
- Teachers will strive to improve their own ability, commitment, initiative, and personal responsibility in building a superior and high performance in their duties.
- Identify the level of professional competence in the practice of the teacher professionalism, knowledge and understanding, as well as teaching and learning skills
- As a guidance. Preparation and implementation of the training needs of the agency and teacher training institutions to ensure teacher competency levels set are achieved.
- Malaysian Teacher Standards will be able to identify policies and development strategies that teacher education should be improved in line with current developments and challenges in education.
- As a coordinating document.
- As a prove that teaching is a profession in Malaysia.

2. Knowledge and Understanding

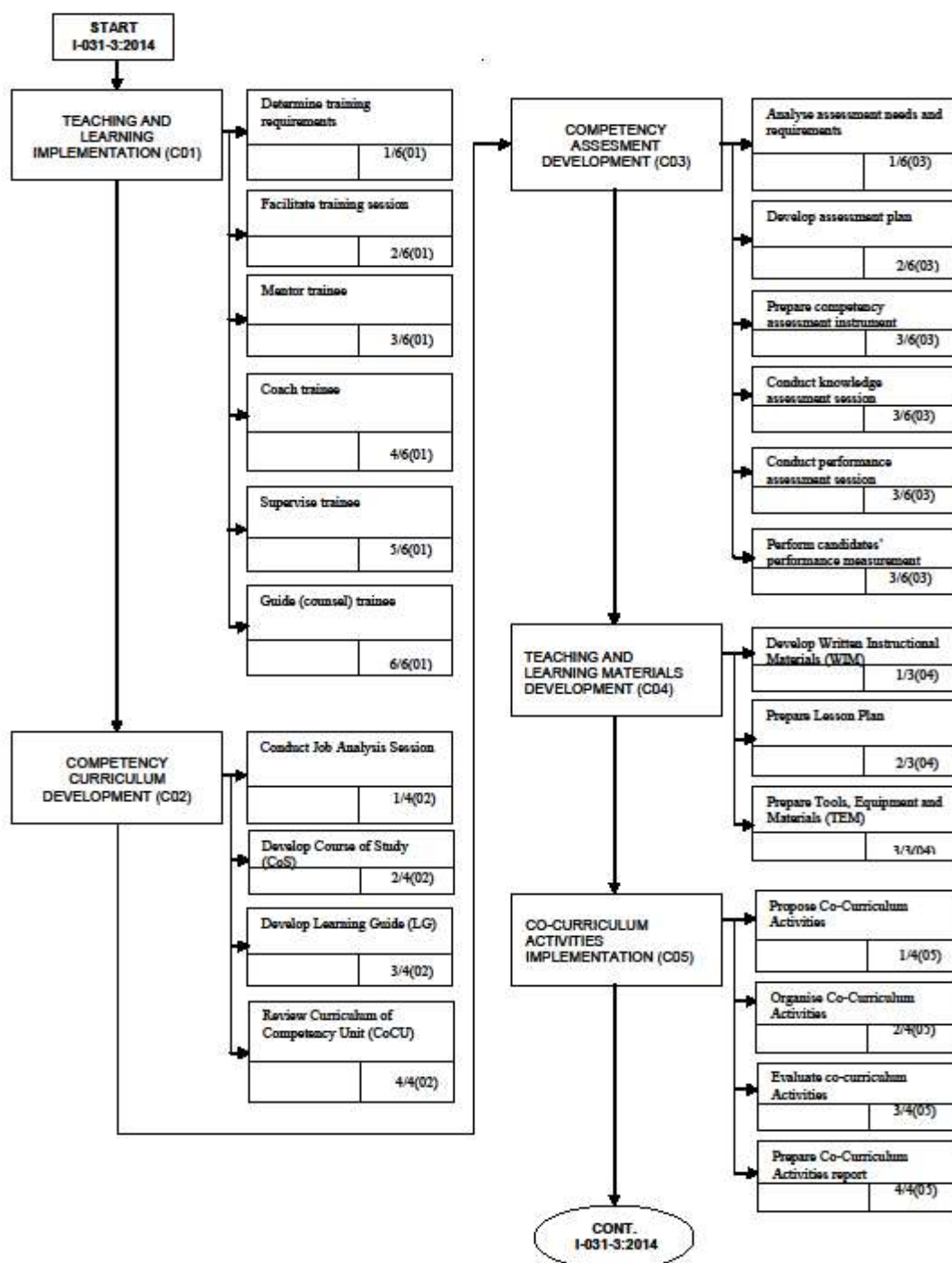
- By mastering knowledge and understanding, teacher can improve their confidence and professional duties to maintain effectiveness.
- The implementation of Knowledge and understanding standards will ensure the professional quality of teachers at the high level and keep it relevant to the development of education.

3. Teaching and Learning Skills

- By mastering the skills to plan, implement, monitor, assess and evaluate, and good classroom management teacher can produce an efficient teaching and learning.
- The classroom environment also will be fun

Appendix B: VTO Job profile

TRAINING PATHWAY I-031-3:2014 VOCATIONAL TRAINING OPERATION



REPORT 6

Philippines

Lesson learned from the development and implementation of National TVET-Teacher Standard in Philippines for the development of Regional TVET-Teacher Standard

Organizations/Institutions

***University of San Carlos (USC)
Cebu, Philippines***

Team

***Dr. Felino B. Javines Jr., SVD
Dr. Cristie Ann Jaca Delfin***

January-September 2016

Development and Implementation of National Teacher Standards in the Philippines: Towards the development of Regional TVET Teacher Standard

Abstract

This study aims to present and analyze the development of the national standard for TVET personnel in the Philippine context. Using a unified survey questionnaire from the collaborative research on the research project entitled Development of National and Regional Core Standards for TVET Personnel employing convenience sampling method and some selected interview schedule, pertinent data were collected. Based on the gathered data, it was found out first that there are differences in the terminologies used regarding the words teachers and trainers. In the Philippines, the term trainers are used to mean the ones who handle classes instead of teachers. However, these trainers (teachers) can also be qualified to become assessors provided they have met the qualifications. In terms of the development of the national standards or TVET teachers, the Philippine's TVET Trainers- Assessors Qualification Framework was used as basis in determining the National Core Standards for Teachers who are handling Technical-Vocational courses. The development of the National Core Standards of TVET personnel were handled by the Technical Education Skills Development Authority (TESDA) in their national office based on the agency's process of organizing these guidelines which were then provided to the regional offices for implementation. Thus, there is a uniform guideline set that is implemented nationwide although not all TVE trainers are aware of the process because what they have are already the training regulations that they use as basis in the delivery of their programs.

Keywords: *Technical-Vocational Education and Training (TVET), National Teacher Standard, Regional Core Standards, Trainer*

Introduction

On May 15, 2013, Philippine President Benigno Aquino III signed into law Republic Act 10533. With the onset of Republic Act 10533 in the Philippine Educational System, the need to implement the Enhanced Basic Education Program in the Philippines starting school year 2013-2014 signaled a change of perspective in the treatment of technical education as it becomes one of the four tracks offered in the Senior High School. Starting in June 2016 Grade 11 students will choose among the four tracks that they will enroll in which Technical-Vocational-Livelihood (TVL) is one of the choices. This paved the way to recognize technical and vocational education as an equally important type of education that earns national certification for the Grade 12 graduates to be acknowledged and accepted in various companies after completion and be deployed in different industries in the country. As such, the need to standardize the teachers' qualifications to ensure quality delivery of instruction becomes a pressing concern that is at the forefront of the issue. This then is the rationale behind the survey on how the teachers' qualifications are set based on the national standards. In this context, the development of TVET Teacher Standards then is being analyzed in order to explain the processes on how these National Core Standards for TVET personnel were made, formulated, and disseminated.

Technical and Vocational Education Training (TVET) in the Philippines is handled by the Technical Education and Skills Development Authority (TESDA). This government agency is tasked to manage and supervise technical education and skills development (TESD) in the Philippines. It was created by virtue of Republic Act 7796, otherwise known as the “Technical Education and Skills Development Act of 1994”. The said Act integrated the functions of the former National Manpower and Youth Council (NMYC), the Bureau of Technical-Vocational Education of the Department of Education, Culture and Sports (BTVE-DECS) and the Office of Apprenticeship of the Department of Labor and Employment (DOLE). (<http://www.tesda.gov.ph/About/TESDA/11>)

TESDA develops competency standards for middle-level skilled workers that reflect the units of competency containing descriptors for acceptable work performance. These qualifications are packaged corresponding to critical jobs and occupations in the priority industry sectors. The qualifications correspond to a specific level in the Philippine TVET Qualifications Framework (PTQF). The competency standards and qualifications, together with training standards and assessment arrangements comprise the national training regulations (TR) promulgated by the TESDA Board. The TRs serve as basis for registration and delivery of TVET programs, competency assessment and certification and development of curricula for the specific qualification.

This study presents the development of the national standard for TVET personnel in the Philippine context. Using a unified survey questionnaire from the collaborative research on the research project entitled Development of National and Regional Core Standards for TVET Personnel, the results of the survey were interpreted and analyzed employing both quantitative and qualitative research method. The study was conducted in Cebu and Cebu City, Philippines and the documents that were analyzed come from the central office through their official website and from TEDA Region VII office.

Purpose/objective

The purpose of this study is to examine the development and implementation of national standards for TVET personnel of 8 ASEAN member countries and China for the development of a regional standard. By learning and considering the experiences from these countries, hopefully the Regional Standard for TVET Personnel, which is currently being developed, will become more relevant and applicable to all members in the Southeast Asian region and beyond. The findings will be used as inputs and basis in developing regional core standards for TVET personnel that are in line with the ASEAN Economic Community initiative concerning the standardization of the recognition of professional qualifications within the region.

Key Questions

1. What processes, content and structures are involved in developing the National Core Standards for TVET personnel?

2. What were the processes in the dissemination of the NCS?
3. What were the issues raised and recommendations suggested in order to set expectations for the Regional Core Standards for TVET personnel?

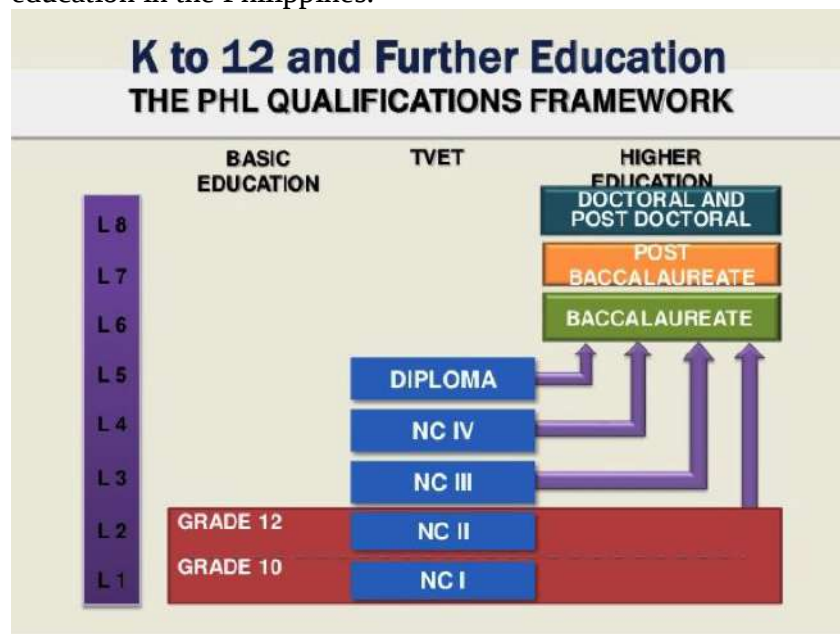
The purpose of this study is to examine the development and implementation of national standards for TVET personnel of ASEAN member countries and China for the development of regional standard. By learning and considering the experiences from these countries, hopefully the Regional Standard for TVET Personnel which currently being developed will be more relevant and applicable to all members in the Southeast Asian region and beyond.

Scope and Limitations of the Study

This survey on the development and implementation of the national core standards for TVET personnel in the Philippines was conducted within the Visayas region particularly in Cebu City. However, the documents that were analyzed came from the national government or the central office and they are the same documents being used in the different regions in the country. The same documents are also found in the official website of Technical Education and Skills Development Authority (TESDA). There were three groups of TVET personnel who were solicited information from namely: TESDA Administrators, teachers/trainers, and school principals/directors/administrators. As much as the researchers wanted to interview different TESDA officials in the region, due to conflict of schedule, only the OIC Regional Director was interviewed together with some of the TESDA personnel. As to the teacher-trainers, very few were willing to be interviewed thus the researchers repeatedly went to the different schools in order have the survey questionnaires answered. One school that researchers visited declined also because of conflict of schedule. Despite the researchers initiative to reach as many learning institutions to participate in this study only four (4) accepted the invitation. Nevertheless, pertinent information was solicited among those who participated. There were two (2) Secondary technical and vocational schools in the Visayas region, particularly in Cebu and Cebu City, one (1) industry-based learning institution and one (1) government agency that offered technical and vocational programs that participated in the study.

The Philippine Qualifications Framework

The Philippine Educational system operates based on the Qualifications Framework below. The Philippine Qualifications Framework (PQF) presents and describes the expected competencies and outcomes expected among students and professionals in the different levels of and types of education in the Philippines.



The Philippine Qualifications Framework reflects the educational hierarchy and incorporates the different types of education in the country in terms of the expected learning competencies per grade and year level. It also highlights the trifocalization of the educational system from basic education, technical and vocational education until higher education. This Philippine Qualifications Framework (PQF) is a national policy that describes the levels of educational qualifications and sets the standards for qualification outcomes. It is a quality assured national system for the development, recognition and award of qualifications based on standards of knowledge, skills and values acquired in different ways and methods by learners and workers in the country. It is competency-based, labor market driven and assessment is based on qualification recognition.

<http://www.tesda.gov.ph/uploads/File/policybrief2013/PB%20Philippine%20Qualification%20Framework.pdf>

The Philippine Technical Vocational Education and Training (TVET)

According to UNESCO, Technical-Vocational Education and Training (TVET) is the education or training process where it involves, in addition to general education, the study of technologies and related sciences and acquisition of practical skills relating to occupations in various sectors of economic life and social life, comprises formal (organized programs as part of the school system) and non-formal (organized classes outside the school system) approaches." (UNESCO)

In the Philippines, the Technical-Vocational Education and Training (TVET) provides education and training opportunities to prepare students and other clients for employment. It also addresses the skills training requirements of those who are already in the labor market and would need to upgrade or develop new competencies to enhance employability and improve productivity (Syjuco, 2005).

The Technical Education and Skills Development Authority (TESDA) is mandated to manage and supervise technical education and skills development in the Philippines. As part of this mandate, TESDA uses competency assessment and certification as both the means and the end of competency and skills development. TESDA's vision is being the leading partner in the development of the Filipino workforce with world-class competence and positive work values. In the performance of its mandate and the pursuit of its vision, TESDA supervises more than 4,500 Technical Vocational Institutions consisting of 4,148 private TVET Institutions, 365 Public Schools and Training Centers, 822 enterprises providing learnership and apprenticeship programs and 126 TESDA Technology Institutions. The Technical Vocational Institutions employ more than 23,000 Technical Vocational Education and Training (TVET) Trainers covering 215 qualifications. Given the enormous number of Technical Training Institutions, TVET Trainers and the diversity of their coverage, TESDA endeavored to ensure consistent delivery of quality training services across the country through the implementation of the National TVET Trainers-Assessors Qualification Program (NTTAQP) in 2006. This Program aims to qualify and certify the current pool of technical trainers-assessors to ensure their competence in trade qualifications, and training and assessment methodologies. According to the Philippine TVET Trainers-Assessors Qualification Framework (2015), a TVET Trainer is a professional who enables a learner or a group of learners to develop competencies to performing a particular trade or technical work. Towards this end, a TVET Trainer may assume various roles such as training facilitator, competency assessor, training designer and developer and training supervisor.

Methodology

The study made use of a unified survey questionnaire from the collaborative research on the research project entitled Development of National and Regional Core Standards for TVET Personnel employing convenience sampling method and some selected interview schedule. Three approaches of gathering the needed data were used namely; answering of survey questionnaires, interview schedule, and document analysis.

There were two (2) Secondary technical and vocational schools in the Visayas region, particularly in Cebu and Cebu City, one (1) industry-based learning institution and one (1) government agency that offered technical and vocational programs that participated in the study. The two schools are Abellana National School (ANS) which is located in Osmena Boulevard Cebu City and The Sisters of Mary (SOM) Boystown School in Tungkop, Minglanilla Cebu. The Center for Industrial Technology and Enterprise (CITE) an industry-based and socially-oriented institution, a technical school in Cebu, Philippines located in San Jose, Tamban, Cebu City and the Technical Education and Skills Development Authority (TESDA) Region VII are the other two institutions that participated in the study. School administrators and TVE coordinators and teachers in these institutions answered the survey questionnaire and their answers were verified through interviews and focused group discussion. The results were supplemented by the

documents that were analyzed in relation to the responses gathered from the research participants. Trainers from TESDA Regional VII office were also solicited information using the survey questionnaire and the responses were verified through a focused group discussion with those who answered the questionnaires. Interviews were also conducted to validate the information gathered from the retrieved questionnaires.

Name of Institution	Administrators	Total	Teachers/Trainers	Total
Abellana National School (ANS)	OIC Principal-1 TVE Coordinator-2	3	Female - 12 Male - 9	21
Center for Industrial Technology and Enterprise (CITE)	TVE Coordinator-3	3	Male - 12	12
Sister of Mary School (SOM) (Boystown)	Principal – 1 Asst. Principal – 1 TVE Coordinator – 1	3	Female – 6 Male – 13	19
Technical Education Skills and Development Authority (TESDA) Region VII	OIC Regional Director -1	1	Female - 3 Male - 8	11
	TOTAL	10	TOTAL	63

Figure 1. Research Participants

Figure 1. presents the learning institutions that participated in the study. It also shows the number of administrators and TVET teachers who answered the survey questionnaires and those who responded to the questions during the interview and in the focused group discussion. All learning institutions that participate in this study underwent three (3) phases of data collection namely: answered the survey questionnaires, participated in the interview and joined in the focused group discussions.

Results and Discussion

Using a unified survey questionnaire from the collaborative research on the research project entitled Development of National and Regional Core Standards for TVET Personnel employing convenience sampling method and some selected interview schedule, pertinent data were collected.

Based on the gathered data, it was found out first that there are differences in the terminologies used regarding the words teachers and trainers. In the Philippines, the term trainers are used to mean the ones who handle classes instead of teachers. However, these trainers

(teachers) can also be qualified to become assessors provided they have met the qualifications. In terms of the development of the national standards or TVET teachers, the Philippine's TVET Trainers- Assessors Qualification Framework was used as basis in determining the National Core Standards for Teachers who are handling TechVoc courses. The development of the National Core Standards of TVET personnel were handled by the Technical Education Skills Development Authority (TESDA) in their national office based on the agency's process of organizing these guidelines which were then provided to the regional offices for implementation. Thus, there is a uniform guideline set that is implemented nationwide.

After the survey questionnaires were retrieved, scheduled interviews and focused group discussions were conducted in order to validate the data gathered. Moreover, document analysis became part in the presentation, analysis and interpretation of the data gathered. The results are being classified based on the identified three (3) key areas in this research namely: 1) the **development** of national core standards, 2) the **implementation** of these standards, and 3) the **expectations** for the regional core standards for TVET personnel.

- **Document Analysis**

The documents that were used in this study come from the Technical Education and Skills Development Authority (TESDA) and the Philippine TVET Qualification and Certification System (PTQCS). The information taken from these sources were used as basis in analyzing the data gathered from the TVE teacher-participants.

The Technical Education and Skills Development Authority (TESDA) is the government agency tasked to manage and supervise technical education and skills development (TESD) in the Philippines. It was created by virtue of Republic Act 7796, otherwise known as the "Technical Education and Skills Development Act of 1994". The said Act integrated the functions of the former National Manpower and Youth Council (NMYC), the Bureau of Technical-Vocational Education of the Department of Education, Culture and Sports (BTVE-DECS) and the Office of Apprenticeship of the Department of Labor and Employment (DOLE). The Technical Education and Skills Development Authority (TESDA) provides direction, direction, policies, programs and standards towards quality education and skills development. The documents that were looked into in this study are all taken from TESDA's central office in Manila as it is the official government agency that handles pertinent documents on Technical and Vocational education and training in the Philippines.

