

## The monitoring model in dual vocational management systems of colleges under the Office of Vocational Education Commission in Thailand

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**Abstract-** The research aims to design a model for monitoring the Dual Vocational Education Systems in vocational colleges under the Office of Vocational Education Commission in Thailand. The researchers studied and synthesized the concept about the process for monitoring from the academicians. To study the regulations, laws, guidelines, the vocational education of dual vocational education management. The conclusions of the monitoring process were: 1) scope of monitoring 2) monitoring planning 3) data collection 4) data analysis 5) inspection 6) reporting and developing. Each process consisted of 5 sub-factors. They were 1) colleges 2) companies 3) students 4) teaching management 5) monitoring and evaluation of dual vocational education management.

### I. INTRODUCTION

Countries around the world are facing economical challenges and they are trying to develop their economy. The fast growing of the digital technology has big impact on economy of the countries in the region. Through the Thailand 4.0 government policy, Thailand is trying to develop its economy [1]. Education is the basic right of Thai people to access. The Thai government has to provide education for all Thais to develop their skills and ethics and vocational competency [1]. Education can help people to develop various skills throughout their life and it is the base for empowering people in the country.

The Vocational Education Act of BE 2551 (2008) has set the framework for vocational education within 3 systems, formal education, non-formal education and dual vocational education [2]. Colleges under the Office of Vocational Education Commission have a main mission to provide education through the dual vocational education system. The Thai government has emphasized on the effectiveness and efficiency of the dual vocational education system. Therefore, monitoring and evaluating is

an important process for colleges to compete and develop the dual vocational education system based on the rules and regulations and related policies [3]. During the period of 5 years, the number of the students in dual vocational education system rapidly increased from 35,181 students in 2011 to 91,448 students in 2015 or it was increased 2.59 times. However, the percentage of students in dual vocational education system is lower than 20% of total number of vocational students. Therefore, in order to promote the efficiency of the dual vocational education policy, it is necessary to monitor and evaluate the dual vocational education systems. This is the way to encourage the operation in the colleges concerning the important point which will lead to improvement and upgrading the dual vocational education system [4].

Thus, the model for monitoring and evaluating the dual vocational education system in the colleges under the Office of Vocational Education Commission in Thailand is useful for the operation of the dual vocational education system. The model will lead the colleges to effectively reach the objectives and goals of the work. The model also helps the administrators and personnel to know the progress, success, impact and problems of their work. The research results could be used to effectively develop or improve the dual vocational education system to meet the standard of the Ministry of Education.

### II. OBJECTIVE

To design a monitoring model for the dual vocational education systems in Thailand

### III. LITERATURE REVIEW

Researchers studied the concepts of the process for monitoring the dual vocational education systems in colleges under the Office of Vocational Education

Commission as follows: 1) Office of the Educational Council Secretary, [5] 2) office of Basic Education, [6] 3) Phisarnbut, [7] 4) Chinphaisarn & Cheewatrakoonkit, [8] 5) The CBM Project Cycle Management Handbook, [9] 6) APPEAL, [10] 7) Malone et al., [11] and 8) Cherasaro & Yanosk [12].

From the concepts of administration processes for monitoring the dual vocational education systems gathered from the academics, the conceptual framework analysis of monitoring processes were shown in Table 1.

**Table 1: Conceptual framework analysis of monitoring the dual vocational education systems of colleges under the Office of Vocational Education Commission**

Process for monitoring the dual vocational education systems	Office of the Educational Council Secretary	Office of Basic Education Commission	Suphaporn Phisarnbut	Thapana Chinphaisarn and Atchana Cheewatrakoonkit	Atchana Cheewatrakoonkit	CBM	APPEAL	Nolan Malone and other	Trudy Cherasaro and David Yanoski	Frequency
(1) Scope for monitoring	•		•	•					•	4
(2) Monitoring planning		•				•	•	•		4
(3) Operation and data collection	•	•		•		•			•	5
(4) Data analysis	•		•	•						3
(5) Inspection and evaluation	•					•		•	•	4
(6) Report and developing		•	•	•		•				4
(7) Consideration and action			•							1
(8) Problems and solutions							•			1
(9) Continuity							•			1
(10) Communication								•		1

From the table, the analysis of the concept related to the process for monitoring the dual vocational education systems of colleges under the Office of the Vocational Education Commission, the researchers synthesized the conceptual framework of the processes for monitoring using criteria from level 3 and higher. It was concluded that the processes for monitoring the dual vocational education systems of colleges under the Office of the Vocational Education Commission consisted of the followings.

