

The Development of ASEAN Vocational Teacher Curriculum

Sutthiporn Boonsong and Saiphin Siharak

Rajamangala University of Technology Thanyaburi, Thailand

Abstract: The purposes of this research were development a curriculum of Vocational Teacher Education (VTE) within the context of ASEAN integration processes. Method used of this research is Research and Development design included the documentary research on ASEAN context by Matrix Analyze, Focus Group on curriculum objectives, structure, and identify competences and evaluate the curriculum. The expected competences of vocational teachers for the developing of AVTC also identified by 3 GIZ experts and 45 of ASEAN vocational teachers and administrators from the several seminar and conferences of Technical and Vocational Education in Thailand and Asian country between 2012 – 2016. The information from strength and weakness of several ASEAN countries were analyzed and were established for AVTC draft on October 2016. The Focus group was processed at the workshop of 25 persons of administrations teachers and 3 experts on August 2017. The results of this research were Curriculum of Diploma in Vocational Teacher Education of ASEAN which composes of 25 Units in 1 year Course Period. Structure of the curriculum are 18 credits of Required Courses, 3 credits of Elective Courses, and 4 credits of Special Topic. The Required Courses composes of 9 subjects which are Learning Management in the Context of ASEAN, Relationships of ASEAN Countries, Product Section and Product Factors of the AEC, ASEAN International Law 1 and 2, Language Used in ASEAN, Career Advancement of Vocational Teacher Education to Promote Business Ethics, Implications for future work The Project of Promotion and Integration of the ASEAN Context, Curriculum Research and Development Design for ASEAN Vocational Teachers. At least 3 units of Elective Courses which students can select according to their interest from Multicultural of ASEAN Countries, ASEAN Environment and Resource Management, Technology and Teaching Materials Production for Vocational Teacher and Quality Assurance System According to ASEAN. The 4 credits of Special Topics is Special Topic in Vocational Teacher Education Curriculum. ASEAN Vocational Teacher Curriculum (AVTC) also was identified by 5 experts with Item Objective Congruence Index (IOC) which found IOC index were at high level.

Key words: *ASEAN, Vocational Teacher, Curriculum*

1. INTRODUCTION

The Association of South East Asian Nations (ASEAN) announced the establishment of an ASEAN Community at Ninth Summit in October 2003 which based upon three pillars: ASEAN Security Community (ASC), ASEAN Economic Community (AEC) and ASEAN Socio-Cultural Community (ASCC) [1-3]. The two significant pillars regarding to Vocational Teacher Education (VTE) are AEC and ASCC, which ASC is to develop a single market and production base that is stable, prosperous, highly competitive and economically integrated with effective facilitation for trade and investment in which there is free flow of goods, services investment, skilled labors, and freer

flow of capital. So academic networking and collaboration is one of the best mean to deal with effected context from ASEAN community. The Regional Cooperation Platform (RCP) is a network which mainly focuses on developing qualities of VTE in changed context of ASEAN community by supporting researches to establish linkages or frameworks according to VTE systems of RCP institute members [4]. This research expect to develop ASEAN Vocational Teacher Curriculum (AVTC) which was a curriculum development for VTE within the context of ASEAN integration processes. The Vocational education and training needs to be as dynamic as the economies and communities it serves [5].

Corresponding Author: Sutthiporn Boonsong, Rajamangala University of Technology Thanyaburi, Thailand, 081-3350679

2. RESEARCH PURPOSE

- 1) To analysis the main issues of expected competencies of ASEAN vocational teachers for ASEAN Vocational Teacher Curriculum (AVTC)
- 2) To develop ASEAN Vocational Teacher Curriculum (AVTC) from particular expected competencies

3. METHODOLOGY

Method used of this research is Research and Development design on included the documentary research, Matrix Analyze, Focus Group on curriculum objectives and structure to identify competences and evaluate the curriculum [6-8]. Curriculum was validated by Item Objective Congruence Index (IOC) The expected competences of vocational teachers for the developing of AVTC also identified by 3 GIZ experts and 45 of ASEAN vocational teachers and administrators from the several seminar and conferences of Technical and Vocational Education in Thailand and Asian country between 2012 – 2016.