The Philippine TVET Qualification and Certification System (PTQCS) is a quality-assured system in recognition of the attainment of competencies (knowledge, skills, attitudes and values) as referred to the competency standards set for middle-level occupation. It is the process of determining the qualification level of a person and a tool in identifying the training needs of a person with competency gaps. The System implements the principles of *Competency Assessment* and *Recognition of Prior Learning*. There are four (4) qualification levels under PTQCS namely: National Certificate I, II, III, IV. National Certificate is issued when a candidate has demonstrated competence in all units of competency that comprised a Qualification Assessment is done through any of the following evidence gathering methods: demonstration/observation with oral questioning; written test; third party report; portfolio and work projects. Apart from the National

Certificates, the Philippine TVET Trainers-Assessors Qualification Framework (2010) further presents the qualification framework that consist of four (4) levels corresponding to the different roles assumed by trainers. These are: Trainer Qualification Level I for Trainer/Assessors; Trainer Qualification Level II for Training Designers/Developers; Trainer Qualification Level III for Training Supervisors and Mentors; and, Training Level IV for Master Trainer. Those being certified in Levels I and II must be specialists in the areas of competencies they will facilitate while those being certified in Levels III and IV must be both specialists and generalists. The trainer curriculum specified in this program is an enabler and is intended to facilitate trainer development through the various qualification levels. Taking the various courses under the curriculum is not a strict requirement as the trainer may acquire the required competencies through other means. <http://www.tesda.gov.ph/uploads/File/PHILIPPINE%20TVET%20QUALIFICATION%20AND%20CERTIFICATON%20SYSTEM.pdf>

- **Interview with the TESDA OIC Regional Director, Principals, and TVE Coordinators**

After looking into the documents from the Central office (national government), which was also verified by the TESDA OIC Regional Director in Region VII, it was noted that the development of the National TVET Teacher Standard in the Philippines is a result of the Central Office's process of coming up with the standard qualification of teachers using their own method of organizing a course of action in deciding on the national standards. According to the Regional Director, there were consultations done among the TESDA administrators and personnel, stakeholders, people from the academe, and people from the industry. From what has been agreed, the decisions made were the basis in formulating the national core standards.

On the other hand, the School Principals and TVE Coordinators that were being interviewed affirmed what the TESDA OIC Regional Director but added their personal understanding of the process. According them, although the competencies set are logical and reasonable, the context may vary depending on the region where it will be implemented since it will also affect the programs that each school offer and the delivery method being used. In other words, they expressed their sentiments of not being able to be invited whenever there are consultations so their mode of implementation and best practices may also be considered since they feel that only the people from the central office are being listened. Furthermore, they expressed that some of the requirements reflected in the document were not really properly implemented.

- **Interview with the Teachers**

When the survey questionnaires were distributed to the teachers, there was a need to verify some details since most of the answers did not reflect specific details. There were also parts that needed verification thus some of the teacher-respondents were interviewed to verify certain items.

As regards with the teachers knowledge on the development of the National Core Standards for TVET personnel, it was found out that majority of the TVE teachers are aware of the existence of the National Core Standards for TVET personnel in the country. On the other hand, they expressed that they have limited understanding on the process that is involved in creating a technical working group that made these standards. These standards serve as their framework and

guide in delivering competency-based instruction. However, the teachers expressed that they have very limited idea on how these were formulated. In fact, some expressed that they do not know that a process exists because they were just given direct instructions to follow and implement these standards. Besides, memorandum from the central office is also being provided to each school to they can follow what is stipulated in the national standards.

- **Interview with the TVE Coordinators and Principals**

During the interview with the principals and the TVE Coordinators, it was found out that these administrators simply follow specific instruction from the central office (Manila) regarding the implementation of technical-vocational programs in the country. In their respective learning institutions, they abide by the prescribed memorandum orders given by the central office as their guidelines in the delivery of the techvoc programs they offer. These refer to the Training Regulations. Some of these TVE Coordinators narrated how they came to know about the national standards by recalling their experiences. Two of these coordinators (the old one) mentioned that about 10 years ago

TESDA invited people from the academe, industry, some TESDA people, stakeholders and experts from the different disciplines for a meeting and discussion on certain competencies and standards for them to critique and to give recommendations. According to them, few years after, there came the training regulations from the central office. It was also noted that after that meeting, there was no follow up consultation.

On the Development of National Core Standards

The table below presents the results on the process and committee on the development of the National Core Standards.

Process and Committee	YES I know	NO I don't know	Comments
What were the processes?	51	10	Most know that there was a process but they are not aware nor familiar with these processes
Who were involved?	20	41	Most respondents are only aware of the central office personnel in charge of the program like the TESDA secretary and regional directors but do not really know the composition of the technical working group.

Who assigned them?	20	41	The central office is usually the one who decides and appoints members of the technical working group.
What was the organizational structure?	31	30	The structure is based on the government mandated organizational structure.
Did they hire consultants?	26	35	They did hire consultants but the respondents have limited information on these consultants that were hired.

The table above shows the teachers' responses on the process of National Standard for TVET personnel in the Philippines. Majority of the respondents knew that a process exists although there were few who expressed that they do not mind if there is a process in place. They were just concerned of their own employment status. As much as they want to be involved in the process, they also suggest that if possible there should be a wide consultative discussion among trainers and stakeholders on field since some doubted that those who are part of the team may not be experts on the field but just recommended appointees. Even if some stakeholders were consulted, the teacher-trainers must also establish a linkage with these stakeholders so there will be mutual understanding of expected competencies and certain matters will also be clarified since during the final stage of the deliberation only the higher officials are convened and the trainers are not anymore part of the group.

Moreover, most knew that a process is in place but are not familiar with how it was done. Some didn't bother to know of the process because they are contented that they were hired. Few hardly knew that there is a process in place. Some were aware of the process but cannot explain what the process is. They simply follow what has been given to them since they are also required to follow the guidelines set by the central office.

Development Process of National Core Standards for TVET Personnel

The table below presents the results on the development process of the National Core Standards.

Research Questions	Answers
1. Process and Committee 1.1 What were the processes involved in the development of the National Core Standards of TVET Teachers? 1.2 Who were involved in the development process who assigned them?	- Central office, experts from industries & the academe validated by TESDA board - Consultation with representatives - Started when TESDA was born/organized (1998-200)

1.3 What is the structure/organization of the team (composition) 2. Contents and Structure 2.1 What are the contents/elements? 2.2 What is the structure of the National Core Standards?	- It evolved, changed by qualification It took 1 year before it was fully implemented - Experts from industries, academe, from TESDA, curriculum developers from the academe
3. Dissemination 3.1 What were the steps in the dissemination of the NCS? 3.2 Who took charge in the dissemination of the NCS? 3.3 How is it disseminated and what forms of dissemination?	- Central office issues the memorandum then distributed to the different regions for implementation. - There are personnel assigned to place the information in the TESDA website. All needed information are on the website
4. Issues and Recommendations 4.1 What issues were raised in the development and dissemination of the NCS? 4.2 What suggestions or recommendations to improve the development and dissemination processes?	- Some are not aware of the process. - Some want to know of the people who were involved if they are really experts on field or just recommended. - There are concerns of the teachers/trainers that were not addressed like there has to be a wide consultation among trainers and stakeholders so their concerns can be heard.

The table above reflects the verbatim answers to the questions being asked on the development process of the National Core Standards for TVET personnel. It can be noted that there is no clear and identified steps in the formulation of the standards that were disseminated. The dissemination happened only after everything has been written on paper for all the regions to follow and comply. Some of the TVE Coordinators remembered few years back that they have attended a consultative meeting on the development of the training methodologies but there were no follow up meetings after that. Then they just received a memorandum from the central office that there already training regulations that enumerates the specific competencies expected in every program offering which also describes the expected outcome.

Part of the issues raised by the the teacher-respondents that they also expressed is their need to undergo capability building trainings and immersion training in industries so they can enhance their skills and competencies at the same time develop specific techniques in delivering their programs they are handling. They want to ensure that the gap between what they teach and what students will do in the industry be lessened when they also get the chance to observe and even

work with their industry partners to have a hands experience also on what their students will soon experience during their On the Job Training (OJT) so that they can prepare their students well.

National Policy documents come from the Central office (National Government, Manila Office) thus there is a limited means of verifying information since those we interviewed cannot give us specific details on the process and thus resulted to recommending us to go to their website (TESDA) for further information. Documents retrieved were basically true only on paper but as to the implementation and monitoring, there is a need to have them verified. This is because the implementation of these policies from one school to the other considering their varied resources.

Implementation of national core standards

The table below presents the results on the implementation of National Core Standards.

Questions	Answers
What are your challenges and issues in the implementation of the National Core Standards for TVET Teachers? a. How have you managed and addressed these challenges? b. How could these challenges have been avoided?	- (23) lack of equipment - (10) lack of training - (10) dissemination process is one way, those in the region does not have any say on any decisions made. They just simply follow what had been given by the central office. - (30) express these issues during meetings but to no avail because nothing can be done since it is already given by the national government (central office in Manila)
Do you have any recommendations for the implementation of the Regional (ASEAN) Core Standards for TVET Teachers?	- (33) capability building for teachers and trainers so as to upgrade skills and become competitive - items such as (10) teaching methodology, (10) content mastery, and (10) personal and professional efficacy must be included so as to ensure that the expected outcomes for both teachers and students are being achieved.

Regarding the implementation of the national core standards, it was found out that technical vocational teachers have a number of challenges in delivering the programs that their school is offering due to lack of equipment and teachers' training. Although the teachers have the needed qualifications in terms of national competencies together with their academic backgrounds, it was noted that they still express their limitations in the delivery of their subject matter because there are a lot of expectations set for them to implement but the support is still very limited. The

teachers expressed their need to upgrade their skills and competencies in order to be updated and relevant to what they are teaching.

On the other hand, it was also noted that the implementation of the national core standards vary in different learning institutions because of the fact that there are so many programs and not all schools offer the same techvoc programs. Furthermore, every school has its own flagship program and every school is known for a particular techvoc program. For instance, Abellana National School is famous for their cookery and cosmetology programs while the Sisters of Mary Boystown School is known for their automotive and electrical programs. The Technical Education Skills and Development Authority is also known for all their programs since most if not all of their graduates are hired by varied industries in the country.

Majority of the teacher-trainers expressed that in two schools expressed their desire to have modern facilities and resources in their school since their laboratory equipment are not new and they cannot cope with the latest trends in technical teaching since they do not have the modern facilities. Likewise, it was also noted that some of these teacher-trainers themselves feel incompetent because they do not have the specialization even if they have the needed competencies. Another issue that surfaced was the language of instruction for teachers use English during classroom discussions but use the mother tongue when they are in the laboratory particularly in the shop (working area) where they do hands on training. It was then suggested that there should be a common language that can facilitate this gap. In the same manner, it was also suggested that there should also be a common language especially on technical terms for both the academe and industry so as to avoid misinterpretations in the use of certain terminologies.

The expectations for regional core standards for TVET personnel

Questions	Answers
What are your expected components to be included in the Regional (ASEAN) Core Standards for TVET Teachers?	- specific and common competencies that are generic to all technical vocational programs but on the higher level - teaching methodology (competency-based, output driven /outcome-based) - personal and professional efficacy for teachers/trainers - teacher training and capability workshop must be done regularly - academe and industry partnership must come up with their own representations and expectations in order to be included to the core standards in order to limit gaps and avoid mismatch of expectations - standardized assessment tools - consistency in the use of a common language of instruction, a common

	language for both academe and industry - teacher-trainer characteristics both for personal and professional efficacy and development must be clearly identified - certification training template
Which structure would you recommend for the Regional (ASEAN) Core Standards for TVET Teachers?	- The establishment of the Technical Working Group (TWG) must be well represented by having representatives per region not just from the central office. Also, there must be representatives for both public and private learning institutions and industries. - There must be proper coordination among the higher administration, middle administration and the trainers and teachers. - There must be a template from the development to the implementation of the Core Standards so it would easy to trace and follow certain protocols.
How will you use the Regional (ASEAN) Core Standards for TVET Teachers?	- There must be a national dissemination of information before its full implementation. - It must be pilot tested first before the national then regional implementation is done. - Feedback mechanism must be in place to enhance the implementation. - Each country must share practices in order to be made aware on each countries mode of implementation and learn from each county's best practices. - The mode of delivery must also be standardized across countries. - There should be a governing body that will accredit the competencies assessed and tested among the different member countries. - National certificates will be honored in all countries.

With regards to the expectations for regional core standards for TVET personnel, most of the TVE teachers being interviewed expressed their excitement in having the Regional Core Standards for TVET teachers because this will provide opportunities for teachers to work in the different parts of the ASEAN region. This will also make teacher exchange programs more feasible so every country can share best practices especially with the ASEAN Integration in place. This will also pose challenges to TVET teachers to be more competent and competitive in the delivery of their technical vocational programs.

The teacher-trainers expect that there will be mutual accreditation and certification agreement among member countries so it is easier to facilitate whatever documents needed for any further study or work opportunities that might be formed. Most of the respondents also expressed their concerns on the licensing issue like what agency will give the license and for how long. In relation to that, they also asked for the number of years for the effectivity of the license or certification and the requirements for its renewal.

Apart from the suggestions and recommendations given, some challenges also surfaced as expressed by those interviewed. Their responses are reflected on the table below:

Challenges/Issues	Suggestions/Recommendations
- National Policy documents come from the Central office (National Government, Manila Office) thus there is a limited means of verifying information since those we interviewed cannot give us specific details on the process and thus resulted to recommending us to go to their website (TESDA) for further information. - Documents retrieved were basically true only on paper but as to the implementation and monitoring, there is a need to have them verified. - The personnel that were interviewed come from different programs so there is a challenge in consolidating information. - Changes in administration can affect the implementation and documentation of programs because the continuity of the program is sacrificed. - It is not easy to get access in interviewing the VIP's (people that can really provide detailed information)	- Each region must have representative in the technical working group (TWG) so their content, context, and implementation will also be considered during the formulation of the national core standards. - There must be a template on the regular monitoring and classroom observation of teachers so as to ensure uniform implementation and identify best practices among - There is a need to have a regular or annual gathering of TVET personnel in the country in order to address issues and respond to challenges in improving the quality delivery of programs and constant updating and upgrading of TVET teachers. - There should be a common assessment tool that will standardize the monitoring and evaluation of all programs.

- Limited documents that are available for our use (some were not divulged) there is a need to get deeper insight and elaborate explanation to really come up with a valid and reliable information - The language of the company is the language of the industry so the challenge is to be consistent in the use of terminologies. - There is no clear template that can facilitate certain inquiries on specific certification issuance or licensing.	- There should be a language program embedded in the regional core standards so all teacher-trainers can use the same language for a better understanding of each country's uniqueness in terms of the implementation of different programs. A common is needed so as to avoid language barrier in the exchange of communication.
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These challenges and issues together with the recommendations and suggestions reflected on the above table are expressed by the both the TVE Coordinators and Teacher-trainers during the focused group discussion. They are just being classified based on the items in the questionnaire with regards to the given responses from the teacher-trainers and TVE coordinators.

It was noted that majority of the participants are in favor of the development the Regional Core Standards for TVET Personnel because this will standardize the trainers qualification and will provide mutual recognition of certification. This also implies the sharing of expertise and best practices among member countries and thus promote unity, cooperation and collaboration that will lead to a stronger ASEAN union.

Conclusion

In the Philippines, the National Core Standards for TVET personnel is given by the national government through the central office in Manila and then disseminated to all the schools and delivering institutions in the country for implementation. The development of these national core standards is made and decided by the technical working committee members composed of TESDA and other government authorities together with some experts from the industry and the academe. However, the process is very limited to those who are in the government agency where the technical committee members are identified. There is minimal participation among other regional trainers, academic leaders, curriculum makers, and industry experts. The development of the National Core Standards of TVET personnel were handled by the Technical Education Skills Development Authority (TESDA) in their national office based on the agency's process of organizing these guidelines which were then provided to the regional offices for implementation. Thus, there is a uniform guideline set that is implemented nationwide. This then will be contributory to the development of the regional core standard for TVET personnel.

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REPORT 7

Thailand

*Lesson learned from the development and implementation of National
TVET-Teacher Standard in Thailand for the development of
Regional TVET-Teacher Standard*

Organizations/Institutions

Rajamangala University of Technology at Thanyaburi

Team

- 1. Asst. Prof. Dr. Sutthiporn Boonsong***
- 2. Asst. Prof. Dr. Tiomyod Pasawano***
- 3. Dr. Wichet Plaimart***
- 4. Mr. Kitipoom Vipahasna***
Dr. Kitipoom Vipahasna

January-September 2016

Introduction

In Thailand, the national core standards for TVET personnel is developed and implemented under the Ministry of Education, Office of the Higher Education Commission –OHEC which is directly responsible for proposing policies, developing plans and standards of higher education. The OHEC provides the Thai Qualifications Framework for Higher Education which is called the National Qualifications Framework for Higher Education in Thailand. The OHEC is authorized to approve the curriculums for a bachelor's degree in education, a bachelor's degree in industrial education and a bachelor's degree in technical education. Moreover, based on the Teachers and Educational Personnel Council Act B.E. 2546 (2003), the Teacher Council of Thailand is authorized to issue the teacher licensing system. The licensing system requires a bachelor's degree in education as a minimum requirement and the license must be renewed every five years. The Teacher Council of Thailand maintains the determination and monitoring of professional standards, issue licenses and their renewals to applicants to practice the profession in education, to promote and support research and professional development in education, to support commend and uphold the honor of professional practice in education, to supervise the conduct and performance of Professional educators to be in compliance with the professional standards and code of ethics and to develop the system of administration and management. In addition, RMUTT in collaboration with Office of the Vocational Education Commission (OVEC), Bureau of Vocational Education Standards and Qualification who provides the standards of Industrial Vocational Education and Vocational Education Quality Assurance for both teacher/instructor and school administrators/principals, Thailand Professional Qualification Institute (public organization) (TPQI) provides the occupational standards, Department of Skill Development (DSD) provides the assessment guidelines for instances National Occupational Skill Standard (NOSS) and National Industrial Skill Standard (NISS).

Research questions

A. Development of the National Core Standards

1. Who are the participants in the development of the national core standard for TVET personnel?
2. What are qualifications of the participants in the development of the core standard for TVET personnel?
3. How are they selected?
4. What are the methods used in identifying the core standards for TVET personnel?
5. How are the core standards stated (e.g., competency statement, subject/topic, etc.)?
6. Is there a leveling of the core standards statement for TVET personnel?
7. What agency promulgates the core standard for TVET personnel?
8. What agency promulgates the core standard for TVET personnel?
9. What are the qualifications provided by the core standard for TVET personnel?
10. How do they package the qualifications for TVET personnel?
11. Is there a time frame for the review or moderation of the core standard for TVET personnel?
12. What are the challenges and issues in the development of the core standard for TVET personnel?

B. Implementation of the National Core Standards

1. Is there any requirement for the institutions that prepare TVET personnel?
2. What are the requirements to become training provider TVET personnel?
3. What is the education and training for TVET personnel being conducted to meet the requirements qualified TVET personnel?
4. What are the assessment methods used to determine who will be certified or meet the core standards?
5. Who conducts the assessment to determine if a personnel meets the core standards?
6. What are the qualifications of the assessors?
7. What agency certifies the candidate who attains the core standard of TVET personnel?
8. What are the challenges and issues in the implementation of the core standard?

C. What are the commonalities and what the main differences of the selected core standards?

D. What is the “ideal” development path of competence standards for TVET teachers?

Findings

A. Development of the National Core Standards

1. Who are the participants in the development of the national core standard for TVET personnel?
 - Teacher Council of Thailand
 - Office of the Higher Education Commission
 - Office of the Vocational Education Commission
 - Department of Skill Development
 - Thailand Professional Qualification Institute (public organization)
 - The association of 9 Rajamangala University of Technology and 3 Kingmongkut's University of Technology
2. What are qualifications of the participants in the development of the core standard for TVET personnel?
 - Teacher Council of Thailand
 - To determine and monitor professional standards.
 - To issue licenses and their renewals to applicants to practice the profession in education.
 - To promote and support research and professional development in education.
 - To support, commend and uphold the honor of professional practice in education.
 - To supervise the conduct and performance of Professional educators to be in compliance with the professional standards and code of ethics
 - To develop the system of administration and management.
 - Office of the Higher Education Commission

- To approve and assess the course curriculums for Bachelor's degree in education
- Office of the Vocational Education Commission
 - Provide recommendations for setting policies, developmental plans, standards and curriculum for all levels of vocational education.
 - Proceed and coordinate for the improvement of vocational education and professional standards.
 - Define the criteria and methods of budget allocation and support of necessary resources.
 - Develop teachers and vocational education personnel.
 - Promote and coordinate for the vocational education management between the government and private sectors, including defining the criteria and cooperation patterns with other agencies and enterprises.
 - Follow up, evaluate and report the outcome of vocational education management of both the government and private sectors.
 - Set up the system, promote and coordinate for the information network system, utilizing information and communication technology (ICT) in the process of vocational education and professional training.
 - Perform the secretary tasks of the Vocational Education Commission and as assigned by the Vocational Education Commission.
 - Conduct other duties as having been authorized or defined by the law as well as assigned by the minister or cabinet.
- Department of Skill Development
 - To provide the National Skill Standards:
 - Level 1 People with working skills and knowledge at basic level
 - Level 2 People with working skills, knowledge and abilities at intermediate-level
 - Level 3 People with skills at advanced level
 - To provide Qualifications of National Skill Standards Testees
 - To provide Test Application Documents
 - To provide Criteria in Skill Standard Test
- Thailand Professional Qualification Institute (public organization)
 - To develop occupational standards
 - To accredit organizations that test individuals' competencies
 - To act as an information center on professional qualification system and occupational standards
 - To evaluate organizations that certify individuals' competencies
 - To collaborate with government and private sectors in promoting professional qualification system
- The association of 9 Rajamangala University of Technology and 3 Kingmongkut's University of Technology
 - Provide the courses in Bachelor's degree in education, Industrial Education and Technical Education.