1. Scoping for monitoring means setting objectives, framework, monitoring items, informants, tools for data collection, data analysis, developing indicators to compare with the goals. This is to create the framework for monitoring the dual vocational education which could lead to the improvement of the dual vocational education system in the next phase.

2. Planning the monitoring is defined as the process for setting the objectives and goals, policy and activities required for dual vocational education system. This is to specify who, what, when and how to efficiently carry out each step of the tasks. The plans will lead to meet the objectives and goals and increase the efficiency of the system for the highest benefits of the Office of Vocational Education Commission.

3. Data collection based on monitoring plan is defined as the collection of raw quantitative and qualitative data related to the dual vocational education system from various sources of information, designing appropriate methods and tools for data collection, set up the useful items for further analysis. Data collection is useful for the operation of the dual vocational education system of the Office of Vocational Education Commission.

4. Data analysis is defined as the process to transform the collected raw data about the dual vocational education system into information by grouping, identifying, and analyzing. This process will explain the cause, the change that will lead to the conclusion which responses to the objectives and goals of the dual vocational education system.

5. Inspecting the correctness of the monitoring and evaluating is defined as the revision of the perfectness and correctness of the data, emphasizing the effectiveness and efficiency of the work, based on the criteria for the standard of the dual vocational education system. The information obtained from data analysis is reasonable and good for submitting to the people involving in dual vocational education system.

6. Reporting and using the results for working process development is defined as dissemination of the information obtained from analyzing process through paper and online document. The report should include the problems faces by the researchers. There should be the way for the people to ask questions and get answers online. The report should be short and understanding so that the administrators or involving people can use the information to improve their dual vocational education system and the information can be used as a reference.

The researchers studied the way to operate the dual vocational education system based on the announcement of the Ministry of Education [13]. The components of the operation of the dual vocational education system are as follows.

1. Colleges. The administrators and the personnel in the college operating the dual vocational education system have to systematically and continuously support the operation of the dual vocational education system. Teaching and learning process have to meet the need of the companies. The memorandum of understanding is to be signed by both the college and the company. Students have to sign the contract for training in the company. Study plan, vocational training, trainer in company, supervising process, monitoring and evaluating process and informing the student guardians are to be designed by both the college and the company. The Preparation and orientation were done before the students trained in the company. Advertising the dual vocational education system to students and their parents are to be done by colleges and companies.

2. Company: The companies involving in the dual vocational education system have to support the activities designed to develop student ethics. Vocational tasks in the companies has to be related to the courses that students are studying. The companies are to sign the Memorandum of Understanding (MOU) with the colleges and sign the contract for student training. The companies and the colleges design study plan, vocational training, trainers, coordinators and supervisors in companies, supervising process, assessment methods, informing the student guardians. Preparation of the students before training in companies and advertising dual vocational education system to students and their parents and communities has to be done. The companies may provide the appropriate wage to the students.

3. Learners mean the management of the dual vocational education concerning students, planning steps

for admission, admission method, advertisement, the cooperation of the company and the college to select the students for the dual vocational education system using paper test, interviewing or practical test. After getting students in the program, both the company and the college develop the students to have discipline and ethics correlated with the vocational standard framework and the vocational qualification framework for each level based on the announcement of the Ministry of Education covering the following aspects, ethics, core competency, general competency and vocational competency.

4. Teaching and learning process have to be based on the objectives of the curriculum and the vocational qualification standard of each branch and level. Learners have portfolio, recording of the vocational training, ethics and voluntary based on the rules and regulations of the Office of Vocational Education Commission.

5. Monitoring and evaluating the management of the dual vocational education system is to use the data from teaching and learning process, assessment, number of graduates and work after graduation and to report the output and outcome of the management of the dual vocational education to the public.

