

THE DEVELOPMENT MODEL FOR ADMINISTRATORS OF THE COLLEGES IN THE DEPARTMENT OF VOCATIONAL EDUCATION, MINISTRY OF EDUCATION, THAILAND

Chompunuch Buabangorn

*Vocational Education Administration, King Mongkut's Institute of Technology Ladkrabang,
Chalongkrung Road, Ladkrabang, Bangkok 10520, Thailand*

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ABSTRACT

The purposes of this research were to study the effectiveness in management of vocational education of colleges under the Department of Vocational Education, to investigate the relationship between administrative factors, namely, administrators' background, their management behavior, ethics and effectiveness, to examine factors affecting the effectiveness in management of vocational education of the colleges, and to suggest a suitable development plan for administrators.

The samples consisted of 200 administrators and 400 instructors from 200 vocational colleges. The instruments used were two questionnaires, one for administrators and the other for instructors. SPSS for Windows was used to analyze the data. The statistics used were frequency, percentage, mean, standard deviation, simple correlation, multiple correlation and stepwise multiple regression analysis. A development plan for administrators was subjected to a content analysis.

It was found that as a whole, administrators and instructors rated highly the effectiveness of management of vocational education was rated at a high level. The relationship between administrative factors and the effectiveness of management of vocational education, based on the opinions of administrators and instructors, was statistically significant at 0.01. The highest level variable was management promoting learning reform, followed by academic leadership, management of changes, leadership and management ethics, respectively. The factors affecting the effectiveness in management of vocational education, based on the opinions of administrators and instructors, were statistically significant at 0.05. The best prediction of effectiveness was management promoting learning reform, followed by management ethics, management of changes, and academic leadership. The development plan for the administrators should be based on a Training Development Model incorporating the four factors mentioned as follows: management promoting learning reform, management ethics, management of changes, and academic leadership.

Keywords : Development model for administrators, vocational education.

INTRODUCTION

National development requires a qualified population, and a well-designed educational system. Thus, a school administrator is a key person to contribute to a well-designed curriculum. To achieve this, administrators have to be well informed so that they can keep pace with global changes and adjust the curriculum to suit such changes. The Department of Vocational Education plays an important part in developing the country since the colleges that it manages produces semi-skilled, skilled, technical and technological labor. These people may determine whether the country can compete with others in the world arena.

Vocational education prepares students for life by aiming to equip them with the capability to earn a living after graduation, whether it be producing, transforming or distributing products. To achieve this goal, administrators of vocational colleges have to be well informed about changes and able to adjust and implement plans accordingly. There are also factors that affect the administrators' management, such as their background, their management behavior, and their management ethics. This is why the researcher decided to look into these factors.

The objectives of this study were aimed at studying the effectiveness of vocational education management in vocational colleges, to investigate

the relationship between the background, management behavior and ethics of educational administrators and their effectiveness, to examine factors affecting the effectiveness of vocational education management in vocational colleges based on administrators' background, management behavior and management ethics, and to suggest a suitable development plan for administrators in vocational colleges.

Conceptual framework

The researcher has adopted the concept of Pendley (1985), which states that the administrators' background-sex, age, education and management experience-affects the education management of education in their colleges. In addition, Office of the National Education Council (2001) has identified the following questions that administrators must process to run a college effectively, i.e., leadership, management promoting learning reform, academic leadership, management of changes, and management ethics. The investigation of effectiveness of vocational education management is based on the concept of Hoy and Miskel (1991) who identified the following two indicators for determining the success of an educational institution. The indicators are consisting of the ability to improve the institution, and the ability to integrate the management in the institution.

Based on the aforementioned concepts, the framework has developed as shown in Figure 1.

