

RCP
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Platform

Curriculum Development of Vocational Teacher Education within the Context of ASEAN Integration Process



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# **Curriculum Development of Vocational Teacher Education within the Context of ASEAN Integration Process**

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#### **List of Abbreviations**

ADB Asian Development Bank

AEB Adult Education Board

AEC ASEAN Economic Community

AFTA Asian Free Trade Area

ASCC ASEAN Socio-Cultural Community

ASEAN Association of South East Asian Nations

AVTC ASEAN Vocational Teacher Curriculum

BKSP Badan Koordinasi Sertifikasi Profesi

BNSP Badan Nasional Sertifikasi Profesi

BSNP Badan Standar Nasional Pendidikan

CAD Computer Aided Design

CBT Competency-Based Training

CNC Computer Numerical Control

CPD Continual Professional Development

DepEd Department of Education

DOET Departments of Education and Training

DoVE Department of Vocational Education

DTVE Department of Technical and Vocational Education

DVT Dual Vocational Training

EDC Education Development Center

EO Enabling Objective

ESP Education Strategic Plan

GIZ Gesellschaft für Internationale Zusammenarbeit

HRD Human Resources Development

IBM Business Machines Corporation

ICT Information and Communications Technology

ILO International Labour Office

ITB Industrial Training Board

ITE Institute of Technical Education

IVET Integrated Vocational Education and Technical

KKNI Kerangka Kualifikasi Nasional Indonesia

LGU Local Government Unit

LSP Lembaga Sertifikasi Profesi

MoE Ministry of Education

MOET Ministry of Education and Training

MoEYS Ministry of Education, Youth and Sports

MOLISA Ministry of Labor – Invalids and Social Affairs

MOST Ministry of Science and Technology

Nakertrans Kementerian Tenaga Kerja dan Transmigrasi

NASSP National Association of Secondary School Principals

NITC National Industrial Training Council

NTC National Training Council

OE Occupational education

PERT Program Evaluation and Review Technique

PLD Provincial Labour Department

RCP Regional Cooperation Platform

SD Sekolah Dasar

Sislatkernas Sistem Pelatihan Kerja Nasional

SKKNI Standar Kompetensi Kerja Nasional Indonesia

SMA Sekolah Menengha Atas

SMK Sekolah Menengah Kejuruan

SMP Sekolah Menengah Prtama

SPM Sijil Pelajaran Malaysia

SPN21 National Education System for the 21st Century

STVED Secondary Technical and Vocational Education Department

SUC State Universities and Colleges

TESDA Technical Education and Skills Development Authority

TPO Terminal Performance Objective

TVE Technical and Vocational Education

TVEC Technical and Vocational Education Council

TVET Technical and Vocational Education and Training

TVQ Thai Vocational Qualification

USAID U.S. Agency for International Development

VEC Vocational Education Commission

VITB Vocational and Industrial Training Board

WD Workforce Development

WE Workplace Education

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### **Executive Summary**

#### Research objectives

The goal of the study was to develop a curriculum on vocational teacher education within the context of ASEAN integration processes. From the goal four research objectives were set, they were:

- 1. to identify needs of "ASEAN" for accelerating of particular growth,
- 2. to identify strengths and weaknesses of ASEAN country members affected TVET Teacher education.
- 3. to design and evaluate an ASEAN Vocational Teacher Curriculum (AVTC) and
- 4. to propose the AVTC program management and collaboration activities for RCP members to implement the developed curriculum.

#### **Research questions**

- 1. What are the needs of ASEAN countries for accelerating of particular growth,
- 2. what are strengths and weaknesses of ASEAN country members affected TVET Teacher education,
- 3. what is the component of the ASEAN Vocational Teacher Curriculum(AVTC) which is suitable for the ASEAN context,
- 4. how should the AVTC curriculum be managed among RCP members

#### Research methods

Due to the differences in nature of the data to be collected, the researcher decided to utilize multiple approaches of data collection. A qualitative data collection utilizing interview and document analysis was chosen to get the answer to research objective number one, and number two. While a quantitative research through research and development approach was chosen to answer research number three and number four.

#### Research results

#### 1. Needs of ASEAN countries

- 1. Need for labor productivity.
- 2. Prepare TVET students for regional needs.
- 3. Need for learning activities relevance for enhancing student skills in entering regional force.

#### 2. Strengths and weaknesses of ASEAN country members that affect TVET education.

There are 5 issues concerning strengths and weaknesses that may affect TVET education. The issues are: 1) Priority given to TVET, 2) Acceptance of TVET in the country, 3) Competency building of TVET curriculum, 4) TVET graduate employment and 5) Cost of study for TVET program. The results of the analysis were that Malaysia and Vietnam are the two countries those posses the most strengths while Lao PDR, the Philippines and Singapore are in the second group, Brunei, Indonesia and Thailand are in the third group in terms of strengths. Myanmar has the least strength in TVET situation.

#### 3. The components of the AVTC.

The AVTC is a one year diploma program, comprises of three parts:

- 1. Eighteen credits of required course
- 2. Three credits of elective course
- 3. Four credits of special topic course.

#### Recommendations

Since the research study aims to answer two separate different sets of research questions. The first set of research questions (question 1 and 2) aims to provide the insight of the strengths of TVET in ASEAN country members, the answer to the research questions could be used for suggestions for those countries to enhance the strengths and eliminate the weakness. The second set of research question (question 3 and 4) aims to develop answer question concerning the curriculum of TVET, the recommendations is based on the research question asked. The researchers recommended the following recommendations:

- 1. The overall requirement of TVET in ASEAN country member is to enhance labor productivity.
- 2. The countries need to prepare vocational students for not only domestic needs but also for regional (the 10 countries) needs.
- 3. The TVET program needs to develop learning activities that are relevance to enhance students' skills for regional force.
- 4. To make vocational education strong, the five issues should be addressed.
- 5. The developed AVTC program should be collaborately managed among the ASEAN country educational institutions.

#### 1 Introduction

#### 1.1 Background of Research Project

This research has tried to develop the special curriculum for ASEAN vocational teacher, especially regarding the policy of the 10 ASEAN Economic Community (AEC) countries forthcoming in 2015. The research team thinks that the ASEAN vocational teacher, especially in AEC countries, should have knowledge about the context of ASEAN countries as the economy and society will always change. (Nanchanok Wongsamuth, 2013)

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).

The ASC is expected to maintain and strengthen peace, security and stability and enhance ASEAN's capacity for self-management of regional security, maritime cooperation and fight against terrorism.

The mission of the AEC 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. But it will not adopt a common currency like the European Union.

The ASCC is for a Southeast Asia bonded together in partnership as "a community of caring and sharing societies". The ASCC Plan of Action contains four core elements: Building a community of caring societies, Managing the social impact of economic integration, Enhancing environmental sustainability, and Strengthening the foundations of regional social cohesion towards an ASEAN Community (ASEAN Secretariat, 2009).

So "One Vision, One Identity, One Community" was declared by the ASEAN Secretariat (2009) as expected goal with strategic plan to reach achievement of ASEAN Community in 2015.

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 quality of VET teacher education in changed context of ASEAN community.

This research results will be a curriculum development of vocational teacher education within the context of ASEAN integration processes which will be well designed and assessed among RCP institute members for empowering potential of VET teacher students in terms of knowledge and technology. This research's result will be one of progressive steps to increase RCP country members' competitiveness.

#### 1.2 Purposes of the Research Project

The main purpose of this research was to develop a curriculum, training package and action plan on vocational teacher education within the context of ASEAN integration processes, which was identified as following objectives;

1. To identify needs of "ASEAN" for accelerating of particular growth

- 2. To identify strengths and weaknesses of ASEAN country members affected TVET Teacher education
- 3. To design curriculum and program management and collaboration among RCP members
- 4. To evaluate the curriculum draft

#### 1.3 Expected Main outputs and outcomes

- 1. Report on macro perspective, the factors and issues affected VET teacher education
- 2. Report of comparative significant strengths and weaknesses classified by ASEAN member country
- 3. Curriculum of vocational teacher education within the context of ASEAN integration processes

#### 1.4 Research Questions

- 1. What are the needs of ASEAN countries for accelerating of particular growth?
- 2. What are strengths and weaknesses of ASEAN country members affected TVET Teacher education?
- 3. What is the component of the ASEAN Vocational Teacher Curriculum (AVTC) which is suitable for the ASEAN context?
- 4. How should the AVTC curriculum be managed among RCP members

#### 2 Literature review

This study investigates the main issues of expected competencies of the vocational teachers within the context of the ASEAN integration process, and to be the ASEAN Vocational Teacher Curriculum (AVTC) development from these expected competencies. This part provides the overview of principle and theoretical framework that support the study and examines the literature relevant to the problem. The content is divided into four sections. The first part focuses on ASEAN. The second part is the basic fact about Technical and Vocational Education and Training (TVET) in ASEAN countries. The third one is theory and practice of curriculum development, and finally is an overview of the competency.

#### 2.1 The Association of South East Asian Nations (ASEAN)

This study gives a brief related to background of ASEAN. The Association of South East Asian Nations (ASEAN) is a geopolitical and economic organization of ten countries: Brunei Darussalam, Cambodia, Indonesia, Laos, Malaysia, Myanmar, the Philippines, Singapore, Thailand, and Viet Nam, which was formed on 8 August 1967 with the signing of the ASEAN Declaration by Indonesia, Malaysia, the Philippines, Singapore, and Thailand. (Institute of Southeast Asian Studies, 2010) As set out in the ASEAN Declaration, the seven aims and purpose are:

- 1. To accelerate the economic growth, social progress and cultural development in the region though joint endeavors in the spirit of equality and partnership in order to strength the foundation for a prosperous and peaceful community of Southeast Asian Nations;
- 2. To promote regional peace and stability through abiding respect for justice and the rule of law in the relationship among countries of the region and adherence of the United Nations Charter;
- 3. To promote active collaboration and mutual assistance on matters of common interest in the economic, social, cultural, technical, scientific, and administrative fields;
- 4. To provide assistance to each other in the form of training and research facilities in the educational, professional, technical, and administrative spheres;
- 5. To collaborate more effectively for the greater utilization of their agriculture and industries, the expansion of their trade, including the study of the problems of international commodity trade, the improvement of their transportation, and communications facilities, and the raising of the living standards of their people;
- 6. To promotion of Southeast Asian studies; and
- 7. To maintain close and benefit cooperation with existing regional and international organizations with similar aims and purposes, and explore all avenues for even closer cooperation among themselves. (National Office for Empowerment of Persons with Disabilities, 2011)

ASEAN announced the establishment of an ASEAN Community at Ninth Summit in October 2003 which based upon three pillars, namely ASEAN Security Community (ASC), ASEAN Economic Community (AEC) and ASEAN Socio-Cultural Community (ASCC).

The ASEAN Security Community (ASC) is expected to maintain and strengthen peace, security and stability and enhance ASEAN's capacity for self-management of regional security, maritime cooperation and fight against terrorism. Recognizing the strong interconnections among political, economic, and social realities, the ASC acknowledges the principle of comprehensive security, and commits to address the board political, economic, social, and cultural aspects of building an ASEAN

Community. It is also acknowledged that political and social stability, economic prosperity, narrowed development gap, poverty alleviation, and reduction of social disparity would constitute strong foundation for a sustained ASC given its subscription to the principle of comprehensive security.

The member states agreed to solve internal and external conflicts through dialogue and reconciliation, not military or violent means. The democratic and peaceful means shall be introduced in dealing with internal and external conflicts.

The ASEAN Economic Community (AEC) shall be a goal of regional economic integration by 2015. The main objectives of the AEC are to create a:

- a. single market and production base,
- b. 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,
- c. region of equitable economic development and
- d. region fully integrated into the global economy.(Road Map for an ASEAN Community 2009-2015:ASEAN Economic Blueprint, 2007, pp 21-36)

The AEC areas of cooperation include human resources development and capacity building; recognition of professional qualifications; closer consultation on macroeconomic and financial policies; trade financing measures; enhanced infrastructure and communications connectivity development of electronic transaction through e-ASEAN; integrating industries across the region to promote regional sourcing; and enhancing private sector involvement for the building of the AEC. IN short, the AEC will transform ASEAN into a region with free movement of goods, services, investment, skilled labor, and freer flow of capital. (ASEAN Secretariat, 2012) AEC is a large market for traders, the investment location for investors, as well as the service business clientele shall be enlarged. Industrial, foods, or agriculture products that produced in one country shall be exported throughout ASEAN with free tax barrier. The investors have more choices for considering or selecting their investment site without national or religious barrier. ASEAN citizens have an opportunity to set their future in term of their education, health, consultancy, livelihood, tourisms, or other services.

The ASEAN Socio-Cultural Community aims to contribute to realizing an ASEAN Community that is people-oriented and socially responsible with a view achieving enduring solidarity and unity among the people and members states of ASEAN. It seeks to forge a common identity and build a caring and sharing society which is inclusive and where the well-being, livelihood, and welfare of the people are enhanced. The ASCC focused on nurturing the human, cultural and natural resources for sustained development in a harmonious and people-oriented ASEAN. (ASEAN Secretariat, 2012)

The ASCC is for a Southeast Asia bonded together in partnership as "a community of caring and sharing societies". The ASCC Plan of Action contains four core elements: Building a community of caring societies, managing the social impact of economic integration, enhancing environmental sustainability, and strengthening the foundations of regional social cohesion towards an ASEAN Community. (ASEAN Secretariate, 2011) The ASCC will improve regarding the management efficiency and effectiveness of ASEAN member countries. The good governance, and transparency principles will be done, check, and act. ASEAN citizens will receive better public services. They have a chance to exchange their cultural, learn or apply their knowledge and experience gained to their works and career. The gap between the rich and poor will be narrower. Our natural environment will be conserved and protected, maintain a green environment, and be revitalized for human being.

So "One Vision, One Identity, One Community" was declared by the ASEAN Secretariat (2009) as expected goal with strategic plan to reach achievement of ASEAN Community in 2015. Asian societies have made vast effort to address current and future challenges.

Education is in fact that the most important component upon these three pillars: The ASEAN Security Community (ASC), ASEAN Economic Community (AEC), and ASEAN Socio-Cultural Community (ASCC). Based on our experience, the poorly and uneducated people tend to solve their conflicts through violent means. They have also hardly created innovative products and cannot produce high quality products due to lack of skill or competency for work. They have limited some creative thinking and problem solving skills. That is means the country or the community that fill up with low quality, poor, and uneducated people hardly compete in the international market. The poor quality people have less opportunity to succeed in their marketing or investment career as well as less opportunity to succeed in increasing their family income. The inequality in income distribution will continue to exist in such a country.

Therefore, education is the key to success in the people's quality improvement process. Especially, Technical and Vocational Education and Training (TVET) play crucial role in the social and economic development of the region. TVET have provided a competent workforce that contributes to efficiency, quality, skill and innovations. Skills are vital for poverty reduction, economic recovery and sustainable development. As a consequence, policy attention to technical and vocational education and training is the key factor in the continuous improvement, in the adaptation of socioeconomic and in the future challenges to the success of the regional, society, its companies, and sustain economic growth societies.

#### **Technical and Vocational Education and Training in ASEAN countries**

The terms Technical and Vocational Education and Training have various meaning and commonly used in different context and countries include:

Vocational education is any sort of formal education that trains students for work in a particular trade or industries. In most vocational education program is somewhat short, usually two years, and want their students graduated to have a diploma or equivalent. Vocational education program focus on providing a board and varied education, vocational school – sometimes also called technical schools.

Finally, although vocational education has different names, but terms commonly used in same context, which is training for a specific occupation in agriculture, trade, or industry through a combination of theoretical teaching and practical experience provided by many vocational schools in their commercial and technical divisions, and by special institutions of collegiate standing (as a college of agriculture, a school of engineering, or a technical college).

An apprenticeship program is a course of education that is based on on-the-job experience. Furthermore, an apprenticeship program usually focuses on one trade or skill rather than on variety of subject areas. For example, someone trying to get started in event photography might apprentice for a photographer who makes a living shooting events. Likewise, someone interested in learning how to become a car mechanic might apprentice at a garage. In the same way, an apprenticeship program combines on-the-job training with academic instruction for those entering the workforce. Also called dual training programs because of the combined occupational and in-class components, apprenticeships help individuals put their academic skills to practical use in various careers.

In conclusion, apprenticeship program is a system of training a new generation of practitioner of a structured competency a basic set of skills.

Occupational education (OE) means some of learning experiences designed to assist the student to acquire and demonstrate competency of skills under student learning goal and which skills are require for success in current and emerging occupations.

Workplace education (WE) refer to adult basic and literacy education programs that are planned and delivered through business/ education partnerships and provide customized work-related basic (or foundation) skills instruction to those already employed and in need of more advanced skills to maintain or advance in their jobs and services designed to demonstrate a strong relationship between basic skills and the literacy requirements of a changing workplace; improves the foundation skills of adults entering the workforce and dislocated workers as they prepare for job training and employment or new occupations. The work-related learning experiences which can include foundation skills, technical and computer skills, serve either employed or unemployed workers, are provided inside or outside the workplace and focus on the skills and knowledge workers need to get and keep good jobs and meet demands for productivity, safety and advancement. (http://worklink.coe.utk.edu/glossaryb.htm)

And workforce development (WD) means the function of assisting individuals, employers and communities achieve occupational competencies necessary for competitive advantage in a dynamic

Workforce development is an approach that attempts to enhance and prosperity by focusing on people rather than businesses. It is essentially a human resources strategy. Workforce development has evolved from a problem-focused approach, addressing issues such as low-skilled workers or the need for more employees in a particular industry, to a holistic approach considering participants' many barriers and the overall needs of the region. (Wikipedia, 2013)

The term of Technical and Vocational Education is one of the most powerful instruments for enabling all members of the community to face new challenges and to find their roles as productive members of society. It is an effective tool for achieving social cohesion, integration, and self-esteem to promote learning and skills for young people and adults. (UNESCO, 1999)

Given the diversity, participants at the UNESCO-convened Second International Congress on Technical and Vocational Education, held in Seoul, Republic of Korea in 1999, agreed that the best, most comprehensive term to use is "technical and vocational education and training (TVET)". The Revised Recommendation concerning Technical and Vocational Education adopted by the General Conference of UNESCO (2001) refers to "technical and vocational education" as the principal conceptual term to describe the range of vocational education and training programmes covered by the international instrument. (International Labour Organization, 2010)

As this term has come to be widely used at international level in the last decade, for purposes of this study vocational education and training will be understood to mean technical and vocational education and training (TVET), and the understanding of this concept as set out in the 2001 Recommendation guides the report:

"technical and vocational education" is used as a comprehensive term referring to those aspects of the educational process involving, in addition to general education, the study of technologies and related

marketplace.

science, and the acquisition of practical skills, attitudes, understanding and knowledge relating to occupations in various sectors of economic and social life.

The purpose of Technical and Vocational Education and Training (TVET) is to provide its participants with practical knowledge and skills which are required by the world of work. Therefore, the scope and delivery systems of TVET tend to vary from country to country to reflect specific national socioeconomic situations. Effective TVET policy, as such, must encompass various policy areas and be sufficiently flexible to ensure the successful transition of its participants from learning to work. (UNESCO, 2013)

In particularly with regard to ASEAN integration, this study explores and focuses on introduction or basic information of technical and vocational and training with the context of ASEAN countries in brief as follows; This is the elaboration to link the following information to the previous mentioned, I consider remain as it is

#### **Technical and Vocational Education and Training in Brunei Darussalam**

BRUNEI Darussalam is planning to strengthen its technical and vocational education system by increasing the number of institutions providing training, expanding the range of courses on offer and establishing exchange programs with neighboring countries.

Over the past decade, the base of Brunei Darussalam economy has become more diversified, with less dependence on energy production, both as a result of the states long-term policy of developing downstream industries in the hydrocarbons sector and via the reinforcing of non-oil-and-gas segments.

Schemes such as the Brunei Methanol Company's \$450 million production facility at Sungai Liang industrial park which commenced production last year along with other projects still in the pipeline, require trained personnel at all levels of their development, from the initial planning process through construction to the final operational stage.

As Brunei Darussalam's economy expands, new and existing industries exploring new technologies are increasingly in need of more skilled personnel. While demand for skilled workers is growing, some observers say that vocational aspects of the education system are not keeping up.

