A Model for Developing Technical Colleges to Be Learning Organization

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ABSTRACT

The purposes of this research were to investigate direct and indirect influences of factors on being learning s of technical colleges, to design a model for developing technical colleges to be a learning organization, and to implement and evaluate the model. The research methodology was divided into three phases. Phase 1 focused on contextual study of direct and indirect influences of factors on being a learning organization. The population was 120 technical colleges in Thailand, and the samples were 92 technical colleges. The data was collected by questionnaire and analyzed by the computer program. The LISREL method was employed for linear analysis. Phase 2 : a model was designed for developing technical colleges to be a learning organization through focus group, brain storming methods and workshops. Thirty research participants consisted of chief executives teachers, educational personnel, students, parents, academicians, education committee members, and technical college administrative committee members. Phase 3 : the model was implemented to the target population and evaluated by Multivariate Analysis of Variance (MANOVA : Repeated Measure). The research findings showed that the factors significantly affected being a learning organization at the .05 level. The four high rated factors included 1) teacher and staff development, 2) academic leadership, 3) vision, mission and strategies and technology including work system. The model for developing technical colleges to be a learning organization consisted of four main areas with 12 activities: 1) teacher and staff development and practice -based training, 2) academic leadership and practice-based training, 3) scope of development, 4) analysis of organization, 5) workshops, 6) review and improvement, six training courses: Microsoft Word , Microsoft Excel , Internet , E-mail , Microsoft Power Point and computer program for research. Lastly, the findings indicated that the overall

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result of the model implementation was significantly better than that of before using the model at the .05 level. In conclusion, the study indicates that the model is efficient and practical for developing technical colleges to be a learning organization.

Keyword : Development Model Technical Colleges Learning Organization

Introduction

United Nations Educational, Scientific, and Cultural Organization: UNESCO (2002 : 1) claims that 80 percent of labors are from vocational man power. The main goal of vocational education is to produce skillful labors for labor markets. The labors have an opportunity to find a good job and earn more money from their regular work for improving their life quality. Concepts of learning organization are an alternative educational strategy for professional progress. Weerawut Makhasiranont (2002 : 22) states that building learning organization is a key indicator for creativity, and successful administration of organization

Technical colleges have adopted learning strategies of the vocational colleges focusing on the educational level of vocational certificate and high vocational certificate. Three important learning strategies for improving students' competency are 1) practice and skill-based curriculum, and 2 technology-based curriculum, and 3) job-creation based curriculum.

According to documentary study, it is concluded that two types of learning organization: process and result of new knowledge. It is obvious that technical colleges are both learning and sharing organization. As a result, system and organizational culture has been changed, which the phenomena is resulted from continuous learning process, and the results are able to predict the future (Peter Senge, 2000:369-389).

Technical colleges have developed strategies for efficient vocational curriculum management focusing on the excellent vocation. Consequently, the curriculum has been improved to be more flexible for independent education. Additionally, the vocational colleges have signed bilateral agreement with the private sectors and workplaces to develop human resources. According to a survey of the previous applicants, it was found that the ratio of vocational applicants and elementary applicants was 36:64 (the Office of Vocational Education Commission: 2013). The government has established policies on increasing the number of applicants for vocational education (50:50). In the developed countries, the number of students in vocational education are always more than those of elementary education. Additionally, students in technical colleges have dropped out (15-25%). Therefore, the

author has conducted research on the influences in being a learning organization, and designing a model for developing an excellent learning organization.

Objectives

1. To analyze factors influencing being a learning organization of technical colleges

2. To design a model for developing technical colleges to be a learning organization

3. To implement and evaluate the model for developing technical colleges to be the excellent learning organization

Hypotheses

1. The linear theoretical relations between administrative factors and a learning organization are consistent with the empirical data for all factors of both direct and indirect influences.

2. The operation of teachers and educational personnel of technical colleges after implementing a model is better than that of before implementing the model.

Scope

The research was divided into three phases:1) contextual study of both direct and indirect factors influencing being a learning organization of technical colleges, 2) model design for technical college development, 3) implementing and evaluating the model.

Research Methodology

Phase 1 : the quantitative research was employed to analyze both direct and indirect

factors affecting being a learning organization of technical colleges.

Population was 120 technical colleges throughout Thailand. The Taro Yamane method was employed for calculating sample size, and the samples was 92 technical colleges selected by the simple random sampling method (Rungsan Singhalert. 2008 : 70-77).

Variables:

Independent variables were atmosphere and culture of organization and academic leadership.

Endogenous Latent Variables were vision, mission an strategies; structure of technical colleges, technology and work system, administration, management, teacher and staff development, operation of teachers and staff, motivation and goal and feedback.

Dependent variables were being a learning organization.

Research instrument was questionnaire.