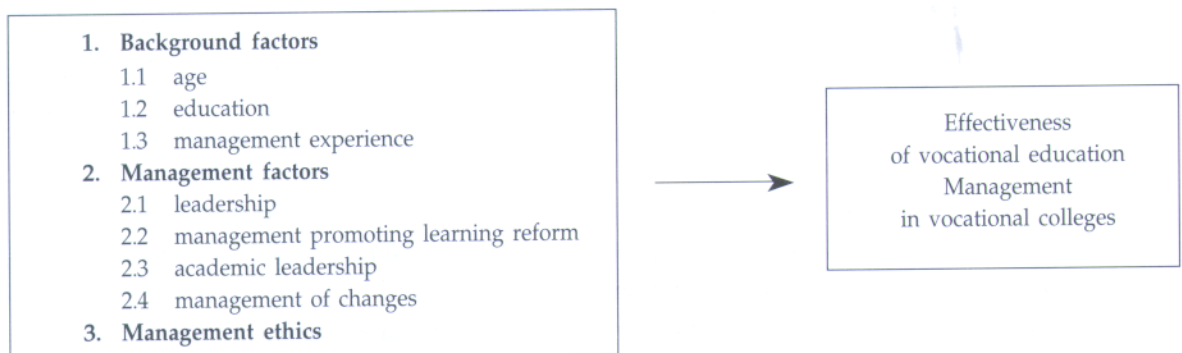


Figure 1. Conceptual framework

The effectiveness of vocational education management in vocational colleges is probably resulting from the following factors. Age, education and management experience are considered as factors concerning the administrators' background. The management behavior factors are consisting of leadership, management promoting learning reform, academic leadership, and management of changes. The last factor is concerning with management ethics.

Remarks

Leadership means the management behavior of administrators which promotes the educational personnel in cooperative works to achieve the organization goals and objectives effectively.

Academic leadership means the administrators' behavior in the application of new knowledge to the teaching and learning organizing including the instructors in carrying out works in order to achieve the goals.

METHODS

Population

The population used in this study consisted of 413 administrators of vocational colleges and 17,954 instructors from 413 vocational colleges under the jurisdiction of the Department of Vocational Education, Ministry of Education, Thailand in the academic year 2003.

Sample

Krejcie and Morgan Table (1970) was used as a tool to take the sample size. The sample group consisted of 200 administrators and 400 instructors. The samples were selected by the use of Multistage Random Sampling that included the division of 12 education regions. Each education region that was divided by the number of provinces and was totally comprised of 200 selected institutions. The administrators and

instructors in each institution were selected in specific number.

Variables

Independent variables

Factors concerning administrators were classified according to background and consisting of age, education, and management experience. Management behaviors consisted of leadership, management promoting learning reform, academic leadership, and management of changes. Finally, management ethics were also included in independent variables.

The effectiveness of vocational education management in vocational colleges is taken into account for dependent variable.

Research instrument

The research instruments consisting of two questionnaires that were designed and developed by the researcher based on theoretical questionnaire were used. They were characterized as two modules of selective identify mode and five levels of rating scale, one for administrators and the other for instructors.

Module 1. Questionnaire for administrators was classified into four parts.

Part 1. Based on administrators' background-age, educational level, experience, the questionnaire was made as checklists and close text, and comprised three topics.

Part 2. Based on administrators' management behavior, the questionnaire was consisting of five levels of rating scale that was classified as the followings; 1) the questionnaire was developed from Multifactor Leadership Questionnaire (MLQ) regarding to administrators' leadership and was adopted from the concept of Bass and Avolio (1990) and comprised 25 topics, 2) the questionnaire that was designed by the researcher based on the conceptual framework of the Office of the National Education Council

(2001) regarding to administrators' management promoting learning reform and comprised 15 topics., 3) the questionnaire, namely, Principle or Assistant questionnaire of Trusty, the University of Tennessee (1986) was developed regarding to administrators' academic leadership and comprised nine topics, and 4) the questionnaire was developed from the concept of Carnell (1990) and Hall and Others (1984) regarding to administrators' management of changes and comprised nine topics.

Example of questionnaire regarding to administrators' behavior.

| Item | Content | Level of performing | | | | |
|---|---|---------------------|---|---|---|---|
| | | 5 | 4 | 3 | 2 | 1 |
| Leadership | | | | | | |
| 1 | You ask for opinion from assistant directors about the administration. | | | | | |
| 2 | You promote instructors' leadership in operation. | | | | | |
| Management promoting learning reform | | | | | | |
| 1 | You establish internal quality assurance in the college. | | | | | |
| 2 | You contribute to the community in organising teaching and learning. | | | | | |
| Academic leadership | | | | | | |
| 1 | You cooperate with instructors in setting the academic goals and objectives. | | | | | |
| 2 | You cooperate with instructors in setting the academic standards | | | | | |
| Management of changes | | | | | | |
| 1 | You cooperate with instructors in the analysis and the synthesis of problems. | | | | | |
| 2 | You cooperate with instructors in planning for facilitating changes in every aspects. | | | | | |

Five levels of determination

| Value score | Level of performing |
|-------------|---------------------|
| 5 | High |
| 4 | Moderately high |
| 3 | Average |
| 2 | Moderately low |
| 1 | Low |

Part 3. Based on administrators' management ethics, the questionnaire that was designed by the researcher based on the aspects of moral and ethics development (1990) was five levels of rating scale and comprised 13 topics.