3. How are they selected?

They are authorized under the TEACHERS AND EDUCATIONAL PERSONNEL ACT

B.E. 2546 (2003)

Based on the TEACHERS AND EDUCATIONAL PERSONNEL ACT

B.E. 2546 (2003) they have duties, missions, roles and responsibilities to work collaboratively to develop and implement as follow:

- National Qualification Framework
- TQF : Thai Qualification Framework
- TQF for Higher Education
- TQF for Vocational Education
- TQF for Basic Education
- TPQF : Thai Profession Qualification Framework
- TVQF : Thai Vocational Qualification Framework
- National Occupational Skill Standard
- National Industrial Skill Standard

4. What are the methods used in identifying the core standards for TVET personnel?
 - Based on the typical Research Methodology
 - Job Analysis
 - Workshop
 - Focus Group
 - Survey, Interview, Seminar
 - Public Hearing
5. How are the core standards stated (e.g., competency statement, subject/topic, etc.)?

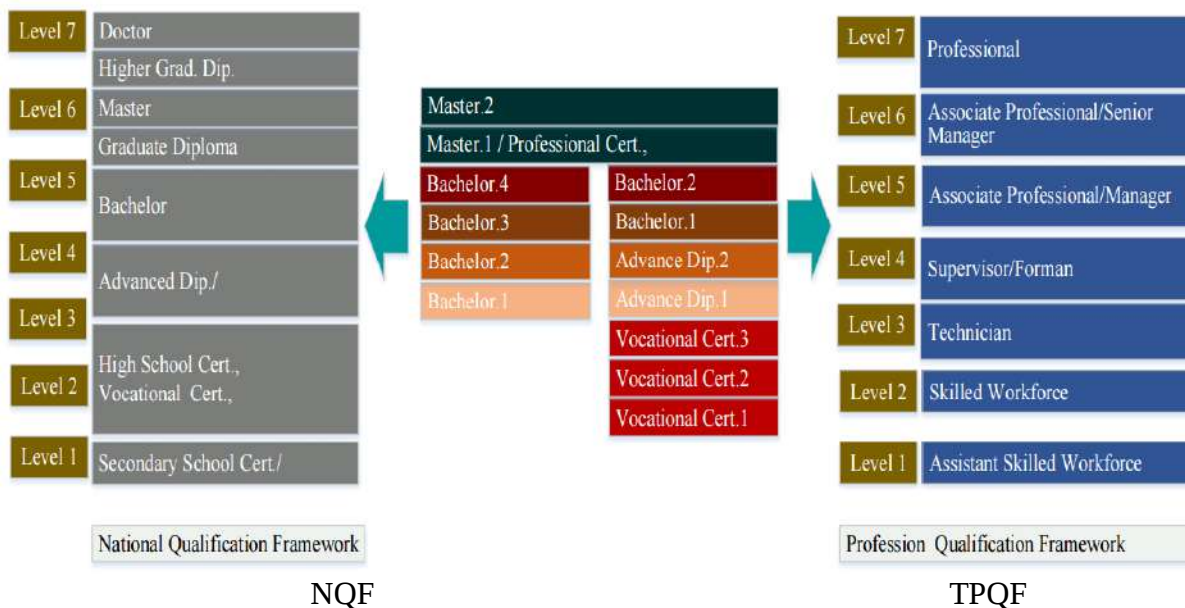
Teacher Professional Competencies

 - Core Competency
 - o Working Achievement Motivation
 - o Service Mind
 - o Self-Development
 - o Team Work
 - o Teacher's Ethics and Integrity
 - Functional Competency
 - o Curriculum and Learning Management
 - o Student Development
 - o Classroom Management
 - o Analysis & Synthesis & Classroom Research
 - o Teacher Leadership
 - o Relationship & Collaborative for Learning
6. Is there a leveling of the core standards statement for TVET personnel?

Thai Profession Qualification Framework



Level 7	National Qualification of Advanced Professional Competence
Level 6	National Qualification of Higher Professional Competence
Level 5	National Qualification of Professional Competence
Level 4	National Advanced Diploma Qualification of Vocational Competence
Level 3	National Qualification of Vocational Competence 3
Level 2	National Qualification of Vocational Competence 2
Level 1	National Qualification of Vocational Competence 1



7. What are the elements of the core standards document for TVET personnel (e.g. qualifications and qualification packaging, assessment guidelines, training provider requirements, qualifications of faculty, etc.)?
 - Qualifications
 - Qualification Packaging
 - Assessment Guidelines
 - Training providers
 - Qualification of faculty
 - Laboratories and classroom
 - Workshop and Facilities
 - Courses and Curriculums
 - Online and E-learning courses
 - Testing Items
 - Industrial Collaborations and Internships
 - Guideline for Work-Integrated Learning and Hands-On for curriculum mapping.
 -
8. What agency promulgates the core standard for TVET personnel?
 - Teacher Council of Thailand
 - Office of the Higher Education Commission
 - Office of the Vocational Education Commission
 - Department of Skill Development
 - Thailand Professional Qualification Institute (public organization)
9. What are the qualifications provided by the core standard for TVET personnel?
 - Thai Profession Qualification Framework
 - Thai Vocational Qualification Framework
 - National Occupational Skill Standard
 - National Industrial Skill Standard
10. How do they package the qualifications for TVET personnel?
 - 5 Years full-time curriculum for the courses in Bachelor's degree in education, Industrial Education and Technical Education.
11. Is there a time frame for the review or moderation of the core standard for TVET personnel?
 - Office of the Higher Education Commission determines all curriculum to be full-renewal every 5 years and semi-renewal every 2 years
 - Thailand Professional Qualification Institute (public organization) determines all standard and training courses to be full-renewal every 3 years
 - Department of Skill Development) determines all standard and training courses to be full-renewal every 3 years

12. What are the challenges and issues in the development of the core standard for TVET personnel?
- There is no such a common standards national wise
 - The core standard for TVET personnel doesn't implement under the law and doesn't strictly require in the curriculums.
 - There is no major agent who takes the overall responsibilities
 - Require a unify framework, standard and qualification that can be applied to all parties and stakeholders.

B. Implementation of the Core Standards

1. Is there any requirement for the institutions that prepare TVET personnel?

Yes, there are selection process for prepare TVET teacher for TVET college which process by Office of Vocational Education Commission.- OVEC.

And now, 10 Faculty of Technical Education from 10 universities still try to develop the TVET teachers' standard for TVET teacher license.

2. What are the requirements to become training provider TVET personnel?

In Thailand now, university often use 1) standard professional qualifications from the Office of Standard Professional Qualifications and 2) occupational standards from Ministry of Labour.

3. What is the education and training for TVET personnel being conducted to meet the requirements qualified TVET personnel?

The education and training for qualified TVET personnel now are as follow:

1. Short course and test by the Ministry of Labour
2. Study or training for certificate or degree in college or university.

4. What are the assessment methods used to determine who will be certified or meet the the core standards?

The assessment methods normally used skill test certified or meet the core standards. But in Thailand now , do not use these test or any assessment for TVET teachers.

5. Who conducts the assessment to determine if a personnel meets the core standards?

There are the core standards for several occupational which prepared by Office of Vocational Education Commission (OVEC) but do not use for TVET test

6. What are the qualifications of the assessors?

So far, there are no official assessors in Thailand but for the Thailand Professional Qualification Institute (Public Organisation) – TPQI, they tend to develop the national professional qualifications system for Thailand, support the industry in developing competency-based occupational standards, accredit, monitor, and evaluate assessment/testing organizations that assess and certify individuals' competencies and award professional qualifications. Furthermore, they conduct research and development to enhance the professional qualification system, collaborate with the industry and related sectors in developing and promoting professional qualifications and hold database and IT system of professional qualification system for Thailand.

7. What agency certifies the candidate who attains the core standard of TVET personnel?

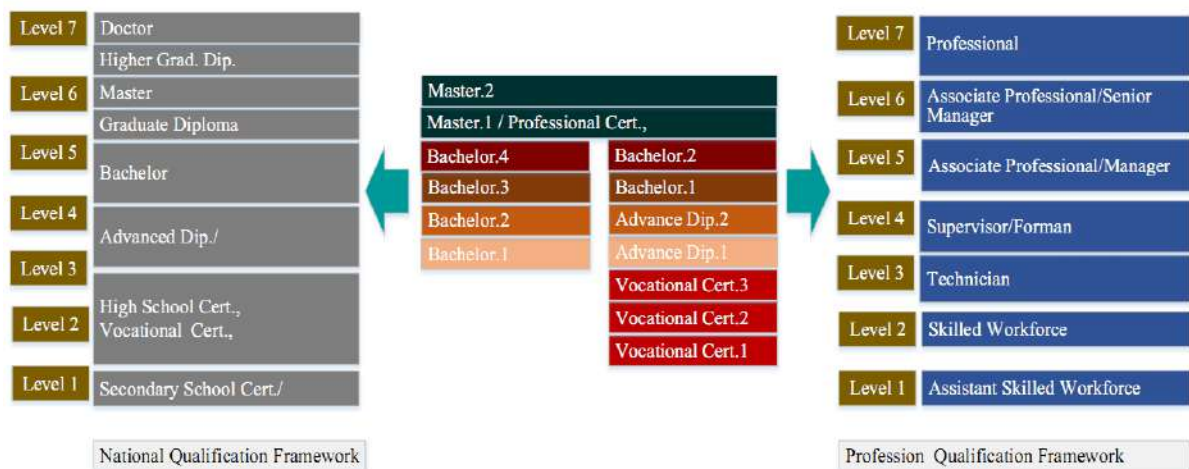
There are no any agency certifies the candidate who attains the core standard of TVET personnel in Thailand now

8. What are the challenges and issues in the implementation of the core standard?

The main challenges and issues in the implementation of the core standard now are "Teacher Council" still not agree in using the core standard of TVET personnel.

C. What are the commonalities and what the main differences of the selected core standards?

Picture below illustrates the similarities as well as differentiation between three differences Thai national standard qualification frameworks includes Thai Qualification Framework or National Qualification Framework that applies for general education on the other hand the Thai Profession Qualification Framework represents the leveling system based on the competency standardization for both Profession and Vocational Qualification Framework. Additionally, the Department of Skill Development provides the National Skill Standards within the three levels of core competency includes Level 1 People with working skills and knowledge at basic level, Level 2 People with working skills, knowledge and abilities at intermediate-level and Level 3 People with skills at advanced level.



D. What is the “ideal” development path of competence standards for TVET teachers?

- Determine the only one united standard and framework for competence standards for TVET teachers.
- Regulate TVET teacher to apply the competence standards for TVET teachers.
- Follow the framework of Training, Testing and Certifying.

REPORT 8

Vietnam

Lesson learned from the development and implementation of National TVET-Teacher Standard in Vietnam for the development of Regional TVET-Teacher Standard

Organizations/Institutions

- ***Ho Chi Minh City University of Technology and Education (HCMUTE)***
 - ***Nam Dinh University of Technology Education (NUTE)***

Team

From HCMUTE:

Assoc. Prof. Dr. Duong Thi Kim Oanh

Ma. Dang Thi Dieu Hien

Ma. Do Thi My Trang

Dr. Nguyen Vu Lan

From NUTE:

Dr. Phan Sy Nghia

January-September 2016

Lesson learned from the development and implementation of National TVET-Teacher Standard in Vietnam for the development of Regional TVET-Teacher Standard

Abstract

In order to achieve the goal “to become a modern and industrialized country in the near future”, Vietnamese government has focused on improving the quality of its human resources (one of the three pillars defined in Vietnam’s Socio - Economic Development strategy for 2011 – 2020), in which the quality of TVET personnel plays a key role. Similar to other ASEAN member countries, Vietnam has built the core standards for TVET teacher since 2010. How is the development, dissemination and implementation of the core standards for TVET personnel in Vietnam? In order to answer the question, HCMUTE and NUTE have implemented the study on the development, dissemination and implementation of the core standards for TVET personnel in Vietnam from April to June 2016. In this study, TVET personnel consists of teachers, school principals and committee. Questionnaires, interview, observation have been used as the main methods to gather data about the development, dissemination and implementation of the core standards for TVET personnel in Viet Nam.

Introduction

2.1. Overview of Vietnam

According to the Vietnam government portal, lying on the eastern part of the Indochinese peninsula, Vietnam is a strip of land shaped like the letter “S”. China borders it to the north, Laos and Cambodia to the west, the South China Sea to the east and south. Mountains and hills cover two thirds of the mainland. Areas above 500m in altitude account for 70 percent of the mainland. The most grandiose and highest mountain ranges lie in the west and northwest of the country. Vietnam’s territorial waters make around 1,000,000 km², with over 3,000 km long coastline lines.

According to the 2014 national census, the total population was estimated 90.493.352 million, ranked 13th in the world and 3rd in Southeast Asia. There are 54 different ethnic groups in 64 cities and provinces of Viet Nam. Ha Noi in the North is the capital city and the second largest province in Viet Nam while Ho Chi Minh City in the South is the largest urban area.

Vietnam is a development success story. Political and economic reform launched in 1986 has transformed the country from one of the poorest in the world with per capital income around US \$100 to lower middle income status within a quarter of a century per capital income of around US \$ 2.100 by the end of 2015 (World Bank, 2016). According to the United Nations, over the last several decades, Viet Nam has gone through a period of rapid socio - economic development. In general, Viet Nam’s growth record has been driven largely by a combination of steady economics reforms, integration into the world economy and a stable macroeconomic environment.

Vietnam has completed a number of Millennium development Goals ahead of schedule in 2015 and improved most development indicators¹, as well as enhanced the access to educational services, health care and social safety networks for many components more widely more classes in the society. Viet Nam’s Socio - Economic Development strategy for 2011 - 2020 focuses on

structural reforms, environmental sustainability, social equity and emerging issues of macroeconomic stability. The strategy defines three breakthrough areas:

- Promoting human resources/skills development (particularly skills for modern industry and innovation);

1 <http://www.vn.undp.org/content/vietnam/vi/home/countryinfo.html>

- Improving market mechanism;
- Infrastructure development.

In order to enter more free trade agreements, Viet Nam has the deep international integration with the Eurasian Economic Union, the European Union, South Korea and the Trans - Pacific Partnership. Besides that, the ASEAN Economic Community was established on December 31, 2015 is likely to create more opportunities for the country to integrate into regional global economies. (World Bank, 2016).

2.2. Overview of TVET system in Vietnam

In order to achieve the goals of the socio - economic development strategy period 2011 - 2020, increasing the quality of human resource is one of three breakthrough solutions. Developing and improving the quality of technical and vocational education training is a need and requirement of the country to upgrade the human resource quality and competitiveness of the economy as a whole. In the past, in particular in the recent 15 years and also at present, technical and vocational education training of Viet Nam has been receiving a high level of attention by the State and society in terms of both financial investments and the development of other required resources geared at the development of vocational training towards demand-orientation and quality improvement. Resulting from that, Viet Nam has achieved positive developments, step by step leading to better meeting the demands of vocational trained labors of economic sectors, especially of focal economic regions and leading economic sectors.

The TVET system in Viet Nam consists of the following main points:

In Viet Nam, the national education and training system is all-encompassing, ranging from academic education (nursery to the highest doctorates, including professional education) to vocational training.

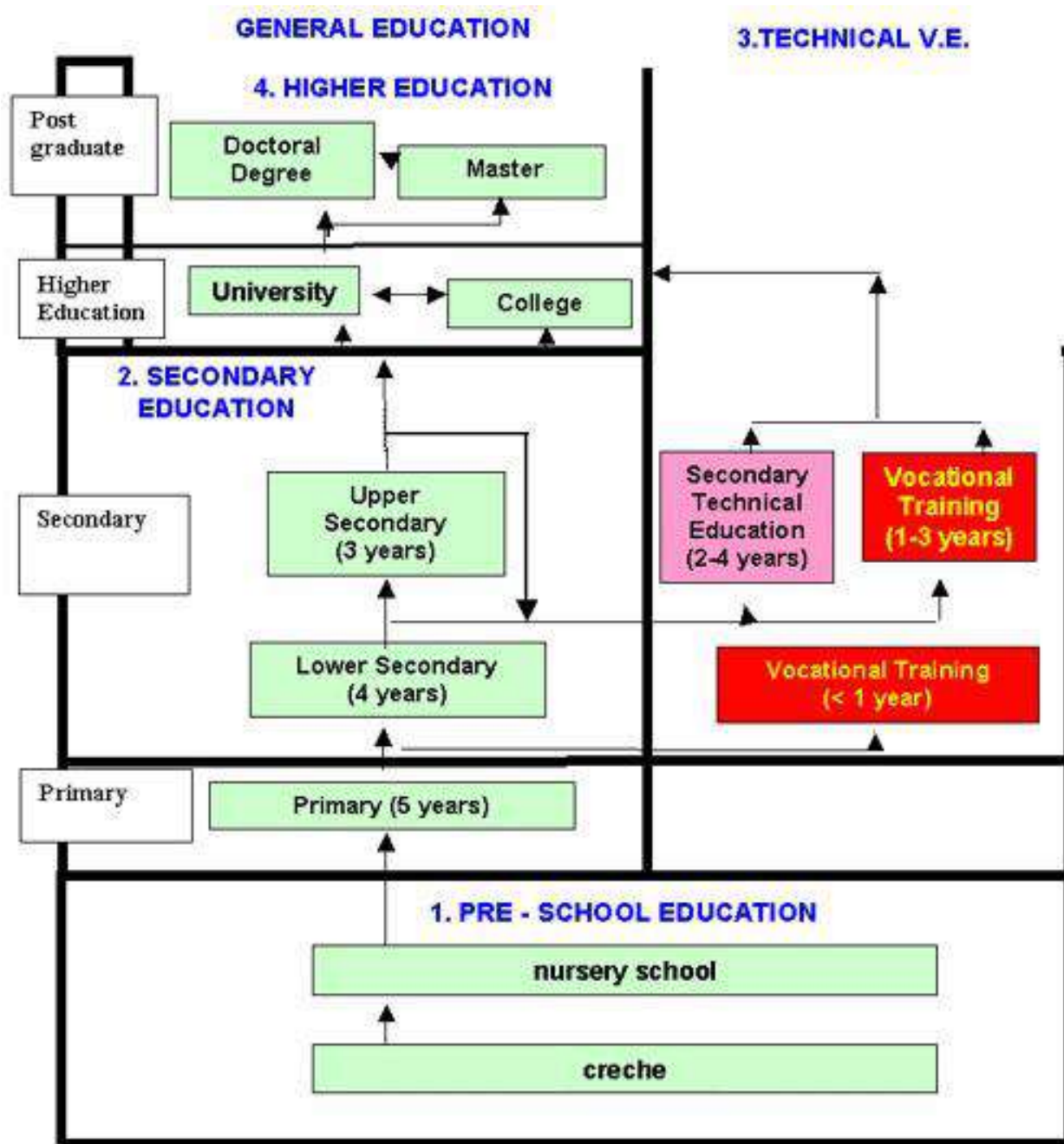


Chart 1: The national education and training in Vietnam

MoET and MoLISA are major responsible for providing and overseeing education nationally. In general, MoET is in charge of pre - school, primary, secondary and higher education while MoLISA has responsibility for managing much of technical and vocational education and training (TVET) sector with a focus on training students to enter the workforce.

According to the Laws on Vocational Education and Training, TVET system includes three levels: elementary level, secondary level and college level. The objectives and training duration of the three levels are as follows:

- The elementary level enables students to implement simple tasks of an occupation. The training duration is from 3 months to 1 year for those who have the academic level suitable to the occupation.
- The secondary level enables students to implement tasks at secondary level and some complicated tasks of a major or an occupation; to apply technology to the job, to work independently or work in a group. The training duration is from 1 to 2 years corresponding to the major or the occupation.
- The college level enables students to implement tasks at college level and complicated tasks of a major or an occupation; to be creative, to apply modern technology to the job, to guide and supervise others in a working group. The training duration is from 2 to 3 years corresponding to the major or the occupation for those who have high school diploma. The training duration is from 1 to 2 years corresponding to the major or the occupation for those who graduate from secondary school (in vocational education and training) and have high school diploma or equivalent.

According to the Preliminary report on 5 years of implementing vocational training development strategy for the period 2011-2020 by General Department of Vocational Training (GDVT), until 31/12/2015, there were 1,467 vocational training institutions, including 190 vocational training colleges (including 48 non-public schools), 280 vocational schools (with 102 non-public schools) and 997 vocational training centers (344 non-public centers). The number of technical secondary schools were about 280 (Asian Development Bank, 2014). Although these institutions are directly controlled by different ministries or local authorities, all of them are under the state management of MoET and MoLISA.