The information from strength and weakness of several ASEAN countries were analyzed and were established for AVTC draft on October 2016. The Focus group was processed at the workshop of 25 persons of administrations teachers and 3 experts on August 2017. Then, the AVTC draft was improved and used approve competences of vocational teachers to developing and evaluating of AVTC courses.

4. FINDING

4.1 Expected competences of of ASEAN vocational teachers for ASEAN Vocational Teacher Curriculum (AVTC)

After the documentary research and matrix analyse, information of the comparative study issue that affected ASEAN vocational teacher education and the information of strength and weakness of several ASEAN countries were analysed and were identified for main issues of ASEAN vocational teachers' competencies [9-10]. The researchers analyzed the main issues of ASEAN vocational teachers' competencies and can summarized that the ASEAN vocational teachers' competencies should be as the following:

Competencies for ASEAN Vocational Teacher were identified in:

- 1) Political Issue
- 2) Economic Issue
- 3) Diversity Issue
- 4) Environment Issue
- 5) Technology Issue
- 6) Learning Theory Issue

There are several competencies in each issue as follow:

- Political Issue
 - Able to manage conflicts and welfares.
 - Able to develop themselves to the requirement of VET standard of ASEAN country.
 - Able to act according to professional standard and ethics
 - Conform ASEAN's labor's laws and regulations for regional stability
 - Able to establish relationship with VET communities outside ASEAN.
- Economic Issue
 - Able to analyze sectors and national productivities
 - Able to analyze about AEC (ASEAN Economic Community)
 - Able to research and development.
 - Able to practice on didactic research.
 - Able to establish and maintain relationship with communities and industrial sectors.
- Diversity Issue
 - Able to (accept) cope with ASEAN culture and beliefs.
 - Able to identify stakeholders' demand of ASEAN people in different countries.
 - Able to identify VET users
- Environmental Issue
 - Able to manage resources and environment.
 - Able to apply technologies for environmental management and preserving energy.
- Technological Issue
 - Able to apply appropriate industrial technologies to ASEAN context.
 - Able to conduct and develop educational technology for ASEAN teachers

- Learning Theory & Practice Issue
- Able to integrate ASEAN context to learning management.
- Able to develop specific didactics and learning environment.
- Able to perform foreign languages communication effectively.
- Able to develop further and to utilize quality assurance system.
- Able to design curricula and programs for ASEAN Vocational Education.
- Able to manage learning in different settings according to ASEAN context.
- Able to assess and evaluate students' achievement.

4.2 Curriculum complement

From the six competencies for ASEAN Vocational Teacher which were identified already, the researchers designed ASEAN Vocational Teacher Curriculum (AVTC). From the six competencies informations, this research could prepare "Curriculum of Diploma in Vocational Teacher Education of ASEAN". This curriculum compose with 25 Units in 1 year course period. Learners are identified as all ASEAN Vocational Teachers and will be communicated in English language.

Structure of the curriculum are 18 credits of Required Courses, 3 credits of Elective Courses as well as 4 credits of Special Topic. The Required Courses composes of 9 subjects which are Learning Management in the Context of ASEAN, Relationships of ASEAN Countries, Product Section and Product Factors of the AEC, ASEAN International Law 1 and 2, Language Used in ASEAN, Career Advancement of Vocational Teacher Education to Promote Business Ethics, Implications for future work The Project of Promotion and Integration of the ASEAN Context, Curriculum Research and Development Design for ASEAN Vocational Teachers.