Example of questionnaire regarding to management ethics.

| Item | Content | Level of performing | | | | |
|------|-------------------------------|---------------------|---|---|---|---|
| | | 5 | 4 | 3 | 2 | 1 |
| 1 | You are punctual | | | | | |
| 2 | Your management shows justice | | | | | |

Part 4. Based on effectiveness in vocational education management, the questionnaire that was developed from Index of Perceived Organizational Effectiveness (IPOE) by Hoy and Miskel (1991) was five levels of rating scale and comprised 20 topics and can be classified into two dimensions. They are the ability in the development of education management in the colleges 10 topics, and the ability in the management integration in the colleges 10 topics.

Example of questionnaire regarding to the effectiveness of vocational education management.

| Item | Content | Level of performing | | | | |
|-------------------------------|--|---------------------|---|---|---|---|
| | | 5 | 4 | 3 | 2 | 1 |
| Ability in development | | | | | | |
| 1 | You and instructors work cooperatively in reviewing the education management goals in responding to the needs of private and government sectors. | | | | | |
| 2 | You and instructors accept the changes in roles and positions | | | | | |
| Ability in integration | | | | | | |
| 1 | You assign duties and responsibilities to all instructors evenly. | | | | | |
| 2 | You motivate instructors to work with willingness and sacrifice. | | | | | |

Module 2. Questionnaire for instructors was classified into three parts. Part 1 was based on administrators' management behavior. The questionnaire was consisting of the factors of leadership, management promoting learning reform, academic leadership, and management of changes. Part 2 was based on administrators' ethics in the vocational colleges. Part 3 was based on effectiveness in vocational education management of the colleges under the Department of Vocational College.

These three parts of questionnaire were the same as the afore-mentioned part 2, 3 and 4 of the questionnaire for administrators.

Instrument testing

The two questionnaires were designed within the conceptual framework of the researches and related theories. They were checked for the language appropriateness and the content validity resulting in clearness and completeness of all

areas of study. Five experts were subsequently reviewed the questionnaires to ascertain the content validity and the language appropriateness. The questionnaires were finally revised according to the experts' suggestions. Then, the two questionnaires were experimented with 30 administrators and 60 instructors in the colleges that were not sampling by simple random sampling. The questionnaires were then analyzed in term of reliability by Alpha Coefficient proposed by Cronbach (1970: 16). Regarding to the opinions of administrators, it revealed that the questionnaire based on leadership showed reliability of 0.91. It was also found that the questionnaire based on management promoting learning reform showed reliability of 0.90, the questionnaire based on academic leadership showed reliability of 0.78, the questionnaire based on management of changes showed the reliability of 0.85, the questionnaire based on management ethics showed reliability of 0.89, and the questionnaire based on effectiveness of the vocational education management showed reliability of 0.94.

Data collection

The researcher mailed 600 sets of questionnaires to the sample group, 200 sets to administrators, and 400 sets to instructors. Only 194 sets of questionnaires (97%) were returned from administrators and 386 sets of questionnaires (96.50%) were returned from instructors.

Data analysis

SPSS for Windows was used to analyze the data according to the purposes and the assumptions.

The assumptions were analyzed in term of administrators' background factor. The statistics used was frequency and percentage.

The data of the first purpose was analyzed in order to study the effectiveness of vocational

education management. The statistics used were mean (\bar{X}) and standard deviation (S.D.). The interpretation of questionnaire scores of performing was as follows:

| Score ranges | Levels of performing |
|--------------|----------------------|
| 4.50 - 5.00 | High |
| 3.50 - 4.49 | Moderately high |
| 2.50 - 3.49 | Average |
| 1.50 - 2.49 | Moderately low |
| 1.00 - 1.49 | Low |

The data of the second purpose were analyzed in order to study the relationship between the administrators and the effectiveness of the vocational education management. The statistics used were simple correlation and multiple correlations.

The data of the third purpose was analyzed in order to study the factors affecting the effectiveness of vocational education management. The statistics used was Stepwise Multiple Regression Analysis.

The data of the fourth purpose were analyzed in order to propose the development plan for administrators of the colleges of vocational department. The analysis of this purpose was the content analysis, thus, the statistics were not used.