2.3. The contribution of this research to the development an improvement of TVET personnel in Viet Nam

Based on the results of the status of development and implementation national standards for TVET personnel such as teacher standard, school/college/principal/director standard, trainer of trainer standard and industry trainer standard, policy makers will have scientific evidences to improve the TVET personnel standards in Viet Nam. They will also propose ways to improve the issues/problems encountered during the dissemination and development of the national standard for TVET: limited time, unclear guideline, limited briefing or capacity building. In the other hands, this research will identify the expected components to be included in the regional (ASEAN) core standard for TVET teachers and levels of teacher competencies. These results are not only very important in improving core standards which are in line with the ASEAN Economic Community initiative concerning “recognition of professional qualifications” which could lead to TVET personnel mobility within the region, but also provide directions on how core standards for TVET personnel in Viet Nam will be developed.

Research Questions

This research focuses on questions in the following:

3.1. Development of the National Core Standards

- Who are the participants in the development of the national core standard for TVET personnel?
- What are qualifications of the participants in the development of the core standard for TVET personnel?
- How are they selected?
- What are the methods used in identifying the core standards for TVET personnel?
- How are the core standards stated (e.g., competency statement, subject/topic, etc.)?
- Is there a leveling of the core standards statement for TVET personnel?
- What are the elements of the core standards document for TVET personnel (e.g. qualifications and qualification packaging, assessment guidelines, training provider requirements, qualifications of faculty, etc.)?
- What agency promulgates the core standard for TVET personnel?
- What are the qualifications provided by the core standard for TVET personnel?
- How do they package the qualifications for TVET personnel?
- Is there a time frame for the review or moderation of the core standard for TVET personnel?
- What are the challenges and issues in the development of the core standard for TVET personnel?

3.2. Implementation of the Core Standards

- Is there any requirement for the institutions that prepare TVET personnel?
- What are the requirements to become a training provider of TVET personnel?
- What is the education and training for TVET personnel being conducted to meet the requirements qualified TVET personnel?
- What is the assessment methods used to determine who will be certified or meet the core standards?
- Who conduct the assessment to determine if personnel meet the core standards?
- What are the qualifications of the assessors? What agency certifies the candidate who attains the core standard of TVET personnel?
- What are the challenges and issues in the implementation of the core standard?

Methods

Cater for gathering data of status of developing regional core standards for TVET personnel in Viet Nam, we mainly conducted surveys on TVET teachers, school principals in

TVET institutions to get quantitative data. In order to make clearly statistics, interviewing was used to gather qualitative data. Interviewing participants included TVET teachers, school principals and committee.

In a short word, questionnaire is the main method to gather data. Parallel with the questionnaire method, interviewing is also applied to gather qualitative data from TVET teachers, school principals and committee. Quantitative and qualitative data help us make clear the status of developing the national core standard for TVET personnel in Viet Nam as well as contribute significant opinions on the expected components to be included in the regional (ASEAN) core standard for TVET teachers. Overview of survey participants will be fully analyzed in the following.

4.1. Some points of survey TVET teachers

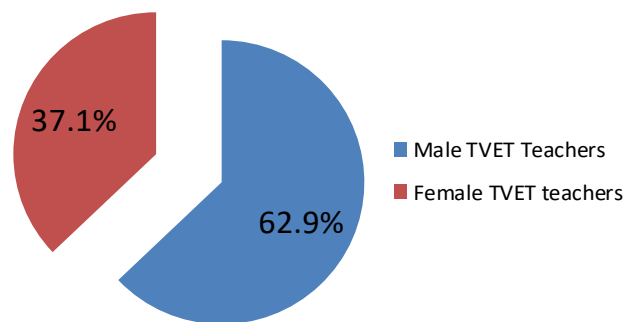


Chart 2: The total of TVET teachers participating in the survey

In this study, TVET teachers took part in the survey total 604. There were 380 male (accounting 62.9%) and 224 female (accounting 37.1%). That means the rate of male TVET teachers is nearly twice higher than the rate of female TVET teachers. Most of training fields of TVET institutions in this study are associated with the technical and vocational training. In Viet Nam, the rate of male TVET teachers is higher than its female in general.

These TVET teachers come from the entire country. Since TVET institutions are located in big cities or cities/provinces developing, so the rate of survey TVET teachers in Ho Chi Minh City, the Southern is higher than the Northern, the Highland and the Middle. There are 80.4% TVET teachers (484/604 survey TVET teachers) in the Southern compared with 10.9% (66/604 survey TVET teachers) in the Northern and 8.9% (54/604 survey TVET teachers) in the Highlands and the Central.

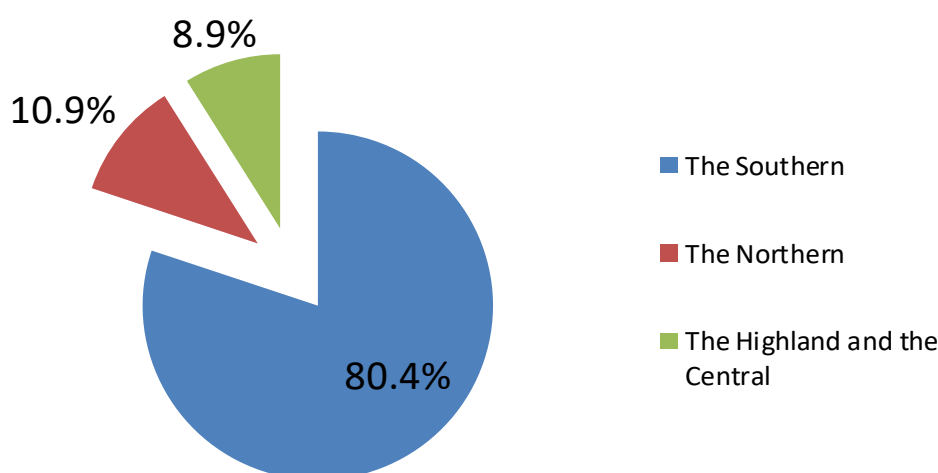


Chart 3: The distribution of TVET teachers participating in the survey

TVET teachers taking part in the survey have the year of working from under 1 year to over 20 years. There are nearly 63% of TVET teachers having 1 - 10 years of work teaching. There is no significant difference on years of work teaching between TVET teachers having 1 - 5 years (32.8%) and 5 - 10 years (32.0%) of work teaching. Statistics show that the age of TVET teachers is getting younger. There are only 15.4% TVET teachers having years of 15 - over 20 work teaching taking part in the survey.

Table 1: Years of working of TVET teachers taking part in the survey

No	No. of Years	Years of Work Related Experience		Years of Work Teaching	
		Quantity of TVET teachers	Percent (%)	Quantity of TVET teachers	Percent (%)
1	Under 1 year	31	5.1	17	2.8
2	1 to 5 years	157	26.0	198	32.8
4	5 to 10 years	179	29.6	193	32.0
5	11 to 15 years	116	19.2	103	17.1
6	15 to 20 years	67	11.1	47	7.8
7	Over 20 years	54	8.9	46	7.6
Total TVET teachers		604	100	604	100

How about the rate of TVET teachers in TVET institutions participating in this study? Statistics show that TVET teachers in the vocational College are nearly twice higher than the rate of TVET teachers in the technical and vocational college (2 and 3 years).

Table 2: The rate of TVET teachers in TVET institutions

No	TVET institutions	Quantity	Percent (%)
1	Technical and vocational College (2 years)	87	14.4
2	Technical and vocational College (3 years)	134	22.2
2	Vocational College	383	63.4
Total		604	100

604 TVET teachers come from areas of specialization such as education, mechanical, electrical, ICT... Over one a half of TVET teachers in 604 TVET teachers are having areas of technical specialization (mechanical, electrical, ICT, engineering) (nearly 56%). The remaining areas of specialization are allocated to education (21%), research (0.5%), management (13.1%), curriculum (0.2%) and others (16.9%).

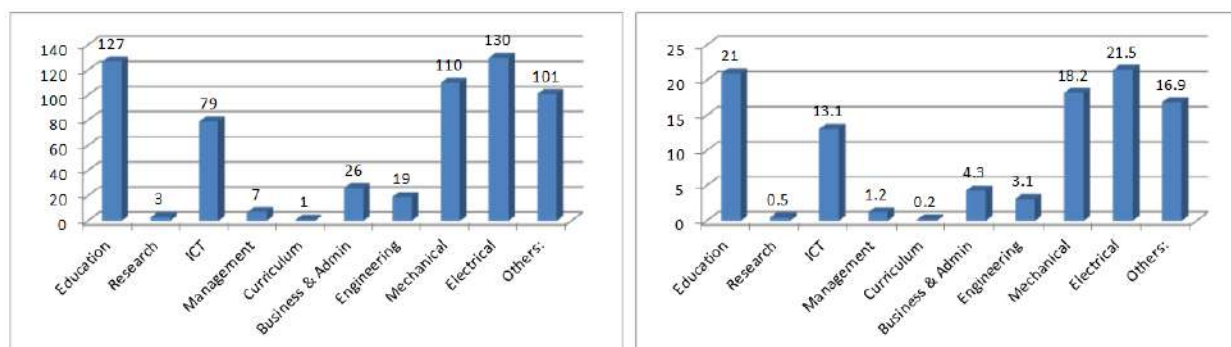


Chart 4: Areas of specialization of TVET teachers in TVET institutions

TVET system in Viet Nam is a quite complicated with multiple agencies administering TVET institutions. There are 202 TVET teachers managed by Ministry of Labor, War Invalids & Social Affairs (accounting 33.4%); 76 TVET teachers under state administration of Ministry of Education and Training (MoET) (accounting 12.6%) and 326 TVET teachers managed by other line ministries in the central (accounting 54%) such as Ministry of Industry and Trade, Ministry of Agriculture and Rural Development, Ministry of Transport, Ministry of Construction, Ministry of Defense.

Table 3: Multiple agencies administering TVET institutions

No	Ministry	Quantity	Percent (%)
1	Ministry of Education & Training	76	12.6
2	Ministry of Labor, War Invalids & Social Affairs	202	33.4

3	Others:	326	54
Total		604	100

How about the highest qualification of TVET teachers taking part in this survey? Some data related to the highest qualification of them will more fully analyze in the following:

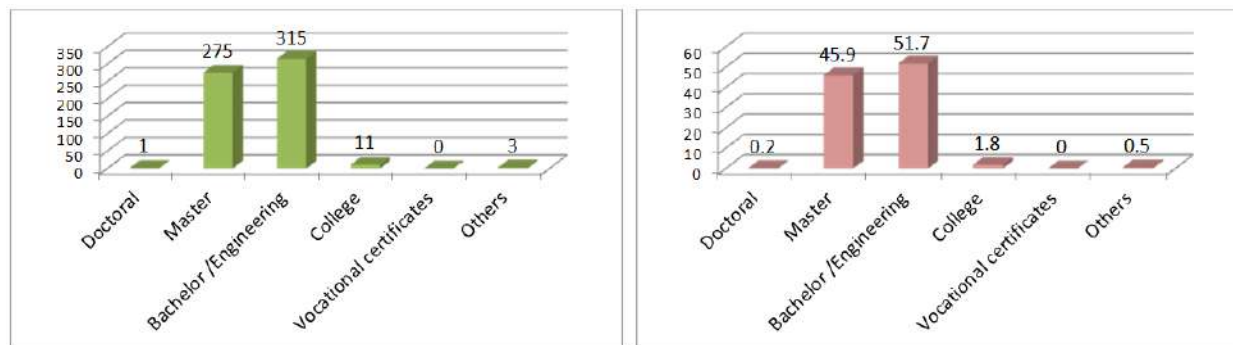


Chart 5: The highest qualification of TVET teachers in this survey

The highest qualification of over one a half TVET teachers taking part in this survey is Bachelor /Engineering (accounting 51.7%). In order to meet higher requirements of social and TVET students on TVET teacher's qualifications, TVET teachers have recently improved their professional knowledge and skills by studying at post - graduate level. The proportion of TVET teachers owns their master degree increasing rapidly in recent years, in particularly in Post-secondary technical and vocational Colleges. There are 275/604 TVET teachers (accounting 45.9 %) owning the Master degree. There are only 1.8% (11/604 TVET teachers) owning the College degree. The proportion of TVET teachers with the Doctoral degree is very low (1/604 TVET teachers). There are 3 TVET teachers with other degree. They are experts in some special training fields such as cooking, making up, nails.

Most of TVET teachers have got teacher certificate/qualification in the local. There are 592/604 TVET teachers (accounting 98%) have got certification/qualification in Viet Nam compared with 12/604 TVET teachers (accounting 2%). TVET teachers graduated from 5 universities of technology and education such as Ho Chi Minh City University of Technology and Education, Vinh Long University of Technology Education, Nam Dinh University of Technology Education, Hung Yen University of Technology Education and Vinh University of Technology Education; and other universities of sciences and technology such as Ha Noi/ Ho Chi Minh City University of Sciences and Technology, Ha Noi/ Ho Chi Minh City University of Industry.

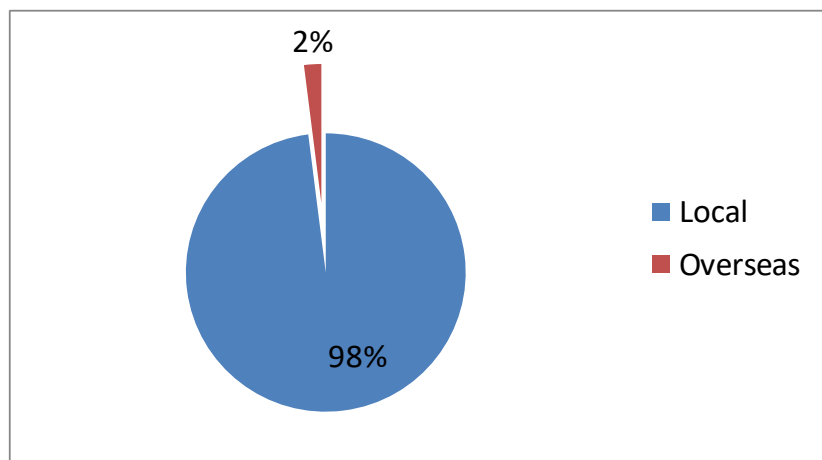


Chart 6: Institutions issued TVET teachers' certificate/qualification

To become TVET teachers, they have to own the certificate/qualification as well as the teacher certification. There are 544/604 TVET teachers (accounting 91.1 %) having the teacher certification compared with 60/604 TVET teachers (accounting 9.9 %) not yet having it in this study.

4.2. Some points of survey school principals

There are 42 school principals participating in this study. They come from TVET institutions located in the entire country (Northern, Southern, Highland and Central). Most of them are male (36/42 school principals) compared with 6/42 female school principals.

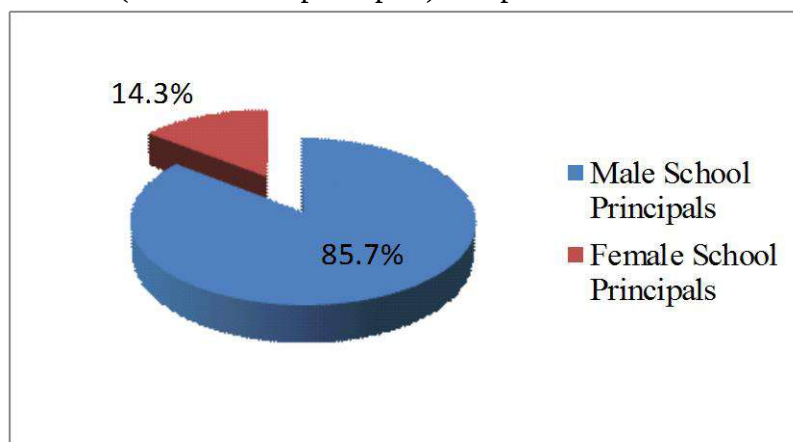


Chart 7: The total of school principals participating in the survey

These school principals have different areas of main specialization. The proportion of school principals with the technical specialization (mechanical, electrical and ICT) is 35.8 % (15 school principals). There is no significant difference about the percentage of school principals in areas of the management (23.8%) and of the education (26.2%). The percentage of school principals in areas of research (4.8%) and business & admin (7.1%) is lower than its management and education. There is also no significant difference between them. There is an only 2.4% school

principal in curriculum and on school principals in engineering. So the percentage of school principals in technical specialization is the highest.

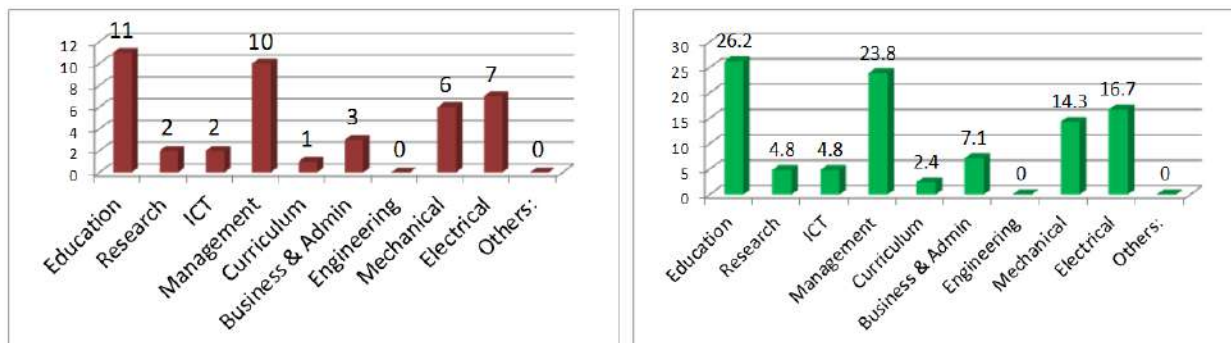


Chart 8: Areas of specialization of TVET teachers in TVET institutions

4.3. Some points of survey committees

In this study, we interviewed 2 committees at Ministry of Ministry of Labor, War Invalids & Social Affairs and committees at Department of Labor, War Invalids & Social Affairs in Kien Giang province, An Giang province ... They are responsible for managing TVET institutions in cities or provinces. Their information helps the research team set up and make clearer the process of development and implement of the national core standards for TVET personnel in Viet Nam.

In summary, there are 604 TVET teachers, 42 school principals and committees conducting the survey. Gathering data from questionnaires and interview plays a very important role in developing national and regional core standards for TVET personnel in ASEAN member countries.

Results

In this part, we will concentrate on analyzing qualitative and quantitative data to gain main outcomes:

- Clarify the status of development and implementation of national standards for TVET personnel;
- Identify issues and recommendations in dissemination of national standards for TVET teachers;
- Identify issues and recommendations in the implementation of national standard for TVET teachers;
- Identify expectations for the regional core standards for TVET teachers such as perceived benefits of having regional (ASEAN) core standards for TVET teachers, the expected (preferred) components and leveling of teacher competencies in the regional (ASEAN) core standard for TVET teachers.

The results of developing national core standards for TVET personnel in Viet Nam will be fully analyzed in the following.

5.1. Status of Development and Implementation of National Standards for TVET Personnel

5.1.1. Status of development of national standards for TVET personnel

5.1.1.1. Description of the process of developing of national standards for TVET personnel in Vietnam

The process of development of national standards for TVET personnel in Vietnam will be described through 9 steps in the following:

Step 1: Establish the Executive Board to develop the professional standards for vocational teachers

General Directorate of Vocational Training (GDVT) assists the Ministry of Labour - Invalids and Social Affairs (MoLISA) to manage vocational training. It is the agency to issue the decision of establishing the Executive Board.

The criteria to choose members of Executive Board:

- The Executive Board includes: Chairman, Vice Chairman, Secretary and other members.
- The number of members of the Executive Board is from 9 to 15 people.
- The structure of the Executive Board:
 - The Chairman is the leader of the Department of Vocational Training Teachers and Managers - an agency under GDVT.
 - Some leading experts in the field of teacher training from Technology Education Universities nationwide.
 - Experienced teachers in vocational institutions.
- Criteria to choose members of Executive Board: The members are those who are capable and experienced in the vocational teacher management and training and teaching in vocational institutions.

Step 2: Study the legal regulations on the management of vocational education and vocational teachers; the functions and structure of teachers' professional activity; the development of professional standards. Retrospectively study the related documents of some advanced countries in the world such as the USA, the UK, Australia, Germany,...

