

Program Development for Enhancing Teachers' Training Competencies for Working in Mutual Enterprise Between Entrepreneurs and Educational Institutions under the Office of the Vocational Education Commission in the Eastern Economic Corridor (EEC)

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Abstract

This research aims 1) to study the components and indicators of teachers' training competencies for working in the mutual enterprise, 2) to study current states, desirable states, methods of development, and necessary needs of teachers' training competencies for working in the mutual enterprise, 3) to design and develop the program for enhancing teachers' training competencies for working in the mutual enterprise, and 4) to study the results of implementing the program for enhancing teachers' training competencies for working in the mutual enterprise. This research was research and development that was conducted in 4 phases following the research objective. The results showed that 1) components and indicators of teachers' training competencies consist of 5 components, 30 indicators, confirmed by 7 qualified experts is appropriate at the highest level. 2) The current state of teachers' training competencies as a whole was at a moderate level, and the desirable state overall was at the highest level, Competency development methods include (1) self-development (2) training (3) workshops/learning exchanges (4) coaching (5) mentors and mentoring, and priorities of competency development needs were (1) preparation of a professional training plan, (2) measurement and evaluation of vocational, (3) coaching techniques, (4) coaching psychology, and (5) teacher trainers and the ethics of the teaching profession, respectively. 3) The program for enhancing teachers' training competencies consists of (1) Principles, (2) Objectives, (3) Contents and methods of development consisting of 5 content modules, and 5 methods of development, (4) Measurement and Evaluation, (5) Expected outcomes, and (6) Success condition. The result of the program evaluation by 5 qualified experts is appropriate, useful, and possible at the highest level. 4) The results of implementing the program to enhance teachers' training competencies in the workplace found that (1) the knowledge of the teachers training in the workplace before the development received an average score of 17.53 (58.44%) out of a full score of 30 after development received an average score of 25.86 (86.22%). Knowledge after development was higher than before development and was statistically significant at the .01 level. (2) The overall performance before development was moderate after development was at the highest level, and (3) the satisfaction assessment results of program participants overall and each aspect were at the highest level.

Keywords: enhancing programs, trainer competency, trainers in the workplace, Eastern Economic Corridor (EEC), vocational education

1. Introduction

Eastern Thailand is located in the best strategic location in the ASEAN region. It can be linked to China and India which are highly populated and have high economic growth rates, with the gross domestic product (GDP) ratio of Asia and the Pacific countries accounting for 1/3 of the world's GDP value. These 3 eastern provinces (Chachoengsao, Chonburi, and Rayong) are also important industrial production bases of the country including the petrochemical industry, the automotive industry, and parts and structural readiness. The important infrastructure consists of Laem Chabang Commercial Port, Map Ta Phut Industrial Port, Intercity Motorway (Motorway), double track train, and U-Tapao Airport. Also, the city of Pattaya is a world-famous tourist destination. It also has enough space to support the expansion of the industry. Therefore, it can be further developed to become "Eastern Economic Corridor: EEC" in order to become Asia's leading economic area to support the additional competence

economic expansion of the country including enhancing the quality of life and income of the people from the economic development policy of Thailand under the vision of "Stable, Prosperous, Sustainable". There is an important mission to reform the country in various fields by strengthening internally alongside being connected to the global community by adhering to the principle of "Sufficiency Economy Philosophy" driven by the mechanism of "civil state", including the 12th National Economic and Social Development Plan, 2017-2021. It aims to provide skills for Thai people of all ages to gain knowledge, competence, and continuous self-development including the production of vocational manpower to support driving the country's economy under the concept that Thailand can drive economic growth (S-Curve) in 2 ways which are 5 potential industries (First S-Curve) and 5 future industries (New S-Curve) that have been prepared according to the 20-year national strategic framework (2017-2036), which is the main plan for national development, Sustainable Development Goals (SDGs), including the restructuring of Thailand towards Thailand 4.0 and as a mechanism to enhance human capital development, strengthen the economy and competitive (Office of the Eastern Economic Corridor Policy Committee (EEC), 2017) In this regard, the Ministry of Education by the Office of the Vocational Education Commission has been assigned to produce, promote, and develop manpower to be a workforce that is consistent with all 10 industries, reducing the percentage difference between demand and supply (Demand & Supply) of vocational workers down. In the meantime, the workers must be equipped with knowledge, skills, habits, morals, ethics, and the ability to adapt in line with occupations and life in the EEC area and the educational area in subjects related to 10 old and new industries that have been fully supported by the government. If it said that it is a professional group in the industrial sector that is growing in 3 provinces of the EEC, it wouldn't be wrong. (EEC Coordinating Center, Office of the Vocational Education Commission, 2017)