RESULTS

The results were described item by item according to the purposes.

It was found that the opinion of administrators rated the effectiveness of vocational education management at a moderately high level with a mean of 4.25, whereas instructors rated it the same as the administrators with a mean of 3.62. In general, both groups rated the effectiveness of vocational education management at a moderately high level and the mean average score for both groups is 3.83. Results are summarized in Table 1.

According to the second purpose concerning the relationship between background factors of administrators and the effectiveness of vocational education management, it was found that the opinions of administrators and instructors viewed the effectiveness and the relationship statistically significant at the level of 0.01. The variable most highly correlated with the effectiveness was management - promotes learning reform with a correlation coefficient 0.865. Academic leadership, management of changes, leadership and management ethics correlated 0.861, 0.861, 0.847, and 0.835, respectively. Results are summarized in Table 2.

Table 1. Mean, standard deviation, level, and order of the opinions expressed by the administrators, the instructors and both groups concerning the effectiveness of vocational education management

| The effectiveness of vocational education management | Opinions | | | |
|--|-----------|------|-----------------|-------|
| | \bar{X} | SD. | Level | Order |
| 1. Opinion of administrators (n = 194) | 4.25 | 0.53 | Moderately High | 1 |
| 2. Opinion of instructors (n = 386) | 3.62 | 0.77 | Moderately High | 3 |
| 3. Opinion of both groups (n = 580) | 3.83 | 0.76 | Moderately High | 2 |

Table 2. Correlation coefficient between the administrators' factors and the effectiveness of vocational education management based on the opinions of administrators and instructors.

| Variables | X ₁ | X ₂ | X ₃ | X ₄ | X ₅ | Y |
|---|----------------|----------------|----------------|----------------|----------------|--------|
| Leadership (X ₁) | 1.000 | .879** | .875** | .868** | .856** | .847** |
| Management which promotes learning reform (X ₂) | | 1.000 | .909** | .871** | .799** | .865** |
| Academic leadership (X ₃) | | | 1.000 | .903** | .817** | .861** |
| Management of changes (X ₄) | | | | 1.000 | .808** | .861** |
| Management ethics (X ₅) | | | | | 1.000 | .835** |
| Effectiveness of vocational educational management (Y) | | | | | | 1.000 |

**The statistical significance is .01

The opinions of administrators and instructors concerning factors affecting the effectiveness of vocational education management revealed that predictive variables of the effectiveness in vocational education management were statistically significant at 0.05. The highest predictive variable was found to be the management promoting learning reform with a regressive coefficient of 0.034, followed by management ethics, management of

changes and academic leadership with a regressive coefficient of 0.289, 0.257 and 0.117, respectively. All of multiple correlation coefficients between four predictive variables and the effectiveness of vocational education management of the vocational education colleges were 0.309. All of the variables can predict the effectiveness of vocational education management at the percentage of 82.60. Results are summarized in Table 3.

Table 3. Multiple correlations and multiple regressions of predictive variables the effectiveness of vocational education management based on the opinions of administrators and instructors.

| Predictive factors | Effectiveness of vocational education management according to administrators and instructors | | | | |
|--|--|-----------------------|------|-------|--------------------------|
| | b. | S.E. | β | t | Statistical significance |
| Fixed value Management promoting learning reform (X ₂) | .468 | .071 | | 6.582 | .000 |
| Management ethics (X ₅) | .311 | .045 | .304 | 6.914 | .000 |
| Management of changes (X ₄) | .243 | .027 | .289 | 9.054 | .000 |
| Academic leadership (X ₃) | .220 | .037 | .257 | 5.932 | .000 |
| | .109 | .047 | .117 | 2.320 | .021 |
| R = .909 | | R ² = .826 | | | |
| S.E. = .3095 | | a = .486 | | | |

P < 0.05 The coefficient expression in terms of raw score is

$$Y = .468 + .311 (X_2) + .243 (X_5) + .220 (X_4) + .109 (X_3)$$

The development plan for the administrators according to the analysis of predictive variables was developed as shown in diagram 1.