The Ministry of Education (MoE) was considering ways of ensuring more students can obtain technical or vocational training to improve their chances of gaining employment. With a limit on the number of students the existing seven technical and vocational institutions can accept, the ministry was looking at establishing new training colleges.

The plan at a regional education conference as part of a presentation on Brunei Darussalams long-term plan for the development of the school system, the National Education System for the 21st Century (SPN21). The vocational and technical education system so that it better meets the needs of both students and the national economy. Students at the secondary school level who may not be suited to university will be encouraged to undertake technical or vocational studies. In the past, technical and vocational subjects were seen as second choice as opposed to academic subjects.

The MoE is already working to increase the infrastructure for its professional training programs, with construction beginning in late 2010 on a new \$23million extension to the Institut Teknologi Brunei (ITB). When completed in 2012, blocks for petrochemicals and civil engineering, a mechanical engineering centre, lecture theatres and computer labs will all have been added.

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Due to current restrictions, ITB can only induct 10 new students for its petroleum engineering degree program and a further 10 for the chemical engineering course annually, well short of the number of graduates needed in the local labor market. With the increased capacity provided by the extensions, the institute will be able to graduate at least 40 students from its petrochemicals program, rising to 60 by 2018.

#### Technical and Vocational Education and Training in Cambodia

After more than a decade of reconstruction of socio-economic and education systems, Cambodia sees the urgent need today to develop and renovate its Technical and Voca¬tional Education and Training (TVET) system. Each year, a large number of secondary-school and university graduates enter the labour market, not fully ready for the transi¬tion. To cope with emerging challenges, UNESCO has initiated the TVET policy dialogues and introduced UNESCO normative instruments to several decision makers, administra¬tors and to all key TVET stakeholders. UNESCO has shared its policy framework and re¬lated publications with the Cambodian government, including the MoEYS, the Ministry of Labour and Vocational Training and other policy-makers, in an attempt to find a way to bridge the gap between TVET and the labour market, to empower the youth with em¬ployment skills, and to identify visions and policies for TVET development in Cambodia.

The Education Strategic Plan (ESP, 2009 - 2013) was approved in September 2010, prepared by the MoEYS and supported by the Development Partners. As a new component, for the first time, the TVET is included in the education sector strategy.

In 2011, UNESCO continues to provide capacity development support to national partners in improving the TVET as well as the implementation of ESP. In this regards, UNESCO Office in Phnom Penh, Bangkok and TVET Section at HQs join to conduct the Policy TVET Review in Cambodia. The TVET Policy Review is not an attempt to provide ready-made policy recommendations; instead, the policy review should be regarded as a part of on-going policy dialogue among various stakeholders.

On-going technical assistance and the capacity development support is provided to the newly established technical department - the Department of Vocational Orientation of the Ministry of Education, Youth and Sport in implementing and monitoring the Annual Operational Plan and ESP, through different forms including the regular meetings, trainings and workshops. Technical support is also provided to assist the process of Vocational Orientation Policy formulation, to encourage the process to be consultative as much as possible, especially among the national TVET related sectors.

#### **Technical and Vocational Education and Training in Indonesia**

Indonesia's TVET system is made up of two parts, namely the vocational education system, which is a part of the National Education System governed by the Education Act (Law No. 20/2003) and the national training system for work, governed by the Manpower Act (Law No. 13/2003).

Basic, compulsory education comprises primary (Sekolah Dasar - SD - 6 years) and lower secondary (Sekolah Menengah Prtama - SMP - 3 years) general education. At upper secondary level which is not (yet) compulsory, there are general higher middle schools (Sekolah Menengha Atas - SMA) and vocational middle schools (Sekolah Menengah Kejuruan - SMK), both lasting 3 years. Some SMK, so-called SMK Plus, are running extended programs of 4 years, which then lead to a Diploma-1

certificate. There is also vocational education at the higher education level. Polytechnics (Politeknik), High Schools (Sekolah Tinggi) and Academies (Akademi) offer Diploma Programs at the levels D2, D3, and D4, the figure after the "D" denoting the length of study. Diploma Programs are also offered by some universities. In addition there are specialist professional programs offered by universities for further training, usually for holders of at least a Bachelor degree.

The Indonesian education system is expanding rapidly. During the last decade one of the biggest problems was a high drop-out rate at all levels of the school system, as well as low transition rates between the levels, even from SD to SMP. For 2008, however, the Ministry of Education reported an over 95% transition rate of SMP graduates to upper secondary education. But before graduating from SMP this cohort has already suffered a loss of almost 40%. One of the reasons for this situation is most likely the problematic economic situation of a high share of the population (in 2010 13,3% lived under the national poverty line, more than 50% from less than 2 US\$ a day) combined with the slow Indonesian recovery after the end of 1990ies Asian economic crisis.

In its mid-term education development plan the Indonesian Government set the target to reverse the ratio of general to vocational students from 70:30 to 70:30 by the year 2020. In the academic year 2008/2009 this ratio already was about 55:45.

In 2008/2009 there were almost 3,1 Mio. vocational students at SMK level, 66,3% of them attending private vocational schools.

Vocational Schools are available for the following subject areas: a) technology and engineering, b) health, c) arts, craft and tourism, d) information and communication technologies, e) agribusiness and agro technology, f) business and management. All together they offer roughly 40 different study programs, some of them with a number of different majors.

Since recently the curricula of the study programs shall be based on National Competence Standards for Work (Standar Kompetensi Kerja Nasional Indonesia - SKKNI), which are developed under contribution of industry and enacted by the Ministry of Manpower and Transmigration. The National Agency for Educational Standards (Badan Standar Nasional Pendidikan - BSNP) issues detailed curriculum guidelines and also develops nationally unified students' final examinations. The schools, however, shall develop their own curricula based on the curriculum guidelines and in negotiation with local stakeholders like companies and other parties interested in education. Curricula need approval from the regional education administration.

SMK curricula contain a fair share of general education content since SMK schooling shall also enable graduates to pursue higher education. The vocational part is restricted to roughly 25% of the curriculum, not including basics of math, sciences, and English language which are covered by the prescribed general education part.

Indonesia has developed a national qualification framework as stipulated by the Education Act, but not yet (April 2011) enacted. The qualification framework (Kerangka Kualifikasi Nasional Indonesia - KKNI) has 9 levels, SMA and SMK both being at level 2. Each of the Diploma-variants has its own level, and the D4 certificate lies together with the academic Bachelor Degree at level 6. Level 7 is for further professional qualifications, and level 8 and 9 are for Master and PhD Degrees.

Starting in 2007 the Indonesian Education Ministry has defined a comprehensive set of education standards comprising curriculum, competence, administration, financing, equipment, teaching staff, assessment standards, etc. In 2005, a teacher law was enacted (Law No. 14/2005) which sets minimum

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formal qualifications for teaching staff and which requires teachers and lectures to acquire a teaching certificate. Quite a number of these standards still require some effort until they can be met, especially those for equipment or for the qualification of teachers.

In average, for SMK graduates it is hard to find a job. It is said, that this is due to the little relevance of SMK education for the needs of the labor market. This is certainly a factor, since teaching tends to be "academic", and most of the schools lack equipment for practical learning. On the other hand, the situation of SMA graduates is worse, and even for graduates from polytechnics or universities it is not easier to find a job. Less than 40% of the Indonesian workforce is working in the "formal" economy, and only 20% of these have a proper work contract, so it will be difficult for everybody to find wage employment.

SMK education in average (but there are exceptions!) does not prepare for the labor market. Even TVET teachers say that SMK graduates are not ready for work, but ready to be trained. Some even doubt that. The reason for that most likely is a mixture of several aspects: The SMK curricula contain a relatively small share of vocational content (see above). There usually is little cooperation between schools and companies (even though schools are obliged to find company partners), since neither of both seems to be really interested in cooperating with the other, due to a deeply rooted mistrust. Teachers do not know the world of work and even the Education Ministry's Directorate for SMK does not seem to actively support cooperation between schools and companies. Instead it promotes the concept of the "School Factory" to build up manufacturing environments in the school, for which the schools and their teachers are not prepared or qualified. The newly implemented teacher certification scheme, even though originally based on a concept for teachers' competence development, has developed into a paper tiger by exclusively using a paper-based portfolio approach.

The training system (Sistem Pelatihan Kerja Nasional - Sislatkernas) is based on the already mentioned Manpower Act (Law No, 13/2003) and further defined by the subsequent regulation No 31/2006 of the Ministry of Manpower and Transmigration (Kementerian Tenaga Kerja dan Transmigrasi - Nakertrans).

Essentially, the training system has the following features:

- training programs are developed based on SKKNI, international, or special standards, and they have to be located in the national qualification framework KKNI;
- training takes place at the workplace or at a training centre;
- training may be organized as an apprenticeship;
- for implementing training the required equipment and competent staff must be available;
- government-run and private training centers need an accreditation by the competent authority
- the successful participant of a training is entitled to receive a training certificate, and after successfully passing a competence test, to receive a competence certificate issued by the national agency for professional certification (BNSP);
- the central government and the local authorities contribute to the financing of training.

The training system virtually implements parallel structures to the vocational education system under the regulatory power of Nakertrans, since the latter does not provide the competences needed by the labor market.

The national training system stipulates the implementation of apprenticeship, which is organized in a "dual" form in cooperation of companies and training centers. That way the development of a "dual

system of vocational education and training" is taken up again, after its implementation under the at that time Ministry of Education and Culture had failed in the 1990ies due to the Asian economic crisis and the political turmoil related to the fall of the new order regime. At that time the Indonesian term for the dual system of TVET was "Pendidikan Sistem Ganda".

Today, apprenticeship, since conceptionalised as further training, may have duration of 6 to 9 months, in well justified cases up to 12 months. For a traditional or modern apprenticeship this timespan certainly is too short, but the legislators apparently intended to prevent "exploitation" of apprentices over a longer period and to ensure a timely conversion of apprenticeships to regular employment.

Since apprenticeship is defined under the labor law, apprentices must be at least 15 years old. An apprenticeship is based on a contract between the employer, the apprentice, and the local labor administration. Only registered employers can offer apprenticeships in their company, and also the cooperating training centers must be registered. Since the system is still pretty young, little can be said about its success. An ILO study testifies relative success, but still small volume.

The Indonesian Work Competence Standards (Standar Kompetensi Kerja Nasional Indonesia - SKKNI) are developed under the National Professional Certification Agency (Badan Nasional Sertifikasi Profesi - BNSP) by workgroups with participation of representatives of professional associations and/or companies to assure their relevance for the world of work. The standards then are issued by Nakertrans. The Quality of these SKKNI however partly is questionable. SKKNI in mechanical engineering for example are just carbon copies of Australian standards while development level and work organization in Australian and Indonesian Industry still differ considerably.

BNSP, besides being responsible for the development of SKKNI, also develops the framework for competence certification against SKKNI. The corresponding institutions at the provincial level are the Coordination Agencies for Professional Certification (Badan Koordinasi Sertifikasi Profesi - BKSP). BKSP currently (April 2011) exist in 17 of 33 provinces, but only 3 or 4 of them are functional. BKSP are tripartite institutions, governed by government, employers and employees organizations. The driving force in BKSP usually is KADIN, the Indonesian Chamber of Industry and Commerce. The function of BKSP is to coordinate all stakeholders of professional certification at the provincial level, to drive the application of professional certification and the creation of Professional Certification Institutes (Lembaga Sertifikasi Profesi - LSP) as well as the recruiting of assessors. LSP are often run by training institutes, professional associations or educational institutions. LSP need a certification by BNSP, and also the assessors who do the certification work, need an accreditation by BNSP.

Up to now professional certification did not yet experience a break through even though the government and the employer organizations place considerable hope in it for improving the competence of the workforce.

In the development of its education system, including its vocational education system, Indonesia always had considerable support either from international donors or through World Bank and Asian Development Bank. Currently several donors are supporting Indonesia with technical and financial aid in developing TVET, including the European Union, AusAid, German Development Cooperation, World Bank, ADB, and ILO. Switzerland, The Netherlands, UK, Republic of Korea, Japan, and maybe others are also running TVET development projects. The main goal of these projects is to develop quantity and quality of TVET in line with the Indonesian Government development targets. An overview of all these activities unfortunately currently is not available.

About 7,600 secondary vocational schools (26% public), 130 polytechnics (21% public), 950 Academy (all private), 16 public university-level institutions with TVET teacher education programs, 6 public centers for the development and empowerment of teachers and educational personnel (P4TK), 5.900 training institutes (3,5% public).

#### Technical and Vocational Education and Training in Laos

Based on the Strategy Paper from 1997, different legal provisions and regulations have been developed as important tools for administration, management and implementation of TVET. In 2000, the Education Sector has developed and improved the Education Strategic Vision, which divided into three programs namely increasing equitable access to education programs, improving quality and relevance program and education administration and management program. During the implementation of the above mentioned Education Strategic Vision, TVET has achieved many accomplishments. The Government of Laos recognizes the role and importance of TVET for training and upgrading of work force for the contribution to socio-economic development of the country.

Previous Accomplishments of Development of Technical, Vocational Education and Training

- 1. Establishing the National Training Council (NTC) including its supporting units (Permanent Office of NTC, Trade Working Groups).
- 2. Elaborating and issuing different legal provisions as tools for the administration, management and implementation of TVET
- 3. Establishing the Vocational Education Development Centre, Integrated Vocational and Technical (IVET) Schools in some provinces including the provision of facilities, training equipments and materials needed.
- 4. Developing pre-service and in-service vocational teacher training system including implementing of training courses for many teachers and administrative personnel in order to meet the development needs of TVET both formal and non-formal.
- 5. Developing and improving curricula, media for learning and teaching and training materials for many teaching subjects in collaboration with public and private training providers.
- 6. Implementing internal projects and projects in cooperation with international organization and foreign countries for building, extension and improving of public and private vocational schools and training centres.

Beside the above-mentioned achievements, some issues and problems remain to be addressed in order to adapt to the fast changing situations, especially in the area of ICT, which has direct impact on the development, and economic growth of the country. Globalization, the opening of the Asian Free Trade Area (AFTA) in 2008, the efforts for abandoning the status of developing country in 2020, the industrialization and modernization of the nation are huge challenges for TVET in LAOS. Normally, the development of TVET in LAOS will still have to face diverse problems such as:

- The number of graduates of secondary schools increases, but there are no sufficient training places. Many young people, especially in the provinces near border, are going to neighbor countries to look for jobs both legal and illegal. This causes many social problems.
- Few people are interested in TVET. Further, the society promotes higher education and requires graduates of higher education only for employment. The training of labor force is not in line with "pyramid education form" and does not match the real demand for the socioeconomic development of the country.

- Compared to general education, TVET needs high investments, especially where sciences and technologies are changing and developing very fast, but the supporting budget for the development of TVET remains very limited.
- Buildings, facilities, and workshops of some schools/training centres are out of date, especially in newly established public schools in some provinces. Some private vocational schools or training centres still lack textbooks, teaching-learning materials, machines, tools, and training materials.
- The development of vocational curricula for bridging courses starting from the basic level up to higher level is very important, but there are no sufficient technical personal in this particular area. Therefore, delays in development in this matter occurred.
- Within teaching-learning processes, traditional approaches are mostly applied, so that studentcentred teaching does not exist. Many teachers lack teaching experiences and/or have had no pedagogical training or vocational teacher training before.
- Provincial Education Service (PES), Provincial Labour Department (PLD) still lack
  experiences for the implementation of TVET system and for the Public Private Partnership,
  especially in the provinces with new vocational and technical schools. They also lack
  experiences for the organization of teaching and learning processes within IVET and dual
  cooperative training system.

#### **Technical and Vocational Education and Training in Malaysia**

Malaysia consists of thirteen states and three federal territories in Southeast Asia. The population stands at over 27 million. The country is located near the equator and experiences a tropical climate. The government is closely modeled after the Westminster parliamentary system.

Malaysia as a unified state did not exist until 1963. Previously, a set of colonies were established by the United Kingdom. Singapore, Sarawak, British North Borneo and the Federation of Malaya joined to form Malaysia on 16 September 1963. The Southeast Asian nation experienced an economic boom and underwent rapid development during the late-20th century. Rapid growth during the 1980s and 1990s, averaging 8% from 1991 to 1997, has transformed Malaysia into a newly industrialized country. Because Malaysia is one of three countries that control the Strait of Malacca, international trade plays a large role in its economy. At one time, it was the largest producer of tin, rubber and palm oil in the world. Manufacturing has a large influence in the country's economy. Malaysia has a biodiversity range of flora and fauna, and is also considered one of the 18 mega diverse countries.

Malaysia is a multi-ethnic, multi-cultural and multilingual society. The population is roughly 27 million. Malaysians of multiple ethnics, faiths and religions are proud of One-Malaysia spirit and strive together to meet daily challenges in order to live harmoniously side by side as well as to be able to appreciate and understand Malaysia's international role.

The Malays, who form the largest community, are defined as Muslims in the Constitution of Malaysia. Their native language is Malay (Bahasa Melayu). Malay is the national language of the country, but English is widely spoken in major towns and cities across the country.

The formal technical and vocational education system starts at the upper secondary level to prepare them for further technical education at the tertiary level (at the polytechnic, college, and university levels) or for entry in to the workforce. TVET programs have taken a broad-based and non-terminal approach. The delivery system allows the opportunity for students to progress to tertiary education level and acquire a Certificate, Diploma or a Bachelor's degree qualification.

At present, the ministry is strengthening the TVET within the schooling system by introducing TVET skills stream at all national secondary schools under the 10th Malaysia Plan (10MP). The purpose is to equip the students with the Sijil Kemahiran Malaysia (SKM)-level skills to make it easy for them to obtain employment even if they do not do well in the Sijil Pelajaran Malaysia (SPM) examination. In other words when the students leave schools, they will not only have SPM, but SKM as well. At the same time, the ministry was also in the process of restructuring technical secondary schools to turn them into vocational secondary schools which would focus on the vocational and skills stream by the year 2011. It is expected the number of Form Four students undergoing the skills training programme at technical secondary schools nationwide will rise dramatically. Earlier, the ministry has introduced 22 vocational subjects to national secondary schools to allow the students to obtain SKM. Other strategies include boosting enrolment in the vocational and skills stream at technical secondary schools, strengthening the technical and vocational education curriculum and enhancing ties with the industry, professional bodies and higher education institutes both local and overseas. The government is also currently reviewing the curriculum to introduce vocational subjects that can be studied as early as the upper-primary and lower secondary levels. (UNESCO-UNEVOC, 2013)

#### **Technical and Vocational Education and Training in Myanmar**

At present, planning and management of Technical and Vocational Education and Training (TVET) in Myanmar is being executed by three different agencies namely; the Ministry of science and technology, the Ministry of Labor and the Myanmar Industrial Development Committee. The expansion and diversification of TVET to meet the demands of changing technology and economy will require more effective coordination between all agencies concerned.

The Ministry of Science and Technology consists of six main Departments. Among them, Department of Advanced Science and Technology and Department of Technical and Vocational Education are conducting undergraduate and graduate courses on various fields in Technology and Computer Studies.

Department of Advanced Science and Technology is comprised of 24 Universities of Computer Studies. Department of Technical and Vocational Education is comprised of (26) Technological Universities, (4) Government Technological Colleges, (11) Government Technical Institutes, (1) Myanmar Aerospace and Aeronautical Engineering University

There are currently 66 Universities, Colleges and Institutes altogether under the Ministry of Science and technology (MOST).

Current Status of Department of Technical and Vocational Education (DTVE): Organization

DTVE is one of the six departments under MOST. It is responsible for the technical education and training of the country's youth to become engineers, technicians, skilled workers. DTVE function within the policy framework laid down by the Technical and Vocational Education Council (TVEC). TVEC is the highest supervisory body for DTVE. This council is responsible for the management of Technical and Vocational Education and Training (TVET) activities.

Its members include senior officials from the other relevant departments and agencies. Under the council, there are two educational committees (i) Technical Education Committee and (ii) Vocational

Educational Committee. They are formed to help to implement the respective educational activities. Two different curriculum committees (i) Technical Education Curriculum Committee and (ii) Vocational Educational Curriculum Committee that are provided along with the two respective examination committees to design, develop, implement and monitor progress in these two distinct types of education offered under DTVE.