Currently, the Office of the Vocational Education Commission has several students approximately 654,083 students, with the number of students who must do an internship or vocational training each year, about 267,161 people, and there are 8,098 establishments that cooperate in teaching and learning together. In each establishment, supervisors are assigned, or those who have experience working as In-house trainers on duty transfer knowledge and experience or teaching jobs in each subject area. Due to the current situation, the delivery of students to internships or internships in the workplace in the internship course has many limitations, especially regarding knowledge skills that students will gain from the establishment or may be due to the broadcasting of the teaching of the trainers at the workplace and educational institutions. The trainers in the workplace are therefore very important in developing the quality of vocational education management. There is a need to strengthen the potential of the trainers to have knowledge in teaching and learning about the competency of the trainers on job teaching for students' apprentice, to acquire knowledge and experience from the actual practice in the workplace, and to have quality alongside with the standard and the curriculum studied. The purpose is to increase the knowledge, skills, attitudes, expertise, and abilities of trainers to be able to teach effectively. When the person has been selected to work, before assigning work, training is required first. After working for a while, it should be evaluated the performance of a person. If the assessment results show that a person is unable to perform his or her responsibilities effectively, it is necessary to provide training to improve deficiencies for that person to be able to work efficiently. The background and the importance of the above problems show that the trainers in the workplace have a need for training competency in teaching and need to promote and develop training.

Therefore, the researcher has an idea to conduct research on "Program Development for Enhancing Teachers' Training Competencies for Working in Mutual Enterprise between Entrepreneurs and Educational Institutions under the Office of the Vocational Education Commission in the Eastern Economic Corridor (EEC)".

According to the Vocational Education Act (2008) (Office of the Vocational Education Commission, 2008), trainers can apply knowledge and skills gained from training to teach vocational training, transfer knowledge, and evaluate students who receive internships for students in the workplace continuously by developing the curriculum in accordance with the needs of educational institutions, the analysis of the competency of trainers in the workplace, the criteria set by the Vocational Education Commission by preparing the curriculum and training package for developing trainers in workplaces effectively. The result of internship students in workplaces is to bring knowledge, and the ability to meet the objectives of the curriculum and meet the needs of the workplace in order to improve student internship management to increase efficiency.

2. Research Questions

This research poses the following research questions:

- 1) What are the components and indicators of teachers' training competencies teachers' training competencies for working in the mutual enterprise between entrepreneurs and educational institutions?
- 2) What are the current status, the desired status, and the need for the competency development of teachers training

competencies teachers' training competencies for working in the mutual enterprise between entrepreneurs and educational institutions?

3) What is the enhancement program for the competency development of teachers training competencies teachers' training competencies for working in the mutual enterprise between entrepreneurs and educational institutions?

4) What results are the implementation of the enhancement program for the competency development of teachers training competencies teachers' training competencies for working in the mutual enterprise between entrepreneurs and educational institutions?

3. Research Objectives

1) To study the components and indicators of teachers' training competencies teachers' training competencies for working in the mutual enterprise between entrepreneurs and educational institutions

2) To study current states, desirable states, methods of development, and necessary needs for the development of teachers' training competencies in enterprises between entrepreneurs and educational institutions

3) To design and develop a program for enhancing teachers' training competencies for the development of teachers' training competencies in enterprises between entrepreneurs and educational institutions

4) To study the results of implementing the program for enhancing teachers' training competencies for the development of teachers' training competencies in enterprises between entrepreneurs and educational institutions

4. Theoretical Conceptual Framework

The researcher analyzed and synthesized the principles, concepts, and theories from scholars for the theoretical conceptual framework of this research as follows:

I. Components of Teachers' training in working in a mutual enterprise consist of 1) Coaching psychology 2) Teacher trainers and the ethics of the teaching profession 3) Preparation of a professional training plan 4) Coaching techniques 5) Measurement and evaluation of vocational training (The Secretariat of the Teachers Council of Thailand, 2019; the Office of the Vocational Education Commission, 2008; Thailand Professional Qualification Institute (Public Organization), 2021; Department of skill Development, 2014)