The data analysis consisted of the results of general information of technical colleges. The descriptive statistics were mean, standard deviation, percentage, and frequency. The Structural Equation Model : (SEM) was used to test hypothesis. The LISREL program was used to analyze the relations between factors influencing being learning organization at the .05 level of statistical significance.

Phase 2 : the qualitative research was used to design a model for developing technical colleges to be a learning organization.

The target population was thirty participants consisting of chief executives teachers,

educational personnel, students,parents, academicians, education committee members, and technical college administrative committee members. They were selected by the purposive random sampling method.

The model was designed based on the results of phase 1 through workshop, focus group and brainstorming methods.

Phase 3 : The model was implemented to Nong Khai Technical College.

Independent variable was a model for developing the technical college, and the dependent variable was a learning organization.

Data was collected from teachers and staff of Nong Khai technical college. The data was results of pre-test and post-test of the model implementation. The data was analyzed by MANOVA (Repeated Measure).

Results

1. The findings showed that the factors significantly affected being a learning organization at the .05 level. The four most factors affecting the learning organization were teachers and staff development (.38), academic leadership (.32) vision, mission and strategies (.28) and technology and work system (.11).

2. The model for developing a learning organization consisted of twelve activities : 1) teacher and staff development and practice -based training, 2) academic leadership and practice-based training, 3) scope of development, 4) analysis of organization, 5) workshops, 6) review and improvement, six training courses : Microsoft Word , Microsoft Excel ,

Internet , E-mail , Microsoft Power Point and computer program for research.

3. The findings indicated that the overall result of the model implementation was significantly better than that of before using the model at the .05 level. In conclusion, the study indicates that the model is efficient and practical for developing technical colleges to be a learning organization.

Discussion

1. Four main factors influenced significantly being a learning organization consisting of teachers and staff development, academic leadership, vision, mission and strategies and technology and work system. The results will be discussed as follows.

1.1 The teacher and staff development affects the success of learning organization. Suwakit Sripatha (2007:3) states that human resource development is necessary for development of all fields. Learning process is important to develop knowledge, value, attitudes and quality of human resources for all areas of country. Somkid Soinam (2004 : 74) studies on developing a model for a learning center of secondary schools in the northeast of Thailand, and he indicates that the administrative factors are significantly able to predict a good learning organization. The factors consisted of teacher and staff development. Wirot Saratana (2002:103-109) has asserted that human resource is a key factor for organizational improvement, and the high quality of educational personnel is necessary for learning

organization development, and his study indicates that self-adaptation, regular self-development and academic leaderships affect significantly the establishment and development of learning organization.

1.2 The academic leaderships affect significantly the achievement of a learning organization. Wirot Saratana (2002: 102-109) studies on the administrative factors affecting the learning organization, and he suggests that school administrators should be a transformation leader rather than a transactional leader. The administrators are a key person to motivate and encourage teachers to achieve the goal of organization. Kaiser. (2000 : 51-349) has asserted that intention and devotion of school administrators are leaderships affecting the achievement of vision and mission of organization. Smith & Andrews. (1989 : 367) claim that academic leaderships emphasize curriculum and the outcomes and the achievement of university curriculum.

1.3 Technology and work system affects the achievement of learning organization. Marquardt & Reynolds (1994 : 389-409) claim that learning technology should be applied appropriately to a learning process, data collection and management. Network and data base should be established, and artificial intelligence should be applied to learn and exchange knowledge of personnel within and inter organization. For example: video conference, and simulation games). Bennett & O Brien (1994 : 41-49) state that smooth information flow depends on the modern

technology for information management and distribution. The computer system supports the communication for officers and work process.

1.4 Vision, mission and strategies affect the achievement of learning organization. Marquardt & Reynolds (2000: 389-409) state that vision of learning organization is created by the agreement of all colleagues. Mission is a drive to achieve the goal of organization based on value, philosophy, concepts and beliefs of personnel in the same organization. Strategy refers to learning strategy focusing on action learning process: planning, implementing and evaluating. Kaiser (2000: 51-349) has proposed that three factors influence mission and strategy of learning organization consisting of system thinking, external assessment, and knowledge enhancement.

2. The finding indicates that Nong Khai technical college is a more learning organization after using the model. The results may be caused by teacher and staff development, knowledge exchange, learning network, and peer groups method for knowledge exchange, creating innovation including student development. Class room action research and seminar attention organized by public and private sectors, including technology and work system development.

Suggestions

The findings indicate that factors influence learning organization consisting of teachers and staff development, academic leadership,

vision, mission and strategies, and technology and work system through many different training projects focusing on four main areas : teachers and staff development, academic leadership, vision, mission and strategies, and technology and work system, and six training courses: Microsoft Word , Microsoft Excel, Internet , E-mail , Microsoft Power Point and computer program for research.

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