Step 3: Analyze the work of vocational teachers

- Organize the training on survey methods, methods of job analysis, task analysis, methods of standard development
- Analyze the activities of vocational teachers
- Make the work list of vocational teachers
- Describe the requirements for knowledge, skills, attitude towards the work of vocational teachers

Step 4: Determine the structure and content of the national standard for vocational teachers

- Determine the structure of the standard
- The Standard is just a frame
- The Standard includes: the criteria, standards and indicators
- Determine the contents of the standard
- Standardized assessment tools

Step 5: Develop the national standard for vocational teachers

- Draft the criteria, standards and indicators including:
 - Professional knowledge
 - Occupational Skills
 - Pedagogical skill
 - Ability in foreign language and information technology
- Draft the standardized assessment tools

Step 6: Organize seminars, consult vocational training institutions and reviewers

- Organize seminars, consult the experts
- Ask for the opinions of vocational training institutions through the website <http://tcdn.gov.vn>

Step 7: Appraise the Standard for vocational teachers

- Prepare the dossiers to appraise the draft of the Standard for vocational teachers, including the report on the process of standard development; the Draft of the Standard for vocational teachers and intermediate products such as vocational analysis diagram, the job analysis as prescribed;
- Organize the Appraisal

Step 8: Complete the national Standard for vocational teachers

Step 9: Submit to the Minister of Labour - Invalids and Social Affairs to issue the standard

5.1.1.2. The process of developing the standard

- The GDVT is the leading agency to develop the national standard for vocational teachers and Department of Vocational Training Teachers and Managers is the permanent body of the agency
- Duration: the process of developing the standard lasts for 6 months:
 - 4 months: develop the contents;
 - 1 month: upload to the website of MoLISA and GDVT to consult organizations and individuals concerned;
 - 1 month: edit, complete the standard and submit to the Ministry leader to issue a circular stipulate the Standard.

5.1.1.3. The outcome of the standard development

- Issues:
 - The national standard for vocational teachers at secondary and college level regulated in the Circular 30/2010/TT-BLĐTBXH dated on 19/10/2010.
 - The national standard for vocational teachers at elementary level regulated in the Circular 40/2015/TT-BLĐTBXH dated on 20/10/2015.
 - The content of the national standard for vocational teachers at secondary and college level. The standard includes 4 criteria with 16 standards and 50 indicators:
 - Criterion 1: The political and professional ethics, lifestyle
 - Criterion 2: Professional capacity: Vocational teachers are required to have university degree or technical education university degree; to have occupational skills equivalent to college level, level 5/7, level 4/6 or national artists
 - Criterion 3: Vocational pedagogy capacity: Vocational teachers are required to graduate from technical education university or college or to have vocational pedagogy certificate
 - Criterion 4: Capacity for professional development and scientific research
 - The content of the standard for vocational teachers at elementary level. The standard includes 4 criteria with 14 standards and 45 indicators:
 - Criterion 1: The political and professional ethics, lifestyle
 - Criterion 2: Professional capacity
 - Criterion 3: Vocational pedagogy capacity

- Criterion 4: Capacity for professional development

However, the current standard is the standard framework for teachers of all occupations. The standard for vocational teachers of each occupation has not been developed.

5.1.1.4. The result of status of development of national standards for TVET personnel in Vietnam

The research team conducted the survey on the status of development of national standards for TVET personnel in Vietnam on 604 TVET teachers and 42 school principals. It can be easily seen that 90.5% of the Principals/ Vice Principals taking part in the survey say that the national standard for TVET personnel has been developed, while only 61.6% of the vocational teachers know that the standard has been developed. 33.6% of the teachers do not know whether the standard has been developed or not. The survey results show that the dissemination or the interest of vocational teachers in the development of the national standards for TVET personnel is limited. In the process of the development, the Executive Board did not receive many opinions from other ministries, industries and especially vocational teachers.

Table 4: Opinions of TVET teachers and School principals on status of development of national standards for TVET personnel

No	TVET personnel Standards	TVET TEACHERS						SCHOOL PRINCIPALS					
		Developed		Not yet developed		Not sure		Developed		Not yet developed		Not sure	
		Quantity	Percent (%)	Quantity	Percent (%)	Quantity	Percent (%)	Quantity	Percent (%)	Quantity	Percent (%)	Quantity	Percent (%)
1	Teacher standard	372	61.6	26	4.3	206	33.6	38	90.5	3	7.1	1	2.4
2	School/college Principal/ Director Standard	212	35.1	57	9.4	335	55.5	31	73.8	10	23.8	1	2.4
3	Trainer of trainers standard	250	41.4	45	7.5	309	51.2	31	73.8	10	23.8	7	16.7
4	Industry trainer standard	79	13.1	61	10.1	464	76.9	3	7.1	16	38.1	23	54.8

Some recommendations for the development of the regional standard for TVET personnel are:

- Develop the standard for vocational teachers in each occupation;
- Appoint members of each country to the Board of Standard Development;
- Submit the standard to the authorities of the participating countries to issue and implement;
- The participating countries must commit to allow mutual recognition when implementing the standard.

5.1.2. Status of implementation of national standard for TVET personnel (TVET teachers)

5.12.1. The agency responsible for the implementation

- GDVT directs the implementation

- The Department of Vocational Training Teachers and Managers is the permanent body of GDVT
- Vocational Training Divisions and vocational training institutions are responsible for disseminating and implementing
- Lecturers and teachers of vocational training institutions implement the standard

5.1.2.2. The issued legal documents to implement the standard for TVET teachers

- The Circular regulating the Standard is uploaded to the portal of MoLISA, GDVT; published in the Official Gazette and sent to all Vocational Training Divisions of the provincial Department of Labour – Invalids and Social Affairs and vocational training institutions.
- GDVT issues a document to guide the assessment and classification of teachers on the basis of the standard (Dispatch No. 1329/TCDN-GV dated on 11/8/2011). Vocational teachers and lecturers are assessed as follows:
- Meet the Standard: Vocational teachers and lecturers are assessed on the basis of the total scores of the criteria, standards and indicators in comparison with the maximum scores. The maximum score for each criterion depends on the number of standards. The maximum score for each standard counts on the number of indicators. The maximum score of each indicator is 2 points. The scoring of each indicator depends on appropriate proofs and is rounded in 3 levels: 0, 1, 2. The classification of vocational teachers and lecturers is divided into 3 levels: Excellent; Good; Average.
- Not meet the Standard

5.1.2.3. Implementation activities

- Organize workshop to disseminate the Standard; organize conference to train the assessment and teacher classification on the basis of the standard for vocational teachers.
- Organize the training for vocational teachers to be standardized:
- Decision No. 647/QĐ-TCDN dated on 25/11/2011 issuing the vocational pedagogical curriculum for teachers of elementary level. The curriculum is used to train vocational pedagogy for vocational teachers of elementary level; those who are professionally qualified and skilful and wish to become vocational teachers of elementary level. The training duration is 160 hours.
- The Circular 19/2011/TT- LĐTBXH dated on 21/7/2011 regulating the vocational pedagogy curriculum framework for teachers of secondary and college level. To become a standardized vocational teacher, teachers need to follow compulsory subjects and elective subjects with a duration of 400 hours. The compulsory subjects account for 340 hours, and the elective subject account for 60 hours.
- Decision 380/QĐ-TCDN issues the curriculum, training and assessing occupational skills on the basis of the standard for vocational teachers. Vocational teachers graduating from technical education university have to learn additional occupational practice program with the duration of 480 hours. Vocational teachers graduating from other universities have to learn with the duration of 960 hours.
- The assessment is implemented annually by the Departments and the leaders of the training institutions. Occupational skills are assessed by the Council established by

GDVT. The leaders of the training institutions issue the decision to recognize qualified teachers. Teachers who do not meet the standard will attend training courses to meet the standard. Among all the criteria, the occupational skills are the most difficult to achieve.

- Technical Education Universities, Technical Education Faculties of Universities; Departments of Vocational Pedagogy in vocational colleges and some other institutes or academies are responsible for training vocational teachers. These institutions have to meet the requirements of teaching staff and facility. The Universities of Technical Education are in charge of training vocational teachers (issuing degrees, certificates of vocational pedagogy and occupational skills), Faculties of Technical Education take charge of training vocational pedagogy and assessing the occupational skills).

5.1.2.4. The result of status of implementation of national standard for TVET teachers

In order to evaluate the implementation of the national standard for TVET teachers and some problems encountered in the implementation, we conducted a survey on among teachers and principals/ vice principals of some training institutions.

Table 5: Opinions of TVET teachers and School principals on status of implementation of national standards for TVET personnel

No	TVET personnel Standards	TVET TEACHERS						SCHOOL PRINCIPALS					
		Developed		Not yet developed		Not sure		Developed		Not yet developed		Not sure	
		Quantity	Percent (%)	Quantity	Percent (%)	Quantity	Percent (%)	Quantity	Percent (%)	Quantity	Percent (%)	Quantity	Percent (%)
1	Teacher standard	310	51.3	60	9.9	234	38.7	35	83.3	4	9.5	3	7.1
2	School/college Principal/ Director Standard	179	29.6	65	10.8	360	59.6	28	66.7	11	26.2	3	7.1
3	Trainer of trainers standard	206	34.1	64	10.6	334	55.3	21	50	11	26.2	10	23.8
4	Industry trainer standard	70	11.6	71	11.8	463	76.7	3	7.1	14	33.3	25	59.5

There are 51.3% of the teachers taking part in the survey are aware of the national standard, while 38,7% of the teachers are not. The number of principals/ vice principals who ensure that the national standard has been implemented accounts for 83.3%. It is obvious that the implementation of the national standard for TVET teachers is limited to TVET teachers.

5. 2. Issues and Recommendations in the Dissemination of National Standard

5.2.1. The agency responsible for disseminating the national standard

- General Department of Vocational Training (GDVT) directs the dissemination
- Department of Vocational Training Teachers and Managers is the permanent body of the dissemination

- Vocational training departments, vocational colleges, vocational secondary schools and other vocational training institutions.

5.2.2. The sequence of disseminating the standard

The sequence and common steps to disseminate the national standard for vocational teachers:

- The Circular regulating the Standard of vocational teachers is posted on the electronic portal of MoLISA and GDVT, Official Gazette and sent to all Vocational Training divisions of provincial Department of Labour – Invalids and Social Affairs.
- GDVT issue a guidance document on the assessment and classification of vocational teachers on the basis of the Standard (Dispatch No. 1329/TCDN-GV)
- Organize workshops to disseminate the Standard; Organize conference to train the assessment and classification of vocational teachers on the basis of the Standard.

To clarify the measure used to disseminate the national standard, we had an interview with the leader and officer of Department of Vocational Training Teachers and Managers. It can be seen that GDVT issued legal documents related to the dissemination and implementation of the national standard: Posted on the website; sent hard copies and soft copies to vocational training institutions; organized workshops to disseminate the standards; issued training programs for vocational teachers. Thus, the dissemination of the national standard to TVET teachers of TVET institutions is limited in terms of methods and contents.

5.2.3. Opinions of TVET teachers and School principals on issues/problems encountered during the dissemination of the national standard for TVET

The dissemination of the national standard is not only time limited but also not clear in the guidance.

Table 6: Opinions of TVET teachers and School principals on the dissemination of the national standard for TVET personnel

No	Issues/problems	TVET TEACHERS		SCHOOL PRINCIPALS	
		Quantity	Percent (%)	Quantity	Percent (%)
1	Limited time	59	9.8	15	35.7
2	Unclear guideline	193	32	16	38.1
3	Limited briefing or capacity building	107	17.7	16	38.1
4	Not yet disseminated	218	36	5	11.9
5	Others:	27	4.5	1	2.4

Through the survey, some TVET teachers say that the national standard has not been disseminated to them but some have been disseminated the national standard to (36%). Some TVET teachers are aware of the national standard, but the guidance is not clear (32%). While there are 36% TVET teachers agreeing with the option “the national standard for TVET personnel has not yet disseminated”, only 11.9% school principals selected it.

There are significant differences about the percentage of opinions of TVET teachers on issues/problems encountered during the dissemination of the national standard for TVET such as “Limited time”, “Unclear guideline” and “Limited briefing or capacity building”. These significant differences did not appear in opinions’ school principals (nearly 36% to 38%).

Some recommendations on the dissemination of the national standard form TVET teachers and School principals are:

- Publish the standard on the mass media, websites of the government and training institutions;
- Disseminate through training, seminars, conferences and meetings;
- Disseminate through hard copies and soft copies to TVET institutions and TVET teachers.

5.3. Issues and Recommendations in the Implementation of National Standard

In recent, there are two standards using for technical teacher in Vietnam vocational education system. They are:

- Circular No. 30/2010/TT-BLĐTBXH regulating the standard for vocational teachers and lecturers.
- Circular No 08/2012/TT-BGDĐT regulating the standard for Technical and Vocational teachers.

Source: <http://thuvienphapluat.vn>

The issues/problems encountered during the implementation of the national standard for TVET Personnel, particularly for Teacher Standard is limited time, unclear guideline, limited briefing or capacity building and not yet implemented. Although 2 standards for TVET teachers in Vietnam has been issued since 2010 and 2012 but options of 604 TVET teachers show that: there are 48.3 percent (292/604 TVET teachers) confirming that these standards have not yet implemented. Some TVET teachers said that they did not know about the Circular No 08/2012/TT-BGDĐT or Circular No 30/2010/TT-BLĐTBXH.

Table 7: Opinions of TVET teachers and School principals on issues/problems encountered during the implementation of the national standard for TVET Personnel, particularly for Teacher Standard in Vietnam

No	Issues/problems	TVET TEACHERS		SCHOOL PRINCIPALS	
		Quantity	Percent (%)	Quantity	Percent (%)
1	Limited time	58	9.6	12	28.6
2	Unclear guideline	166	27.5	13	31

3	Limited briefing or capacity building	113	18.7	16	38.1
4	Not yet disseminated	292	48.3	6	14.2
5	Others:	29	4.8	3	7.1

Besides 48.3 percent TVET teachers confirmed standards not yet implemented, there are 51.7% of teachers agreed that national standard implemented. The issues/problems encountered during the implementation of the national standard for TVET Personnel, particularly for Teacher Standard are limited time, unclear guideline, limited briefing or capacity building.

“Unclear guideline” is the problem encountered during the implementation of the national standard for TVET Personnel, particularly for Teacher Standard in Vietnam. There is 27.5 percent of TVET teachers chose n this option. It is highest rate as teachers who related to these standards directly care a lot. It is easy to understand. However, these standards is not in detail and don’t separate for every specific vocational field, for example: required vocational level is 4/7 or 5/7 for all fields but these are not satisfactory with classified learning result in economic section recently, teachers at Thu Duc Vocational College said. Also, interviewed teachers explain more that charge department has not directed how to do, so their school implemented these standards slowly.

There are 18.7 percent of teachers showing that “limited capacity building” is the problem encountered during the implementation of the national standard for TVET Personnel, particularly for Teacher Standard in Vietnam. It is because of unclear guideline and criteria of assessment are not suitable for every major in particular economic major. Furthermore, some older teachers have limit of learning ability lead to training for upgrading their competency in standard is difficult.

There is 58/604 TVET teachers (accounting 9.6 percent) agreed with the option “limited time in preparation”. Explaining about this issue is now the teacher standards change regularly and the time in short to get them.

“Other problems” is the option chosen by 4.8 percent TVET teachers. The other problem are limited of finance, lack of motivate to enhance self-teachers’ competency because they are not aware of its meaning as well as linking to salary.

The teachers shared more via interviewing that they tackled these difficulties by self-learning or do nothing until there is new instruction. According to them these maybe made them spending a lot of time, money, as well as lack of orienting for upgrading their competencies.

In this study, opinions of 42 school principals on the issues/problems encountered during the implementation of the national standard for TVET Personnel, particularly for Teacher Standard in Vietnam will be remarked in the following:

- There are only 6/42 school principals (accounting 14.2 percent) confirming of standards not yet implemented while 85.8% Principal agreed that national standard has implemented.

- 28.6% of principals agreed that there is limited time in preparation. They also told that some teacher standards change quite regularly.
- 31% of principals said that the standard is common and there is not instruction to implement detail. These made them have struggles to build journey.
- 38.1% of principals also agreed with limit capacity building. They indicated status of teachers' competency does not reach standards so much therefore the training met difficulties such as: finance, older teachers. Beside, interviewed principles told that vocational schools in current are not easy to attract learner enrolling that also caused to not enable recruit standard teacher.
- 7.1% is other issues. There is not a specific department can assess teachers' vocational qualification instead of schools' self - assessing each other, some principles at Nguyen Truong To Vocational College, ThuDuc Vocational College, so on said.

Teacher standard is implementing synchronously, such as: Tien Giang Vocational College has been implementing since 2014; Thu Duc Vocational College is in 2013; Long An Vocational College is in 2010 or Cai Be Technical school is not implemented, ect. This led to teachers are not enough determine to get teacher standard, Thu Duc Vocational College's Principal said.

Survey results found that principal often has over view on implementing teacher standards. They have higher percentage of problem option than teachers and also chose more than one option. But, in general, there are main issues in implementing teacher standard as:

- Standard is not in detail, and is not specific for every major.
 - There is no clear instruction about conducting method and journey.
 - There is not affords to training teacher to meet standard.
 - Older teachers are limited of learning ability, old facilities.
 - There is not a specific department to assess teacher's standardized competency.
- In order to overcome difficulties, some recommendations are by principals and teachers:
- Issue a circular guiding the implementation in detail.
 - Design/Develop significant plans, standards and criteria for assessment and evaluation of the implementation
 - Designing training programs and implementing these programs in order to improve teachers' competence/ qualification to achieve new standards regularly.
 - Synchronous implementation in all TVET institutions across the country.
 - Have to follow up and assessment regularly all stages of implementation.
- There is a specific department to assess teacher's standardized competency.

5.4. Expectation for the Regional Core Standards for TVET Personnel

5.4.1. Benefits of having regional (ASEAN) core standards for TVET personnel

Table 8: Opinions of TVET teachers on benefits of having regional core standards for TVET personnel

No	Benefits	Strongly Agree (4)		Somewhat Agree (3)		Somewhat Disagree (2)		Strongly Disagree (1)		Mean
		Quantity	(%)	Quantity	(%)	Quantity	(%)	Quantity	(%)	
1	Harmonize TVET development in the region	321	51.7	280	46.4	4	0.7	8	1.3	3.48
2	Provide platform for benchmarking	281	46.5	311	51.5	11	1.8	1	0.2	3.44
3	Improve the quality of TVET overall	293	48.5	304	50.3	7	1.2	0	0	3.47
4	Strengthen ASEAN integration	298	49.3	297	49.2	3	0.5	6	1.0	3.47
5	Facilitate mobility of human resources	243	40.2	338	56.0	17	2.8	6	1.0	3.35

604 TVET teachers and 42 school principals gave their opinions on benefits of having regional (ASEAN) core standards for TVET personnel.

There are no significant differences (approximately 0.3 - 0.5%) of TVET teachers' selections on benefits of having regional core standards for TVET personnel above. About 96 - 98% TVET teachers agreed with benefits such as "Provide platform for benchmarking", "Improve the quality of TVET overall", "Strengthen ASEAN integration" and "Harmonize TVET development in the region" and "Facilitate mobility of human resources".

Compared with TVET teachers' opinion, there are no significant differences on selecting benefits of having regional core standards for TVET personnel between school principals and TVET teachers. They have the same opinion in selecting options associated with benefits of having regional core standards for TVET personnel.

Table 9: Opinions of school principals on benefits of having regional core standards for TVET personnel

No	Benefits	Strongly Agree (4)		Somewhat Agree (3)		Somewhat Disagree (2)		Strongly Disagree (1)		Mean
		Quantity	(%)	Quantity	(%)	Quantity	(%)	Quantity	(%)	
1	Harmonize TVET development in the region	32	76.2	10	23.8	0	0	0	0	3.76
2	Provide platform for benchmarking	27	64.3	15	35.7	0	0	0	0	3.64
3	Improve the quality of TVET overall	27	64.3	15	35.7	0	0	0	0	3.64
4	Strengthen ASEAN integration	27	64.3	15	35.7	0	0	0	0	3.64
5	Facilitate mobility of human resources	19	45.2	22	52.4	1	2.4	0	0	3.43

Thus, statistics show that there are more than 98% teachers and 100% agreeing with benefits of having regional (ASEAN) core standards for TVET personnel. The average level of ideas about harmonizing TVET development in the region, provide platform for benchmarking, improving the quality of TVET overall, strengthening ASEAN integration and facilitating mobility of human resources of teachers are 3.35, 3.44, 3.47, 3.47, 3.55 and of principals are 3.76, 3.64, 3.64, 3.64, 3.43 respectively.

These statistics also show that school principals seem to evaluate benefits of having the regional (ASEAN) core standards for TVET personnel higher than TVET teachers. These opinions of school principals will be helpful to develop, disseminate and implement the regional core standards for TVET personnel in Viet Nam.

Besides the above ideas, principals and teachers had given some more benefits via interviews. They are:

- The regional core standard does not only improve the quality of TVET overall, but also help each TVET institutions to improve training quality because national standard will be revised to meet standard of regional. Based on the national standards, each TVET institution will have to make their own training plan to improve the professional, pedagogical, foreign language... quality for their personnel.
- Teachers will have more motivation to improve their abilities to meet new requirements as well as get more chances to promote in their career, to work in other countries.