At least 3 units of Elective Courses which students can select according to their interest from Multicultural of ASEAN Countries, ASEAN Environment and Resource Management, Technology and Teaching Materials Production for Vocational Teacher and Quality Assurance System According to ASEAN. The 4 credits of Special Topics is Special Topic in Vocational Teacher can select according to their interest Education Curriculum. ASEAN Vocational Teacher Curriculum (AVTC) was identified by 5 experts with IOC of 37 items which the IOC were at high level. The detail of Diploma in Vocational Teacher Education of ASEAN curriculum and curriculum study plan can be shown in Table 1, and Table 2.

Table 1: The Detail of Diploma in Vocational Teacher Education of ASEAN curriculum

1. Curriculum Title	Diploma in Vocational Teacher Education of ASEAN curriculum	
2. Degree and Course Name	Full name : Diploma in Vocational Teacher Education of ASEAN	
	Short name :	Dip. in VTEA
3. Course Unit	25 Unit	
4. Curriculum Character	4.1 Course Period : 1 Year Diploma course	
	4.2 Language :	English
	4.3 Learner :	All of ASEAN Vocational Teacher
5. Curriculum Structure		
	5.1 Required Courses	18 credits
	5.2 Elective courses	3 credits
	5.3 Special Topic	4 credits

6. Rational

The Regional Cooperation Platform(RCP) is a network which mainly focuses on developing qualities of VTE in changed context of ASEAN community by supporting researches to establish linkages or frameworks according to VTE systems of RCP institute members. This ASEAN Vocational Teacher Curriculum (AVTC) is a curriculum for VTE, and expect to develop the necessary knowledges for all ASEAN Vocational Teacher. The research information from the comparative study and the information of strength and weakness of several ASEAN countries were analyzed and were identified for main issues of ASEAN vocational teachers' competencies. The issues of ASEAN vocational teachers' competencies can summarized and should contain in the ASEAN vocational teacher curriculum.

7. Objective of curriculum

1. To develop ASEAN vocational teachers' competencies accordance with ASEAN context.
2. To develop necessary skills of ASEAN education for ASEAN vocational teachers.

8. Course Subject

1) Course Requirements

xx-xxx-xxx	ASEAN Vocational Education	1 credits
xx-xxx-xxx	Learning Management in the Context of ASEAN	1 credits
xx-xx-xx-	Relationships of ASEAN Country	2 credits
xx-xxx-x	Product Section and Product Factor of the AEC	3 credits
xx-xxx-x	ASEAN International Law	3 credits
xx-xxx-x	Curriculum Research and Development Design for ASEAN Vocational Teacher	3 credits
xx-xxx-x	Language Used in ASEAN	3 credits
xx-xxxxx	Career Advancement of Vocational Teacher Education to Promote Business Ethics	1 credits
xx-xxx-x	The Project of Promotion and Integration the ASEAN Context	3 credits

2) Elective courses 3 credits

(Students select only 3 credit which serves their interesting and basis for their special topic)

xx-xxx-x	Multicultural of ASEAN Country	2 credits
xx-xxx-x	ASEAN Environment and Resource Management	3 credits
xx-xxx-x	Technology and Teaching Materials Production for Vocational Teachers	1 credits
xx-xxx-x	Quality Assurance System According with the ASEAN	2 credits

3) Special Topics 4 credits

xx-xxx-x	Special Topic in Vocational Teacher Education Curriculum	4 credits
----------	--	-----------

Table 2: Study Plan

Semester 1		credit	lecture	lab	Self-study
xx-xxx-xxx	ASEAN Vocational Education	1	1	0	0
xx-xxx-xxx	Learning Management in the Context of ASEAN	1	1	0	0
xx-xxx-xxx	Relationships of ASEAN Country	2	2	0	0
xx-xxx-xxx	Product Section and Product Factor of the AEC	3	3	0	0
xx-xxx-xxx	Language Used in ASEAN	3	3	0	0
xx-xxx-xxx	ASEAN International Law	3	3	0	0
Total		13	13	0	0