#### The principle objectives of DTVE are:

- To train engineers, technicians and skilled workers.
- To formulate the programs of strong linkages between teaching and on the job experience.
- To set the priorities for occupation and skills this will be the most useful in practical field.
- To organize training programs in vocational trades for the students who dropped out at various levels of the formal education system.
- To train and nurture skilled technicians and experts who are imbued with a sense of conscientiousness and convictions to cherish the state.

#### Functions of DTVE may be enumerated as follows:

- Implementing tasks according to the policies and guidelines laid down by the MOST
- Planning for the attainment of highly qualified and proficient teaching staff
- Promoting effective teaching system using modern teaching aids and equipments
- Admission Requirement of Enrollment
- The student who achieves the total marks of 320 and above on the B.E.H.S (Basic Education High School) examination can apply to any Technological University. Admission is limited to 20,000 students per year in 26 members of Technological Universities in Myanmar.
- In Technological Universities, the timetable is scheduled with 40 percent theoretical lessons and 60 percent practical works (jobs and laboratories tests) especially for technicians. To sit for the final examination, students must attend the class in 75 percent of individual academics durations. During the academic years, monthly tests and weekly tutorial have been done. To pass the course, 65 percent of final examination mark is added by 10 percent of monthly test marks, 10 percent for attendances, 10 percent of practical marks, and 5 percent of weekly tutorial marks
- Qualified students from GTIs can sit for entrances examinations conducted specially for them
  by Technological Universities. Realizing the education and training are lifelong processes.
  DTVE with the approval of the Ministry of Science and Technology has already implemented
  several continuing education programs. Thus, it is envisaged that Technical and Vocational
  Education and Training will continue to be given a high priority in Myanmar for sustainable
  Human Resource Development.
- The era of Ministry of Science and Technology from 1988 to 2006 under department of Technical and Vocational Education, the total number of 41384 candidates completely finished courses.
- For the practical works of the technological students, modern advanced workshop machines including the Computer Numerical Control (CNC) machines, such as CNC Lathe, CNC Milling Machine, and CNC Machining Centre, have also been bought and installed. By using these CNC machines, courses that combine theoretical knowledge with practical applications have been conducted and the required equipment for laboratories has also been produced. About 859 trainees have been trained in the courses on Auto CAD and CNC Applications from 2002 up to the present.

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The human resource requirements of the future trends in industry and economy are by:

- a. developing teaching quality and effectiveness of teachers
- b. introducing competency-based curricula and new courses
- c. providing opportunities for retaining of workers
- d. establishing more training institutions
- e. promotion high technology training, research and development

TVET in Myanmar will continue to be given a high priority for sustainable human resource development in enhancing TVET systems through relevant training programs, consultancy projects, research and development assistance, and information communication and technology services.

#### **Technical and Vocational Education and Training in the Philippines**

Technical-Vocational Education became the jurisdiction of Technical Education and Skills Development Authority (TESDA) as legally mandated through RA 7796 otherwise known as the TESDA Act which was signed into law on August 25, 1994.

At present, TVET provides education and training opportunities to prepare students and other clients for employment. It also addresses the skills 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.

A report from the Department of Vocational Education on the typical progression of pupils indicates a huge market that needs TVET. Out of 100 pupils entering Grade I, only 66 will graduate from Grade 6. Out of the 66 elementary graduates, 58 will enter first year, 43 will graduate from high school and the remaining 15 will join the ranks of out-of—school youths. Out of 43 high school graduates, 23 will enroll in 1st year college, 10 will get tech-voc education and 10 will drop out. The potential clientele of TVET includes primarily the high school graduates, secondary school leavers, college undergraduates and graduates who want to acquire competencies in different occupational fields. Other potential clientele of TVET are the unemployed persons who are actively looking for work. These include the displaced workers who lost their jobs because of closure of establishments, retrenchment or laying-off of workers due to economic and other related reasons. Returning overseas Filipino workers who decide to discontinue working aboard are also clients of TVET as well as those currently employed who want to upgrade their skills or acquire new skills.

There are four basic modes of training delivery. In the year 2005, 24.68% of TVET graduates came from the formal school-based programs, 4.82% was contributed by center-based non-formal training programs, a large 41% came from community-based programs leading to livelihood and self-employment opportunities and enterprise-based programs like apprenticeship, learner ship and dual training programs contributed a 7.5% to the total annual output. Other government agencies conducting mostly community-based programs contributed 22% to the output.

The training and development of the Filipino workforce for skilled employment is provided mostly by the private TVET institutions. There are 4,510 TVET providers in the country today, 62% (2,786) of which are private and 38% (1,714) are public. The public TVET providers include the 121 TESDA Technology Institute composed of 57 schools, 15 Regional Training Centers, 45 Provincial Training Centers and 4 Specialized Training Centers. Other public TVET providers include State Universities

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and Colleges (SUCs) and local colleges offering non-degree programs; DepEd supervised schools, LGUs, and other government agencies providing skills training programs.

#### **Technical and Vocational Education and Training in the Singapore**

Singapore's vocational and technical education has gained much international recognition for its effective training and whole person development. Today, Institute of Technical Education (ITE) accredited courses have been conducted overseas, and ITE has provided consultancy services to countries setting up their own vocational schools.

In 2007, ITE was conferred the international IBM Innovations in Transforming Government Award (organized by the Ash Institute of Harvard University), in recognition of its transformation of VTE in Singapore as "the world's most transformative government programme", which has "profound impact on citizens' lives" and a "model programme" with potential for global replication. ITE has certainly come a long way since it was dubbed "It's The End" by local comedian Jack Neo.

Singapore had recognized the need for vocational training as an avenue for employment. In 1960, a Commission of Inquiry into Vocational and Technical Education in Singapore was set up. It recommended establishing a 2-year secondary vocational education stream in schools for poorer performers.

By the late 1960s, there was a shortage of industrial skills. A ministerial level National Industrial Training Council (NITC) was formed in 1968 to address the issue. A Technical Education Department was created within the Ministry of Education. Technical assistance was sought through the Colombo Plan and the United Nations. In 1969, an industrial training system replaced the secondary vocational education stream. Nine vocational institutes were created between 1969 and 1971. With these developments, the NITC ceased in 1972.

In 1973, the Industrial Training Board (ITB) was established to oversee the development of industrial training. One of its achievements was to establish national certification systems - National Skills Standards and the Public Trade Test system.

By mid 1970s, Singapore achieved full employment, and had to shift its focus to increasing manpower productivity. There was also concern that school leavers did not take up vocational training. At the same time, the Adult Education Board (AEB, established in 1960) has shifted from general academic education towards commercial courses and pre-vocational training. In 1979, the AEB and ITB were merged to form the Vocational and Industrial Training Board (VITB). The Council on Professional and Technical Education was formed to strategise measures to help manpower meet the demands of a new economic strategy that was technology intensive.

By the end of the 1980s, employment figures showed that VITB graduates with secondary school education were preferred. The government thus decided to provide students with at least ten years of general education before they proceed to technical education. VITB was upgraded and converted to a post-secondary institution, the Institute of Technical Education (ITE). A \$300 million budget was allocated to build, rebuild or extensively upgrade the existing ten technical institutes in Singapore.

This section focuses mainly on education provided by ITE, which is positioned at a post-secondary level and takes in about 25% of a cohort. Some mention is made of post-primary schools focused on vocational education (namely Assumption Pathlight School and NorthLight School), as well as

Singapore Polytechnic, our oldest polytechnic, which conducted courses at craft and technician level at its inception until these courses were transferred to vocational institutes.

Technical and vocational Education and Training (TVET) addresses education and training for craft workers and technicians. It should be noted that "technicians" does not have a clear and standard definition, forming the broad spectrum between the professionals/technologists and craftsmen (Technician training, 1994).

TVET similarly covers a broad spectrum, from upper secondary levels to non-university higher education levels, depending on the structure in the country and its historical developments. In Singapore, polytechnic graduates are positioned as technologists and middle-level professionals. ITE graduates are positioned as technicians.

#### Technical and Vocational Education and Training in the Thailand

Formal vocational and technical education is conducted at three levels: upper secondary (the Certificate in Vocational Education (Bor Wor Saw), post secondary (leading to the Technical Diploma (Bor Wor Chor or Vocational Associate Degree) and university level which admission to university for a Bachelor degree program may be granted. Vocational education is also provided by private institutions. There are currently over 1 million students enrolled in the various vocational study pathways. Eight fields of study are undertaken as majors: trade and industry, agriculture, home economics, fisheries, business and tourism, arts and crafts, textiles and commerce.

The move toward lifelong learning and a learning society has been embodied in a credit transfer system to facilitate mobility between institutions; in the recognition of different types of qualifications from various institutions offering vocational training; and the evaluation of prior learning and work experience from within the formal, non-formal and informal sectors. Reforms are currently being implemented to remodel the system towards a Thai Vocational Qualification (TVQ) based upon industrial practices and needs.

Currently 412 colleges are governed by the Vocational Education Commission (VEC), of the Ministry of Education with more than a million students following the programs in 2004. Additionally, approximately 380,000 students were studying in 401 private vocational schools and colleges.

Technical and vocational education (TVE) begins at the senior high school grade where students are divided into either general or vocational education. At present, around 60 per cent of students follow the general education programs. However, the government is endeavoring to achieve an equal balance between general and vocational education.

**Dual Vocational Training (DVT)** 

Essential to DVT is the active participation of the private sector. In 1995, based primarily on the German model, the Department of Vocational Education launched the initiative to introduce dual vocational training programs which involve the students in hand-on training in suitably selected organizations in the private sector.

DVT is a regular element of the DoVE "Certificate" and "Diploma" program. The training is for a period of three years with more than half of the time devoted to practical training on-the-job, spread over two days a week, or for longer periods depending on the distance, throughout the semesters.

Two levels of DVT are offered: the three-year certificate level for skilled workers where students and trainees are admitted at the age of 15 after completing Matthayom 3 (Grade 9); and the two-year diploma technician level for students who have graduated with the Certificate of Vocational Education after 12 years of formal education.

In the scheme, vocational, unlike regular internships, where students may be assigned to work on unpaid irrelevant jobs, the cooperative education program enables the students of the vocational schools to do field work while benefiting from an allowance to cover living expenses or free accommodation, and compensation for their contributions made towards the company's income and profits as temporary employees.

Schools collaborate directly with the private sector in drafting action plans and setting goals for students to meet. Generally, the company will offer permanent employment to the trainees on graduation and successful completion of the program. Conversely, companies that recruit trainees from among young people who have completed a minimum of nine years at school may enroll their employees with a technical or vocational college where they are taught vocational subjects as the theoretical background to the occupational field in which they are being trained.

The Office of Vocational Education Commission showed student attendance for the 2005 academic year as follows:

Technical colleges 290,058; industrial and community colleges 137,377; business administration and tourism colleges 3,480; commercial colleges 16,266; arts and crafts colleges 2,214; polytechnic colleges 36,304; vocational colleges 89,703; agricultural and technology colleges 34,914; Golden Jubilee Royal Goldsmith College 525; industrial and ship building colleges 2,391; fishery colleges 1,510; agricultural engineering training centers 806; with a further 340,000 in private vocational schools.

Technical and vocational education (TVE) begins at senior high school grade where students are divided into either general or vocational education. At present, around 60 percent of students follow the general education programs. However, the government is endeavoring to achieve and equal balance between general and vocational education.

The Office of the Vocational Education Commission will set up professional testing and standards certification centers at educational institutions under its supervision and at various universities nationwide, in preparation for the ASEAN Community.

The Secretary-General of the Office of the Vocational Education Commission explained that the decision would increase job opportunities for entrepreneurs and skilled personnel, so that their skills and standards would be recognized in the ASEAN labor market.

Emphasis will be placed on professional standards in the fields that Thailand wants to develop as its strengths in the ASEAN region. These fields are involved with information technology and communication, construction, beauty and spas, gems and jewelry, logistics, automobiles and automotive parts, fashion, Thai cuisine, and retail business. The centers would be located across the country for the convenience of those who wish to apply for professional testing. Related government agencies and private organizations will join forces in conducting testing and certifying professional standards. Each center will focus on only one particular field of profession, and those who pass the testing will receive certificates.

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The mapping out of the plan for the project will be completed in 2013, and the Office of the Vocational Education Commission will seek resources to buy necessary equipment for each center by 2014. Although the standards of Thailand's vocational education system are considered high, students at various educational institutions at the vocational level need to improve their communication skills in English and the languages of other ASEAN nations. In this connection, the Vocational Education Commission would open English and "mini-English" programs to enhance language skills for both students and teaching staff, to prepare them for the ASEAN Community, which will be in place in 2015.

Meanwhile, King Mongkut's Institute of Technology Ladkrabang has opened new engineering courses, as it strives to become a leading university in ASEAN, excelling in engineering studies. The opening of the Defense Engineering program is the first of its kind in Thailand and ASEAN, while the Biomedical Engineering program is in response to the Thai government's policy of developing Thailand into a medical hub in Asia.

The introduction of the new courses is seen as a significant step toward produce engineering personnel to cope with the ASEAN labor market demand in the future.

#### Technical and Vocational Education and Training in the Viet Nam

Viet Nam is aiming to become an industrialized country by 2020. Technical and vocational education and training (TVET) is central to this aspiration: the demand for skilled workers is increasing steadily as the country's economy continues to grow and it aims to be competitive both regionally and globally. There is a shortage of skilled workers and technicians with practical training, yet around 1.4 million people enter the labor market each year. Only about 27% of workers currently have training relevant to the job they do, while just 15% have completed formal vocational training. The Government of Viet Nam has, therefore, put vocational skills training and boosting employment at the heart of its development goals. Its plan is that by 2020, trained skilled workers will make up 55% of the labor force, compared with the current figure of 30%, and that one third will have successfully completed intermediate or advanced vocational training. The Government also wants to tailor its vocational training more to the needs of the business community, so it is promoting the expansion of vocational education and training provision and improvements in the quality and needs-based focus of training.

The Program on Reform of Technical and Vocational Education and Training (TVET) supports Viet Nam's reform efforts at a number of levels. Working with the Vietnamese partners, the program is implementing a comprehensive vocational education and training program that provides policy and system advisory services and supports selected training institutions in improving the quality of the training they offer. With the involvement of the business community, strategies for practice-oriented vocational training have been developed and implemented. These also include sustainable funding and design of an assessment system.

Support for vocational training institutions focuses on training provision in sectors with growth potential. Working closely with the business community, the program creates the necessary conditions for training programs, including in-service training for teachers and trainers with a practical focus, advice for school management teams, adaptation of existing training programs, and modernization of equipment.

The Vietnamese partners have been supported in developing and improving the quality of the country's TVET system. The program has helped significantly to improve needs-led and practice-oriented training in the supported institutions: communication and cooperation between managerial and operational levels in the TVET system have been improved, and strategies and instruments that have been trialed successfully are now firmly established.

Over the last decade, the Vietnamese Government has persisted in the policy of renovation of the economy. The Government is deeply aware of the importance of human resources development (HRD) and makes great efforts to develop education and training. The reform of TVET is one of those efforts. The efforts made to TVET sector can be seen in almost all aspects such as curriculum development, teacher retraining, partnership strengthening between business and training institution, establishing qualification frameworks, accreditation, management systems, and co-operation with international TVET institutions. Socializing TVET and making its courses more relevant to the labor market are important policies of the reform of education. Although TVET system in Vietnam has gained preliminary success for a couple of years, there has been a long way to go with many pitfalls. It may not be able to overcome obstacles and difficulties in a short while, as it will require time, resources and efforts.

Before 1987, TVET system in Vietnam was developed with over 200 technical vocational colleges and 125 vocational schools. For many years, TVET system has trained and supplied hundreds of thousands of workers and technicians for the economy, which was controlled and planned by the central Government. At that time, there was mismatch between supply and demand of the labor force. Consequently, since the country has moved into the market-oriented economy, the TVET has exposed deficiency of skilled workers in a wide range of industries. The "products" of TVET could not meet demands of the economy. Skills and knowledge of TVET graduates have not been relevant to the needs of the labor market. Besides that, most young people have been reluctant to choose TVET because of poor training programs, which cannot be furthered to higher qualifications in universities and because of other cultural reasons. Added to those problems is the scarcity of resources which has made TVET system more difficult. There was a dramatic decrease in the number of students during the period before 1990, while enrollments into the university remarkably increased, leading to imbalance in the structure of the labor force, disparity between training trades, and resulted in relative redundancy of laborers. This period could be the crises of TVET. Thanks to "Doi moi" policy, the economy has gained the growth of about 7 per cent annually and TVET has shared its vitality and developed.

Up to now, the TVET system includes over 300 colleges and schools which train technicians and workers in such sectors as agriculture, industry, health care, tourism, construction and transportation. There are a number of higher education institutions offering courses leading to diplomas and certificates. In almost provinces, there are centers for general technical education and vocational training that offer short-courses for high school students and vocational programs.

The scope and objective of the present TVET system of Vietnam can be summarized as follows:

- Short-term vocational training/re-training programs are for unemployed/-employed individuals to get specific vocational skills and a certificate.
- 1 to 3 years vocational training programs are for students who have graduated from lower or upper secondary education to lead towards a vocational certificate. Based upon duration and field of training, the students can be granted certificates of different levels of qualification

- from level one to level three. After finishing school, students can be employed to work as skilled workers.
- 2 to 3 year vocational & technical education. These programs combine general education subjects and specific occupational subjects to lead to a diploma. The graduate will be able to enroll for higher education degree.

There are several forms of TVET such as: formal, informal, continuous, in-service training with a various range of providers: public, semi-public and private (people-founded) institutions.

The TVET system is under state administration of MOET, MOLISA and other line ministries in the central level. In the local level, it is controlled by the local authorities - it is a quite complicated system.

As a result of the reform of TVET, the Prime Minister issued the Decision No. 67/1998/QD-TTg dated 26 March 1998, which transferred responsibility for vocational training from MOET to MOLISA. This Decision was followed closely by the Decree No.33/1998/ND-CP of the Government dated 23 May 1998 to establish the new General Department of Vocational Training. The responsibility for secondary technical and vocational education remains with MOET.

The Secondary Technical and Vocational Education Department (STVED) takes responsibilities in such areas as building up national policies on TVET, designing strategic plans for TVET, promulgating managerial regulations under its own authorities, planning of TVET institutions system, retraining TVET teachers, management of core curriculum of different specialties of training, development of national qualification frameworks related to TVET.

Besides, STVED also gives proposals or advices to the Minister of MOET in matters related to TVET system development.

In co-operation with other departments in MOET, STVED engages in activities such as permitting a certain new secondary technical school to be established or to shift to the status of a three-year college of TVET. A couple of years ago, there were over 90 per cent of high school graduates enrolling in secondary technical and vocational schools. In order to carry out the policy on public administration reform in MOET, STVED will be assigned more tasks and responsibilities. Therefore, the name of STVED may soon be renamed Technical and Vocational Education Department according to a new announcement from Personnel Department of MOET.

At the central level, there are Personnel and Training Departments, which run under administration of other line ministries and in charge of management and administration of TVET institutions. Such activities as planning, recruitment of staff, specialized occupational standards, retraining of teaching staff, making partnership with industry or foreign training institutions, promotion and so on are responsibilities of those ministries and general departments.

At the local level, there are professional offices under the administration of Provincial Departments of Education and Training (DOET), which are in charge of educational administration and management in provinces, or Municities. The professional office is assigned some tasks of technical and vocational education administration and management by MOET.

In terms of management, TVET Vietnam is mixed both State-based and school-based management according to the Educational Law.

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The main objectives of TVET in Vietnam are to prepare for the country a labor force meeting needs of the labor market, to enable people for their contributions to sustainable social, economic and environment development, and to create equal opportunities for all and to make a cross-linkage between TVET and higher education.

In order to gain those objectives, Vietnam has made big efforts in formulating the policy on the reform of education. The reform has involved most stakeholders in the society and taken place in all areas of TVET.