5.4.2. The expected (preferred) components to be included in the regional (ASEAN) core standard for TVET teachers

In this study, components of competencies for TVET teachers are proposed in 4 models:

Model 1:

- Basic and common (Professional) competence (Communication, problem-solving, teamwork, etc.).
- Core/functional (teaching, learning, and assessment) competence.

Model 2:

- Pedagogical competence.
- Social competence.
- Personality competence.
- Professional competence.

Model 3:

- Education laws and regulations (institutional and national) competence.
- Pedagogy and pedagogical psychology competence.
- Didactic and teaching methodology competence.
- Subject-based methodology competence.

Model 4: Proposed model

The results of 604 TVET teachers of the expected components to be included in the regional (ASEAN) core standard for TVET personnel will be illustrated in the following:

Table 10: The expected (preferred) components to be included in the regional (ASEAN) core standard for TVET personnel

No	Model	TVET TEACHERS		SCHOOL PRINCIPALS	
		Quantity	Percent (%)	Quantity	Percent (%)
1	Model 1	228	37.7	17	40.5
2	Model 2	279	46.1	20	47.6
3	Model 3	84	13.9	5	11.9
4	Proposed Model	13	2.2	1	2.4

Compared with the model 1, model 3 and the proposed model, 4 competencies in the model 2 (pedagogical competence, social competence, personality competence and professional competence) are selected with the highest rate by TVET teachers and school principals. The model 2 mentions a holistic competence approach of a TVET teacher:

- Personal competences contain the attitude, values, motives, self - perception and self - organization.
- Social competences are communicative or cooperative skills in situation of interaction.
- Methodological competences are work - and department - comprehensive abilities (problem solving competence, learning competence...).
- Professional competences are abilities, capabilities, and skills, which are necessary for the accomplishment of work - specific requirements.

In this study, there are 279/604 teachers participated in the survey (accounting for 46.1%) selecting the model 2. This statistic number is not so different from the percentage of school principals selecting the model 2 (accounting 47.6%).

Compared with the model 2, the model 1 was chosen with the percentage 37.7 by TVET teachers. The model 1 consists of the basic and common (Professional) competence (Communication, problem-solving, teamwork, etc.) and core/functional (teaching, learning, and assessment) competence. School principals tended to select the model 1 with the higher percentage (40.5%). However, there is not so much significant difference on the statistic number between TVET teachers and school principals.

The model 3 mainly focuses on the pedagogical competence of TVET teachers. There are only 84/604 TVET teachers (accounting for 13.9 %) and 5/42 (accounting for 11.9 %) participating in the survey selecting this model.

These statistic numbers above showed that the similarity in selecting the expected (preferred) components to be included in the national core standard for TVET teachers is to focus on the professional competence. The result of interviewing TVET teachers and school principals showed that the professional competence is the most necessary of TVET teachers (Vu. N.V, Dong Nai Vocational College; Canh. N, Bac Lieu Vocational College; Quang. L.N, Vietnam - Singapore Vocational College; ...).

Besides selecting the model 1, 2 or 3, TVET teachers gave proposed models. Almost TVET teachers identified common competencies such as: professional competence, pedagogical competence and linguistic competence (Canh. N, Bac Lieu Vocational College; Quang. L.N, Vietnam - Singapore Vocational College ...). Some TVET teachers proposed the expected (preferred) components to be included in the national core standard for TVET teachers such as: professional competence, pedagogical competence and physical competence (Ngoan. D.T, Bac Lieu Vocational College); personal competence (Quang. L.N, Vietnam - Singapore Vocational College)...

How about the proposed model of school principals? Mr. Liem P.T from Kien Giang Vocational College is the only principal giving the proposed model. He distinguished the core standard for TVET personnel into 3 components: General competencies (linguistic competence, pedagogical competence, computer competence); professional competence and soft competencies.

5.4.3. Levels of teacher competencies should be in the regional (ASEAN) core standard for TVET teachers

Both TVET teachers and school principals selected the few levels (novice, intermediate, advance /expert) been in the regional core standard for TVET teachers. There are 402/604 TVET teachers (accounting 66.5%) and 27/42 school principals (accounting 64.3%) agreeing this option. Almost of TVET teachers in interviewing had the same opinion about having few levels in the regional core standard for TVET teachers. They explained that: It is easier for TVET teachers to classify criteria of levels of teacher competencies and practice to gain these levels. Few levels also help school principals assess fully and objectively on existing levels of TVET teacher competencies. Interviewing school principals taking part in the survey on the reason why they selected the few levels. Most of them showed the advantages of having few levels in the regional core standard for TVET teachers are better to classify and assess levels of teacher competencies. The results

of classifying and assessing levels of teacher competencies will help them to assign and manage TVET teachers in TVET institutions more effectively.

Table 11: Levels of teacher competencies should be in the regional (ASEAN) core standard for TVET teachers

No	Levels of teacher competencies	TVET teachers		School principals	
		Quantity	Percent (%)	Quantity	Percent (%)
1	One level	37	6.1	5	11.9
2	Few levels	402	66.5	27	64.3
3	One level with more responsibilities as career progresses	152	25.1	9	21.4
4	Your proposed leveling	13	2.1	1	2.4

There is from over 21% to 25% school principals and TVET teachers selected “One level with more responsibilities as career progresses” in the regional core standard for TVET teachers. “One level” is the fewest level of teacher competencies selected by TVET teachers and school principals.

5.4.4. How will you use the regional (ASEAN) core standard for TVET teachers in your country/school?

Statistics show that there is no significant difference of selecting how to use the regional core standard for TVET teachers in Vietnam/school of TVET teachers and school principals. Both TVET teachers (mean = 3.37) and school principals (mean = 3.38) will use the regional core standard for TVET teacher to review/update the national standard with the highest mean. There are 95.2% school principals and 97.1% TVET teachers agreeing strongly with this option. This result shows that the regional core standard for TVET teachers plays a very important role for developing the national core standard. Based on the regional core standard for TVET teachers, ASEAN country members (including Vietnam) will review/update the national core standard to harmonize with the regional and international core standard.

Compared with the option above, the option “To use it as an added reference and value of the national standard” were also selected by TVET teachers and school principals with the rather alike mean. 94.5 TVET teachers selected this option while 92.8 principal had the same choice.

With the option “To adopt it as the national standard”, 85.3% TVET teachers selected it compared with 90.5% school principals. Although the percentage of the selection’s TVET teachers is lower than the percentage of the selection’s school principals but mean of TVET teachers is higher than mean of school principals. The reason why for the difference is the percentage of

TVET teachers not agreeing with this option be higher than the percentage of school principals having the same opinion. TVET teachers' selections distributed to other level answers (somewhat disagree and strongly disagree).

There are 89.3% TVET teachers will “use the regional core standard as a reference only” compared with only 71.4% school principals.

Table 12: Using the regional (ASEAN) core standard for TVET teachers in Vietnam/school for TVET teachers and school principals

No	The use of the regional (ASEAN) core standard for TVET teachers	TVET teachers									School principals								
		Strongly Agree		Somewhat Agree		Somewhat Disagree		Strongly Disagree		MEAN	Strongly Agree		Somewhat Agree		Somewhat Disagree		Strongly Disagree		MEAN
		(4)		(3)		(2)		(1)			(4)		(3)		(2)		(1)		
		Quantity	(%)	Quantity	(%)	Quantity	(%)	Quantity	(%)		Quantity	(%)	Quantity	(%)	Quantity	(%)	Quantity	(%)	
1	To review/update the national standard	242	40.1	344	57	18	3.0	0	0	3.37	19	45.2	21	50	1	2.4	1	2.4	3.38
2	To use it as a reference only	173	28.6	367	60.7	60	9.9	8	1.3	3.08	10	23.8	20	47.6	11	26.2	1	2.4	2.93
3	To use it as an added reference and value of the national standard	176	29.1	395	65.4	32	5.3	1	0.2	3.24	10	23.8	29	69	2	4.8	1	2.4	3.14
4	To adopt it as the national standard	166	27.5	349	57.8	85	14.1	4	0.7	3.12	13	31	25	59.5	4	9.5	0	0	2.98

Parallel with conducting the survey, we also interviewed TVET teachers and school principals about how to use the regional core standard. Almost they will use it to review or update the national standard. Some TVET teachers gave some recommendations such as: Vietnam should develop the standard for TVET teachers such as the pedagogical competence, the professional competence and the social competence according to the regional (ASEAN) core standard for TVET teachers.

Conclusions

The survey on Developing national core standards for TVET Personnel in Viet Nam were conducted by 604 TVET teachers, 42 school principals and committees in the entire country from March to May, 2016. Ho Chi Minh City University of Technology and Education (HCMUTE) and Nam Dinh University of Technology Education (NUTE) are assigned to implement this research.

Qualitative and quantitative statistics analyzed has not only drawn a holistic picture on developing national core standards for TVET personnel in Viet Nam, but also contribute to develop regional core standards for TVET personnel in ASEAN. Some main outcomes are:

1. The national standard for TVET personnel in Viet Nam has been developed and implemented;
2. “Unclear guideline”, “limited briefing or capacity building” and “Limited time” are the major issues during the dissemination and implementation of the national standard for TVET Personnel, particularly for TVET teachers standards;
3. Both TVET teachers and school principals put their believe highly on benefits of of having regional (ASEAN) core standards for TVET personnel like “Harmonize TVET development in the region”, “Provide platform for benchmarking”, “Improve the quality of TVET overall” and “Strengthen ASEAN integration”.

4. The expected (preferred) components to be included in the regional (ASEAN) core standard for TVET teachers are the model 2 (Pedagogical, Social, Personality, Professional) and the model 1 (Basic and common (Professional) (Communication, problem-solving, teamwork, etc; Core/functional (teaching, learning, and assessment). TVET teachers and school principals have a high agreement with these models.
5. The expectation of leveling of teacher competencies in the regional (ASEAN) core standard for TVET teachers is few levels (Novice, Intermediate, Advance /expert). This expectation comes from TVET teachers as well as school principals.
6. “Reviewing/updating the national standard” and “using it as an added reference and value of the national standard” are the main use of the regional (ASEAN) core standard for TVET personnel of 604 TVET teachers and 42 school principals.

In the process of studying, the research team faced with some challenges such as:

- The existing TVET system is a quite complicated system with multiple agencies administering TVET institutions (MoET, MOLISA, other line ministries in the central, local authorities)
- The wide areas and limited budget lead to the fact that the feedbacks are sometime not up to the research team’s expectation.
- Some questions are not unfamiliar with TVET personnel.
- Lack of willingness to answer the questionnaire from TVET teachers.

The research team from HCMUTE and NUTE has gradually overcome these challenges thanks to the strongest support of the President of HCMUTE - Assoc. Pro. Do Van Dung and the President of NUTE - Dr. Tran Van Khiem, TVET institutions in the entire country as well as the best efforts of members in the research team.

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REPORT 9

China

Lesson learned from the development and implementation of National TVET-Teacher Standard in China for the development of Regional TVET-Teacher Standard

Organizations/Institutions

Tongji University

Team

Prof. Dr. Wang Jiping & CDIBB team

January-September 2016

Lesson learned from the development and implementation of National TVET-Teacher Standard in China for the development of Regional TVET-Teacher Standard

Abstract

The objective of the research is to analyze the core contents of the competence standards of TVET teachers in various countries, and to summarize the experience of competence standards development in China so that the framework and development path of the competence standards for TVET teachers can be given to support the development of TVET teachers' competence standards in ASEAN countries.

Key words : TVET Personnel, Competence standards, Standards development

Introduction

Nowadays in China, there are 2,113,690,000 students in vocational school with 880,000 TVET teachers who are undertaking educational and teaching work. The development of TVET teachers is essential to improving the quality of education. Since 20th September 2013, Ministry of Education of the People's Republic of China (MOE) has issued 'The Professional Standard for TVET-Teachers'. The standard means basic requirements of the state for qualified secondary vocational school teachers; a basic norm for TVET teachers to implement educational activities and lead their professional development; a fundamental basis of secondary vocational school teachers' developing, access, training, assessment and other work. The research on the standard framework of TVET teachers is also essential to the quality management and evaluation. CDIBB has a full understanding of the TVET systems and patterns of China and abroad, and has been doing some further research on the TVET teacher competence standards and their development paths.

Purpose

» Research Question

- What is the Framework of Standard in Teacher Education?
- How is *the Professional Standard for Teachers* developed in China?
- What is the core content of the Professional Standard for Teachers?

» Research Objectives

The project will be based on analyzing international vocational education models, competence standards of TVET teachers, and procedures of standard development, combined with the practical experience of the development of Chinese TVET Teachers' competence standard, so that the content framework and development path can be proposed. The content framework and development path to be proposed shall be specific, and highly operable.

Methods

- Through comparative study, to summarize the content framework and competence standard of TVET teachers in America, Germany, Britain and Australia.

- Through literature research and practice research, to summarize TVET pattern, experience of developing competence standards of TVET teachers in China, focusing on the structure and core content and development path.
- Through questionnaire survey, to find out the status of TVET personnel standard development and implementation, and the expectation for the regional core standards from the perception of teachers and principals. The questionnaire survey lasted for six months and there are five parts in the content of survey which involves personal data, status of development, implementation, issues and recommendations and expectation for the regional core standards for TVET personnel.

Results

5.1 The Framework of Standard in Teacher Education (In comparative perspective)

5.1.1 Comparative study on TE Standard in developed countries.

• Kind of TE Standard

TE standard has been formulated in each country. There are multi-level TE standard in America and Britain. In America, Germany and Australia, there existing standards for TVET teachers, while in Australia, standards are made focusing on teachers of Higher Vocational Education. Besides, major accreditation standard or TE standard for training institutions are developed in America, Germany and Australia.

Chart 1 TE Standard in America, Germany, Britain and Australia

Types of Standard	Country			
	America	Germany	Britain	Australia
Professional standard	National standard*	Teacher's standard	Multi-level**	Teacher's standard
Training standard	√	√		√
TVET personnel	√	√	Refer to General	For higher vocational

* Different national standards : for candidate teacher, new teacher, outstanding teacher

** Multi-level teacher's standard : for pre-service teacher, qualified teacher, senior teacher, outstanding teacher, etc.

• Content of TVET standard

From the perspective of the first grade index, the dividing dimension varies from country to country. In American, Germany and Australia, 'ability' is considered as the main factor.

Standard in American emphasizes the significance of students. Standard in Britain focus on accomplishment, knowledge and skill. Standard in Germany gives prominence to four aspects: education, teaching, evaluation and innovation. Standard in Australian refers to eight aspects.

Chart 2 Content of TVET standard in 4 countries

TVET teacher standard	Country				5.1.2 The
	America	Germany	Britain	Australia	
First Grade Index	Abilities: • Promoting students' learning • Helping change the role of student • Professional development etc.	Abilities: • Education • Teaching • Evaluation • Innovation	• Teacher Accomplishment • Knowledge and understanding • Skill	Abilities: • Environment coordinating • Instructional design • Lesson Implementation • Evaluation • Counseling service • Quality management • Language and Mathematics expression	

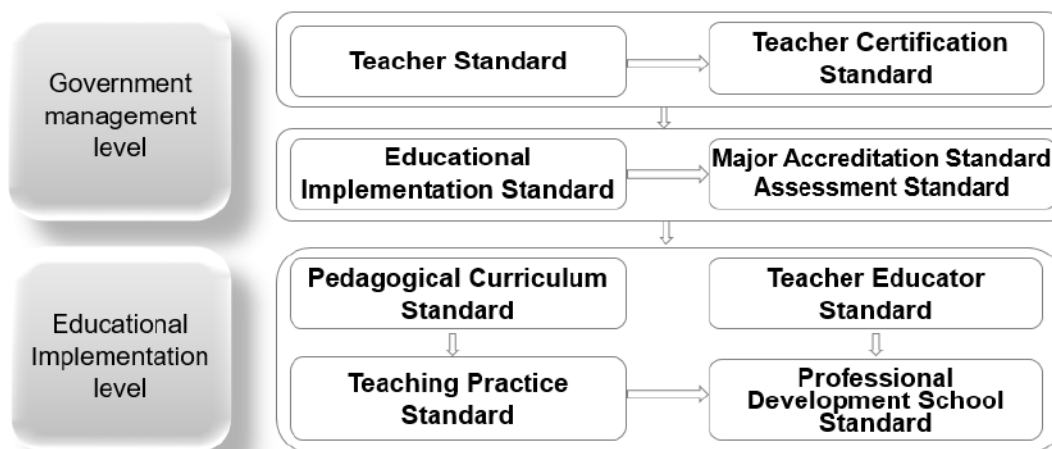
Framework of Standard in Teacher Education

From the perspective of quality assurance, The framework of standard in teacher education is mainly made up of two levels of standards : Government management level and educational implementation level.

The framework of standard at government management level is a standard formulated based on the needs of macro-management, which includes Teacher Standards, Teacher Certification Standards, Educational Implementation Standard, Major Accreditation Standard, and Assessment Standard, etc.

The framework of standard at educational implementation level is used for school practice. The correlative standards not only reflect the general rules and features of higher education, but also reflect the specifics of TVET teacher training, which includes Standard for Pedagogical Curriculum, Standard for Teacher Educators, Standard for Teaching Practice, and Standard for Professional Development School, etc.

Figure 1 The Framework of Standard in Teacher Education



5.2 Development process

5.2.1 The Process and the Committee

'*The Professional Standard for Teachers*' was issued by Ministry of Education of the People's Republic of China (MOE) on Sep 20th, 2013. Based on *Teachers Law of the People's Republic of China*, *Vocation Education Law of the People's Republic of China* and *Labor Law of the People's Republic of China*, The Professional Standard for Teachers means basic requirements of the state for qualified secondary vocational school teachers; a basic norm for TVET teachers to implement educational activities and lead their professional development. It has a profound impact on professional development for secondary vocational school teachers. "Professional Standard" was established on the basis of many successful practices and experiences at home and abroad.

The development paths consist of four steps which includes Research and Draft, Expert Consultation, Open for Comments, and Issued to the Public.



- Research and Draft: The research was based on current development and International comparison, with teachers, school principals, university experts, and policy makers participated.
- Expert Consultation: Meeting held by National Institute of Education Sciences for suggestions and revisions.
- Open for Comments: Collecting comments on MOE website.
- Issued to the Public: Officially issued to the public.

5.2.2 Structure and Contents

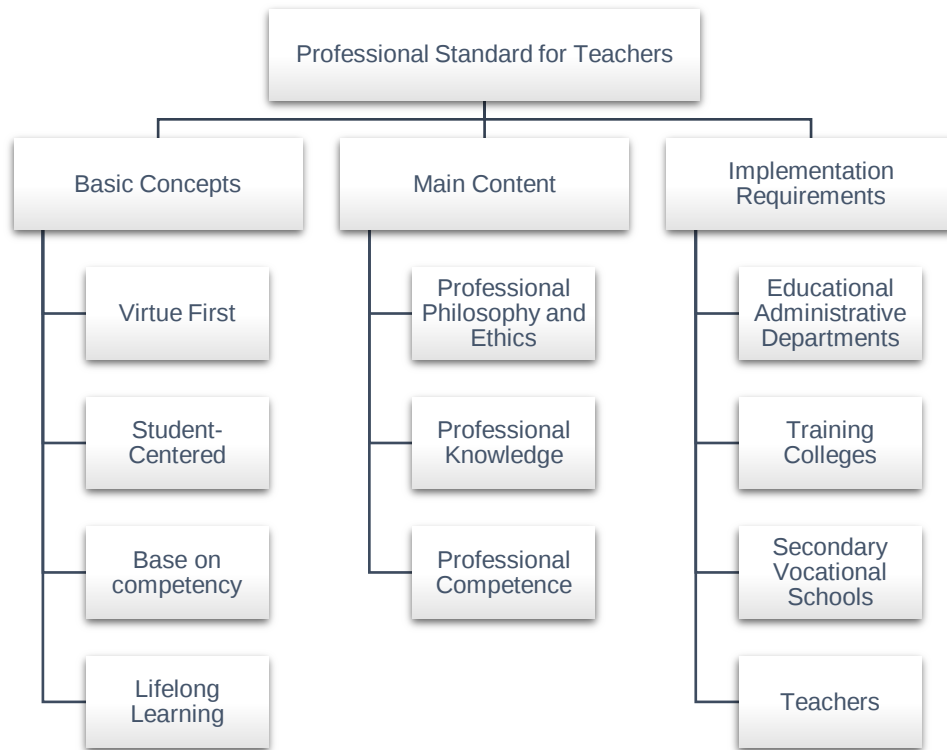
a. Structure

The standard means basic requirements of the state for qualified secondary vocational school teachers; a basic norm for TVET teachers to implement educational activities and lead their professional development; a fundamental basis of secondary vocational school teachers' developing, access, training, assessment and other work. It is made up of three sections: basic concepts, main content and implementation requirements, which highlights the characteristic of secondary vocational school teacher from content and structure.