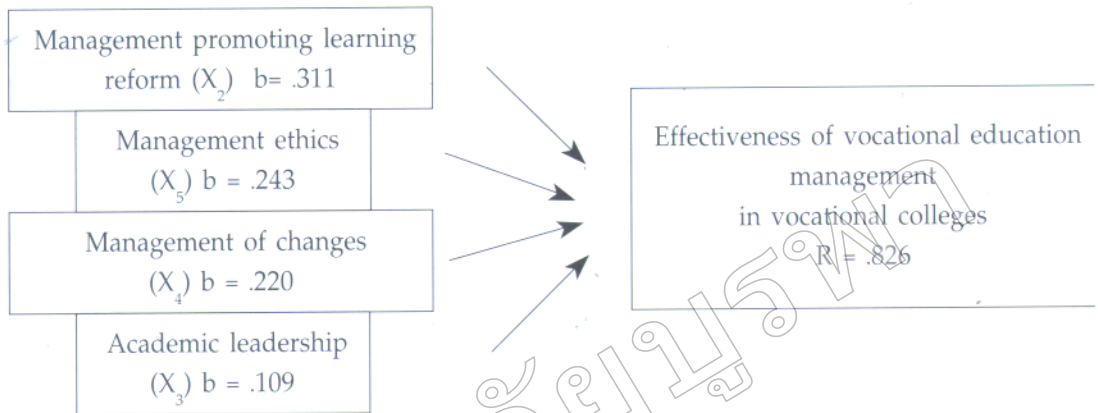


Diagram 1. The diagram of predictive variables the effectiveness of vocational education management.

Results suggested that the training model for administrators' development should embody the three factors for the training, i.e., training methodology, training contents, and training evaluation.

Training methodology is consisting of self-study, seminars, study visits, and practice. According to self-study method, administrators were given the opportunity to orient themselves by spending time during work studying related documents from various resources such as library, internet including teleconference for two weeks. The reports and documents related to the training contents need to be proposed to the project organizer who determines the scope of assignment for the self-study initially. The seminars for four days are the activity after the self-study and the seminars topics will be set specifically. The study visits for three days will be organized after the seminars to both private and government sectors, followed by the reports submitted to the project organizer after the study visits. The administrators should have the opportunity to apply theories they have learned to practice by experiencing the management during work in the

colleges for one semester. The reports of practice will be proposed to the project organizer after the completion of course.

Training contents are dealing with the appropriateness of training has been complied by analyzing comments of a group of 10 experts during the meeting of a focus group session. Administrators should know about organization management, internal quality assurance, community cooperation, environment which promotes learning and staff development in order to be equipped with management skill for promoting learning reform. In addition, they have to undergo training on student-centered curriculum design, introduction of information technology to learning reform and instilling ethics and desirable values in students. Concerning management ethics, administrators should be trained to apply spiritual principles to improve themselves and their organizations. Administrators should be trained about changes in leadership, economy, politics, society, and new educational concepts so that they can adjust their curriculum and management accordingly. In addition to dealing with academic leadership, the administrators should

be trained in curriculum development, learning processes, learning network development, academic community cooperation, academic standards, and evaluation of academic plans or projects.

The evaluation of the effectiveness after the completion of training course is conducted to all practitioners and to all activities-self study, seminars, study visits and practice. Key Performance Index (KPI) assesses the achievement in each activity.

DISCUSSION

According to the research results, it was found that several factors affected the effectiveness in management of vocational education of colleges under the Department of Vocational Education.

Based on the first purpose, which aimed at studying the effectiveness in management of the colleges under the Department of Vocational Education, it was found that both agents of administrators and instructors share the similarities of opinions about the effectiveness in management at a moderately high level. When each particular mode of the five factors, namely, leadership, management of changes and management ethics was determined, it was found that the effectiveness in management was at a moderately high level in every aspect. When the effectiveness in management as assessed by administrators and the effectiveness in management as assessed by instructors were compared, it was found that the former was higher than the latter. When the two modes were separately determined, it was found that the effectiveness in management was also rated at a moderately high level. In particular factor, the highest level of variable was management ethics followed by management promoting learning reform.

Due to the establishment of policy as prescribed by National Education Act to empower the management directly to education institutions,

the advocate of changes in roles and management of administrators in responding to the policy of the Office of the National Education Council (2001: 6-7) was required. The supportive approaches should, therefore, be initiated to the administrators in self-supervision and self-improvement. The selection as the projected institution results in increasing roles of administrators to active in successful management promoting learning reform. All education institutions need to adopt internal quality assurance and this means that there will be an emphasis on management in term of good governance. As a consequence, the administrators have to enhance the ability in development and management with the commitment to the internal quality assurance standards. Community contribution and parental participation are supportive factors. Also included are self-development, management ethics, and professional organizing of administrators that will promote learning reform and result in the development in the society as a whole.