#### Key Policies to do in the future:

- To restructure the TVET's network and make it more relevant to needs of local and central industries as well as to a multi-sector and dynamic economy;
- To have a demand driven TVET system directed by labor market information and with multientry-exit points and with courses delivered flexibly;
- To have a system of TVET institutions which provide students from high school to postsecondary with technical and vocational programs;
- To improve quality, effectiveness, efficiency and size of TVET system;
- To mobilize sources from society for development of TVET and make the socialization of education and training qualitative, effective, attractive, realistic and sustainable;
- To have a decentralized system of TVET with more autonomy, responsibility and accountability assigned to local education and training authorities and institutions;
- To make a smooth transition from school to work;
- To facilitate lifelong learning for all.

#### **Key Strategies**

- Institutional system should be restructured in order to make TVET more effective and high
  quality. The following principles should be taken into account as planning for development of
  the system:
  - 1. Effectiveness and efficiency need to be taken into account as changing the institutional structure:
  - 2. Restructure of TVET system should link with economic and social development policy and strategies as well as regional co-operation;
  - 3. Validity of management orders is respected;
  - 4. Follow the policy of the public administration reform of the Government. Both management and administration in the system should run smoothly;
  - 5. In the central and local level, changes in TVET institutional system structure should get credit from TVET institutions so that TVET system work well;
  - 6. Outputs of TVET after changes of institutional structure need to be reflected in quality of graduates, creating more opportunities of employment, reduction of training cost, increase of young people enrolling into TVET and matriculating to higher education;
  - 7. Every decision made for changes in TVET institutional structure should be supported from scientific research.

In the coming years, a feasibility study of local secondary technical and vocational schools integration into community colleges should be conducted. Wherever conditions are available for affiliation of these schools, a decision on that should be made.

- To deregulate and regulate properly in accordance with decentralization process. At the same time, STVED needs to review regulations promulgated and to revise or cancel as necessary.
- To train management in every layer of institutional hierarchy from macro to micro level so that managerial staffs are ready to be empowered as decentralization occurs;
- To improve quality and effectiveness of TVET system, the measures should be taken as below:
  - To check list and approve fields of training and put it in relevance to curriculum framework;
  - To renovate objectives, content and method of training towards needs of the industry;
  - To orient TVET in society to change the view of the people about TVET;
  - To improve quality of teaching and learning activities at some key colleges;
  - To incept and conduct the articulation courses among levels of training;
  - To mobilize resources of society for human resources development;
  - To develop and maintain the partnership between TVET institutions and business;
  - To strengthen and develop the international co-operation in TVET;
  - To cooperate closely with General Department of Vocational Training (MOLISA) and other institutes to monitor quality of graduates and then set up an accreditation body for TVET as well as coordinate other activities related to TVET;
  - To reduce costs of training based on a reasonable increase of the number of enrollments into schools and colleges;
  - To form partnership with enterprises to determine needs of industry and using production equipment more effective;
  - To establish the management information system and labor market information to improve planning for resources and training;
  - To fight against corruption in schools and colleges;
  - To expand size of schools and colleges:
  - Streamlining students who complete junior secondary schools (year 9) into two pathways: senior secondary schools (high school) oriented academic education and secondary vocational schools oriented both academic education and occupational training, but the latter is more focused;
  - Reducing fee for student who study in TVET institutions;
  - Making articulation and credit transfer easy between qualifications levels, while keeping the training quality.

The globalization, the introduction of state-of-the-arts technology into the workplace and the reform of the national economy, require the labor force to have well-prepared skills, knowledge and attitudes. Vietnam TVET takes the responsibility for the development of human resources with high standards in almost all areas of the economy. Within such context, the policy of development on TVET in Vietnam is to take advantage of the opportunity and to limit disadvantages in order to improve the technical and vocational schools (colleges) network, TVET management and curriculum development as well as to work together with international organizations for TVET such as UNEVOC-UNESCO, SEAMEO VOCTECH and other non-government organizations.

The globalization process, the knowledge economy, advances in technology are increased competition due to trade liberalization are major forces driving change in the world of work. They have important implications for the demand for skills, human resource development and training. The use of new technologies, especially ICT and the introduction of new manufacturing processes, and new modes of

work organization have led to skills intensification and an increase in the demand for higher order skills and productivity.

Nowadays TVET is regarded as an instrument in creating new employment opportunities and incomegenerating activities in the formal and informal sectors of the economy, the need for which has become more acute due to the finance crisis. TVET can play an important role in economic development and poverty reduction if due attention is given to customizing or targeting education and training provision to local needs.

## 2.2 Curriculum Development

The word "curriculum" derived from the Latin word currere means "to run" or "to run the course". (Jon Wiles and Joseph Bondi, 2007) The term of "curriculum" is frequently used to refer to the content which will be involved with in a class or seminar or training. It is very important to make a distinction between "curriculum" and "teaching" The short of definition of each is that curriculum I "what you teach", while teaching is "how you teach". In this study, curriculum is defined as all the experiences provided by the institute or agency or companies which are desired to foster students or teachers or workers or labors learning.

The curriculum is a systematic group of courses or sequence of subjects required for graduation or certification in a major field of study. (Oliva, 1988, p.6)

Curriculum development is central to the teaching and learning process, and includes all the planning and guiding of learning by training or teaching organization, whether it is carried on in groups or individually, inside or outside a classroom, in an institutional setting or in a village or field. (Rogers and Taylor, 1998)

Curriculum development is a set of coordinated activities that follow a logical process. Thus, curriculum development is a deductive process and the actions become more detailed that results in a final product. Curriculum development activities are a combination of being both purposeful and process-oriented. The theme common in all curriculum development efforts is for the improvement of students or audiences or learners learning. The process that contributes to improved learning is a cyclical model: analysis, design, implementation, and evaluation. The constant processes of analysis, design, implementation, and evaluation have contributed to the establishment of a process-oriented structure in curriculum planning.

Consequently, curriculum planners have been able to apply this process to improve their own processes of setting goals, plan learning experiences, select program content, and assess outcomes of the programs.

The curriculum development process systematically organizes what will be taught, who will be taught, and how it will be taught. Each component affects and interacts with other components. For example, what will be taught is affected by who is being taught (e.g., their stage of development in age, maturity, and education). Methods of how content is taught are affected by who is being taught, their characteristics, and the setting. In considering the above three essential components (FAO, 2013)

Curriculum Development can be defined as the systematic planning of what is taught and learned in schools as reflected in courses of study and school programs. The primary focus of a curriculum is on what is to be taught and when, leaving to the teaching profession decisions as to how this should be done. (UNESCO-UNEVOC, 2013)

Process of curriculum development is essential for successful achieving educational goals for technical and vocational education and training students. It asks for systematic approach which should respect several aspects: the needs of entrepreneur, of the society, the students and teaching staff. This process should be maximal efficient and effective; it should be built upon previous work. Process itself should be done in a specific algorithm starting from the definition of final goals of the educational process, through the selection of the certain tools for achieving this goals, and integration of different elements inside one curriculum.

Taba (1962) presented seven majors steps of curriculum development as follows:

- 1. Needs analysis
- 2. Objectives formulation
- 3. Content selection
- 4. Organization of content
- 5. Selecting learning experience
- 6. Organizing learning experience
- 7. Determine what to evaluate and means of doing it.

In a vocational education program, it should be understood that there is also a training component and, in a well-conceived vocational training program, the necessary educational component should also be included. It should be make clear that there is no dichotomy between education and training – both have a role to play in society and are interlinked. (UNESCO, 1982)

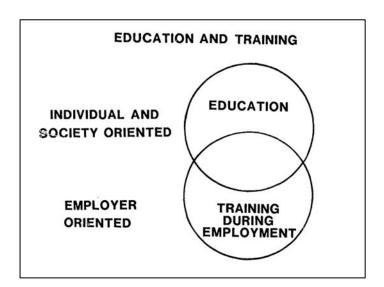


Figure 1: Inter-relationship between education and training (UNESCO, 1982)

With increased industrialization, the need for more specialized skills has become evident. Training, in its traditional forms (e.g. apprenticeship), has accordingly become more specifically oriented. Today, one can find industrial training program which, although of only a few hours duration, are sufficient to train someone to do a specific job, as is the case, for example, of soldering parts of electrical equipment. Such training need not even be organized and carried out on the job (on-the-job training). Training is normally employer-oriented and its function is to train personnel for a given production. Understandably, employers are not interested in training personnel for their competitors (it is for this

reason that inter-factory training centers have been developed to provide training of a boarder conception). Education (including technical and vocational education), on the other hand, has a social function as well. Its propose is not only to prepare people for employment, but also to educate them for their whole lives so that they can cope with changes and be afforded a better mobility.

Educational systems are being reoriented towards the realities of life and the needs of employment, and training systems are widening their scope in order to provide greater mobility to trained persons. The ways of organizing education and training are being introduced, as is the case with co-operative education, and concepts such as "learning by doing" and 'earning with learning" are finding increasing favor with educators. Despite the difference between education and training, a methodology common to both can be applied in the field of curriculum development.

Curricula can be developed more easily where clear objectives are identified. In this sense, a somewhat narrow training program can more easily be developed than a curriculum for general education, which must suitable for a boarder spectrum of the population and which must satisfy individuals' aspirations. The problem of integrating theory with practice should also be considered, that is very important. It implies that classrooms and workshops should be closely linked and that preferably, one teacher teaches both theory and practice. In reality, this occurs only in exceptional cases and much has an improvement remains to be made in the planning of facility and the training of teachers who are competent to tech both theory and practice in an integrated manner. (UNESCO, 1982)

Special techniques have been developed in industry for system approach, such as PERT (Program Evaluation and Review Technique), which allows for a constant monitoring of a process. The system approach is not limited to industry but has also already been applied to newspaper production and other fields. Educators have realized that much can be learned from industry, and it is therefore education is increasingly adopting a systems approach to curriculum development.

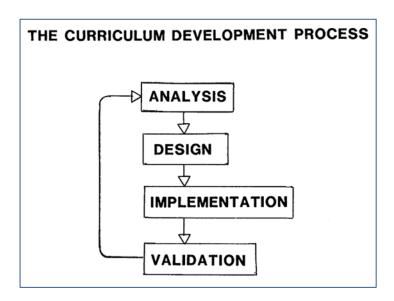


Figure 2: The curriculum development process (UNESCO, 1982)

The process applied to curriculum development as shown in Figure 2 consists of four distinct steps – analysis, design, implementation, and validation. The first step, analysis, implies the ascertaining of

what is needed. In step 2, design, aims and objectives are identified, resources and materials are developed. In step 3, the new curriculum is implemented and, in step 4, the curriculum material is validated against the needs identified in the initial analysis, this may also be called evaluation.

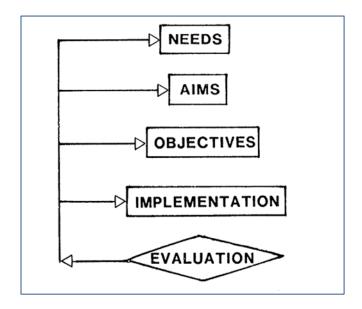


Figure 3: Major phases in curriculum development

This process can be summarized as shown in Figure 3 with the following steps:

- Step 1 Analysis of needs
- Step 2 Goals and aims
- Step 3 Detailed objectives
- Step 4 Implementation
- Step 5 Continuous evaluation with feedback to above four steps. (UNESCO, 1982)

Effective approaches to TVET vary significantly. To better understand what works, USAID commissioned EDC to conduct a 2-year, 20-country study (1995-1997) on best practices in workforce development and TVET. The study conclude that the most effective programs shared nine characteristics: (Monika Aring, 1997 pp 51-74)

- 1. Leadership and accountability: The underlying philosophies, values, and strategies that design, implementation, and evaluation of TVET program must be defined and communicated to all partners and stakeholders.
- 2. Demand-driven design: TVET programs can only be successful if they are tightly aligned to local, regional, national, and/or international economies and if the flow of information between stakeholders is open and transparent.
- 3. Open access: Barriers to entry-including information and practices that provide access- must be low enough to ensure that populations who have traditionally been excluded from education and training programs, such as woman, girls, the disabled, and other marginalized groups, are able to participate and gain skills for employability.
- 4. Portable skills: Successful workforce development projects should allow for geographic mobility, as jobs or work opportunities may not be physically close to where learners have acquired skills and knowledge. Additionally, because work changes over time and workers

- change jobs and occupations over their lifetimes, transferable skills and soft skills, such as learning how to learn, plan, and communicate, are in great demand.
- 5. Continuous improvement: A commitment to continuous improvement encourages TVET programs to measure and evaluate students and programs throughout the process to ensure the quality of training and links to the labor market.
- 6. Public-private partnerships: A key success factor for effective workforce development systems is the degree to which the program links the demand side of the labor market (employers or entrepreneurs) with the supply side (learners). Developing multiple partnerships that bring together resources from the private and the public sectors appears to be the most sustainable approach for workforce development initiatives.
- 7. Sustainable financing: If TVET programs are to continue to continue to innovate, change, expand, and reach their goals, it is crucial that they are linked to multiple and flexible financing sources.
- 8. Explicability: It is important to identify the factors that influence successful and sustainable replication, such as alignment to national needs, social mores, and labor laws, if programs are to serve as models for providing and delivering training.
- 9. Economic and social impact of the program or system: Successful TVET programs benefit not just the individual but contribute, in varying degrees, to economic growth and democratic processes.

This research was applied "Ten-Step Curriculum Planning Model" a systematic-model approach from Systems and Models in Curriculum Development (VSU, 2011) which was considered to be suitable for this research in term of new ASEAN's demand, RCP institute members' resource and restraints, RCP taskforce for example. This model first appeared in the NASSP Bulletin in 1984 in an article by Zenger and Zenger, 1984, pp 17-23). It is an inclusive, organized approach that certainly meets the definition of "systematic model". When using the "Ten-Step Model", shown as Figure 4 the process may or may not include all steps, may begin or end at any of the steps, steps may be repeated as necessary and evaluation is a crucial component of all steps. The 10 steps involve (1) identifying or stating a curricular need, (2) developing curricular goals and objectives, (3) planning and organizing resources and identifying constraints, (4) organizing and stating the functions of curriculum committees, (5) establishing the roles and responsibilities of personnel involved, (6) identifying and analyzing new curriculums or programs to meet the curricular need, (7) assessing and selecting the new curriculum, (8) designing the new curriculum, (9) implementing the new curriculum, and (10) evaluating the curriculum.

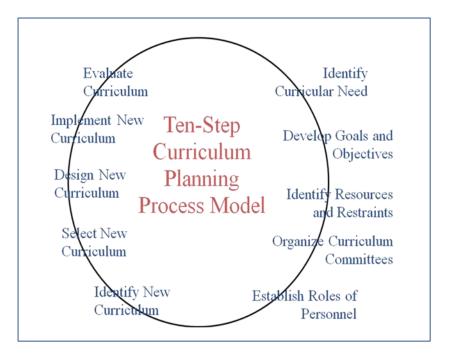


Figure 4: Ten-Step Curriculum Planning Model

Curriculum developed for vocational training should not only meet the goals and objectives of training but also be implemented effectively. There have been a variety of models that have been tried in the past and hence curriculum development has either been in the subjective or objective mode. But recently the trainers and educationalists have developed competency based curriculum which can be implemented using multi-media educational resources that have now become available. Such an approach allows open entry/open exit philosophy of Curriculum implementation to be adopted to allow the trainees to learn at one's own pace in the most flexible way.

# 2.3 Competency

In the competency-based individualized and multi-media curriculum development, the subject matter has been divided into modules. The modules are studied through workstations. The learning process is student-centered and not teacher-centered. The modules are sub-divided into learning elements. These are learnt by carrying out tasks which help to acquire employable skills. This approach of curriculum development, obviously, assumes the availability of resources for its implementation. (UNESCO-UNEVOC, 2013)

Another feature of the delivery systems is the development of modular training and competency-based training (CBT). CBT stresses the outcomes of training in knowledge and skill acquired, rather than time spent in training. Moreover, CBT put instructors under intense pressure to perform. CBT exposes instructor performance through more frequent examinations (at the end of each module, instead of the end of each year or course of instruction.) Sufficient resources must be set aside for instruction retraining.

Competency Based Training (CBT) can also enhance quality. CBT is actually learning by doing and by coaching. It is necessary to incorporate the principles and methodology of CBT into the formal technical and vocational education system. However, since the development and implementation of competency-based qualifications (involving standards, levels, skills recognition and institutional arrangements) are very costly in terms of training infrastructure and staff capacity, piloting of the CBT

approach in a few economic and employment growth areas is recommended, rather than a wholesale training reform strategy. Vocational students should be encouraged to build a portfolio of projects undertaken or items produced during training as evidence of proficiency and proof of ability to perform prescribed professional tasks.

Here is David Dubois' definition of competency: Those characteristics - knowledge, skills, mindsets, thought patterns, and the like – that when used whether singularly or in various combinations result in successful performance (Dubois, 1998. p9)

The following definition is from Thomas Gilbert's definition and formulas in his book Human Competency. Human competence is a function of worthy performance (W), which is a function of the ratio of valuable accomplishments (A) to costly behavior (B).

Or 
$$W = A/B$$

Performance = B + A

Competent people are those who can create valuable results without excessively costly behavior (Gilbert, 1996)

Klemp (1980, p.21) defined competence as an underlying characteristic of a person which results in effective and/or superior performance on the job.

While a more detailed definition is a cluster or related knowledge, skills, and attitudes that reflects a major portion of one's job (a role or responsibility), that correlates with performance on the job, that can be measured with well-accepted standards, and that can be improved with training and development (Parry, 1996, p50)

Since its initial conception, attitudes, traits, or personalities have also played a major role in competencies, even though they are not normally thought of as being observable and measurable. Some people group attitudes with competencies (McClelland, 1973)

Competency is the ability of an individual to do a job properly. A competency is a set of defined behaviors that provide a structured guide enabling the identification, evaluation and development of the behaviors in individual employees. (Wikipedia, 2013)

While there are many definitions of competency, most of them have two common elements:

- 1. The competency is an observable and measurable knowledge and skills.
- 2. The knowledge and skills must distinguish between superior performers (or exemplary performance) and other performers.

Competency refers to the knowledge, skills, and attitudes linked to practicing a job

- Education standard refers to statements of learning objectives, content of curricula, entry requirement and resources required to meet learning objectives
- Skills standard refers to performance level, requirements of essential knowledge, skills and attitudes to perform the tasks of one occupation.
- Occupational standard refers to statements of duties and tasks related to a specific occupation and to its practice in similar jobs
- Assessment standard refers to statements of learning outcomes to be assessed and the methodology used

- Validation standard refers to statements of level of achievement to be reached by the person assessed, and the methodology used
- Certification standard refers to statements of rules applicable to obtaining a certificate or diploma as well as the rights thus conferred. (GIZ, 2012)

Competencies can be thought of as the state or quality of being well qualified to perform a task. A person gains competency through education, training, experience, or natural abilities.

In conclusion, the concept of competency is an integrated set of knowledge, attitudes, and skills that can be shown or expressed with the observable and measurable behavior. It is the ability to perform a prescribed professional task which under consideration of teachers in the technical and vocational education and training context.

Technical and vocational education and training (TVET) has emerged as one of the most effective human resource development strategies that ASEAN countries need to embrace in order to train and modernize their technical workforce for rapid industrialization and national development.

In response to the challenges facing systems and their staff, as well as their initial and further preparation for evolving roles, an effort is set out some criteria for excellence or what some might term of good teachers as a prerequisite for defining the necessary training and qualification system that responds to such objectives. (International Labour Organization, 2010) Good teachers and trainers may be understood as those who meet a certain number of professional criteria (Nielsen, 2007,pp206-230), tangible and intangible, including:

- extensive knowledge in one or more subjects or fields of learning;
- a high degree of functionality in ICT and technology processes;
- general understanding and ability to share larger economic and social realities with students;
- capacity to impact generic learning skills to students through their instruction and organization of learning processes;
- ability to function collaboratively in a team;
- research, reflection and change as necessary in teaching practice (teacher as learner);
- ability to communicate and empathize with students;
- capacity to innovate and impact innovation in learning.

Depending on the national TVET context, teachers and trainers will have gone through a number of different stages of training and have developed skills that can be measured both quantitatively and qualitatively. Among the possible stages are:

- initial university, post-secondary or tertiary studies of from one to three years on average;
- non-academic work example in internships or other alternatives;
- industry and/or service work experience of varying duration;
- pre-service teacher training in addition to disciplinary studies;
- ongoing in-service teacher training (continual professional development CPD).