II. Methods for developing the competency of teachers' training in the workplace consist of 1) Self-development 2) Training 3) Workshops/Learning Exchange 4) Coaching 5) Mentors and being mentors (Mongkolvanich, 2012; Taengchuang, 2015; Fullan, 2015; Maseana, 2016; Phuvitayapun, 2016)

III. Program Elements consist of 1) Principles 2) Objectives 3) Contents and method of development 4) Process 5) Development Activities 5) Measurement and evaluation 6) conditions of success (Jomhongpipat, 2010; Kongsuk, 2011; Junsuwan, 2011)

IV. Program development process consists of 1) Necessity analysis 2) Defining the purpose of the program 3) Planning for the preparation of the program 4) Program creation 5) Program Implementation 6) Evaluation of the program to bring the evaluation results obtained to develop the program 7) Exchange of knowledge (Caffarella, 2002; Sararattana, 2013; Carolyn, 2009)

V. Program Evaluation consists of 1) Appropriateness, 2) Feasibility, and 3) Utility (Songtiang, 2005; Jomhongpipat, 2010; Stufflebeam, Madaus, & Kellaghan, 2000)

This theoretical conceptual framework is used in the research as shown in Figure 1.

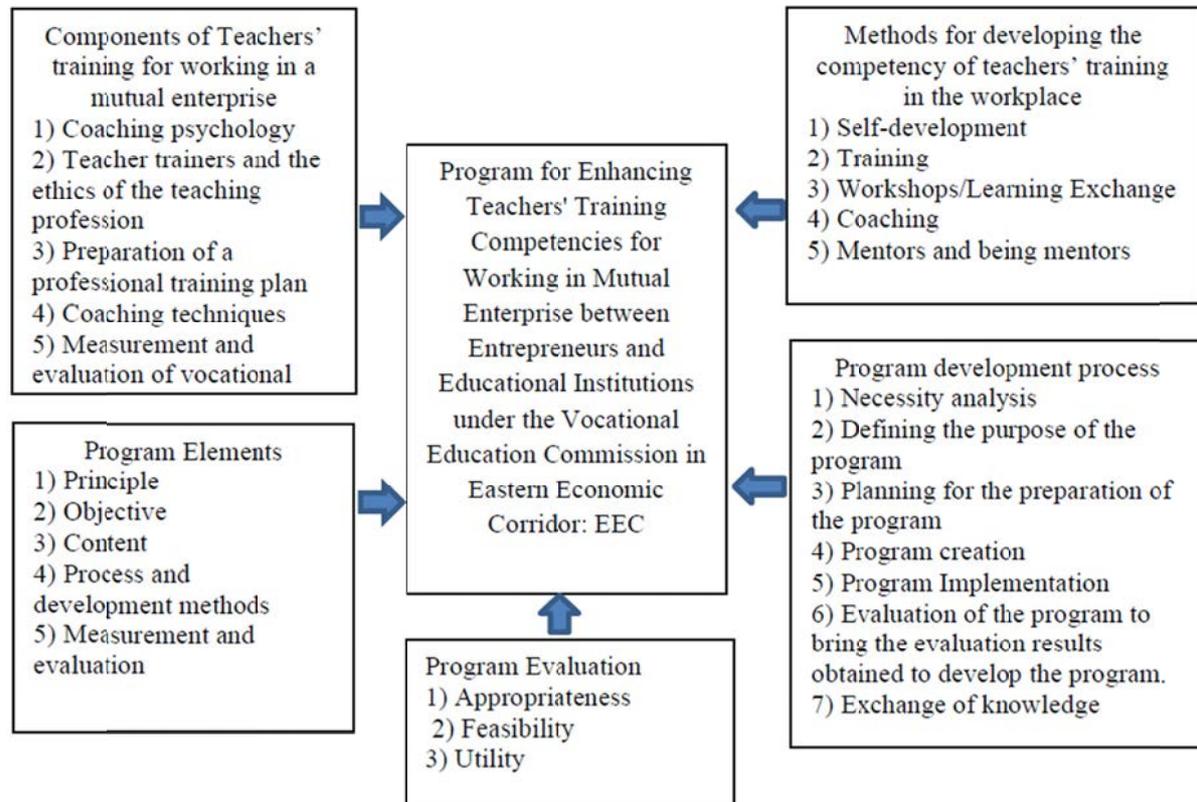


Figure 1. Theoretical conceptual framework for research

5. Research Methodology

This research was research and development, the conducted method was divided into 4 phases as follows:

Phase I: to study the components and indicators of teachers' training competencies. The group of informants who examined the suitability of components and indicators was 7 experts by purposive sampling. The instrument for data collection was an appropriate assessment form, the statistics for data analysis were mean, and standard deviation.