#### IV. RESULTS

From the synthesis of the concepts of the process for monitoring and practicing methods for the dual vocational education systems based on the announcement of the Ministry of Education in 2014 about the standard for the management of the dual vocational education of the colleges under the Office of Vocational Commission, it was concluded that the model for monitoring the dual vocational education of the colleges under the Office of Vocational Commission consisted of 6 components including 1) scoping for monitoring 2) planning the monitoring 3) data collection based on monitoring plan 4) data analysis 5) inspecting the correctness of the monitoring and evaluating the working process and 6) reporting and using the results for working process development. Each process consisted of 5 sub-factors. They were 1) colleges 2) companies 3) students 4) teaching management 5) monitoring and evaluation of dual vocational education management.

These were concluded as a model for monitoring the dual vocational education system of colleges under the Office of Vocational Education Commission and it was shown in Figure 1.

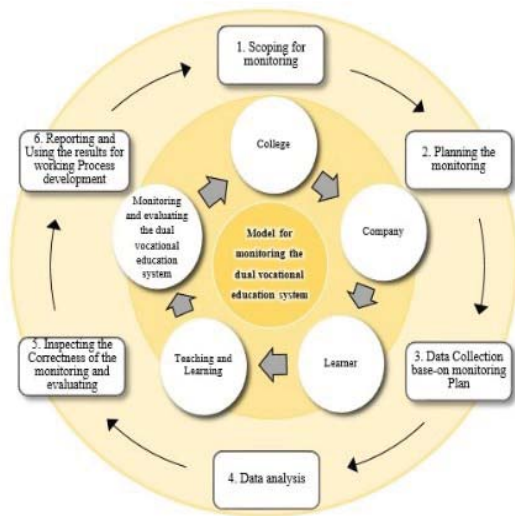


Figure 1. A model for monitoring the dual vocational education systems of colleges under the Office of Vocational Education Commission

## V. CONCLUSION AND DISCUSSION

A model for monitoring the dual vocational education systems of colleges under the Office of Vocational Education Commission consisted of 6 components with 5 elements in each component.

1) Scoping for monitoring included the setting of the objectives, framework and the monitoring items, developing indicators for monitoring and selecting the informants or the information sources for monitoring the management of the dual vocational education of the colleges. This component was correlated with Ritcharoon [14] who wrote conceptual framework for project evaluation and how the assessors applied the model by drawing a table to show the relation of the objectives of the evaluation, the evaluating items, variables, indicators, sources of information, informants, data collection, data analysis and criteria for evaluation. After setting the scope for monitoring the college will do the planning.

2) Planning for monitoring included forming the committee, setting operating methods, appointing responsible persons, setting period for working, identifying resources required for monitoring the management of dual vocational education. This component corresponded with Phromjui [15] who explained the meaning of planning that it was the future

process indicating what to do, how to do, who will do, where to do, and when to do it to meet the goals and objectives using effective systematic operation. After planning the college will collect data.

3) Data collection based on monitoring plan included, setting the types of the data which were quantitative and qualitative data, creating the tools for data collection and designing the data collection method for monitoring the management of dual vocational education. This component correlated with Wanichbanchorn [16] who mentioned that data collection for analysis consisted of primary and secondary data and also quantitative and qualitative data. In case of using primary data, the data was collected by the unit who wanted to use the data. After collecting data, the data will be analyzed.

4) Data analysis, quantitative and qualitative data were both analyzed, grouping the data obtained from the monitoring the management of dual vocational education. This component corresponded with Phromjui [15] who mentioned that data analysis means grouping the collected data, calculate, conclude and report the results in the appropriate and meaningful forms to response to the objectives of the evaluation. After data analysis, the college will carry onto the next component.

5) Inspecting the correctness of the monitoring and evaluating the working process can be done by comparing the results from data analysis with the goals of the management of dual vocational education. The college record the results obtained from the inspection of monitoring the dual vocational education. This component corresponded with Worakam [17] who indicated that checking data was the reviewing how complete and how correct the data was, especially the data from questionnaires. If the data from the questionnaires was incomplete or contradict, the researchers have to get back to the informants to get the complete and correct data. After the data inspection was done the college will move onto the final stage.

6) Reporting and using the results for working process development is the stage for writing report and setting the ways to disseminate the results and also to set the way to further monitor the management of the dual vocational education in the colleges. As Kenneth & Jane [18] indicated that disseminating output is useful for those who wants to use the information.

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