Based on the second purpose, which aimed at investigating the relationship between administrators' background, management behavior, management ethics, and the effectiveness in management, it was rated at a statistical significance regarding to the aspects of age, management experience, leadership, management promoting learning reform, academic leadership, management of changes, and management ethics. Based on the administrators' opinions, the management behavior in leadership showed the highest relationship. Based on instructors' opinions, administrators' management behavior in management of changes showed the highest relationship. Based on the opinions of both administrators and instructors, administrators' management promoting learning reform showed the highest relationship.

Due to the fact that the vocational education management is currently directed to the policy of the education reform in both structure and

management systems, the Department of Vocational Education shifts in power from the central to the regions in order to facilitate the effectiveness and the standards of vocational education provision. Thus, it could be seen that administrators take important roles in the changing towards new orientation. This means that the education management aims to develop qualified manpower to meet the needs of labor market at all levels—semi-skilled, skilled, technical and technological workforce. (The Department of Vocational Education, 2001: 2-3)

In order to attain the educational goal, administrators need to apply management behavior involving leadership and management promoting learning reform to the management of vocational education. Importantly, administrators require the awareness and the understanding of changes in economics, society, politics including new concept of the education reform and should be able to adapt and develop the institutions to keep pace with the changing world.

Based on the third purpose, which aimed to examine factors affecting the effectiveness in the management of the colleges under the Department of Vocational Education and with regard to administrator's background, management behavior and management ethics, it was found that the factors affecting the effectiveness in the management were management promoting learning reform, management ethics, management of changes, and academic leadership.

This brings to the discussion in the aspect that new model of administrators in vocational education according to the National Education Act, 1999 directly emphasizes on the development involving the distribution of power in management to institutions. The variety in organizing vocational education, the system of grade transferring, the adoption of internal quality assurance, the establishment of community contribution, the provision of environment which

promotes learning while instilling of ethics and desirable values in learners are taken into action. (The Office of National Education Council, 2001) Consequently, the administrators need to prepare themselves in order to implement the policy.

According to the results of the present study, the administrators' opinion about the importance of their academic leadership was rated at the least. It could be said the vocational education in the period before the education reform in 1999 faced the problems of producing qualified manpower to the workforce. Also included were the rapid development and expansion of vocational education in the academics, quality and quantity, the amount of students, and technological innovation. In addition, based on administrators' opinion, each institution received limited budget allocation including the lack of personnel, equipment, and resources took a great part in rating the importance of academic leadership at the lowest level.

In effect, the emphasis will be focused on the production of manpower in response to the workforce, and that the administrators are required to shift in management behavior, in teaching methodologies including the levels of curriculum design to suit the global changes.

Based on the fourth purpose, which aimed to propose a development plan for the administrators of the colleges under the vocational education, the results revealed that the predictive variables affecting the effectiveness of vocational education management were acceptable. The researcher studied from related documents about the development plan for the administrators, including focus group brainstorming initiated by 10 experts in educational administration and vocational education in both policy and practical level. The analysis and synthesis brought about the shaping of the development plan for the administrators.

As you can see from the training model previously mentioned, the activities begin with

self-study so that administrators can orient themselves by spending time studying related documents from various sources for two weeks. After that they have to attend seminars for four days followed by study visits for three days. Then, they have to put what they have studied into practice by managing their vocational colleges for one semester. Each phase is assessed according to the set indicators. This training model is useful because it addresses the required management skills, does not take a long time and can be put into practice. Most importantly, the implementation of development plan in the future depends on the policy of vocational education and the associated agents in applying the comprehensible determination to the potential consequences of actions.

Recommendations on implementation

1. The Department of Vocational Education can specify qualifications required for administrators on the basis of these research results. It should organize management training before or during work and offer a short - time study visit to provide administrators with hands-on experience, resulting in more effective management of vocational education.

2. The findings revealed that the responsible agents could initiate the development plan for the administrators in order to develop efficiency in the management.

3. The study also initiate the new channel to other institutions that share similar characteristics in management of the development plan such as vocational education administration in private sector.

All levels of administrators and instructors should be assessed in order to evaluate the effectiveness of vocational education management in colleges as a whole. Other dimensional variables affecting the effectiveness in vocational education management should be taken into consideration for future studies. There should be

comparable studies regarding factors affecting the effectiveness of vocational education management of the colleges between private and government sectors in order to compare the similarities and the differences of those factors.

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มหาวิทยาลัยบูรพา
Burapha University