These different stages in teaching training might be done in various combinations, although non-academic work or industry/service work is increasingly considered an essential component of TVET preparation, as is some grounding in pre-service pedagogical training and lifelong access to CPD following concepts of lifelong learning for all and the crucial need for TVET teachers to renew their skills set in the course teaching career.

# 3 Methodology

As mentioned before that there were two sets of research objectives, the first set (question 3 and 4) was to provide the insight of the strengths of TVET in ASEAN country members, the answer to the research questions could be used for suggestions for those countries to enhance the strengths and eliminate the weakness. The second set of research question (question 3 and 4) aimed to answer question concerning the curriculum development and the management of the developed curriculum The researchers utilized both the qualitative and the quantitative approach in the study.

#### 3.1 The Qualitative Approach

The researchers collected the data concerning the needs of ASEAN countries for a particular growth thought document analysis. The document of the ASEAN countries vocational profession and vocational education of nine countries were collected. The nine countries were: Brunei Darussalam, Indonesia, Lao LPD, Malaysia, Myanmar, the Philippines, Singapore, Thailand and Vietnam. The data were analyzed through content analysis. The researchers also collected the data concerning strengths and weaknesses of the vocational education situation in the nine ASEAN country members using interview and document analysis. The data were also analyzed through qualitative content analysis.

# 3.2 The Multiple Methods Approach for Curriculum Development

This section of research was considered the research and development research (R&D) The researchers combined the "Ten-Step Curriculum Planning Model" with UNESCO's curriculum development process to become a five steps development process. The five steps development was: Analysis, Design, Development, Implementation and Evaluation.

Analysis Step: the Needs Analysis This is part of the R&D process, it is an ongoing process. The final product is the curriculum.

The researchers summarized the findings concerning the needs/problems of the TVET from the qualitative study together with the result of a Matrix Analysis. As the results, the needs were identified together with the vocational teacher's competencies. The identified competencies were:

- 1. Knowledge and understand of political issue
- 2. Knowledge and understand of economic issue
- 3. Knowledge and understand of diversity issue
- 4. Knowledge and understand of environment issue
- 5. Knowledge and understand of technology issue
- 6. Knowledge and understand of learning theory issue

All 6 issues were important issues and should be considered for curriculum development.

There were several competencies in each issue as follow:

#### **Political Issues**

- Able to manage conflicts and welfares
- Able to develop themselves to the requirements of the VET standard of ASEAN
- countries (Educational standards of Vocational Education in the ASEAN countries)

- Able to act according to professional standards and ethics
- Conform to ASEAN's labor laws and regulations for regional stability
- Able to establish relationships with VET communities outside of ASEAN

#### **Economic Issues**

- Able to analyze sector and national productivities
- Able to analyze AEC (ASEAN Economic Community)
- Able to provide research and development
- Able to practice didactic research
- Able to establish and maintain relationships with communities and industrial sectors

#### **Diversity Issues**

- Able to (accept) cope with ASEAN cultures and beliefs
- Able to identify stakeholder demands 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 preserve energy

### Technological Issue

- Able to apply appropriate industrial technologies to the ASEAN context
- Able to conduct and develop educational technology for ASEAN teachers

# **Learning Theory & Practice Issues**

- Able to integrate ASEAN context to learning management
- Able to develop specific didactics and learning environments
- Able to perform foreign language communication effectively
- Able to develop further and to utilize a quality assurance system
- Able to design curricula and programs for ASEAN Vocational Education
- Able to manage learning in different settings according to the ASEAN context

Able to assess and evaluate student achievement

#### **Design step**

From the needs/problems, the researchers analyzed and synthesized the causes of the needs/problems, then synthesized them in to the goal of the curriculum. From the goal, the researchers generated the curriculum objectives.

At this point the researchers set up a focus group discussion to verify and validate the curriculum objectives. The researchers had also set up three workshops to identify the competencies of the AVTC. The expected competences of vocational teachers for the development of AVTC was also identified by 3 GIZ experts and 80 ASEAN vocational teachers in the Annual Conference 2012 of the Regional Co-operation Platform for Vocational Teachers Training and Education in Asia, Bangkok, Thailand, 9th – 10th of August, 2012. The result of the design state was that the following aspect of the AVTC were identified: 1) Philosophy, 2) Goal, 3) objectives, 4) curriculum structure, 5) curriculum courses

#### **Development step**

The researchers have prepared the following items: 1) curriculum course contents, 2) suggesting the instructional media to be used, 3) course evaluation, 4) courses management. The final product of this step is the AVTC.

#### **Curriculum of Vocational Teacher Education (AVTC)**

From the six competencies for ASEAN Vocational Teacher, which were identified already, the researchers designed the ASEAN Vocational Teacher Curriculum (AVTC). Based upon the information regarding the six competencies, his research prepared the Curriculum of Diploma in Vocational Teacher Education of ASEAN". This curriculum consists of 25 Units in a course for a period 1 year. Learners are identified as all ASEAN Vocational Teachers and communication will be in the English language.

Structure of the curriculum is 18 credits of Required Courses, 3 Credits of Elective Courses, as well as 4 credits of a Special Topic.

The Required Courses were composed of 9 subjects which were: 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's 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.

There were at least 3 units of Elective Courses, which students can select according to their interest such as: Multicultural of ASEAN Countries, ASEAN Environment and Resource Management, Technology and Teaching Materials Production for Vocational Teachers, and Quality Assurance System According to ASEAN. The 4 credits of Special Topics were in the Vocational Teacher Education Curriculum. The ASEAN Vocational Teacher Curriculum (AVTC) was evaluated by 9 experts with IOC of 37 items where the IOC index was between 0.86 to 1.00.

#### Implementation/evaluation step

The researchers had not done the real implementation due to the constraints of time availability, the sample group who will use the curriculum. However, the developed curriculum was validated and evaluated by a panel of experts and had been revised accordingly to the experts recommendations

#### 4 Research Results

### 4.1 The needs of ASEAN countries for acceleration of particular growth

The researchers reported the results accordingly to the research questions, starting from research question number one.

#### Research question one:

# What are the needs of ASEAN countries for accelerating of particular growth

The result of the qualitative data analysis had shown that the needs of ASEAN countries for accelerating growths were:

- 1. Need for labor productivity.
- 2. Prepare TVET students for regional needs.
- 3. Need for learning activities relevance for enhancing student skills in entering regional force.

# 4.2 Strengths and weaknesses of ASEAN country members affected TVET Teacher education

The researchers have analyzed the data on strengths of 9 ASEAN countries, the researchers had selected 5 criterions for being the strength of the TVET of each country. The five criterions were:

- 1) Priority given to TVET
- 2) Acceptance of TVET in the country
- 3) Competency building of TVET curriculum
- 4) TVET graduate employment
- 5) Cost of study for TVET program.

From the above descriptive data, the researchers had classified and categorized them in to a table. The country that met the criterions the most were interpreted as having the most strength. The qualitative data of the 9 countries were shown in the following table

Table 1: Details of strengths and weakness of the ASEAN countries according to the 5 criterions

country	Strengths					
	Priority	Acceptance	Competency	Employment	Cost of study	Over all
Brunei	3/4	0/1	1/2	2/2	2/2	3/5
Indonesia	4/4	1/1	1/2	2/2	1/2	3/5
Lao	3/4	1/1	2/2	2/2	1/2	4/5
Malaysia	4/4	1/1	2/2	2/2	2/2	5/5
Myanmar	0/4	1/1	1/2	2/2	0/2	2/5
Philippines	4/4	1/1	2/2	2/2	1/2	4/5
Singapore	4/4	1/1	2/2	2/2	1/2	4/5
Thailand	4/4	0/1	2/2	2/2	2/2	3/5
Vietnam	4/4	1/1	2/2	2/2	2/2	5/5

The first digit in the column was denoted for the achieved aspects within the criteria while the second digit was the total aspects in the criterion.

The researchers had grouped the countries according to the number of the achieved criterions; the results were that there were four groups as follows:

Group one: Malaysia and Vietnam

**Group two**: Lao, Philippines and Singapore **Group three**: Brunei, Indonesia and Thailand

**Group four**: Myanmar

For the full detail please see the appendix

#### **Research Question two**

# What is the component of the ASEAN Vocational Teacher Curriculum (AVTC) which is suitable for the ASEAN context?

The components of the AVTC were reported below.

## Philosophy

Vocational education is the back bone of economic development of any nation to prepare for a country's economic development is to prepare a good vocational education curriculum

#### 4.3 Curriculum of Vocational Teacher Education

From the six competencies for ASEAN Vocational Teacher, which were identified already, the researchers designed the ASEAN Vocational Teacher Curriculum (AVTC). Based upon the information regarding the six competencies, his research prepared the Curriculum of Diploma in Vocational Teacher Education of ASEAN". This curriculum consists of 25 credit hours for a one year period course. Learners are identified as all ASEAN Vocational Teachers. English language is recommended to be a medium of instruction and all aspects of communication.

Structure of the curriculum is 18 credits of Required Courses, 3 Credits of Elective Courses, as well as 4 credits of a Special Topic.

The Required Courses are composed 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's Education to Promote Business Ethics, Implications for future work, The Promotion and Integration of the ASEAN Context, Curriculum Research, and Development Design for ASEAN Vocational Teachers.

There are at least 3 units of Elective Courses, which students can select according to their interest such as: Multicultural of ASEAN Countries, ASEAN Environment and Resource Management, Technology and Teaching Materials Production for Vocational Teachers, and Quality Assurance System According to ASEAN. The 4 credits of Special Topics are in the Vocational Teacher Education Curriculum.

These following frames are the Curriculum Information:

#### Table 2: **Curriculum information**

#### 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. Major

#### 4. Course Unit

25 Unit

#### 5. Curriculum Character

5.1 Course Period: 1 Year Diploma course

5.2 Language: English

5.3 Learner: All of ASEAN Vocational Teacher

#### 6. Curriculum Structure

6.1 Required Courses 18 credits
6.2 Elective courses 3 credits
6.3 Special Topic 4 credits

#### 7. 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 member. This ASEAN Vocational Teacher Curriculum (AVTC) is a curriculum for VTE, and expect to develop the necessary knowledge 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.

#### 8. Objective of curriculum

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

Table 2: Curriculum information (Cont.)

	nts	
1. Required Courses	18 credits	
xx-xxx-xxx	ASEAN Vocational Education	1 credit
XX-XXX-XXX	Learning Management in the Context of ASEAN	1 credit
XX-XXX-XXX	Relationships of ASEAN Country	2 credits
XX-XXX-XXX	Product Section and Product Factor of the AEC	3 credits
XX-XXX-XXX	ASEAN International Law	3 credits
XX-XXX-XXX	Curriculum Research and Development Design for ASEAN Vocational Teacher	3 credits
xx-xxx-xxx	Language Used in ASEAN	3 credits
xx-xxx-xxx	Career Advancement of Vocational Teacher Education	1 credit
xx-xxx-xxx	The Project of Promotion and Integration the ASEAN Context	3 credits
2. Elective courses	3 credits	
	3 credits 3 credit which serves their interesting and basic for their Sp	pecial Topic)
(Students select only		pecial Topic) 2 credits
	3 credit which serves their interesting and basic for their S <sub>I</sub>	
(Students select only xx-xxx-xxx	3 credit which serves their interesting and basic for their Sp Multicultural of ASEAN Country	2 credits
(Students select only xx-xxx-xxx xx-xxx	3 credit which serves their interesting and basic for their Sp Multicultural of ASEAN Country ASEAN Environment and Resource Management Technology and Teaching Materials Production for	2 credits 3 credits
(Students select only xx-xxx-xxx xx-xxx xx-xxx	3 credit which serves their interesting and basic for their Sp Multicultural of ASEAN Country ASEAN Environment and Resource Management Technology and Teaching Materials Production for Vocational Teachers	2 credits 3 credits 1 credit

# Study Plan (For 1 year)

Table 3: Study Plan (Semester 1)

Semester 1		credits	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

Table 4: Study Plan (Semester 2)

Semester 2		credits	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

Diploma in the Vocational Teacher Education of ASEAN curriculum, the course modules are prepared. All course modules will include module title, course description, module purpose, element / enabling objectives, learning outcomes, the knowledge evidence required, core skills, and assessment guidance. The example of the course module follows:

# The example of Course Modules

 Table 5:
 Modules of ASEN Vocational Education Course

ASEAN Vocational Education				
<b>Module Codes</b>	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

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 6: Module Specifications: ASEAN Vocational Education

Module	Specifications	XXXXX
Module Name:	ASEAN Vocational Education	
Duration:	15 Hours	
Module Code:	xxxxx	
Competency standard:		
Module Prerequisites:		

# **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

### Module Purpose/ Terminal Performance Objective; TPO:

Understanding of vocational education in ASEAN

#### Range:

- ASEAN Vocational Education Policies and Practices
- Problems and solutions resulting from managing ASEAN Vocational Education
- Characteristics of ASEAN teachers and vocational students

# **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 ASEN

Vocational Education

Section 3: Understanding the characteristics of ASEAN vocational teachers and students

#### Table 7: **ASEAN Vocational Education: Learning Outcomes**

#### **Learning Outcomes**

XXXXX

**Section 1:** Element/ Enabling Objectives (EO) in order to:
Understand the policies and guidelines for ASEAN Vocational Education

# **Evidence Requirements:**

Evaluation Methodology and Evidence of Knowledge

### The Knowledge Evidence Required:

Pre-Test, Post Test, Assessment Skills and Report

#### **Knowledge:**

Basic Knowledge: It is significant to understand the basic for the study of the policy module for the ASEAN Vocational Educational guidance noted below:

- 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

#### **Core Skill:**

- Communication: Reading, writing and speaking
- Analysis
- Synthesis
- Problem Solving
- Information technology: Computer and the Internet

#### **Assessment Guidance:**

Assessment of Evidence and Knowledge: Pre-Test, Assessment Skills

# Table 7: ASEAN Vocational Education: Learning Outcomes (Cont.)

Learning Outcomes	XXXXX

**Section 2:** Element/ Enabling Objectives (EO) in order to:

Understand the problems and solutions resulting from managing ASEAN Vocational Education.

#### **Evidence Requirements:**

Assessment Strategy and Evidence of Knowledge

# **Knowledge Evidence Requirement:**

Pre-Test, Post Test, Assessment Skills, and Report

# **Knowledge:**

Basic Knowledge: It is significant to understand the basic for the module concerning the problems and solutions arising from the management of the ASEAN Vocational Education as follows:

- 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

# **Core Skills:**

- Communication: Reading, writing and speaking
- Analysis
- Synthesis
- Problem Solving
- Information technology: Computer and the Internet

#### **Assessment Guidance:**

Assessment of Evidence and Knowledge, Assessment Skills, and Report.

# Table 7: **ASEAN Vocational Education: Learning Outcomes (Cont.)**

# Learning Outcomes xxxxx

**Section 3:** Element/ Enabling Objectives

Understanding characteristics of ASEAN teachers and vocational students

### **Evidence Requirements:**

Assessment Strategy and Evidence of Knowledge

# **Knowledge Evidence Requirements:**

Pre-Test, Post Test, Assessment Skills, and Report

#### **Knowledge:**

Basic Knowledge: It is significant to understand the basic for the module concerning the problems and solutions arising from the management of the ASEAN Vocational Education as follows:

- 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

### **Core Skills:**

- Communication: Reading, writing and speaking
- Analysis
- Synthesis
- Problem Solving
- Information technology: Computer and the Internet

#### **Assessment Guidance:**

Assessment of Evidence and Knowledge, Post Test, Report

# **Course Modules**

 Table 8:
 Special problem courses vocational teachers meeting

Special problem courses vocational teachers meeting			
<b>Module Codes</b>	Module Title	Time	
XXXXX	Consideration of vocational teacher courses for ASEAN group	15 Hours	
XXXXX	Factors related to the vocational teacher course of the ASEAN group	15 Hours	
XXXXX	Special issues on teacher vocational education courses, ASEAN	30 Hours	
Total		60 Hours	

### Description

Educational and vocational teachers to consider their course of the ASEAN group: Factors related to the vocational teacher course of the ASEAN group and special education teachers, vocational courses issues about ASEAN, to define the guidelines for the development of vocational courses for teachers of the ASEAN group

Table 9: Module Specifications: Special Topic in Vocational Teacher Education
Curriculum

Mo	xxxx-xxxx-x	
Module Name:	Special Topic in Vocational Teacher Education	acation
Duration:	60 Hours	
Module Code:	xxxx-xxxx-x	
Competency standard:	-	
Module Prerequisites:	-	

#### **Description:**

Educational and vocational teachers to consider their course of the ASEAN group: Factors related to the vocational teacher course of the ASEAN group and special education teachers, vocational courses issues about ASEAN, to define the guidelines for the development of vocational courses for teachers of the ASEAN group

# **Module Purpose/ Terminal Performance Objective; TPO:**

Understand and be able to determine the course of their vocational teachers in the ASEAN group, The relevant factors and issues about the vocational teacher course of the ASEAN group

#### Range

- Vocational teacher course of the ASEAN group
- Factors related to the vocational teacher course of the ASEAN group
- Problems with vocational courses

#### **Element/ Enabling Objective (EO):**

Section 1: The condition of the ASEAN vocational courses

Section 2: Factors related to the vocational teacher course of the ASEAN group

Section 3: Vocational education teachers, special issues in ASEAN

# Table 10: Special Topic in Vocational Teacher Education Curriculum: Learning Outcomes

# **Learning Outcomes**

XXXX-XXXX-X

**Section 1:** Element/ Enabling Objectives (EO):

Can consider teacher vocational courses part of ASEAN group

# **Evidence Requirements:**

Assessment Strategy: Using the evidence of knowledge

# **Knowledge Evidence Requirements:**

Reporting the results of the present study

#### Knowledge

Vocational teacher course of the ASEAN group

#### **Core Skills:**

- Communication: Speaking, within, reading, answering questions
- Information Technology: Using computers and the Internet to research for more knowledge

#### **Assessment Guidance:**

Assessment of knowledge: Reporting the results of the present study

# Table 10: Special Topic in Vocational Teacher Education Curriculum: Learning Outcomes (Cont.)

# **Learning Outcomes**

XXXX-XXXX-X

**Section 2:** Element/ Enabling Objectives (EO):

Understand the factors involved in the course of vocational teachers ASEAN group

# **Evidence Requirements:**

Assessment Strategy: Using the evidence of knowledge

# **Knowledge Evidence Requirements:**

Summarizes results found and have a discussion

# **Knowledge:**

Factors related to the vocational teacher course of the ASEAN group include:

- Political Issue
- Economic Issue
- Diversity Issue
- Environmental Issue
- Learning Theory & Practice Issue

# **Core Skills:**

- Communication: Writing and compose a speech of the conclusion
- Information Technology: Using computers and the Internet to research for more knowledge

# **Assessment Guidance:**

Assessment of knowledge: Results are compiled. Summarize results found and discuss

# Table 10: Special Topic in Vocational Teacher Education Curriculum: Learning Outcomes (Cont.)

#### **Learning Outcomes**

XXXX-XXXX-X

**Section 3:** Element/ Enabling Objectives (EO):

Special issue on vocational teacher education courses ASEAN.

### **Evidence Requirements:**

Assessment Strategy: Using the evidence of knowledge

#### **Knowledge Evidence Requirements:**

Compiled the report to answer questions

#### Knowledge

Special problems about the vocational curriculum teachers meeting

- Situation and problems of developing vocational teachers course in ASEAN countries
- Situation and problems with the vocational teacher course in ASEAN

#### **Core Skills:**

- Communication: Speaking, writing, reading, answering questions
- Information Technology: Using computers and the Internet to research for more knowledge

#### **Assessment Guidance:**

Assessment of knowledge: Defining issues, To compose a report answering questions

#### 4.4 The results of the validation and evaluation

- 1. It was suggested that the curriculum should start with philosophy.
- 2. Curriculum contents:
  - a. The curriculum should provide knowledge covering the three pillars of ASEAN, namely; economics, social and culture and national security.
  - b. The curriculum should enhance student's capacity to successfully work in ASEAN country members.
  - c. The content should cover vocational education standards.
  - d. The curriculum should offer the contents of occupational standards and occupational analysis.
  - e. There are too many courses/ too many credits for core courses
  - f. There should be more credit hour for a media technology course.
- 3. Instructional activity process:
  - a. The teaching and learning may not need to be only in classroom.
  - b. The contents and learning activity should be competency based

- c. The teaching and learning process should be integrating by nature
- d. The learning approach should be "work integrated learning"

# 4.5 The last phase: managing the AVCT curriculum

The final activities of the research are to propose the management of the developed curriculum. The curriculum should be made a shared-curriculum by which all individual ASEAN countries educational institution propose the curriculum to the responsible ministry of education as a shared curriculum. As the result, the curriculum committees will comprises of those ASEAN educational institutions who will co-manage the curriculum. The participated educational institution nominates at least one qualified instructor to be a curriculum committee member. The qualification of the curriculum committee should be:

- 1. Having at lease a master degree in vocational education or equivalence.
- 2. Be able to use English for teaching and communication.