- The first is basic concepts. It includes 'Virtue First', which requires that teachers should love the career and be the guiders for students' career development and healthy growth; 'Student-centered', which requires that teachers should hold the concept that everyone can be successful and provide suitable education for every student; 'Base on competency', which requires that teachers should obtain the teaching ability with both professional education theory and professional practice; 'Lifelong learning' requires teachers' awareness and capability for lifelong learning and sustainable development.
- The second is main content, which includes three dimensions: professional philosophy & virtue, professional knowledge and professional ability, which is divided into 15 areas and is subdivided into 60 entries. It lays emphasis on characteristics of secondary vocational school teachers' work. 'Professional philosophy and Virtue' requires that teachers should have command of professional virtue and personal accomplishment; 'professional knowledge' requires that teachers must master knowledge of education and professional background; 'professional ability' requires teachers should get the ability of education and career guidance.

- The third is implementation requirements. It puts forward specific requirements on how to use ‘standard’ for educational administrative departments, training colleges of vocational education teachers, secondary vocational schools and the teachers. The framework is as follow:

Figure 2 The Structure of Professional Standard for Teachers



b. Basic Concepts

- Virtue First

Teacher is a special profession, which not only teach and dispel students' doubt, but also affect student development with words and deeds. Teachers should educate students with their noble virtue and knowledge demeanor and make every student become a person valuable to the society.

- Student-centered

Teachers should understand students, concern about students, care for students and trust students. They would also enable students to acquire vocational knowledge and skills, as well as high professional Virtue and professionalism. The education and management of the school should be implemented from the perspective of the students, and always put the benefits of the students at the top of school reform and development.

- Base on competency

Vocational education is kind of competency-based education, and vocational school teachers should be capable of both professional practice ability and teaching ability, that is "Double Teacher" ability. The ability of vocational teachers requires educational concepts and professional knowledge. It is directly related to the quality and effectiveness of education, which also affects the developmental level and quality of high-quality skilled personnel.

- Lifelong-learning

Lifelong learning is the basic feature of modern society. Vocational education has the closest and most direct relationship to the society. With the scientific and technological progress and adjustment of industrial structure, the content of vocational education needs constantly updated and vocational school teachers must establish the concept of lifelong learning, and constantly learn new knowledge, new skills, new methods and new technology to train skilled personnel who can meet the needs of career.

c. Main Content

The main content of standard consists of 3 dimensions, 15 areas and 60 basic requirements. Three dimensions include professional philosophy and Virtue, professional knowledge and professional competence. There are four to seven areas in each dimension. And each area involves three to six basic requirements.

Chart 3 The Content Framework of Professional Standard for Teachers

Dimensions	Areas
Professional Concept and Virtue	(1) Understanding of the occupation
	(2) Attitude towards students
	(3) Teaching attitude
	(4) Self-cultivation and behavior
Professional Knowledge	(5) Educational knowledge
	(6) Occupation background knowledge
	(7) Teaching and learning knowledge
	(8) General knowledge
Professional Competence	(9) Teaching design
	(10) Teaching implementation
	(11) Management of training and practice
	(12) Class management and educational activities
	(13) Teaching evaluation
	(14) Communication and cooperation

- Professional philosophy and Virtue

Professional philosophy and Virtue includes vocational understandings and awareness, attitudes and behaviors towards students and education and personal accomplishment. It puts forward four requirements: how to treat profession, how to treat students, how to treat education and how to treat themselves.

- Professional knowledge

Professional knowledge includes four aspects: educational knowledge, Occupation background knowledge, teaching and learning knowledge and general knowledge, which is made up of seventeen basic requirements. Professional knowledge is the foundation to support teachers' professional competence. The level of teachers' professional knowledge not only affects the quality of education, but also has impact on teachers' professional development. Only those teachers who have got deep professional knowledge can they fulfill their responsibilities.

- Professional competence

Professional competence includes seven aspects: teaching design, teaching implementation, practical training, class management and educational activities, teaching

evaluation, communication and cooperation and teaching research and professional development. It also puts forward 27 basic requirements regarding the professional competence of secondary vocational school teachers, which cover five basic competences: teaching ability, class management and educational activities, professional practice, communication and cooperation skills, self-development.

Chart 4 Professional competence of Secondary Vocational School Teachers

Areas	Requirements
Teaching Design	• Designing teaching objectives and plans • Designing teaching process and situation • Guiding and helping students to design a personalized study plan • Participating in school-based curriculum development
Teaching Implementation	• Creating a good learning environment and atmosphere and arousing students' interests in vocation and study, as well as self-confidence • Combining theory and practice and effectively implementing teaching • Guiding students in active learning and technical skills training and effectively control the teaching process • Implementing teaching with modern educational technologies
Practical Training	• Mastering the methods of internal and external practical training, arranging for training program and ensuring the training results. • Having the ability to communicate with apprenticeship site and participating in practical training • Being familiar with relevant laws and regulations to protect the students' safety and safeguarding the legitimate rights of students
Class management and Educational activities	• Conducting education activities in accordance with the characteristics of students' moral and ethical formation • Conducting education activities beneficial to the health of students • Providing necessary career planning, employment and entrepreneurship guidance • Providing psychological counseling for learning and living • Responding to emergencies properly
Teaching Evaluation	• Evaluating students' development with multiple evaluation methods and law of talents cultivation • Guiding students to self-evaluation and mutual evaluation. • Carrying out self-evaluation and mutual evaluation and evaluation of teachers and timely adjusting and improving teaching work
Communication and Cooperation	• Learning students, communicating with students equally and establishing a good teacher-student relationship.

	• Collaborating, exchanging and sharing experiences and resources with colleagues for common development • Communicating and cooperating with parents and promoting students' development with joint effect • Mating and promoting the relationship among school, companies and communities, as well as promoting school-enterprise cooperation and providing social services
Teaching research and Professional development	• Collecting and analyzing relevant information on both graduates and employees' needs; constantly reflecting and improving teaching work • Exploring and researching the practical needs and problems in teaching • Participating in school-based teaching research and teaching reform. • Developing personal and professional development plan according to the needs of employees and professional development; continuously improving professional quality by different means, such as participating in professional training and business practice

5.2.3 Dissemination and issues

The draft version of the Professional Standard for Teachers was offered by MOE on its website before officially issued to the public, which is for both dissemination and comments collection because the draft version still needed some revision. The news of the new standards will be reported via lots of websites or media such as newspapers, and magazines.

After the comments collection, the standard has been officially issued to the public. In China, the Professional Standard for Teachers was issued by MOE in 2013.

According to the survey result, most of teachers and principals consider there are still some problems in the dissemination of the national standard because of limited briefing or capacity building. Some people regard unclear guideline and limited time in preparation also have great influence on the dissemination.

Issues during dissemination	Number	Ratio (%)
Limited time in preparation	28	 38.84%
Unclear guideline	44	 59.46%
Limited briefing or capacity building	59	 79.73%

Note: There where multiple responses possible

5.3 Implementation process of National TVET Teacher Standard

There exists the implementation requirement issued by The Ministry of Education, which aims to make clear of teachers' duties, to standardize education management and teaching behavior to meet the requirements for high quality education by promulgating 'the Professional Standard for Teachers'. The implementation requirement involves 4 aspects.

- It is the fundamental basis for the construction of TVET personnel in secondary vocational schools. The construction of TVET personnel involves many aspects, which includes

training system, qualification system, employment (hiring) system, the assessment system and exit mechanisms, etc. The standard is a high-position system. The standard services as the scientific basis to develop other systems, which can promote the professional development of teachers more effectively.

- It is a main basis for training colleges to carry on teacher training. Teacher training is an important way to promote the professional development of teachers. Only when students are educated in accordance with the standard can they be qualified teachers and only when they find the weakness of teachers' professional development in accordance with the standard can they carry out teacher training effectively and constantly promote the professional development of teachers.
- It is a basis for secondary vocational school to manage teachers. Teacher is the first resource and the core element in education, and the quality of teacher affects the quality of education. It is necessary to strengthen the management of teachers, plan teachers' career scientifically, make clear of teachers' responsibilities and assess and evaluate their performance scientifically to improve the quality of education. The implementation of the "standard" undoubtedly provides a scientific basis for teacher management and institutional guarantee to improve the quality of teachers and the quality of education.
- It is a basis for teacher self-development. The Professional Standards for Teachers is the eligibility criteria for teachers. The standard plays a role of guidance, and teachers can self-evaluate themselves according to the Standard, as well as take the initiative to find the gap and self-training in order to improve their professional level.

Regarding the survey result, the majority of vocational school teachers and principals find the TVET personnel standard not yet well implemented. And they consider the limited time in preparation and limited briefing or capacity building are the most issues encountered during the implementation of National Standards. As mentioned above, there exists the implementation requirement officially, but it is not well-known in the most of teacher and principals. The main reason could be the lack of details on the implementation requirement.

Implementation Status	Implemented	Not yet implemented	Not sure
Teacher Standard	10(13.51%)	60(81.08%)	4(5.41%)
School Principal/ Director Standard	14(18.92%)	51(68.92%)	9(12.16%)
Trainer of trainers Standard	11(14.86%)	56(75.68%)	7(9.46%)
Industry Trainer Standards	7(9.46%)	57(77.03%)	10(13.51%)

Issues during Implementation	Number	Ratio (%)
Limited time in preparation	44	 59.46%
Unclear guideline	36	 48.45%
Limited briefing or capacity building	62	 83.78%

Note: There where multiple responses possible

One third of the teachers have taken the assessment to be a teacher, and more than half of them rate the difficulty of assessment in medium. All the teachers think the assessors in assessment well trained and knowledgeable. In the survey, some teacher think they haven't been assessed to be a teacher. This may be a misconception, due to the fact that in China everyone must take a teacher-certificated examination if he/she wants to be a teacher. Only by passing the examination can one get the teacher certification, and to be a teacher in the school. The examination was organized by local Ministry of Education, including writing test and oral test. The examination is, to some extent, a kind of test to assess the teacher competencies of candidates.

Assessment of competency	Number	Ratio (%)
Yes	7	 25.93%
No	20	 74.07%

Rating Assessment	Number	Ratio (%)
Easy	1	 14.29%
Medium	4	 57.14%
Difficult	2	 28.57%

5.4 Expectation for the Regional Core Standards for TVET Personnel

The expectation for the Regional Core Standards for TVET Personnel is partly based on the Survey result on the Development of National and Regional Standard for TVET Personnel in ASEAN Member Countries.

5.4.1 The perceived benefits of having a regional standard

More than 90% school principals and teachers believed that having regional standards for TVET personnel will facilitate mobility of human resources, strengthen ASEAN integration, and improve the quality of TVET overall. Moreover, over 80% School Principals and teachers considered that having regional standards for TVET personnel will provide a platform for benchmarking, as well as harmonizing TVET development in the region.

Perceived benefits of Regional Standards	..harmonize TVET development in region.	..provide a platform for benchmarking.	..improve quality of TVET overall.	..strengthen ASEAN integration.	..facilitate mobility of human resources.
4 - Strongly agree	38(51.35%)	37(50%)	49(66.22%)	39(52.70%)	41(55.4%)
3 - Somewhat agree	26(35.14%)	27(36.49%)	21(28.38%)	26(35.14%)	29(39.19%)
2 - Somewhat disagree	9(12.16%)	8(10.81%)	4(5.40%)	9(12.16%)	4(5.40%)
1 - Strongly disagree	1(1.35%)	2(2.70%)	0	0	0

5.4.2 The expected components

More than 70% of school principals and teachers expected components of Pedagogical, Social, Personality, Professional to be included in the regional (ASEAN) core standard for TVET teachers. Also, in terms of leveling of teacher competencies, they prefer Few levels (E.g. Level1: novice, Level2: intermediate, Level3: advance/expert) to be involved in standards.

Expected components	Number	Ratio (%)
Model 1: Basic and Common (Communication, Problem solving, teamwork, etc.), Core/functional (teaching, learning, assessment).	17	22.97%
Model 2: Pedagogical (teaching methodologies, learning theories, student assessment), Social (Good communication skills, good teamwork, etc.), Personality (trustworthy, responsible, etc.), Professional.	55	74.32%
Model 3: Education laws and regulations (institutional and national), Pedagogy and pedagogical psychology, Didactic and teaching methodology, Subject-based methodology.	0	0%
Others	2	2.70%

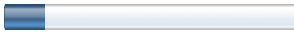
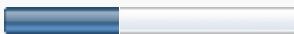
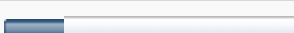
Level of teacher competencies	Number	Ratio (%)
One level	0	0%
Few levels (e.g. Level1: novice, Level2: intermediate, Level3: advance/expert).	48	64.86%
One level with more responsibilities as career progresses.	26	35.14%
Others	0	0%

5.4.3 How the country members will utilize the standard

Nearly 70 % of respondent agreed with the use of the regional (ASEAN) core standard for TVET teachers to review/update the national standard, and to use it as an added reference and value of the national standard. More than half of teachers and principals think the standards could be used as a reference only.

The use of regional (ASEAN) core standard	To review/update the national standard	To use it as a reference only	To use it as an added reference and value of national standard
4 - Strongly agree	24(32.43%)	21(28.38%)	26(35.14%)
3 - Somewhat agree	28(37.84%)	27(36.49%)	30(40.54%)
2 - Somewhat disagree	20(27.03%)	25(33.78%)	18(24.32%)
1 - Strongly disagree	2(2.70%)	1(1.35%)	0

However, there is some divergence in the opinion of adoption as national standard. Half of respondent think the regional (ASEAN) core standard for TVET teachers could be adopted as the national standard, but the others somewhat disagree.

To adopt it as national standard	Number	Ratio (%)
4 - Strongly agree	9	 12.16%
3 - Somewhat agree	28	 37.84%
2 - Somewhat disagree	24	 32.43%
1 - Strongly disagree	13	 17.57%

5.4.4 Suggestions

- To ensure the quality of implementation, the implementation requirement of standard should be provided.
- To use various ways of dissemination, e.g. via Internet, media, magazines, official report etc.
- To provide Teacher Standard in Subject Area to explain the general standard in a subject background.
- To provide more related standards such as Teacher Certification Standard, Teaching Practice Standard, Assessment Standard, and Teacher Educator Standard etc.
- To stress the role of Front-line Teachers in course of standard setting.
- To make sure the standards shall be specific, highly operable, and shall be applied to all teachers.

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Appendices



A Survey on the Development of National and Regional Standard for TVET Personnel in ASEAN Member Countries

Dear School/College Principals/Directors,

Warm greetings!

SEAMEO VOCTECH and its research partners under Regional Cooperation Platform (RCP) of GIZ-RECOTVET is conducting a study on the **Development of National and Regional Standard for TVET (Technical and Vocational Education and Training) Personnel in ASEAN Member Countries**. The research partners in this study are Universiti Tun Hussein Onn Malaysia (UTHM), Institute of Vocational Education of Tongji University (CDIBB), Yogyakarta State University (YSU), National University of Laos (NUL), Rajamangala University of Technology at Thanyaburi (RMUTT), Ho Chi Minh City University of Technology and Education (HCMUTE), NamDinh University of Technology Education (NUTE), University of San Carlos Cebu City Philippines, National Teaching Training Institute (NTTI) Cambodia, and State University of Surabaya (UNESA).

The purpose of this study is to examine the development and implementation of national standards for TVET personnel of ASEAN member countries and China as input for the development of regional standard. By learning and considering the experiences from the these countries hopefully the Regional Standard for TVET Personnel which currently being developed will be more relevant and applicable to all members in the Southeast Asian region and beyond.

As one of the important players in the development and implementation of national standard for TVET Personnel, especially for teacher standard, we would like to seek your inputs on the implementation of national standards and your recommendations for the regional standard for TVET personnel. To complete the questionnaire you may complete the printout provided or by visiting the online survey at: <http://>

It will take about 10 minutes to complete. For your information, individual answer will remain anonymous. Thank you for your time and inputs and we believe that your participation will make a difference in enhancing the quality TVET personnel in the region.

P A R T 1 - PERSONAL DATA

Please complete these questions by writing the space provided.

Name: (optional)

Institution Name and Country:

Position:

Gender (please circle):

Started working in current
position or duration (in years):

M / F

[Date]

Area of Specialisation:

☐ Education ☐ Research ☐ ICT ☐ Management ☐ Curriculum ☐

Electrical

☐ Business & Admin ☐ Engineering ☐ Mechanical ☐ Others, please specify.....

PART 2 - STATUS OF DEVELOPMENT AND IMPLEMENTATION OF NATIONAL STANDARDS FOR TVET PERSONNEL

Please complete these questions by checking appropriate boxes and writing in the space provided.

2.1. Status of development of national standard for TVET personnel.

Status	Teacher standard	School/college Principal/Director Standard	Trainer of trainers standard	Industry trainer standard
Developed	☐	☐	☐	☐
Not yet developed	☐	☐	☐	☐
Not sure	☐	☐	☐	☐
Explanation	_____	_____	_____	_____
	_____	_____	_____	_____

2.2. Status of implementation of national standard for TVET personnel.

Status	Teacher standard	School/college Principal/Director Standard	Trainer of trainers standard	Industry trainer standard
Implemented	☐	☐	☐	☐
Not yet implemented	☐	☐	☐	☐
Not sure	☐	☐	☐	☐
Explanation	_____	_____	_____	_____
	_____	_____	_____	_____

PART 3 - ISSUES AND RECOMMENDATIONS IN THE DISSEMINATION OF NATIONAL STANDARD

Please complete these questions by checking appropriate boxes and writing in the space provided.

3.1. In the case that the national standard, especially for TVET teachers has been implemented, what were the issues/problems encountered during the dissemination of the national standard for TVET Personnel, particularly for Teacher Standard? (If the standard is yet to implement, skip to Part 5)

	☐ Limited time	☐ Unclear guideline	☐ Limited briefing or capacity building	☐ Others, please specify and elaborate
Explanation	_____	_____	_____	_____
	_____	_____	_____	_____

32. What would you recommend to improve the dissemination process of the national standard for TVET Personnel, particularly for Teacher Standard?

PART 4 - ISSUES AND RECOMMENDATIONS IN THE IMPLEMENTATION OF NATIONAL STANDARD

Please complete these questions by checking appropriate boxes and writing in the space provided.

4.1. In the case that the national standard, especially for TVET teachers has been implemented, what were the issues/problems encountered during the implementation of the national standard for TVET Personnel, particularly for Teacher Standard? *(If the standard is yet to implement, skip to Part 5)*

	☐ Limited time in preparation	☐ Unclear guideline	☐ Limited briefing or capacity building	☐ Others, please specify and elaborate
Explanation	_____	_____	_____	_____
	_____	_____	_____	_____

4.2. What would you recommend to improve the implementation process of the national standard for TVET Personnel, particularly for Teacher Standard?

PART 5 - EXPECTATION FOR THE REGIONAL CORE STANDARDS FOR TVET PERSONNEL

Please complete these questions by checking appropriate boxes (✓) and writing in the space provided.

5.1. What are your perceived benefits of having regional (ASEAN) core standards for TVET personnel?

Having regional standards for TVET personnel will	Strongly Agree 4	Somewhat Agree 3	Somewhat Disagree 2	Strongly Disagree 1
7. Harmonize TVET development in the region				
8. Provide platform for benchmarking				
9. Improve the quality of TVET overall				
10. Strengthen ASEAN integration				
11. Facilitate mobility of human resources				
12. Others (please specify): _____				
13. _____				
14. _____				
15. _____				
16. _____				

5.2. What are the expected (preferred) components to be included in the regional (ASEAN) core standard for TVET teachers?

	☐ Model 1	☐ Model 2	☐ Model 3	☐ Model 4 Your proposed model
Component of competencies	i) Basic and common (Professional) (Communication, problem-solving, teamwork, etc.) ii) Core/functional (teaching, learning, and assessment)	i) Pedagogical ii) Social iii) Personality iv) Professional	i) Education laws and regulations (institutional and national) ii) Pedagogy and pedagogical psychology iii) Didactic and teaching methodology iv) Subject-based methodology	

5.3. In terms of leveling of teacher competencies, what would you prefer the regional (ASEAN) core standard for TVET teachers to have?

☐ One level	☐ Few levels (E.g. Level 1: novice, Level 2: intermediate, Level 3: advance /expert)	☐ One level with more responsibilities as career progresses*	☐ Your proposed leveling
Explanation _____	_____	_____	_____
_____	_____	_____	_____

**Example: New teachers will have less responsibility than the experienced teachers. The experienced teachers will have additional tasks such as mentoring new teachers, involve in curriculum development, etc.*

5.4. How will you use the regional (ASEAN) core standard for TVET teachers in your country/school?

The use of the regional (ASEAN) core standard for TVET teachers	Strongly Agree 4	Somewhat Agree 3	Somewhat Disagree 2	Strongly Disagree 1
7. To review/update the national standard				
8. To use it as a reference only				
9. To use it as an added reference and value of the national standard				
10. To adopt it as the national standard				
11. Not going to use it				
12. Others (please specify): _____				
13. _____				
14. _____				
15. _____				
16. _____				

5.4. Please list any suggestions for developing the regional (ASEAN) core standard for TVET personnel, if any.

b) _____

c) _____

d) _____

Thank you very much for your support to the development of regional standard for TVET personnel!