Semester 2		credit	lecture	lab	Self-study
xx-xxx-xxx	Career Advancement of Vocational Teacher Education to Promote Business Ethics	1	1	0	0
xx-xxx-xxx	The Project of Promotion and Integration the ASEAN Context	3	3	0	0
xx-xxx-xxx	Curriculum Research and Development Design for ASEAN Vocational Teacher	3	3	0	0
xx-xxx-xxx	Elective Course	3	3	0	0
xx-xxx-xxx	Special Topic in Vocational Teacher Education Curriculum	4	0	0	80
Total		13.5	9.5	0	0

For the implementation of Diploma in Vocational Teacher Education of ASEAN curriculum, the course modules are prepared. All course modules will included with module title, course description, module purpose, element / enabling objective, learning

outcomes, the knowledge evidence required, core skills, and assessment guidance. The example of course module is following in Table 3 & Table 4.

Table 3: Modules of ASEAN Vocational Education Course

ASEAN Vocational Education		
Module Codes	Module Title	Time
xxxxx	ASEAN Vocational Education Policies and Practices	5 Hours
xxxxx	Problems and Solutions resulting from managing ASEAN Vocational Education	6 Hours
xxxxx	ASEAN characteristics of teachers. and vocational students	4 Hours
Total		15 Hours

Description of Module

Study of the Policies and Guidelines of Vocational Education The Benefits, Problems and the

solutions of the problems of vocational education in ASEAN. The ASEAN characteristics of the teacher and vocational students.

Table 4: Show the Module Specifications

Module Specifications		Xxxxx
Module Name:	ASEAN Vocational Education.	
Duration:	15 Hours	
Module Code:	Xxxxx	
Competency standard:	-	
Module Prerequisites:	-	
<p>Description: Study of the Policies and Guidelines of Vocational Education The Benefits, Problems and the solutions of the problems of vocational education in ASEAN The ASEAN characteristics of the teacher and vocational students</p> <p>Module Purpose/Terminal Performance Objective; TPO: Understanding of vocational education in ASEAN</p> <p>Range</p> <ul style="list-style-type: none"> - ASEAN Vocational Education Policies and Practices - Problems and solutions resulting from managing ASEAN Vocational Education - Characteristics of ASEAN teachers. and vocational students 		
<p>Element/Enabling Objective (EO): Section 1 Understanding the policies and guidelines for ASEAN vocational education Section 2 Understanding the problems and solutions resulting from managing ASEAN Vocational Education Section 3 Understanding the characteristics of ASEAN vocational teachers and students</p>		
Learning Outcomes		xxxxx
<p>Element/Enabling Objectives(EO): Section 1 Understand the policies and guidelines for ASEAN Vocational Education</p>		
Evidence Requirements:		
Evaluation Methodology and Evidence of Knowledge		
<p>The Knowledge Evidence Required: Pre-Test, Post Test, Assessment Skills, and Report</p> <p>Knowledge Basic Knowledge: It is significant to understand the basis for the study of the policy module for the ASEAN Vocational Educational guidance noted below:</p> <ul style="list-style-type: none"> - The meaning and importance of the policy approach to ASEAN Vocational Education - ASEAN Vocational Education policies and practices - The Pros and Cons of the policy approach to ASEAN Vocational Education - The benefits of the policy approach to ASEAN Vocational Education <p>Core Skills:</p> <ul style="list-style-type: none"> - Communication: Reading, writing and speaking - Analysis - Synthesis - Problem Solving - Information technology: Computer and the Internet 		
<p>Assessment Guidance: Assessment of Evidence and Knowledge: Pre-Test, Assessment Skills,</p>		