Phase II: to study current states, desirable states, methods of development, and necessary needs for the development of teachers' training competencies.

1) The population includes 17 business executives and 85 in-house trainers the business has cooperation with 20 educational institutions under the Vocational Education Commission in Eastern Economic Corridor: (EEC) amounting to 17 places in industrial technical

2) The sample group consisted of 10 business operators and 50 in-house trainers that have cooperated with educational institutions under the Vocational Education Commission in Eastern Economic Corridor: EEC in the amount of 10 places, each of which has 6 informants, consisting of 1 business executive, and 5 in-house trainers in the workplace, totaling 60 people obtained by purposive sampling.

3) The instrument for data collection was a 5-level scale rating questionnaire with the Index of Congruence (IOC) between 0.80-1.00, a reliability of 0.94, and Data were analyzed through mean, standard deviation, and Modified Priority Needs Index (PNImodified)

Phase III: The design and program development for Enhancing Teachers' Training Competencies for Working in Mutual Enterprise between Entrepreneurs and Educational Institutions under the Vocational Education Commission in Eastern Economic Corridor: EEC. The researcher brings research results from Phase 1, and Phase 2 to draft program and develop the program through the informant group in a focus group discussion consisting of 7 experts who have come according to the specified criteria and a group of informants who are responsible for evaluating the program (by evaluating appropriateness/feasibility/utility), namely 7 experts who have been obtained according to the specified criteria.

Phase IV: to study the results of implementing the Program for Enhancing Teachers' Training Competencies for Working in Mutual Enterprise between Entrepreneurs and Educational Institutions under the Vocational Education Commission in Eastern Economic Corridor: EEC. The informants were trainers in enterprises that cooperate with educational institutions under the Vocational Education Commission in the Eastern Economic Corridor: EEC, 4 locations, totaling 15 people.

6. Research Results

I. The components and indicators of teachers' training competencies for Working in Mutual Enterprise between Entrepreneurs and Educational Institutions under the Office of the Vocational Education Commission in the Eastern Economic Corridor: EEC consists of 5 components and 30 indicators as follows: 1) Coaching psychology consists of 7 indicators. 2) The preparation of a vocational training plan consists of 5 indicators. 3) Coaching techniques consist of 8 indicators. 4) Teacher trainers and teacher professional ethics of the teaching profession consist of 5 indicators. 5) Measurement and evaluation of vocational training consist of 5 indicators, results of the appropriate evaluation of the components and indicators by experts, it was found to be appropriate at the highest level.

II. The current state of teachers' training competencies overall and in each aspect was moderate, desirable state overall and in each aspect was at the highest level, methods for developing the competency of teachers' training competencies, adhere to the development principle of 70: 20: 10 by using various development methods according to the opinions of the respondents can be sorted from descending order, consists of (1) Self-development (2) Training (3) Workshops/Learning Exchange (4) Coaching (5) Mentors and Mentoring, and priorities of competency development needs were (1) preparation of a professional training plan, (2) measurement and evaluation of vocational, (3) coaching techniques, (4) coaching psychology, and (5) teacher trainers and the ethics of the teaching profession, respectively.

The means of the current states, desirable states, and modified priority needs index is shown in Table 1.

Table 1. Shows the means of the current states, desirable states, modified priority needs index, and priority of teachers' training competencies for working in a mutual enterprise

Teachers' Training Competencies for Working in Mutual Enterprise	Current state (D)	Desirable state (I)	PNI_{modified}	Priority
1. Coaching psychology	2.75	4.62	0.680	4
2. Preparation of a professional training plan	2.69	4.75	0.765	1
3. Coaching techniques	2.75	4.70	0.709	3
4. Teacher trainer and the ethics of the teaching profession	2.78	4.61	0.658	5
5. Measurement and evaluation of vocational training	2.68	4.64	0.731	2
Total	2.73	4.66	0.706	