To facilitate curriculum management, the following guide lines are proposed:

- 1. Curriculum implementation
- 2. Sites of instruction
- 3. Instructional management
- 4. Financial management
- 5. Degree conferring

#### Curriculum Implementation.

- 1. The curriculum can be offered at the Education institution that can fulfill the following criteria:
  - Having a library that has a collection of Vocational Education textbook, book, journal and research on Vocational Education. Or
  - Having internet that can access for data on Vocational Education text, journal and research.
  - Having a qualified instructors and academic advisor adequately to the number of student.

#### 2. Site of Instruction

- The site instruction can be any ASEAN educational institution that shared the curriculum.
- The instruction could be done not only in formal class setting but also as a long distance or internet-base approach such as e-learning, online learning.
- Any education institution that offer the exact course.

### 3. Instructional Management

- The instruction can be done with various approach such as traditional classroom approach, online instruction, cooperative instructional approach.
- The educational institutions in different country can set a teaching schedule at the same day and same time (there is not much of time difference among the ASEAN countries) to allow sharing instructional resource through synchronous online instruction.
- Student can enroll to study in the curriculum at any participating educational institutions that are ready to provide an instruction.
- Financial management

- Tuition fee should be comparable or compatible for each ASEAN country to allow transferring of credit.
- Student will pay their tuition fee to the education institution they study at.
- Student's need to pay credit transferring from off-campus credit to graduate at any education institution that shared the curriculum

# 5. Degree Conferring

- Students who accumulate that required credits for graduation can graduate at any education institution that shared the program. Students need to pay graduation fee to the education institution they graduated

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# 6 Appendix

### Diploma in Vocational Teacher Education of the ASEAN Curriculum

# **Chapter1 Course Information**

#### 1. Curriculum Code and 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. Major

#### 4. Course Units

25 Units

#### 5. Curriculum Character

5.1 Course Period: 1 Year Diploma Course

5.2 Language: English

5.3 Learners: All ASEAN Vocational Teachers

#### 6. Curriculum Structure

6.1 Required Courses 18 credits

6.2 Elective Courses 3 credits

6.3 Special Topic 4 credits

# 7. 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 knowledge 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 curriculum.

# 8. 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 .

# **Course Requirements**

	1. Required Courses	18 credits
xx-xxx-xxx	ASEAN Vocational Education	1 credit
xx-xxx-xxx	Learning Management in the Context of ASEAN	1 credit
xx-xxx-xxx	Relationships of ASEAN Countries	2 credits
xx-xxx-xxx	Product Section and Product Factors of the AEC	3 credits
xx-xxx-xxx	ASEAN International Law 1	1.5 credits
xx-xxx-xxx	ASEAN International Law 2	1.5 credits
xx-xxx-xxx	Language Used in ASEAN	3 credits
xx-xxx-xxx	Career Advancement of Vocational Teacher Education to Promote Business Ethics	1 credit
xx-xxx-xxx	The Project of Promotion and Integration of the ASEAN Context	3 credits
xx-xxx-xxx	Curriculum Research and Development Design for ASEAN Vocational Teachers	3 credits

	2. Elective Courses	3 credits
(Students select of their Special Topi	nly 3 credits which serves their interests and is the basis for c)	
xx-xxx-xxx	Multicultural of ASEAN Countries	2 credits
xx-xxx-xxx	ASEAN Environment and Resource Management	3 credits
xx-xxx-xxx	Technology and Teaching Materials Production for	1 credit
	Vocational Teachers	
xx-xxx-xxx	Quality Assurance System According to ASEAN	2 credits
	3. Special Topics	4 credits
xx-xxx-xxx	Special Topic in Vocational Teacher Education Curriculum	4 credits

# Study Plan (For 1 year)

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 Countries	2	2	0	0
xx-xxx-xxx	Product Section and Product Factor s of the AEC	3	3	0	0
xx-xxx-xxx	Language Used in ASEAN	3	3	0	0
XX-XXX-XXX	ASEAN International Law 1	1.5	1.5	0	0
Total	ı	11.5	11.5	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 of the ASEAN Context	3	3	0	0
xx-xxx-xxx	Curriculum Research and Development Design for ASEAN Vocational Teachers	3	3	0	0
xx-xxx-xxx	ASEAN International Law 1	1.5	1.5	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

# **Course Modules**

Relations of ASEAN		
Module	Module Title	Time
Codes		
	The relations between the countries	8 Hours
	Factors in the relations between countries	6 Hours
	The specific context of ASEAN	2 Hours
	Policies and the creation of ASEAN Relations	7 Hours
	Management conflicts of ASEAN and eliminating disputes between ASEAN countries by peaceful means	7 Hours
Total		30 Hours

# Description

The study of the relationship between the factors: The focus is on the relationship of ASEAN and the specific context of ASEAN in order to determine the relationship between the countries and policy conflicting principles of ASEAN, eliminating disputes between ASEAN countries by peaceful means

Module Specification		XXXX-XXXX-X
<b>Module Name</b>	Relations Between the Countries	I
Duration	30 Hours	
<b>Module Code</b>	XXXX-XXXX-X	
Competency Standard		
Module Prerequisites		

### **Description**

The study on the relationship between the factors: The focus is on the relationship of ASEAN and the specific context of ASEAN in order to determine the relationship between the countries and policy conflicting principles of ASEAN, eliminating disputes between ASEAN countries by peaceful means

Module Purpose/Terminal Performance Objective; TPO:

The study on the relationship between the factors

#### Range

- The relations between the countries
- Conceptual factors in shaping international relations
- Specific context of ASEAN
- Policies and relations of ASEAN
- Principles of ASEAN Conflict Management and eliminating disputes between ASEAN countries by peaceful means

#### **Element/Enabling Objective (EQ):**

• Section1: To understand the relationship between the countries

Section2: The factors that explain the relationship between the countries
 Section3: Understanding the specific context of the ASEAN countries

• Section4: To describe and understand the relationship of the ASEAN countries

• Section5: To understand the principles of conflict of ASEAN and eliminating

international disputes by peaceful means with ASEAN

**Section1:** Element/Enabling objective (EQ):

To understand the relationship between the countries.

## **Evidence Requirements:**

Assessment Strategy: Evidence of knowledge

## **Knowledge Evidence Requirements:**

Test: Study, observation form, a summary of the discussion

## The Knowledge:

- The meaning of the relations between the countries
- The relationship between the countries
- Political relations
- Economic relations
- Social relationships
- Legal relationship
- Relationship of science and technology

#### **Core Skills:**

- Communication: reading, writing, speaking
- Information technology: using computers to search the Internet
- Learning
- Debate

#### Assessment

Assessment to the test: a report of the study, the observed behavior, the results of the discussion

## **Section 2:** Element/Enabling Objective (EQ):

The factors that explain the relationship between the countries

## **Evidence Requirement:**

Assessment Strategy: Evidence of knowledge

## **Knowledge Evidence Requirements:**

Tests, Study, Observation, Conclusion of the Discussion, the Preparation of the Project.

## The Knowledge:

- 1. The concept of International Relations
  - Conceptual Realism
  - Conceptual Liberalism
- Conceptual Idealism
- 2. Factors International Relations
  - Public Policy Factors
  - Economic Factors
  - Political Factors
  - The World System
  - Public Opinion
  - Benefits
  - Military Factors

#### **Core Skills:**

- Communication: Reading, writing, speaking
- Information technology: Using a computer to search the Internet
- Learning
- Teamwork

#### **Assessment**

Assessment of the Test, Study, Observation Form, a Summary of the Discussion, Projects

# **Section 3:** Element/Enabling objective (EQ):

Understanding the specific context of the ASEAN countries

## **Evidence Requirements:**

Assessment Strategy: Evidence of knowledge

## **Knowledge Evidence Requirements:**

Tests, Reports, Studies, Observation, and the Conclusion of the Debate

## The Knowledge:

Specific context of ASEAN

- Politics
- Economy
- Culture
- Environment
- Education

#### **Core Skills:**

- Communication: reading, writing, speaking
- Information Technology: using Computers to Search the Internet
- Learning
- Teamwork

### Assessment

Assessment of the test, a report of the study, the observed behavior, the results of the discussion

## **Section 4:** Element/Enabling Objective (EQ):

The examples describe and understand the relationship of the ASEAN countries

## **Evidence Requirements:**

Assessment Strategy: Evidence of knowledge

## **Knowledge Evidence Requirements:**

Tests, Study, Observation, Conclusion of the Discussion, the Plan

## The Knowledge:

Factors of ASEAN

- Policy
- Politics
- Economy
- Culture
- Environment
- Education
- Tactics

#### **Core Skills:**

- Communication: reading, writing, speaking
- Information technology: Using Computers to Search the Internet
- Learning
- Teamwork

#### Assessment

Assessment of the Test, Study, Observation, Conclusion of the Discussion, The Plan

## **Section 5:** Element/Enabling Objective (EQ):

Understanding the principles of conflict by eliminating international disputes by peaceful means with ASEAN

## **Evidence Requirements:**

Assessment Strategy: Evidence of knowledge

## **Knowledge Evidence Requirements:**

Tests, Reports, Studies, Observation, and Conclusion of the Debate

### The Knowledge:

Factors of ASEAN

- Policy
- Politics
- Economy
- Culture
- Environment
- Education
- Tactics

#### **Core Skills:**

- Communication: reading, writing, speaking
- Information technology: Using Computers to Search the Internet
- Learning
- Teamwork

#### Assessment

Assessment of the Test, a Report of the Study, Observed Behavior, Results of the Discussion

## **Course Modules**

Study of internati	Study of international law, ASEAN		
<b>Modules Code</b>	Module Title	Time	
XXXXXX	ASEAN Law (1)		
	Introduction to Law	15 Hours	
XXXXXX	Law in ASEAN	15 Hours	
XXXXXX	Introduction to International Economic Law ASEAN	15 Hours	
XXXXXX	ASEAN law (2)		
	Introduction to the Human Rights Act	15 Hours	
	ASEAN international humanitarian law		
XXXXXX	Worker Protection in ASEAN countries	15 Hours	
XXXXXX	Management of the worker's welfare in ASEAN	15 Hours	
Total		90 Hours	

# **Description**

Study the Background and Introduction to Law, Introduction to the Human Rights Act, ASEAN International Humanitarian Law, Knowledge of International Economic Law ASEAN countries, Worker Protection in ASEAN, ASEAN Labor welfare and appropriate ASEAN Labor characteristics

<b>Module Specification</b>		xxxxxxxx
Model Name:	ASEAN Law School	
Duration:	90 Hours	
Module Code:	xxxxxxxx	
Competency Standard:		
Module Prerequisite:	ASEAN Law	

#### **Description**

Study Background and Introduction to Law. Introduction to the Human Rights Act. ASEAN international humanitarian law, Knowledge of the ASEANE countries Law, Worker Protection in ASEAN, and the welfare of workers with ASEAN labor

Module Purpose/Terminal Performance Objective; TPO: An introduction to the law of ASEAN

#### Range

ASEAN Law (1)

- Introduction to international law
- Law in ASEAN
- Introduction to ASEAN International Economic Law

International law, ASEAN (2)

Introduction to the Human Rights Act /ASEAN international humanitarian law

- The protection of workers in ASEAN countries
- Labor welfare management appropriate for ASEAN Labor characteristics

#### **Element/Objectives (EO):**

#### **International law, ASEAN (1)**

Section 1: Basics of international law

Section 2: International law in the ASEAN group

Section 3: Basics of economic law between ASEAN countries

#### **International law, ASEAN(2)**

Section 4: Basics of law, human rights/International humanitarian law

**ASEAN** 

Section 5: Laws protecting workers in the ASEAN countries

Section 6: Labor welfare management appropriate for ASEAN Labor characteristics

**Section 1:** Element/Enabling Objectives (EO):

The basics of international law, ASEAN

# **Evidence Requirements:**

Assessment Strategy: Evidence of knowledge

#### **Knowledge Evidence Requirements:**

Testing, Discussion

## **Knowledge:**

History and basics of international law

- Rules: Regulations and agreements arising from the agreement or the intention to be binding on the state and is often used as evidence in disputes between countries.
- International criminal law
- Maritime law
- Trade between the countries.
- The International Court of Justice
- Intellectual property

#### **Core Skills:**

- Communication: Reading. Writing
- Information Technology: Computer
- Problem Solving: Consider and resolve the issue
- Improving one's learning and performance:

### **Assessment Guidance:**

Assessment of evidence and knowledge: Testing, Debate

**Section 2:** Element/Enabling Objectives (EO):

International law in the ASEAN group.

#### **Evidence Requirements:**

Assessment Strategy: Evidence of knowledge

# **Knowledge Evidence Requirements:**

Knowledge test, Report of the research

## **Knowledge:**

Knowledge of the law in ASEAN

- ASEAN Economic Community or AEC
- ASEAN Charter
- History
- The importance of ASEAN
- Structure of ASEAN Charter
- Syllabus

## **Core Skills:**

- Communication: Reading and Writing
- Information Technology: The use of computers
- Problem Solving: Consider and resolve the issue
- Improving one's learning and performance

# Assessment Guidance:

Assessment of evidence and knowledge: Testing, Report of the research

**Section 3**: Element/Enabling Objectives (EO):

Introduction to International Economic Law ASEAN

## **Evidence Requirements:**

Assessment Strategy: Evidence of knowledge

## **Knowledge Evidence Requirements:**

Testing, Debate

# **Knowledge:**

Introduction to the ASEAN Economic Law

- ASEAN Free Trade Area
- The liberalization of services
- ASEAN industrial cooperation
- Investment in ASEAN region
- To facilitate the transportation of goods across the border
- ASEAN transport
- The opportunity and the impact of the ASEAN economic community

### **Core Skills:**

- Communication: Reading and Writing
- Information Technology: Computer
- Problem Solving
- Improving one's learning and performance

### **Assessment Guidance:**

Testing, Debate

#### **Learning Outcomes**

XXXXXXXXX

**Section 4:** Element/Enabling Objectives (EO):

Introduction to the Human Rights Act/International humanitarian law in ASEAN

#### **Evidence Requirements:**

Assessment Strategy: Evidence of knowledge

### **Knowledge Evidence Requirements:**

Testing, Reporting, and research.

### **Knowledge:**

The basics of the law of human rights/ International humanitarian law in ASEAN

- Privacy
- Property
- Civil and political rights
- Human rights treaties
- Freedom
- Media threats
- Violations of human rights
- Acceptance of religious diversity
- Legal and natural rights
- The idea of freedom
- Universal Declaration of human rights

## **Key and Core Skills:**

- Communication: Reading and Writing
- Information Technology: Computer
- Problem Solving: Consider and resolve the issue
- Improving one's learning and performance

#### **Assessment Guidance:**

Testing, Reporting of the research

# **Section 5:** Element/Enabling Objectives (EO):

Laws protecting workers in the ASEAN countries

# **Evidence Requirements:**

Assessment Strategy: Using the evidence of knowledge

## The Knowledge Evidence Requirements:

Testing, Reporting, and research.

## **Knowledge:**

Laws protecting workers in the ASEAN countries

- Statutes of the alien
- ASEAN Declaration on proposals to protect the labor rights campaigns across the nation
- Department of welfare and labor protection in the ASEAN group

#### **Core Skills:**

- Communication: Reading and Writing
- Information Technology: Use of Computer
- Problem Solving:
- Improving one's learning and performance

### **Assessment Guidance:**

Testing, Reporting, and research.

**Section 6**: Element/Enabling Objectives (EO):

Labor welfare management appropriate for ASEAN Labor characteristics

## **Evidence Requirements:**

Assessment Strategy: Using the evidence of knowledge

#### The Knowledge Evidence Requirements:

Testing, Reporting, and research.

## **Knowledge:**

Labor welfare management appropriate for ASEAN Labor characteristics

- To update the law with relevant rules and regulations, consistent with the guidelines of the ASEAN community.
- Development of the management system and labor services for ASEAN
- Public relations, knowledge to create awareness in the labor sector
- The section that deals with labor standards in Central Asia
- Development of human resources
- the protection of social welfare
- Justice and rights associated with the workers '

#### **Core Skills:**

- Communication: Reading and Writing
- Information Technology: Computer
- Problem Solving
- Improving one's learning and performance

#### **Assessment Guidance:**

Testing, Reporting, and research

# **Course Modules**

Department of Teacher Training and Career Advancement for the promotion of business ethics		
Module Codes	Module Title	Time
xxxxx	The prospects of vocational teachers	5 Hours
xxxxx	Professional standards	5 Hours
xxxxx	Business ethics	5 Hours
Total	l	15 Hours

# Description

Study and practice about the development progress, prospects of vocational teacher evaluation of vocational teacher colleges of ASEAN standards and the promotion of business ethics

<b>Module Specification</b>		XXXX-XXXX-X
Module Name:	Career advancement of teachers colleges for the promotion of business ethics	
<b>Duration:</b>	10 Hours	
Module Code:	xxxx-xxxx-x	
Competency Standard:	-	
Module Prerequisites:	-	

## **Description**

Laboratory studies on the development and career advancement of teachers colleges, Vocational teacher evaluation standards of the ASEAN countries and the promotion of business ethics

(Module Purpose/Terminal Performance Objective; TPO:

Study and practice about the development progress and prospects of vocational teachers.

### Range

Career advancement of teacher colleges for the promotion of business ethics

- The plan developed by a different career
- Management of professional teacher education requirements standards

Implementation plan in accordance with professional standards

- Knowledge of business ethics

## **Element/Enabling Objectives (EO)**

Section 1: Understand and meet the standard of teacher education in the ASEAN level

Section 2: Understand and operate in accordance with standard professional levels

Section 3: Understand and meet the assessment standards and ethical business practices

Element/Enabling Objectives (EO):

Understand and meet the standard of teacher education in the ASEAN level

### **Evidence Requirements:**

Assessment Strategy: Using the evidence of knowledge

## **Knowledge Evidence Requirements:**

Portfolio, the theory test, the practical test

#### **Knowledge:**

Basic Knowledge: understanding the basis for the module

Task: Effective and meet the standards of teacher education

ASEAN countries in the levels as follows:

- System of professional qualifications
- The development of professional qualifications
- The preparation of professional standards
- Classification level of performance standards
- The specifications of the module

# **Core Skills:**

- Communications Technology: Reading and writing
- Information technology: Using computers and the Internet
- Problem solving
- Improving one's learning and performance

#### **Assessment Guidance**:

Assessment of evidence and knowledge: Written exam, a book or portfolio

## **Section 2** Element/Enabling Objectives (EO):

Understand and operate in accordance with standard professional level.