Learning Outcomes	xxxxx
Element/Enabling Objectives(EO):	
Section 2 Understand the problems and solutions resulting from managing ASEAN Vocational Education.	
Evidence Requirements: Assessment Strategy and Evidence of Knowledge	
<p>Knowledge Evidence Requirements: Pre-Test, Post Test, Assessment Skills, and Report</p> <p>Knowledge Basic Knowledge: It is significant to understand the basis for the module concerning the problems and solutions arising from the management of the ASEAN Vocational Education as follows:</p> <ul style="list-style-type: none"> - The meaning and significance of the problems resulting from managing ASEAN Vocational Education - The strengths and weaknesses of ASEAN Education Management Education - Management solutions ASEAN Vocational Education <p>Core Skills:</p> <ul style="list-style-type: none"> - Communication: Reading, writing and speaking - Analysis - Synthesis - Problem Solving - Information technology: Computer and the Internet 	
<p>Assessment Guidance: Assessment of Evidence and Knowledge, Assessment Skills, and Report.</p>	
Learning Outcomes	xxxxx
Element/Enabling Objectives(EO):	
Section 3 Understanding characteristics of ASEAN teachers and vocational students	
Evidence Requirements: Assessment Strategy: Evidence of Knowledge.	
<p>Knowledge Evidence Requirements: Pre-Test, Post Test, Assessment Skills, and Report</p> <p>Knowledge Basic Knowledge: It is significant to understand the basis for the module concerning the problems and solutions arising from the management of the ASEAN Vocational Education as follows:</p> <ul style="list-style-type: none"> - Meaning and importance of the ASEAN Teachers and Vocational Students - General characteristics of the ASEAN teachers and vocational students - The unique features of the ASEAN School and Vocational Students - The standard of ASEAN Teachers and Vocational Students - Development of ASEAN Teachers. and Vocational Students <p>Core Skills:</p> <ul style="list-style-type: none"> - Communication: Reading, writing and speaking - Analysis - Synthesis - Problem Solving - Information technology: Computer and the Internet 	
<p>Assessment Guidance: Assessment of Evidence and Knowledge, Post Test, Report</p>	

5. CONCLUSION

This research expect to develop ASEAN Vocational Teacher Curriculum (AVTC) which was a curriculum development for Vocational Teacher Education (VTE)

within the context of ASEAN integration processes. The research purpose were to analysis the main issues of expected competencies of ASEAN vocational teachers for AVTC and to develop AVTC from particular expected competencies. Methodology used of this

research is Research and Development design on included the documentary research, Matrix Analyze, Focus Group on curriculum objectives and structure to identify competences and evaluate the curriculum.

The results found the main issues of ASEAN vocational teachers' competencies and can be summarized that the ASEAN vocational teachers' competencies should be as the following: 1) Political Issue, 2) Economic Issue, 3) Diversity Issue, 4) Environment Issue, 5) Technology Issue, 6) Learning Theory Issue. From the finding of six competencies informations, can be explained that: the collaboration of ASEAN country such as the group of Regional Cooperation Platform (RCP) which this group is a network which mainly focuses on developing qualities of VTE in changed context of ASEAN community by supporting researches to establish linkages or frameworks according to VTE systems of RCP institute members. This ASEAN Vocational Teacher Curriculum (AVTC) is a curriculum for VTE, and expect to develop the necessary knowledges for all ASEAN Vocational Teacher. The research information from the comparative study and the information of strength and weakness of several ASEAN countries were analyzed and were identified for main issues of ASEAN vocational teachers' competencies. The issues of ASEAN vocational teachers' competencies can summarized and should contain in the ASEAN vocational teacher curriculum. This curriculum compose with 25 Units in 1 year course period. Learners are identified as all ASEAN Vocational Teachers and will be communicated in English language. Structure of the curriculum are 18 credits of Required Courses, 3 credits of Elective Courses as well as 4 credits of Special Topic. The Required Courses composes of 9 subjects which are Learning Management in the Context of ASEAN, Relationships of ASEAN Countries, Product Section and Product Factors of the AEC, ASEAN International Law 1 and 2, Language Used in ASEAN, Career Advancement of Vocational Teacher Education to Promote Business Ethics, Implications for future work The Project of Promotion and Integration of the ASEAN Context, Curriculum Research and Development Design for ASEAN Vocational Teachers. At least 3 units of Elective Courses which students can select according to their interest from Multicultural of ASEAN Countries, ASEAN Environment and Resource Management, Technology and Teaching Materials Production for Vocational Teacher and Quality Assurance System According to ASEAN. The 4 credits of Special Topics is Special Topic in Vocational Teacher Education Curriculum. For the implementation of Diploma in Vocational Teacher Education of ASEAN curriculum, the course modules are prepared. All course modules will included with module title, course description, module purpose,