III. The Program for Enhancing Teachers' Training Competencies for Working in Mutual Enterprise between Entrepreneurs and Educational Institutions under the Office of the Vocational Education Commission in the Eastern Economic Corridor (EEC) consists of 7 components, namely: 1) principles, 2) objectives, 3) contents and methods of development, contents consist of 5 Modules as follows: Module 1 Psychology for teaching, Module 2 Preparing a professional training plan, Module 3 Teaching techniques, Module 4 Teacher trainer and ethics of the teacher profession, Module 5 Training measurement and evaluation, and 5 methods of development consists of (1) Self-development (2) Training (3) Workshop/learning exchange (4) Coaching (5) Mentor and being mentors

5) measurement and evaluation, 6) Expected outcomes, and 7 success conditions, using a development period of 160 hours. The results of the program assessment by experts were suitability, usefulness, and possibility at the highest level. The program for enhancing teachers' training competencies for working in the mutual enterprise between entrepreneurs and educational institutions under the office of the Vocational Education Commission in the Eastern Economic Corridor (EEC) is shown in Figure 2.

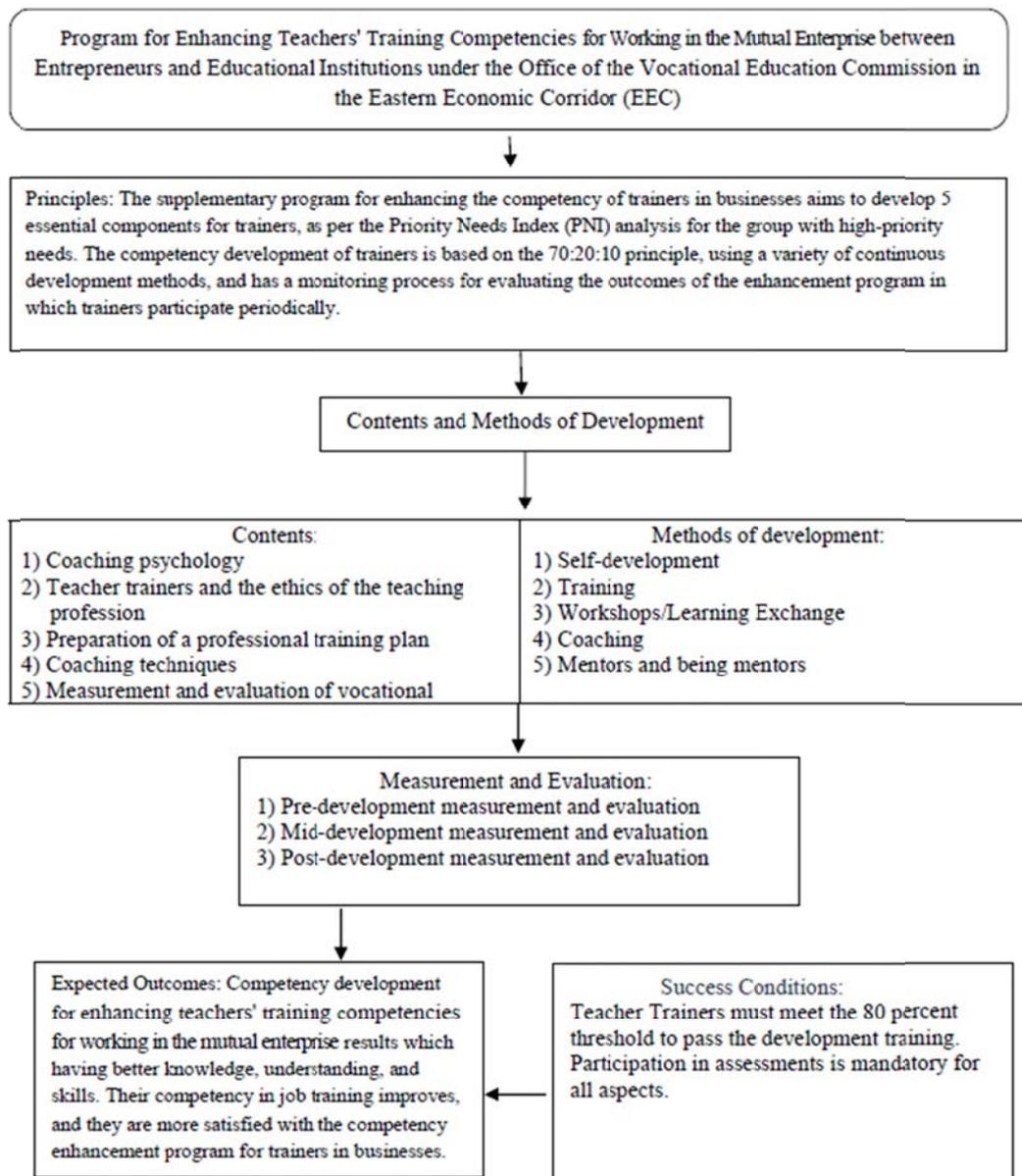


Figure 2. Program for enhancing teachers' training competencies for working in the mutual enterprise between entrepreneurs and educational institutions under the Office of the Vocational Education Commission in the Eastern Economic Corridor (EEC)