## **Evidence Requirements:**

Assessment Strategy: Evidence of knowledge

### The Knowledge Evidence Required:

To test the theory, the practical test

### **Knowledge:**

Basic Knowledge: It is significant to understand the basis for the module

Operational efficiencies in their operations in accordance with standards of professional levels

- Specifications of the module
- Preparation of the performance modules
- The level of professional qualifications
- Professional academic standards for each subject
- The format of the course competencies
- A performance base course linked to the structure of the regular curriculum

#### **Core Skills:**

- Communication Technology: Reading and writing
- Information Technology: Using computers and the Internet
- Problem Solving
- Improving one's learning and performance

#### **Assessment Guidance:**

Assessment of evidence and knowledge: Written exam, Practical test, and the Report results and Operations

Element/Enabling Objectives (EO):

Understand and meet the assessment standards and ethical business practices

## **Evidence Requirements:**

Assessment Strategy

# **Knowledge Evidence Requirements:**

To test the theory, practice exams, a project, a plan

#### **Knowledge:**

Basic Knowledge: It is significant to understand the basis for the module

Operational efficiency and meet assessment standards and their implementation

By following ethical business practices

- Graduate professional students
- Curriculum development and teaching
- Student development activities
- Professional services to society
- Innovation and research
- Leadership and management
- Implementation of professional standards and ethics

#### **Core Skills:**

- Communication Technology: Reading and writing
- Information Technology: Using computers and the Internet.
- Problem Solving
- Improving one's learning and performance

#### **Assessment Guidance:**

Assessment of evidence of knowledge: To test the theory, Writing a project and plan

The practical exam

## **Course Modules**

Study of the production sectors and production factors of the ASEAN Economic Community		
modules Code	Module Title	Time
xxxxx	Sectors of ASEAN	15 Hours
XXXX	Inputs of ASEAN	15 Hours
XXXX	The production problems and production sectors of the ASEAN economic community.	15 Hours
Total		45 Hours

# **Description**

Study and Analysis of the means of production and the production of the ASEAN Economic Community; Problems with the production and manufacture of the ASEAN Economic Community; Trends in research and development programs for vocational teachers of ASEAN; Define guidelines for the investment, production, transportation, marketing, and services of ASEAN

Module Specification		xxxx-xxxx-x
Module Name:	The production sectors and production factors economic community.	s of the ASEAN
Duration:	45 Hours	
Module Code	xxxx-xxxx-x	
Competency Standards:	-	
Module Prerequisites :	-	

## **Description**

Study and analysis of production factors and the production sector of the economy of ASEAN community. Problems with production and manufacturing sectors of the ASEAN economic community; Trends in research and development of the curriculum for vocational teachers meeting; To define guidelines for the investment; Transport capacity; Marketing and various services in ASEAN

The aim of the module/Terminal Performance Objective; TPO:

Understanding the production sectors and production factors of the ASEAN economic community

#### Range

- Manufacturing Sector
- Production Factors
- ASEAN Economy

## **Element/Enabling Objectives (EO):**

Section 1: Understanding the production sector of the ASEAN.

Section 2: Understanding the essentials of ASEAN

Section 3: Understanding the production and manufacturing sectors of ASEAN

## **Learning Outcomes**

XXXX-XXXX-X

**Section 1:** Element/Enabling Objectives (EO):

The manufacturing sector of ASEAN

## **Evidence Requirements:**

Assessment Strategy: Evidence of knowledge

#### **Knowledge Evidence Requirements:**

Reporting Questions

#### **Knowledge:**

Basic Knowledge: understanding that is based on the study module of operations being more efficient in the manufacturing sector and the factors affecting production of the ASEAN economic community as follows:

- The meaning and importance of the manufacturing sector of ASEAN

#### **Core Skills:**

- Communication: Speaking, writing, reading, answering questions
- Information Technology: The use of computers and the Internet to gain more knowledge

#### **Assessment Guidance:**

Evaluation of evidence and knowledge: Reports and answering questions

Section 2: Element/Enabling Objectives (EO):
Understand the essentials of ASEAN

# **Evidence Requirements:**

Assessment Strategy: Evidence of knowledge

#### **Knowledge Evidence Requirements:**

Written Exam, Reporting, Questions

### **Knowledge:**

Basic Knowledge understanding that it is based on the essence of the study module of operations that are more efficient in the manufacturing sector and factors of production of the ASEAN economic community as follows

- The meaning and importance of the production factors of ASEAN

#### **Core Skills:**

- Communication: Speaking, writing, reading, answering questions
- Information Technology: Using computers and the Internet to research for more knowledge

#### **Assessment Guidance:**

Evaluation of evidence and knowledge: Written Exam, Reporting, Questions

# **Section 3:** Element/Enabling Objectives (EO):

Understanding the production and manufacturing sectors of the AEC

# **Evidence Requirements:**

Assessment Strategy: Evidence of knowledge

### **Knowledge Evidence Requirements:**

Written Exam, Reporting, Questions

### **Knowledge:**

Basic Knowledge: understanding that is based on the study module of operations being more efficient in the manufacturing sector and the factors of production of the ASEAN economic community as follows:

- The production problems and production sectors of the ASEAN economic community
- The investment, production, marketing and transport services in the ASEAN group

#### **Core Skills:**

- Communication: Speaking, writing, reading, answering questions
- Information Technology: Using computers and the Internet to research for more knowledge

#### **Assessment Guidance:**

Evaluation of evidence and knowledge: Written exam, Reporting, Questions

#### **Course Modules**

Multilateral Culture of ASEAN Countries		
<b>Module Codes</b>	Module Title	Time
XXXXX	The meaning and importance of multicultural ASEAN countries	10 Hours
XXXXX	ASEAN cooperation in the context of cultural pluralism	10 Hours
XXXXX	Problems arising from the multicultural of the ASEAN countries	10 Hours
Total		30 Hours

## **Description**

Learn about multiculturalism of the ASEAN countries. To describe the beliefs of multiculturalism and ASEAN, Analyze and synthesize multiculturalism and beliefs of ASEAN, Knowledge, understanding, and awareness of the importance about multiculturalism and society,. ASEAN law, Problems and obstacles arising from the citizenship of the ASEAN group, communicate and live together on the basis of equality and mutual benefit, to strengthen the political economy, legal, social, and cultural development of the region

<b>Module Specification</b>	xxxx-xxxx-x
Module Name:	Citizenship in the countries of ASEAN
<b>Duration:</b>	30 Hours
Module Code:	xxxx-xxxx-x
Competency Standard:	-
Module Prerequisites:	-

#### **Description**

Learn about multiculturalism of the ASEAN countries. To describe the beliefs of multiculturalism and ASEAN, Analyze and synthesize multiculturalism and beliefs of ASEAN, Knowledge, understanding, and awareness of the importance about multiculturalism and society. ASEAN law, Problems and obstacles arising from the citizenship of the ASEAN group, communicate and live together on the basis of equality and mutual benefit, to strengthen the political economy, legal, social, and cultural development of the region

Module Purpose/Terminal Performance Objective; TPO

Understanding of multiculturalism of the ASEAN countries

## Range

Citizenship in the countries of ASEAN

- The meaning and the importance of multiculturalism of ASEAN countries
- Acceptance of the multiculturalism ASEAN
- Dealing with a multicultural approach
- The reform of education
- The use of language to communicate with each other
- The restructuring of society and culture
- Laws on multiculturalism and faith in ASEAN
- Learning International Laws
- The impact of the law in ASEAN
- Production of laws for ASEAN

# **Element/Enabling Objectives (EO)**

- Section 1: Understand the meaning and importance of the multiculturalism of the ASEAN countries
- Section 2: Understand the principles of ASEAN cooperation in multicultural contexts
- Section 3: Understand the issues and challenges arising from the citizenship of the ASEAN group

## **Learning Outcomes**

XXXX-XXXX-X

## **Section 1:** Element/Enabling Objectives (EO):

Understand the meaning and importance of the multiculturalism of the ASEAN countries

### **Evidence Requirements:**

Assessment Strategy: Using the evidence of knowledge.

# **Knowledge Evidence Requirements:**

Written exam, complete task

### **Knowledge:**

Basic Knowledge: It is significant to understand the basis for the module

Perform effectively in learning the multiculturalism of the ASEAN countries, as follows:

- The meaning and the importance of multiculturalism of ASEAN countries
- Acceptance of the multiculturalism ASEAN
- Dealing with a multicultural approach

#### **Core Skills:**

- Communication Technology: Reading and writing
- Information Technology: Using computers and the Internet
- Problem Solving
- Improving one's learning and performance

#### **Assessment Guidance**:

Evaluation of knowledge and evidence of knowledge: written exam and task

Section 2: Element/Enabling Objectives (EO):
Understand the principles of ASEAN cooperation in multicultural contexts

# **Evidence Requirements:**

Assessment Strategy: Using the evidence of knowledge

### **Knowledge Evidence Requirements:**

Written exam, completea task

### **Knowledge:**

Basic Knowledge: understanding the basis for the module

Perform effectively in learning the multiculturalism of the ASEAN countries, as follows:

- The reform of education
- The use of language to communicate with each other

The restructuring of society and culture

#### **Core Skills:**

- Communication Technology: Reading and writing
- Information Technology: Using computers and the Internet
- Problem Solving
- Improving one's learning and performance

#### **Assessment Guidance:**

Evaluation of knowledge and evidence of knowledge: written exam and task

## **Section 3:** Element/Enabling Objectives (EO):

Understand the issues and challenges arising from the citizenship of the ASEAN group

## **Evidence Requirements:**

Assessment Strategy: Using the evidence of knowledge

#### **Knowledge Evidence Requirements:**

Written exam, completing task

### **Knowledge:**

Basic Knowledge: It is significant to understand the basis for the module

Perform effectively in learning the multiculturalism of the ASEAN countries, as follows::

- The law on citizenship and the belief in the ASEAN group
- Learning international law
- The legal impact of the ASEAN group
- Production of laws for ASEAN

#### **Core Skills:**

- Communication Technology: Reading and writing
- Information Technology: Using computers and the Internet
- Problem Solving
- Improving one's learning and performance

#### **Assessment Guidance:**

Evaluation of knowledge and evidence of knowledge: written exam and task

# **Course Modules**

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**

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 student

Module Specifications		xxxxx
Module Name:	ASEAN Vocational Education.	<u>l</u>
<b>Duration:</b>	15 Hours	
<b>Module Code:</b>	xxxxx	
<b>Competency Standard:</b>	-	
<b>Module Prerequisites:</b>	-	

#### **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

#### Module Purpose/Terminal Performance Objective; TPO:

Understanding of vocational education in ASEAN

#### Range

- ASEAN Vocational Education Policies and Practices
- Problems and solutions resulting from managing ASEAN Vocational Education
- Characteristics of ASEAN teachers. and vocational students

#### **Element/Enabling Objectives (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

**Section 1:** Element/Enabling Objectives (EO) in order to:
Understand the policies and guidelines for ASEAN Vocational Education

### **Evidence Requirements:**

Evaluation Methodology and Evidence of Knowledge

## The Knowledge Evidence Required:

Pre-Test, Post Test, Assessment Skills, and Report

## **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:

- 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

#### **Core Skills:**

- Communication: Reading, writing and speaking
- Analysis
- Synthesis
- Problem Solving
- Information technology: Computer and the Internet

#### **Assessment Guidance**:

Assessment of Evidence and Knowledge: Pre-Test, Post Test, Assessment Skills, and Report

Element/Enabling Objectives (EO) in order to:

Understand the problems and solutions resulting from managing ASEAN Vocational Education.

### **Evidence Requirements:**

Assessment Strategy and Evidence of Knowledge

#### **Knowledge Evidence Requirements:**

Pre-Test, Post Test, Assessment Skills, and Report

## **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:

- 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

#### **Core Skills:**

- Communication: Reading, writing and speaking
- Analysis
- Synthesis
- Problem Solving
- Information technology: Computer and the Internet

### **Assessment Guidance:**

Assessment of Evidence and Knowledge: Pre-Test, Post Test, Assessment Skills, and Report

Learning Outcomes xxxxx

Element/Enabling Objectives (EO):

Understanding characteristics of ASEAN teachers and vocational students

### **Evidence Requirements:**

Assessment Strategy: Evidence of Knowledge.

## **Knowledge Evidence Requirements:**

Pre-Test, Post Test, Assessment Skills, and Report

### **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:

- 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

### **Core Skills:**

- Communication: Reading, writing and speaking
- Analysis
- Synthesis
- Problem Solving
- Information technology: Computer and the Internet

### Assessment Guidance:

Assessment of Evidence and Knowledge: Pre-Test, Post Test, Assessment Skills, and Report

Department of Resource and Environmental Management in ASEAN		
Module	Module Title	Time
Codes		
XXXXX	Resources and environmental conditions of the ASEAN	15 Hours
XXXXX	The management of resources and environment	15 Hours
XXXXX	Projects and plans for the management of resources and environment	15 Hours
Total		45 Hours

## **Description**

Study: Environmental conditions and resource analysis of the ASEAN, The necessary resources and the environment, Environmental management technology and energy treatment, Projects and plans for the management of resources and environment

Module Specification		XXXX-XXXX-X
Module Name:	The management of resources and environment	of ASEAN
<b>Duration:</b>	45 Hours	
Module Code:	XXXX-XXXX-X	
<b>Competency Standards:</b>	-	
Module Prerequisites :	-	

#### คำอธิบายรายวิชา

Environmental conditions and resource analysis of ASEAN, The necessary resources and the environment, Environmental technology and energy healing, Project planning and management of resources and the environment

Module Purpose/Terminal Performance Objective; TPO

Educational resource and environmental condition analysis of the ASEAN

### Range

The management of resources and environment of ASEAN

- Climate resources and environment of ASEAN
- The necessary resources and the environment
- Format of Resource and Environmental Management
- Environmental management technology and energy treatment
- Applying technology to environmental management and energy treatment
- Applying the technology of ASEAN countries
- Projects and plans for the management of resources and environment
- Project management, resource management and the environment
- Develop a plan for resource management and environmental management
- Plan the project and the need to define are source and environmental management

### **Element/Enabling Objectives (EO)**

- Section 1: Understand the principles, conditions and environment of ASEAN resources
- Section 2: Understand the main resource management and environment
- Section 3: Understanding of the project and plans for the management of resources and environment

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**Section 1**: Element/Enabling Objectives:

Understand the principles, conditions and environment of ASEAN resources

### **Evidence Requirements:**

Assessment Strategy: Using the evidence of knowledge

### **Knowledge Evidence Requirements:**

The writing test, Define a format in the management of resources and environment

### **Knowledge:**

Basic Knowledge: It is significant to understand the basis for the module

Operating effectively in the management of resources and environment of ASEAN

For the following:

- Climate resources and environment of ASEAN
- The problem and the need of resources and environment
- Define a format in the management of resources and environment

### **Core Skills:**

- Communication Technology: Reading and writing
- Information Technology: Using computers and the Internet
- Problem Solving
- Improving one's learning and performance

### **Assessment Guidance:**

Evaluation of knowledge and evidence of knowledge: Written exam and configuration management of resources and the environment

## **Section 2:** Element/Enabling Objectives (EO):

Understand the main resource management and environment

### **Evidence Requirements:**

Assessment Strategy: Using the evidence of knowledge

### **Knowledge Evidence Requirements:**

The writing test, report, applying technology to environmental management and energy

Maintaining and applying technology of ASEAN countries

### **Knowledge:**

Basic Knowledge: It is significant to understand the basis for the module

Operating effectively in the management of resources and environment of ASEAN

#### As follows:

- Environmental management technology and energy treatment
- Applying technology to environmental management and energy treatment
- Applying the technology of ASEAN countries

### **Core Skills:**

- Communication Technology: Reading and writing
- Information Technology: Using computers and the Internet
- Problem Solving
- Improving one's learning and performance

### **Assessment Guidance:**

Evaluation of knowledge and evidence of knowledge: To write messages and reports applying technology to environmental management and energy treatment and applying technology of ASEAN countries

XXXX-XXXX-X

## **Section 3:** Element/Enabling Objectives (EO):

Understanding of the project and plans for the management of resources and environment

### **Evidence Requirements:**

Assessment Strategy: Using the evidence of knowledge

# **Knowledge Evidence Requirements:**

Written exam, a project, a plan

## **Knowledge:**

Basic Knowledge: It is significant to understand the basis for the module

Operating effectively in the management of resources and environment of ASEAN

#### As follows:

- Writing projects and plans for the management of resources and environment
- Making project management, resource management and the environment
- Making a plan for resource management and environmental management
- To make a project plan and the need to define a format in the management of Resources and the environment

### **Core Skills:**

- Communication Technology: Reading and writing
- Information Technology: Using computers and the Internet
- Problem Solving
- Improving one's learning and performance

### **Assessment Guidance:**

Evaluation of knowledge and evidence of knowledge: Written exam, Writing a project and a plan

Codes		
xxxxx	Technology is consistent with the ASEAN context	15 Hours
xxxxx	Production and media training for vocational teachers	15 Hours

## **Description**

Study and practice in a consistent and appropriate technology to the ASEAN context, Production and use of media to suit the context of ASEAN Occupational teachers, Production and use of appropriate teaching materials for possible teacher education in the context of ASEAN

<b>Module Specification</b>		XXXX-XXXX-X
Module Name:	The technology for producing educational material vocational teachers	als for
<b>Duration:</b>	30 Hours	
รหัสมอดูล (Module Code) :	xxxx-xxxx-x	
<b>Competency Standards:</b>	-	
<b>Module Prerequisites:</b>	-	

### **Description**

Study and practice in a consistent and appropriate technology to the ASEAN context, Production and use of media to suit the context of ASEAN Occupational teachers, Production and use of appropriate teaching materials for possible teacher education in the context of ASEAN

Module Purpose/Terminal Performance Objective; TPO

Study and practice of technology related to the production of educational materials for vocational teachers

## Range

- The technology for producing educational materials for vocational teachers
- Knowledge about the technologies that are consistent and suitable with the ASEAN context
- Production of learning materials in the area of teacher's meeting
- Suitability of teaching media in the teaching business

## **Element/Enabling Objectives (EO)**

Section 1: Understanding the technology is consistent with the ASEAN context

Section 2: To understand how to produce and use educational materials that are appropriate for the teachers in the area of ASEAN

Element/Enabling Objectives (EO):

Understanding of the technology that is consistent with the ASEAN context

## **Evidence Requirements:**

Assessment Strategy: Using the evidence of knowledge

## **Knowledge Evidence Requirements:**

written exam, the study report

### **Knowledge:**

Basic Knowledge: It is significant to understand the basis for the module Perform effectively in their understanding of the technology that is consistent with the ASEAN context

- Technologies that are consistent with appropriate use
- The development of technologies to suit the ASEAN context
- The advancement of technology in line with the ASEAN context

### **Core Skills:**

- Communication Technology: Reading, Writing, and Speaking
- Information Technology: Using computers and the Internet
- Problem Solving: Solve problems in practice
- Improving one's learning and performance

#### **Assessment Guidance:**

Evaluation of knowledge and evidence of knowledge: The examination and reporting of research data in the technology that is consistent with the ASEAN context

## **Section 2:** Element/Enabling Objectives (EO):

To understand how to produce and use educational materials that are appropriate for the teachers in the area of ASEAN

### **Evidence Requirements:**

Assessment Strategy: Using the evidence of knowledge

## **Knowledge Evidence Requirements:**

The writing test, Report on media use and production strategies, Practical use and production of instructional media

### **Knowledge:**

Basic Knowledge: It is significant to understand the basis for the module

Operational efficiency in the production and use of appropriate teaching and learning materials for ASEAN as noted below

- Technology and media education
- Suitability of media strategies
- Producing educational teachings of vocational teachers in the ASEAN group

### **Core Skills:**

- Communication Technology: Reading and writing
- Information Technology: Using computers and the Internet
- Problem Solving: Knowledge to solve the sub-problems during the operation
- Improving one's learning and performance

### **Assessment Guidance:**

Assessment of the evidence that: a written test and a written report of the process of teaching and learning materials, teaching methods, and learning are good

Students learning in the context of ASEAN		
Module Codes	Module Title	Time
XXXXXX	The teaching of ASEAN	10 Hours
xxxxxx	Integration of ASEAN in the context of learning	10 Hours
Total		20 Hours

# **Description:**

Education teaching and learning of ASEAN: Integration of ASEAN in the context of learning in order to maximize the potential of students from ASEAN countries.

Specifications of the Module		XXXXXXXX
Module Name:	Students Learning Context for ASEA	N
Duration:	10 Hours	
Module Code:	XXXXXXXX	
Competency Standard:		
Module Prerequisite:		

## **Description:**

Study of the Teaching of ASEAN: Integration of ASEAN in the context of learning in order to maximize the potential of students from different countries of ASEAN.

Module Purpose/Terminal Performance Objective; TPO

Knowledge and learning in the context of ASEAN

### Range

- Learning in the context of ASEAN
- The teaching of ASEAN
- Integration of ASEAN in the context of learning
- The module is divided into 2 units

## **Element/Enabling Objectives (EO):**

Section 1: The Teaching of ASEAN.