element / enabling objective, learning outcomes, the knowledge evidence required, core skills, and assessment guidance. The suggestions from this research are as follow: 1) This curriculum should be also certified by particular university council according to focused policies and so far recognized by the ministry of education of ASEAN country 2) The Curriculum structure and contents should conform to several Teacher Council of ASEAN country regulations [11-12].

REFERENCE

- [1] Office of Vocational Education Commission, Ministry of Education. (2016). The Professional Competency Development on The Competency Standard Development for the Module Development. from <http://www.202.44.43.230/vetrc/2016/vec2559>. (Retrieved 21.6.2016).
- [2] Wahab, R. (2009). Current Issues in global education. Keynote speech presented at the International Seminar 'Responding to Global Education Challenges', State University of Yogyakarta, Indonesia, 19th May 2009.
- [3] RMUTT. (2015). Rajamangala University of Technology Thanyaburi Strategy of Policy and Planning 2557-2561. Department of Policy and Planning, Rajamangala University of Technology Thanyaburi.
- [4] Wang Jianchu & Xu Shu. (2012): RCP Project–Comparative Study of Vocational Teacher Education and Training, Vocational Teacher Education and Training in Germany, from http://www.rcp-platform_untry-study_Germany.pdf. (Retrieved 19.6.2012).
- [5] RATVE. (2015). RAVTE Five Point Plan on TVET Improvement for AEC. <http://ravte.asia/wp-Content/RAVTE-5-Point-Plan.pdf>. (Retrieved 9.6.2015).
- [6] Kestutis Pukelis & others. (2012). Methodology for the curriculum of vocational teacher qualification improvement. Online: http://uni-stuttgart.de/bwt/dateien/forschung/.../8+Methodology_english.pdf (Retrieved 19.6.2012).
- [7] Kestutis Pukelis & Others. (2016). Goals and Design of the European Competence Standards. from http://www.uni-stuttgart.de/bwt/dateien/forschung.../8_Methodology_english.pdf. Retrieved 19.11 2016.

- [8] Klemp, G. O. (1980). *The Assessment of Occupational Competence*. Washington, DC.: Report to the National Institute of Education. Institute of Southeast Asian Studies (2010) *Know your ASEAN* (2nd Edition) Singapore ISEAS Publishing
- [9] Tubsree, C. and Boonsong, S. (2013). *Practice and Working Paper – 2 for Curriculum Development of Vocational Teacher Education within the Context of ASEAN Integration Process*. Regional Cooperation Platform for Vocational Teacher Education in Asia (RCP) project. RCP Secretariat and GIZ office in Shanghai/ China.
- [10] GIZ, CPSC, and UNESCO-UNEVOC (2011). *International Conference on Preparing TVET educators for the next generation (EDUCON 2011)*, December 12-13, 2011, Kuala Lumpur Malaysia.
- [11] Qiding Yu. (2016): *Study on Establishing National Standard of Vocational Teachers' Training in China*. from <http://penerbit.uthm.edu.my/ojs/index.php/JTET/article/view/282> Retrieved 19.6.2016.
- [12] Teachers' Council of Thailand (2015), *Qualification Requirements for Education Professional License Renewal*, <http://www.ksp.or.th/ksp2013/service.php?t=2>, (Retrieved 18.2.2015).