IV. The results of implementing a Program for Enhancing Teachers' Training Competencies for Working in Mutual Enterprise between Entrepreneurs and Educational Institutions under the Vocational Education Commission in Eastern Economic Corridor: EEC, it was found 4) The results of implementing the program to enhance teachers' training competencies in the workplace found that (1) the knowledge of the teachers training in the workplace before the development received an average score of 17.53 (58.44%) out of a full score of 30 after development received an average score of 25.86 (86.22%). Knowledge after development was higher than before development and was statistically significant at the .01 level. (2) The overall performance before development was moderate after development was at the highest level, and (3) the satisfaction assessment results of program participants overall and each aspect were at the highest level.

7. Conclusion and Discussion

According to the research results, there are some interesting issues that can be discussed as follows:

I. The competency component and indicators of teachers' training competencies for Working in Mutual Enterprise

between Entrepreneurs and Educational Institutions under the Office of the Vocational Education Commission in the Eastern Economic Corridor: EEC confirmed by experts. Overall, it was at the highest level. These reasons for research results are that workplace trainers have competencies that cover knowledge, abilities, skills, and desirable characteristics. These competencies include the ability to control, supervise, and follow up on the professional experience training of students in the workplace. Trainers should also be able to manage learning in a consistent and systematic manner, with an emphasis on cultivating morals, ethics, and the exchange of knowledge. Workplace trainers should also be able to create new knowledge in the profession through self-development and continuous work development. They should conduct themselves as a model according to the teacher professional ethics of the trainers, and support and promote learning management, teaching techniques, and the ability to measure and assess based on actual conditions. These components and performance indicators were obtained from literature reviews from many scholars, namely: The Secretariat of the Teachers Council of Thailand (2011), Office of the Vocational Education Commission (2013), Department of Skill Development (2014), Morarai (2015), Institute of Professional Qualifications (Public Organization) (2016). This makes the components and performance indicators reliable, and the result of the suitability assessment was at the highest level. This is consistent with the research of Sangsri (2013) on the development of learning resources in the workplace. A learning center model was developed to promote lifelong learning for workers. The model consists of 12 components: the purpose of the learning center, the location of the learning center, the person responsible for identifying the knowledge that workers need, the type of printed media that should be arranged, the content of the printed media, the type of electronic media, the activities that should be organized, the budget, the things that workers want the establishment to help with, and the participation of workers in learning centers. This is consistent with the research of Thonglert (2012) who studied the research on the innovation of bilateral vocational education administration in vocational institutes. It was found that the state of administration of bilateral vocational education in educational institutions was at a high level. The innovation of bilateral vocational education administration found that there were 7 components: bilateral vocational education administration, Bilateral vocational education system, Bilateral vocational education policy, Cooperation in organizing vocational education in a bilateral system, The measurement and evaluation of the curriculum, and student characteristics by experts agree that the bilateral vocational education administration innovation is accurate, comprehensive, appropriate, feasible and beneficial.