A Survey on the Development of National and Regional Standard for TVET Personnel in ASEAN Member Countries

Dear School Teachers,

Warm greetings! SEAMEO VOTEC and its research partners under Regional Cooperation Platform (RCP) of GIZ-RECOTVET is conducting a study on the **Development of National and Regional Standard for TVET (Technical and Vocational Education and Training) teachers in ASEAN Member Countries**. The research partners in this study are Universiti Tun Hussein Onn Malaysia (UTHM), Institute of Vocational Education of Tongji University (CDIBB), Yogyakarta State University (YSU), National University of Laos (NUL), Rajamangala University of Technology at Thanyaburi (RMUTT), Ho Chi Minh City University of Technology and Education (HCMUTE), NamDinh University of Technology Education (NUTE), University of San Carlos Cebu City Philippines, National Teaching Training Institute (NTTI) Cambodia, and State University of Surabaya (UNESA).

The purpose of this study is to examine the development and implementation of national standards for TVET teachers of ASEAN member countries and China as input for the development of regional standard. By learning and considering the experiences from the member countries hopefully the Regional Standard for TVET teachers which current being developed will be more relevant and applicable to all members in the Southeast Asian region and beyond.

As one of the important players in the development and implementation of national standard for TVET teachers, we would like to seek your inputs on the implementation of national standards and your recommendations for the regional standard for TVET teachers. To complete the questionnaire you may complete the printout provided or by visiting the online survey at: <http://www>.

This will take few minutes to complete. For your information, individual answer will remain anonymous. Thank you for your time and inputs and we believe that your participation will make a difference in enhancing TVET Teachers Standards in the region

P A R T 1 - PERSONAL DATA

Please complete these questions by writing the space provided.

1.1.Name (Optional)

.....

1.2. Name of school/college

.....

1.3. Gender ☐ Male ☐ Female

14. You are working at:

☐ Secondary technical and vocational School

☐ Post-secondary technical and vocational College

1.5. Under which Ministry is your school represent:

- ☐ Ministry of Education
☐ Ministry of Labour
☐ Ministry of Higher Education

1.6. Highest Qualification:

- ☐ Doctoral ☐ Master ☐ Bachelor Degree ☐ Higher National Diploma ☐ Diploma
☐ Others, please specify.....

1.7. Area of Specialisation:

- ☐ Education ☐ Research ☐ ICT ☐ Management ☐ Curriculum
☐ Business & Admin ☐ Engineering ☐ Mechanical ☐ Electrical
☐ Others, please specify.....

1.8a.No. of Years of Work Related Experience:..... 1.8b. No. of Years of Work Teaching:.....

1.9a. Were your teaching competencies assessed to be a teacher? ☐ yes ☐ No

1.9b.How did you rate the assessment? ☐ Easy ☐ Medium ☐ Difficult

1.9c. Methods used.....

1.10. Do you have teacher certification? ☐ yes ☐ No

1.11. Where did you get your certificate/qualification? ☐ Local ☐ Overseas, country.....

1.12. Do you think the assessors well trained and knowledgeable? ☐ yes ☐ No

1.13. Do you have any recommendation for the assessment process? Please specify

.....
.....
.....
.....

PART 2 - STATUS OF DEVELOPMENT AND IMPLEMENTATION OF NATIONAL STANDARDS FOR TVET PERSONNEL

Please complete these questions by checking appropriate boxes and writing in the space provided.

2.1. Status of development of national standard for TVET personnel.

Status	Teacher standard	School/college Principal/Director Standard	Trainer of trainers standard	Industry trainer standard
Developed	☐	☐	☐	☐

Not yet developed	☐	☐	☐	☐
Not sure	☐	☐	☐	☐
Explanation	_____	_____	_____	_____
	_____	_____	_____	_____

2.2. Status of implementation of national standard for TVET personnel.

Status	Teacher standard	School/college Principal/Director Standard	Trainer of trainers standard	Industry trainer standard
Implemented	☐	☐	☐	☐
Not yet implemented	☐	☐	☐	☐
Not sure	☐	☐	☐	☐
Explanation	_____	_____	_____	_____
	_____	_____	_____	_____

PART 3 - ISSUES AND RECOMMENDATIONS IN THE DISSEMINATION OF NATIONAL STANDARD

Please complete these questions by checking appropriate boxes and writing in the space provided.

3.1. In the case that the national standard, especially for TVET teachers has been implemented, what were the issues/problems encountered during the dissemination of the national standard for TVET Personnel, particularly for Teacher Standard? *(If the standard is yet to implement, skip to Part 5)*

☐ Limited time	☐ Unclear guideline	☐ Limited briefing or capacity building	☐ Others, please specify and elaborate
Explanation	_____	_____	_____
	_____	_____	_____

3.2. What would you recommend to improve the dissemination process of the national standard for TVET Personnel, particularly for Teacher Standard?

PART 4 - ISSUES AND RECOMMENDATIONS IN THE IMPLEMENTATION OF NATIONAL STANDARD

Please complete these questions by checking appropriate boxes and writing in the space provided.

4.1. In the case that the national standard, especially for TVET teachers has been implemented, what were the issues/problems encountered during the implementation of the national standard for TVET Personnel, particularly for Teacher Standard? (If the standard is yet to implement, skip to Part 5)

☐ Limited time in preparation	☐ Unclear guideline	☐ Limited briefing or capacity building	☐ Others, please specify and elaborate
Explanation _____	_____	_____	_____
_____	_____	_____	_____

4.2. What would you recommend to improve the implementation process of the national standard for TVET Personnel, particularly for Teacher Standard?

PART 5 - EXPECTATION FOR THE REGIONAL CORE STANDARDS FOR TVET PERSONNEL

Please complete these questions by checking appropriate boxes (✓) and writing in the space provided.

5.1. What are your perceived benefits of having regional (ASEAN) core standards for TVET personnel?

Having regional standards for TVET personnel will	Strongly Agree 4	Somewhat Agree 3	Somewhat Disagree 2	Strongly Disagree 1
17. Harmonize TVET development in the region				
18. Provide platform for benchmarking				
19. Improve the quality of TVET overall				
20. Strengthen ASEAN integration				
21. Facilitate mobility of human resources				
22. Others (please specify): _____				
23. _____				
24. _____				
25. _____				
26. _____				

5.2. What are the expected (preferred) components to be included in the regional (ASEAN) core standard for TVET teachers?

	☐ Model 1	☐ Model 2	☐ Model 3	☐ Model 4 Your proposed model
Component of competencies	i) Basic and common (Professional) (Communication, problem-solving, teamwork, etc.) ii) Core/functional (teaching, learning, and assessment)	i) Pedagogical ii) Social iii) Personality iv) Professional	i) Education laws and regulations (institutional and national) ii) Pedagogy and pedagogical psychology iii) Didactic and teaching methodology iv) Subject-based methodology	

5.3. In terms of leveling of teacher competencies, what would you prefer the regional (ASEAN) core standard for TVET teachers to have?

	☐ One level	☐ Few levels (E.g. Level 1: novice, Level 2: intermediate, Level 3: advance /expert)	☐ One level with more responsibilities as career progresses*	☐ Your proposed leveling
Explanation	_____	_____	_____	_____
	_____	_____	_____	_____

**Example: New teachers will have less responsibility than the experienced teachers. The experienced teachers will have additional tasks such as mentoring new teachers, involve in curriculum development, etc.*

5.4. How will you use the regional (ASEAN) core standard for TVET teachers in your country/school?

The use of the regional (ASEAN) core standard for TVET teachers	Strongly Agree 4	Somewhat Agree 3	Somewhat Disagree 2	Strongly Disagree 1
17. To review/update the national standard				
18. To use it as a reference only				
19. To use it as an added reference and value of the national standard				
20. To adopt it as the national standard				
21. Not going to use it				
22. Others (please specify): _____				
23. _____				
24. _____				
25. _____				
26. _____				

5.4. Please list any suggestions for developing the regional (ASEAN) core standard for TVET personnel, if any.

- e) _____
- f) _____
- g) _____

Thank you very much for your support to the development of regional standard for TVET personnel!

INTERVIEW QUESTIONS FOR SCHOOL PRINCIPALS

Name of Interviewer (optional): _____ Institution and Country: _____

Name of Interviewee (optional): _____ Name of School : _____

General questions

16. What is the current status of development of the National Core Standard for TVET Personnel?

- a. Is the Teacher Standard already developed/implemented/yet to implement?

17. In the case that the national standard, especially for TVET teachers, has been implemented, since when do you implement it in your institution?

Part A. DEVELOPMENT PROCESS OF NATIONAL STANDARD FOR TVET PERSONNEL (Esp. TEACHERS)

18. How did you receive the National Core Standards for TVET Teachers? (Email, Hardcopy, Workshop)

19. Was there a guideline?

- a. Did you develop a guideline for your teachers?

20. Was there need for more clarification on your side?

21. How did you disseminate the Teacher Standard in your institution?

22. What concerns and issues did you raise in the development and dissemination process?

23. What suggestions or recommendations to improve the development and dissemination process can you give?

Part B. IMPLEMENTATION OF NATIONAL STANDARD FOR TVET PERSONNEL (Esp. TEACHERS)	
24. What are the requirements to become a training provider of TVET teachers? 25. What type of institution does it need to be? 26. What is the needed status in accreditation that examines the status of financial, equipment, and infrastructure of the institutions? (if apply) 27. What are your challenges and issues in the implementation of the National Core Standards for TVET Teachers? e. How have you managed and addressed these challenges? f. How could these challenges have been avoided? 28. Do you have any recommendations for the implementation of the Regional (ASEAN) Core Standards for TVET Teachers?	

Part C. EXPECTATION FOR THE REGIONAL CORE STANDARDS FOR TVET PERSONNEL (Esp. TEACHERS)	
29. What are your expected components to be included in the Regional (ASEAN) Core Standards for TVET Teachers? • Anything that may compromise pedagogical, technical/vocational, personal attributes? 30. Which structure would you recommend for the Regional (ASEAN) Core Standards for TVET Teachers? 31. How will you use the Regional (ASEAN) Core Standards for TVET teachers? • Could the new standards be used as a referencing/benchmarking/strategic tool to improve the National Core Standards for TVET Teachers? • Are there other strategies that may be relevant?	

32. What would be the perceived benefits of having Regional (ASEAN) Core Standards for TVET Teachers? 33. Where do you see possible challenges? 34. Do you have any other suggestion for developing the Regional (ASEAN) Core Standards for TVET Teachers?	
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INTERVIEW QUESTIONS FOR TVET TEACHERS

Name of Interviewer (optional): _____ Institution and Country: _____

Name of Interviewee (optional): _____ Name of School : _____

General questions	
1. Do you already have the National Core Standards for TVET Teachers in your Country/Institution?	
2. Since when do you have them?	
Part A. DEVELOPMENT PROCESS OF NATIONAL STANDARD FOR TVET PERSONNEL (Esp. TEACHERS)	
3. How did you receive the National Core Standards for TVET Teachers? (Email, Hardcopy, Workshop)	
4. Was there a guideline?	
5. Was there need for more clarification on your side?	
6. What concerns and issues did you raise in the development and dissemination process?	
7. What suggestions or recommendations to improve the development and dissemination process can you give?	
B. IMPLEMENTATION OF NATIONAL STANDARD FOR TVET PERSONNEL (Esp. TEACHERS)	
8. What are your challenges and issues in the implementation of the National Core Standards for TVET Teachers?	
g. How have you managed and addressed these challenges?	

h. How could these challenges have been avoided? 9. Do you have any recommendations for the implementation of the Regional (ASEAN) Core Standards for TVET Teachers?	
Part C. EXPECTATION FOR THE REGIONAL CORE STANDARDS FOR TVET PERSONNEL (Esp. TEACHERS)	
10. What are your expected components to be included in the Regional (ASEAN) Core Standards for TVET Teachers? - Anything that may compromise pedagogical, technical/vocational, personal attributes? 11. Which structure/model would you recommend for the Regional (ASEAN) Core Standards for TVET Teachers? 12. How will you use the Regional (ASEAN) Core Standards for TVET teachers? c. Could the new standards be used as a referencing/benchmarking/strategic tool to improve the National Core Standards for TVET Teachers?) d. Are there other strategies that may be relevant?	
13. What would be the perceived benefits of having Regional (ASEAN) Core Standards for TVET Teachers? 14. Where do you see possible challenges? 15. Do you have any other suggestion for developing the Regional (ASEAN) Core Standards for TVET Teachers?	

INTERVIEW QUESTIONS FOR THE NATIONAL COMMITTEE OF TVET PERSONNEL STANDARD

Name of Interviewer (optional): _____ Institution and Country : _____

Name of Interviewee (optional): _____ Position in the committee: _____

Part A. DEVELOPMENT PROCESS OF NATIONAL STANDARD FOR TVET PERSONNEL (Esp. TEACHERS)

2. Process and the Committee

1. What were the processes involved in the development of the National Core Standards for TVET Teachers?
 - a. How long did the process take? (Starting from having the first meeting to discuss the standard up to producing the first draft of the standard)
2. Who were involved in the development process?
 - a. What were the qualifications of those involved?
 - b. Did they have practical experience?
 - c. Did they have teaching experience?
3. Who assigned them?
 - a. Which positions and qualifications did those in charge of giving assignments have?
4. What was the organisational structure of the team and committee?
5. Did they hire consultants?
 - a. Who and where are they from?

3. Contents and Structure

6. What are the main components of the competency standards, especially teacher standard? a. What are the sub components in the competency standards? 7. Is there any levelling or grouping of the competencies for certain levels? 8. Are there performance indicators described in the National Core Standards for TVET Teacher? 9. How are the National Core Standards for TVET Teachers structured?	
4. Dissemination	
10. Please describe the chronological process of disseminating the National Core Standards for TVET Teachers? a. What were the steps? b. Was there a guideline? c. How long did the disseminating process take? 11. Who was in charge of the dissemination process? 12. Who else was involved in the process? 13. Which positions and qualifications did those involved have? 14. What were the strategies or ways of disseminating the National Core Standards for TVET Teachers? a. What types of documents did you disseminate? b. In what form did you disseminate the documents? c. To whom did you disseminate the National Core Standards?	
5. Issues and Recommendations	

15. What concerns and issues did you raise in the development and dissemination process?	
16. What suggestions or recommendations to improve the development and dissemination process can you give?	

Part B. IMPLEMENTATION OF NATIONAL STANDARD FOR TVET PERSONNEL (Esp. TEACHERS)

17. What is the level of education and training for TVET teachers being conducted to meet the requirement of qualified TVET teachers? (Diploma Degree, Bachelor's or Master Degree) a. What are the required courses? b. What is the duration of the needed education and training programme? 18. What are the requirements to become a training provider of TVET teachers? a. What type of institution does it need to be? b. What is the needed status in accreditation that examines the status of financial, equipment, and infrastructure of the institutions? (if apply) 19. What are your challenges and issues in the implementation of the National Core Standards for TVET Teachers? a. How have you managed and addressed these challenges? b. How could these challenges have been avoided? 20. Do you have any recommendations for the implementation of the Regional (ASEAN) Core Standards or TVET Teachers?	
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Part C. EXPECTATION FOR THE REGIONAL CORE STANDARDS FOR TVET PERSONNEL (Esp. TEACHERS)	
21. What are your expected components to be included in the Regional (ASEAN) Core Standards for TVET Teachers? • Anything that may compromise pedagogical, technical/vocational, personal attributes? 22. Which structure would you recommend for the Regional (ASEAN) Core Standards for TVET Teachers? 23. How will you use the Regional (ASEAN) Core Standards for TVET teachers? - Could the new standards be used as a referencing/benchmarking/strategic tool to improve the National Core Standards for TVET Teachers?) - Are there other strategies that may be relevant? 24. What would be the perceived benefits of having Regional (ASEAN) Core Standards for TVET Teachers? 25. Where do you see possible challenges? 26. Do you have any other suggestion for developing the Regional (ASEAN) Core Standards for TVET Teachers?	

INTERVIEW GUIDE

General guideline

1. The interview will be conducted to the Committee Members involved in development and implementation of national standard for TVET personnel, especially teacher standard. In addition, interview will also be conducted to selected (5 to 10) technical and vocational teachers and school principals/directors as a follow up from the survey/questionnaire.
2. The function of the interview is to complement document analysis and the survey questionnaire for teachers and principals/directors.
3. In case that the respondent has no knowledge about the question, you may skip to the next question.
4. The number interviewee can be decided based on the “saturation” level of information from them. You may stop adding the next interviewee should you think that no new information can enrich the research findings.
5. You may add more questions as needed to follow up certain questions.
6. To have a backup information, it is advisable to record (sound recording) the interview upon the agreement or consent from the interviewees.

Interview for National Committee Members of TVET Personnel Standard

1. Please select the coordinators as well as some members of the committee based on your best judgement.
2. The interview questions may be send by Email so that the interviewee can prepare beforehand.
3. If they hired Consultants, you may also interview some of them.

Teachers and School Principals/Directors

The primary function of the teacher and school principal/director interview is for clarification of information gathered from the survey questions and for deepening our understanding on relevant questions.

DOCUMENT ANALYSIS GUIDING QUESTIONS

Name of the documenter : _____
 Institution : _____
 Country : _____

Part A. DEVELOPMENT PROCESS OF NATIONAL STANDARD FOR TVET PERSONNEL (Esp. TEACHERS)

Data Source	Question	Answer
1. The Process and the Committee		
Minutes of Meetings, documents	1. What were the processes involved in the development of the National Core Standards for TVET Teachers? 2. How long did the process take? (Starting from having the first meeting to discuss the standard up to producing the first draft of the standard)	
Documents of committee and those involved, Assigners	3. Who were involved in the development process? 4. What were the qualifications of those involved? a. Did they have practical experience? b. Did they have teaching experience? 5. Who assigned them? 6. Which positions and qualifications did those in charge of giving assignments have?	
Documents, members of the team or committee	7. What was the organisational structure of the team and committee? 8. Did they hire consultants? Who and where are they from?	
2. Contents and Structure		

Secondary source, National Policies and Standards, Existing documents (policies, exams,...), Government agencies, Teacher associations, Consultant	9. What are the main components of the competency standards, especially teacher standard? a. What are the sub components in the competency standards? 10. Is there any levelling or grouping of the competencies for certain levels? 11. Are there performance indicators described in the National Core Standards for TVET Teacher?	
Documents, Committee, Consultant	12. How are the National Core Standards for TVET Teachers structured?	
3. Dissemination		
Existing documents, Committee, Consultant	13. What was the chronological process of disseminating the National Core Standards for TVET Teachers? 14. What were the steps? 15. Was there a guideline? 16. How long did the disseminating process take?	
	17. Who was in charge of the dissemination process? 18. Who else was involved in the dissemination process? 19. Which positions and qualifications did those involved have?	
	20. What were the strategies or ways of disseminating the National Core Standards for TVET Teachers? (Briefing, meeting, workshop, emails, database sharing) 21. What types of documents have been disseminated? (the standard itself, guide book, other supporting documents)	

	22. In what form have the documents been disseminated? (soft or hard copy or both) 23. To whom have the National Core Standards been disseminated?	
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Part B. IMPLEMENTATION OF NATIONAL STANDARD FOR TVET PERSONNEL (Esp. TEACHERS)

Data Source	Question	Answer
Implementation Committee, Consultant, Documentation, Website of TVET teacher education providers	24. What are the requirements to become a training provider of TVET teachers? 25. What type of institution does it need to be? (university level, teacher education and training institution) 26. What is the needed status in accreditation that examines the status of financial, equipment, and infrastructure of the institutions? (if apply)	
Documents produced by the committee and the consultants, other documents, and Website	27. What is the level of education and training for TVET teachers being conducted to meet the requirement of qualified TVET teachers? (Diploma, Bachelor's Degree, Masters) a. What are the required courses? b. Does it include technical and vocational courses? 28. What is the duration of the needed education and training programme?	
Library and documents produced by the examiners	29. Please list the types of assessment methods used to determine qualified candidates who meet the National Core Standards for TVET Teachers.	

Documents, Assessors and assesses' documentations	30. Who conducts the assessment to determine if the teachers meet the National Core Standards for TVET Teachers? 31. How long does this process take?	
Curriculum vitae, other relevant documents	32. What are the required personnel and professional qualifications of the assessors?	
Documents related to the persons involved, National Qualification agency	33. What agency certifies the candidate who attains the National Core Standards for TVET Teachers? 34. What is the level of achievement?	
Documents and minute of meetings	35. What were the challenges and issues in the implementation of the National Core Standards for TVET Teachers? a. How have these challenges been managed and addressed? 36. Are there any recommendations for the implementation of the Regional (ASEAN) Core Standards for TVET Teachers?	