Section 2: Integration of ASEAN in the context of learning.

**Section 1:** Sub units -Element/Enabling Objectives (EO): Knowledge about the teaching and learning of ASEAN.

## **Evidence Requirements:**

Assessment Strategy: Evidence of knowledge

### **Knowledge Evidence Requirements:**

Written exam, portfolio, a collection of information in a book report

### **Knowledge:**

Knowledge about the teaching and learning of ASEAN

- Patterns of teaching in ASEAN countries
- The problems and obstacles in the management of teaching in the ASEAN countries

### **Core Skills:**

- Communication: Reading and writing
- Information Technology: Computer and the Internet
- Problem Solving: Solving the problem
- Improving one's learning and performance:

### **Assessment Guidance:**

Assessment of evidence and knowledge: Written exam, portfolio and research presentation

Element/Enabling Objectives (EO):

Integration of ASEAN in the context of learning

### **Evidence Requirements:**

Assessment Strategy: Evidence of knowledge

## The Knowledge Evidence Requirements:

Written exam, portfolio and research presentation

### **Knowledge:**

Integration of ASEAN in the context of learning

- Knowledge and understanding of the education system of the country in ASEAN.
- To recognize the similarities and differences of the educational systems for the benefit of ASEAN integration

### **Core Skills:**

- Communication: Reading and writing
- Information technology: Computer and the Internet
- Problem Solving: Solving the problem
- Improving one's learning and performance:

### **Assessment Guidance:**

Written exam, portfolio and research presentation

Module	Module Title	Time
Codes		
xxxxx	The types and methods of the project	15 Hours
xxxxx	The program promotes learning in the context of ASEAN	15 Hours
xxxxx	Integration of the project in accordance with the ASEAN context	15 Hours
Total	1	45 Hours

# Description

Learn about the meaning, type and activity in the context of the ASEAN Community. Event/Project: Promote consistency in the ASEAN context and integration activities/ Projects for the ASEAN Context Integration activities outside the classroom/Integration of the ASEAN Context for learning effectively

<b>Module Specification</b>		xxxx-xxxx-x
Module Name:	The types and methods of the project	
Duration:	45 Hours	
<b>Module Code:</b>	xxxx-xxxx-x	
<b>Competency Standards:</b>	-	
<b>Module Prerequisites:</b>	-	

### **Description**

Learn about the meaning type and activity/ Project in the context of the ASEAN Community Activities/projects: Promote consistency in the ASEAN context and integrate activities/ Projects for the ASEAN context, Integration activities outside the classroom/ The integration of the ASEAN context or learning effectively

Module Purpose/Terminal Performance Objective; TPO

understand the meaning of types and methods of the project

#### Range

The type: How to organize and integrate in the project in the context of ASEAN

- The definition of the elements of the project
- Project management principles and methods to promote the ASEAN context
- Integration in to teaching and learning in the context of ASEAN

### **Element/Enabling Objectives (EO)**

- Section 1: Understand the meaning and the importance of the project
- Section 2: Understand the different types of projects and projects that can promote learning in the context of ASEAN.
- Section 3: Integrated understanding of the project in line with the ASEAN context and situation which can be integrated in to the project

# **Section 1:** Element/Enabling Objectives (EO):

Understand the meaning and importance of the project

# **Evidence Requirements:**

Assessment Strategy: Using the evidence of knowledge

### **Knowledge Evidence Requirements:**

Written exam, Presentation, Debate in front of the class, Book report.

## **Knowledge:**

Basic Knowledge It is significant to understand the basis for the module

Work: How to understand the meaning and importance of the project as follows:

- History of the project
- The implications of the project
- The importance of the project

#### **Core Skills:**

- Communication Technology: Reading and writing
- Information Technology: Using computers and the Internet
- Problem Solving
- Improving one's learning and performance

### **Assessment Guidance:**

Evaluation of knowledge and evidence of knowledge: The writing test, Presentation, Discussion in front of the class, Book report.

## **Section 2:** Element/Enabling Objectives (EO):

To understand the differences of each project that can provide projects that promote learning in the ASEAN context

### **Evidence Requirements:**

Assessment Strategy: Using the evidence of knowledge

### The Knowledge Evidence Requirements:

The writing test, The discussions presented in front of the classroom, Make a real project

### **Knowledge:**

Basic Knowledge: It is significant to understand the basis for the module

Work: Each project is different. The appropriate project can be selected according to the following categories:

- The type of project and the differences in each project
- The project organized by categories of tasks
- Projects that promote the ASEAN spirit

### **Core Skills:**

- Communication Technology: Reading and writing
- Information Technology: Using computers and the Internet
- Problem Solving
- Improving one's learning and performance

### **Assessment Guidance:**

The writing test, The discussions presented in front of the classroom, Make a real project

## **Section 3:** Element/Enabling Objectives (EO):

Integrated understanding of the project in line with the ASEAN context and situation that can become an integrated project

### **Evidence Requirements:**

Assessment Strategy: Using the evidence of knowledge

## **Knowledge Evidence Requirements:**

Written exam, a project that is consistent with the ASEAN context

## **Knowledge:**

Basic Knowledge: It is significant to understand the basis for the module

Work: To understand how the project is integrated in to the teaching and learning in the following situation:

- Writing project.
- To make a project that corresponds to the ASEAN context
- A summary of the project

#### **Core Skills:**

- Communication Technology: Reading and writing
- Information Technology: Using computers and the Internet
- Problem Solving
- Improving one's learning and performance

### **Assessment Guidance:**

Evaluation of knowledge and evidence of knowledge: The writing test, Writing project, Creating a project in a real situation.

Subjects Language used in ASEAN		
Code modules	Module Title	Time
xxxxxxx	Context 10 ASEAN countries	10 Hours
XXXXXXX	Indigenous groups and languages in ASEAN	10 Hours
xxxxxxx	Universal language used in ASEAN	10 Hours
XXXXXXX	The spoken and written language of international communication in ASEAN	10 Hours
Total		40 Hours

## **Description**

Learn about the language context of member countries of the ASEAN group, Native groups and the native language of each country in ASEAN, Ready to learn and practice the language of international communication that is acceptable for use in ASEAN countries at least 2-3 Languages such as English, Chinese, Bahasa, etc.

Specifications of the module	
Module Name	The language of communication in ASEAN
Duration	40 Hours
Module Code	XXXX – XXXX - X
<b>Competency Standards</b>	-
Module Prerequisites	-

### **Description**

Learn about the language context of countries member of the ASEAN group, Indigenous groups and the native language of each countries members in ASEAN, Ready to learn and practice using the international language that is acceptable for use in the ASEAN group communication with at least.2-3 such languages as English, Chinese, Bahasa, etc.

Module Purpose / Terminal Performance Objective; TPO: To understand indigenous groups and local languages used in different countries in the ASEAN group.

#### Range

- Indigenous groups in each country
- Indigenous culture
- The international language of communication in the ASEAN group countries
- International languages spoken, read, written and used to communicate among ASEAN countries

### **Element/ Enabling Objectives (EO)**

Section 1: Understanding about the culture and language of the indigenous people in each country

Section 2: Understand the global language used to communicate among ASEAN countries

Section 3: Understand spoken and written language for international communication in ASEAN

XXXX-XXXX-X

**Section 1:** Element/ Enabling Objectives (EO) In order to understand the culture and language of the indigenous people in each country

Evidence Requirements: Assessment Strategy: Evidence of knowledge

### **Knowledge Evidence Requirements:**

The writing test, Notebook

## **Knowledge:**

As a knowledge base for understanding the cultural context as follows:

- Indigenous groups in each country
- Culture of indigenous groups in each country
- The language of the indigenous people

### **Core Skills:**

- Communication: Reading, writing and communication
- Information technology: Using computers and the Internet

### **Assessment Guidance:**

Assessment of evidence of knowledge written exam and notebooks

XXXX-XXXX-X

**Section 2:** Element/ Enabling Objectives (EO): To understand the universal language used to communicate among ASEAN countries

**Evidence Requirements: Assessment Strategy: Using the evidence of knowledge** 

### **Knowledge Evidence Requirements:**

Written exam, and communicate using the universal language of ASEAN

### **Knowledge:**

Understanding the basic knowledge about language and content

- The international language of communication in the ASEAN group
- The main language of international communication within the ASEAN group

#### **Core Skills:**

- Communication: Reading: writing and communication
- Information Technology: Using computers and the Internet

### **Assessment Guidance:**

Evaluation of knowledge and evidence to test the knowledge of writing and communicating in local languages

XXXX-XXXX-X

**Section 3:** Element/ Enabling Objectives (EO): Understand the principles of speaking, reading, and writing the global language used to communicate in the ASEAN group

Evidence Requirements: Assessment Strategy: Using the evidence of knowledge

### **Knowledge Evidence Requirements:**

With the written exam, read, write and communicate in the universal language of ASEAN

## **Knowledge:**

In order to understand the basic knowledge about the language and content

- The main language of international communication in Asian languages such as English, Chinese, etc.
- Communication by using the universal language of ASEAN

Speak, Read, and Write a universal language

### **Core Skills**

- Communication: Speaking, reading, writing and communication
- Information Technology: Computer and the Internet.

## Assessment Guidance:

Assessment of evidence, knowledge: written test, reading, writing and speaking the universal language of communication of ASEAN

Quality Assurance System in accordance with ASEAN		
Module	Module Title	Time
Codes		
xxxxx	The quality assurance system according to the standards of education in ASEAN	15 Hours
xxxxx	Factor analysis, Indicators, and evaluation system	15 Hours
xxxxx	Analysis of the quality assurance system in accordance with the circumstances and the context of ASEAN	15 Hours
xxxxx	Applying quality assurance system in accordance with the circumstances and the context of ASEAN	15 Hours
Total		60 Hours

## **Description**

Study and practice on the quality assurance system of educational quality assurance academic courses, The instructor and students according to academic standards ASEAN, An analysis of the factors, The scorecard and measurement systems, Analysis and application of the principles of quality assurance systems that conform to environmental and educational context ASEAN

Module Specification		XXXX-XXXX-X
Module Name:	The quality assurance system according to the standards of education in ASEAN.	
<b>Duration:</b>	60 Hours	
<b>Module Code:</b>	xxxx-xxxx-x	
<b>Competency Standards:</b>	-	
Module Prerequisites:	-	

### **Description**

Study and practice on the quality assurance system of educational quality assurance academic courses, The instructor and students according to academic standards ASEAN, An analysis of the factors, The scorecard and measurement systems, Analysis and application of the principles of quality assurance systems that conform to environmental and educational context ASEAN

**Module Purpose/Terminal Performance Objective; TPO**: To understand the quality assurance system according to the standards of education in ASEAN

### ขอบเขต (Range)

The quality assurance system according to the standards of education in ASEAN

- The quality assurance system.
- ASEAN education standards
- Benefits of the quality assurance system
- The development of the quality assurance system

## **Element/Enabling Objectives (EO)**

- Section 1: To understand the concept of the quality assurance system according to the standards of education in ASEAN
- Section 2: To understand Factor Analysis indicators and the Evaluation System
- Section 3: Primary analysis of quality assurance systems that conform to the environment and context of ASEAN
- Section 4: The application of the principles of quality assurance systems that conform to the environment and context of ASEAN

**Section 1**: Element/Enabling Objectives (EO):

Understand the concepts of quality assurance academic standards of ASEAN

## **Evidence Requirements:**

Assessment Strategy: Using the evidence of knowledge

### **Knowledge Evidence Requirements:**

Written exam, portfolio

### Knowledge

Basic Knowledge: It is significant to understand the basis for the module Operational concept. To ensure the quality of education. Academic standards for students in ASEAN as follows:

- The quality assurance system.
- ASEAN education standards
- Benefits of the quality assurance system
- The development of the quality assurance system

### **Core Skills:**

- Communication Technology: Reading and Writing
- Information Technology: Using computers and the Internet
- Problem Solving
- Improving one's learning and performance

### **Assessment Guidance**:

Evaluation of knowledge and evidence of knowledge: Written exam and portfolio

# **Section 2.** Element/Enabling Objectives (EO):

Understand Factor Analysis Indicators and Evaluation System

## **Evidence Requirement:**

Assessment Strategy: Using the evidence of knowledge

### The Knowledge Evidence Requirements:

Written exam, portfolio

### **Knowledge:**

Basic Knowledge: It is significant to understand the basis for the module Operational concept: To ensure the quality of education. Academic standards for students in ASEAN as follows:

- ASEAN education system indicators
- Evaluation standards ASEAN

### **Core Skills:**

- Communication Technology: Reading and Writing
- Information Technology: Using computers and the Internet
- Problem Solving
- Improving one's learning and performance

### **Assessment Guidance:**

Evaluation of knowledge and evidence of knowledge: Written exam and portfolio

## **Section 3:** Element/Enabling Objectives (EO):

Primary analysis of quality assurance systems that conform to environmental and educational context of ASEAN.

### **Evidence Requirements:**

Assessment Strategy: Using the evidence of knowledge

## **Knowledge Evidence Requirements:**

Written exam, portfolio

## **Knowledge:**

Basic Knowledge: It is significant to understand the basis for the module Operational concept: To ensure the quality of education. Academic standards for students of ASEAN as follows:

- The quality assurance system.
- Environment and education system of ASEAN

### **Core Skills:**

- Communication Technology: Reading and writing
- Information Technology: Using computers and the Internet
- Problem Solving
- Improving one's learning and performance

#### **Assessment Guidance**:

Evaluation of knowledge and evidence of knowledge: Written exam and portfolio

## **Section 4:** Element/Enabling Objectives (EO):

The application of the principles of quality assurance systems that conform to environmental and educational context, ASEAN

### **Evidence Requirements:**

Assessment Strategy: Using the evidence of knowledge

# **Knowledge Evidence Requirements:**

Written exam, portfolio

## **Knowledge:**

Basic Knowledge: It is significant to understand the basis for the module Operational concept: To ensure the quality of education. Academic standards for students in ASEAN as follows:

- Benefits of the quality assurance system
- The development of the quality assurance system
- The application of the principles of quality assurance systems that conform to the environment and context in ASEAN

### **Core Skills:**

- Communication Technology: Reading and writing
- Information Technology: Using computers and the Internet
- Problem Solving
- Improving one's learning and performance

### Assessment Guidance:

Evaluation of knowledge and evidence of knowledge: Written exam and portfolio.

Course design, research and development programs.  For vocational teachers meeting				
Module Codes	Module Title	Time		
XXXXX	Design, research and development programs	30 Hours		
xxxxx	Trends in research and development programs for vocational teachers ASEAN	15 Hours		
Total		45 Hours		

# Description

Study and practice about design research and course development. Trends in research and development of the curriculum for vocational teachers meeting

Specifications of the module	xxxxxxxx
Model Name:	Design, research and development, vocational courses for teachers meeting
<b>Duration:</b>	45Hours
Module Code:	XXXXXXXX
<b>Competency Standards:</b>	Design, research and development of the curriculum for vocational teachers meeting
Module Prerequisites:	Designing and developing research courses

## Description

Study and practice on course design, research and development trend in research and development of the curriculum for vocational teachers meeting

Module Purpose/Terminal Performance Objective; TPO

Understanding of designing research and course development

### Range

Design, research and development, vocational courses for teachers meeting

- Design, research and curriculum development
- Trends in research and development of the curriculum for vocational teachers meeting

## **Element/Objectives (EO)**

Section 1: Understand the principles, design, research and curriculum development

Section 2: Trends in research and development of the curriculum for teachers meeting

XXXXXXXX

**Section 1:** Element/Enabling Objectives (EO):

Understanding of designing research and course development

### **Evidence Requirements:**

Assessment Strategy: Using the evidence of knowledge

### The Knowledge Evidence Requirements:

Written exam, portfolio

### **Knowledge:**

Design, research and curriculum development.

### **Core Skills:**

Design, research and course development

### **Assessment Guidance:**

Evaluation of knowledge and evidence of knowledge: The written test or a portfolio

### **Learning Outcomes**

XXXXXXXX

**Section 2:** Element/Enabling Objectives (EO):

Trends in research and development of the curriculum for teachers meeting

### **Evidence Requirements:**

Assessment Strategy: Using the evidence of knowledge

### **The Knowledge Evidence Requirements:**

The writing test, Writing training course for ASEAN

### **Knowledge:**

Trends in research and development of the curriculum for teachers meeting

## **Core Skills:**

Trends in research and development of the curriculum for teachers meeting

### **Assessment Guidance:**

Evaluation of knowledge and evidence of knowledge: the written exam or to write programs for ASEAN

Special problem courses vocational teachers meeting				
Module Codes	Module Title	Time		
xxxxx	Consideration of vocational teacher courses for ASEAN group	15 Hours		
xxxxx	Factors related to the vocational teacher course of the ASEAN group	15 Hours		
XXXXX	Special issues on teacher vocational education courses, ASEAN.	30 Hours		
Total		60 Hours		

## **Description**

Educational and vocational teachers to consider their course of the ASEAN group: Factors related to the vocational teacher course of the ASEAN group and special education teachers, vocational courses issues about ASEAN, to define the guidelines for the development of vocational courses for teachers of the ASEAN group

Module Specification		xxxx-xxxx-x
Module Name:	Special Topic in Vocational Teacher Education Curriculum	
<b>Duration:</b>	60 Hours	
<b>Module Code</b>	XXXX-XXXX-X	
<b>Competency Standards:</b>	-	
Module Prerequisites:	-	

### **Description**

Educational and vocational teachers to consider their course of the ASEAN group: Factors related to the vocational teacher course of the ASEAN group and special education teachers, vocational courses issues about ASEAN, to define the guidelines for the development of vocational courses for teachers of the ASEAN group

## Module Purpose Terminal Performance Objective; TPO:

Understand and be able to determine the course of their vocational teachers in the ASEAN group, The relevant factors and issues about the vocational teacher course of the ASEAN group

### Range

- Vocational teacher course of the ASEAN group.
- Factors related to the vocational teacher course of the ASEAN group
- Problems with vocational courses

## **Element/Enabling Objectives (EO):**

- Section 1: The condition of the ASEAN vocational courses
- Section 2: Factors related to the vocational teacher course of the ASEAN group
- Section 3: Vocational education teachers, special issues in ASEAN

XXXX-XXXX-X

**Section 1:** Element/Enabling Objectives (EO):

Can consider teacher vocational courses part of ASEAN group

## **Evidence Requirements:**

Assessment Strategy: Using the evidence of knowledge

## **Knowledge Evidence Requirements:**

Reporting the results of the present study

### **Knowledge:**

Vocational teacher course of the ASEAN group

## Core Skills:

- Communication: Speaking, writing, reading, answering questions
- Information Technology: Using computers and the Internet to research for more knowledge

### **Assessment Guidance:**

Assessment of knowledge: Reporting the results of the present study

**Section 2:** Element/Enabling Objectives (EO):

Understand the factors involved in the course of vocational teachers ASEAN group

## **Evidence Requirements:**

Assessment Strategy: Using the evidence of knowledge

### **Knowledge Evidence Requirements:**

Summarizes results found and have a discussion

### **Knowledge:**

Factors related to the vocational teacher course of the ASEAN group include:

- Political Issue
- Economic Issue
- Diversity Issue
- Environmental Issue
- Technological Issue
- Learning Theory & Practice Issue

### **Core Skills:**

- Communication: Writing and compose a speech of the conclusion
- Information Technology: Using computers and the Internet to research for more knowledge

### **Assessment Guidance:**

Assessment of knowledge: Results are compiled: Summarize results found and discuss

XXXX-XXXX-X

**Section 3:** Element/Enabling Objectives (EO):

Special issue on vocational teacher education courses ASEAN.

## **Evidence Requirements:**

Assessment Strategy: Using the evidence of knowledge

### **Knowledge Evidence Requirements:**

Compiled the report to answer questions

### **Knowledge:**

Special problems about the vocational curriculum teachers meeting

- Situation and problems of developing vocational teachers course in ASEAN countries
- Situation and problems with the vocational teacher course in ASEAN

### **Core Skills:**

- Communication: Speaking, writing, reading, answering questions
- Information Technology: Using computers and the Internet to research for more knowledge

### **Assessment Guidance:**

Assessment of knowledge: Defining issues, To compose a report answering questions