II. The current state of the competency of teachers' training for Working in Mutual Enterprise between Entrepreneurs and educational institutes under the Vocational Education Commission in Eastern Economic Corridor: EEC, overall was moderate. The desirable states of teacher's training competencies in Mutual Enterprise between Entrepreneurs and educational institutes under the Vocational Education Commission in Eastern Economic Corridor: EEC was at the highest level. Methods for enhancing the competency of trainers in enterprises that cooperate with educational institutes under the Vocational Education Commission in Eastern Economic Corridor: EEC, according to respondents' opinions, include 1) self-improvement 2) training 3) practical meetings/experience exchanges 4) job coaching 5) trainers and being a trainer, and priorities of competency development needs, which are and priorities of competency development needs were (1) preparation of a professional training plan, (2) measurement and evaluation of vocational, (3) coaching techniques, (4) coaching psychology, and (5) teacher trainers and the ethics of the teaching profession, respectively. These reasons for research results are that workplace trainers may lack the skills and knowledge to transfer knowledge and academic principles in teaching according to the guidelines for learning management according to the specified curriculum. This can cause gaps in communication or preparation for teaching work. Workplace trainers may not be specialized in the field of teaching, such as psychology for teaching, preparation of a professional training plan, teaching techniques, measurement and evaluation of vocational training, etc. Therefore, workplace trainers need to develop skills, knowledge, and principles of learning management for effective teaching. This is consistent with the research of Srirakul (2013) who has studied research on the development of vocational education management in the bilateral system of Nong Khai Technical College. It was found that the current conditions and problems in bilateral education management inefficient management are on the curriculum side, there is no direct bilateral system curriculum. Students are not proud of their course completion. The management of teaching and learning lacks continuity. Teachers do not want to teach because students lack interest. The lack of measuring of participation between educational institutions and enterprises. As for the internship in the workplace, there is no mentor to supervise students and interns like normal employees, without teaching skills. In terms of cooperation between educational institutions and enterprises, there is a lack of good interaction. There is no collective agreement, and the school does not provide in-depth information about trainees, issues that need improvement or development well as parents' expectations on the achievement of the bilateral vocational education management model, and the desirable characteristics of students who graduated from the curriculum.

III. The program for Enhancing Teachers' Training Competencies for Working in Mutual Enterprise between Entrepreneurs and Educational Institutions under the Vocational Education Commission in Eastern Economic Corridor: EEC consists of the following: 1) principles, 2) objectives, 3) contents and methods of development, content consist of 5 modules as follows: Module 1 psychology for teaching, Module 2 preparing a professional training plan, Module 3 teaching techniques, Module 4 teacher trainer and ethics of the teacher profession, and Module 5 training measurement and evaluation, and 5 methods of development consist of (1) Self-development (2) Training (3) Workshop/learning exchange (4) Coaching (5) Mentor and being mentors, and 5) measurement and evaluation, using a development period of 160 hours. There is a method for developing trainer competencies in workplaces that cooperate with educational institutes under the Vocational Education Commission in Eastern Economic Corridor: EEC, adhering to development principle: 70: 20: 10. The development process has been defined into 4 phases, namely, Phase 1 Preparation, Phase 2 Training, Phase 3 Learning from Operations and Exchange of Knowledge, and Phase 4 The evaluation of program evaluation results. The results of the preparation of a manual for the program to enhance the competency of the trainers in the enterprises that cooperate with educational institutions under the Vocational Education Commission in Eastern Economic Corridor: EEC consists of 3 parts: Part 1 is an introduction, Part 2 is a program to enhance the competency of trainers in enterprises that cooperate with educational institutes under the Vocational Education Commission in Eastern Economic Corridor: EEC, and Part 3 is the introduction of a program to enhance the competency of trainers in enterprises that cooperate with educational institutions under the Vocational Education Commission in Eastern Economic Corridor: EEC to be used in enhancing the competency of trainers in the workplace. The results of the program assessment by experts were suitability, usefulness, and possibility at the highest level. These reasons for research results are that the development of workplace trainers' competencies through a comprehensive and continuous program is a way to enhance the knowledge and skills of learners and produce and develop human resources to support the modern industry. Workplace trainers play an important role in this process, as they are responsible for not only training but also facilitating learning. They must be able to adjust the learning process to keep up with changes in the industry and ensure that learners gain the skills, knowledge, and professional competence they need to succeed in the future. This is consistent with the research of Sukwan (2019) who studied research on the creation of a teaching model for vocational students in the bilateral system in the category of industrial subjects of trainers in the workplace for the creation of teaching model for vocational students in the bilateral system in the category of industrial subjects for trainers in the workplace. The results of the study were as follows: In the workplace (GEAR +3 Coaching Model) consists of 4 steps of teaching (GEAR) namely, 1) Preparing the team for training planning (Group Planning), 2) The educating stage Educating and Coaching, 3) Assessment and Evaluation, and 4) Reaction and Standard Setting. There are 3 parts (+3) of teaching support conditions, consisting of 1) Bilateral vocational education management standards, and 2) Competencies of trainers in the workplace, and 3) Teaching support mechanisms, and 4) Efficiency of the training model teaching job consists of a) The quality of the teaching style and, b) The teaching competency of the trainers in the workplace on the use of the teaching model was at a high level.

IV. The results of the Program for Enhancing Teachers' Training Competencies for Working in Mutual Enterprise between Entrepreneurs and Educational Institutions under the Vocational Education Commission in Eastern Economic Corridor: EEC are as follows. There is score before development, the average score was 17.53, representing 58.44 percent, and there was the score after development received an average score of 25.86, representing 86.22 percent, indicating that trainers in enterprises that cooperate with schools under the Vocational Education Commission Eastern Economic Corridor: EEC had higher scores after development than before development, and all teachers passed the criteria of 80 percent. The results of the teacher competency assessment in enterprises that cooperate with educational institutes under the Vocational Education Commission in Eastern Economic Corridor: EEC by assessment before development is moderate, and after development, the overall level was at the highest level. The results of the satisfaction assessment of the trainer competency building program in the establishments that cooperated with educational institutes under the Vocational Education Commission in Eastern Economic Corridor: EEC was at the highest level. These reasons for research results are that the workplace trainers may have learned from the learning module, which includes interesting learning activities and various development methods that can stimulate interest very well. In addition, the workplace trainers have undertaken activities as assigned based on theoretical concepts and principles to create module lessons. It is consistent with the research of Pannuek (2011) has conducted research on The research and development of the basic education school administrator competency development program found that 1) the basic education school administrator competency development program consisted of 4 parts: Part 1: Leadership, Part 2: Details of the basic education school administrator competency development program, Part 3: Efficiency evaluation tool for a competency development program for basic education institute administrators in the field, and Part 4: guidelines, conditions,

and indicators for success in implementing the basic education school administrator competency development program, competency of administrators of basic education institutions. Overall, all aspects were at a high level. 2) After the development according to the competency development program for basic education institute administrators in the experimental group have the knowledge and skills in accordance with the competency of administrators of basic education institutions, new knowledge, and skills are put into practice, and the performance from the performance of duties was higher than before development with statistical significance at the .01 and .05 levels. 3) After the development according to the basic education school administrator's competency development program, the experimental group had knowledge and skills according to the basic education school administrators' competencies. The performance from the performance of duties was significantly higher than the control group at the .01 level.

For the above reasons, as a result, the researcher developed teachers' training competencies enhancing program for working in the mutual enterprise between entrepreneurs and educational institutions under the Vocational Education Commission in Eastern Economic Corridor: EEC has awareness of the value and that such development program is useful, appropriate, feasible, and valid. It can be used in real situations.

8. Suggestions

8.1 Suggestions for Using

The Office of the Vocational Education Commission should recognize and give importance to developing teachers' training competencies for working in the mutual enterprise between entrepreneurs and educational institutions under the Vocational Education Commission in Eastern Economic Corridor: EEC. The development of the program will have a continuous and systematic nature and will affect the development of teachers' training competencies for working in the mutual enterprise between entrepreneurs and educational institutions under the Office of the Vocational Education Commission further efficiently.

The Office of the Vocational Education Commission should promote and support speakers with knowledge and ability or have specific expertise in line with the content in the program to pass on the knowledge to those who are developing, gaining knowledge, understanding, and be able to apply in teaching and learning effectively.

8.2 Suggestions for Further Research

There should be research on confirmatory factor analysis of the teachers' training competencies for working in the mutual enterprise between entrepreneurs and educational institutions under the Vocational Education Commission in the Eastern Economic Corridor: EEC to develop teachers' training competencies for maximum efficiency and effectiveness.

There should be follow-up research or further education in terms of applying the program to enhance other competencies of teachers' training under the Office of the Vocational Education Commission.

There should be qualitative research about implementing the teachers' training competencies enhancing program for working in the mutual enterprise between entrepreneurs and educational institutions under the Vocational Education Commission in the Eastern Economic Corridor: EEC to take action seriously.

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Authors contributions

Mr. Waroj Pinta and Assistant Professor Dr. Chaoyuth Sirisuthi were responsible for the study design and revising, Mr. Waroj Pinta was responsible for data collection, and data analysis, Dr. Pha Agsonsua drafted the manuscript and Assistant Professor Dr. Chaoyuth Sirisuthi revised it, All authors read and approved the final manuscript, and Professor Dr. Chaoyuth Sirisuthi was responsible for the publication and corresponding manuscript.

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