

Administrator' S Competencies for Private Vocational Colleges in Bangkok

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ABSTRACT

The objectives of this research were (1) to determine the components and indicators of administrator's competencies for private vocational colleges in Bangkok; and (2) to propose and verify the administrator's competencies model for private vocational colleges in Bangkok.

The research was a mixed method, including qualitative and quantitative research. The population consisted of 75 private vocational colleges in Bangkok, and selected to study by simple random sampling method, totaling 64 colleges, the representative of population were one administrator and four senior teachers in each college, totaling 320 persons. The instruments used for data collection were semi-structured interview and a five-level rating scale questionnaire. The statistics used for data analysis were descriptive statistics, Exploratory Factor Analysis (EFA.) and Confirmatory Factor Analysis (CFA.).

The research results reveal that (1) there were six components and 37 indicators of administrator's competencies for private vocational colleges in Bangkok, consisting of: leadership competency, directing subordinate competency, personal competency, professional competency, managerial competency, and analyzing and deciding competency; (2) the administrator's competencies model for private vocational colleges in Bangkok that developed was consistent with the empirical data. The value of Relative Chi-square (χ^2/df) = 1.91, Degree of Freedom (df) = 155, Goodness of Fit Index (GFI) = 0.95, Tucker-Lewis Index (TLI) = 0.98, and Root Mean Square Error of Approximation (RMSEA) = 0.05, all in line with specified criteria. And the key components had the weight between 0.91-0.97 higher than 0.70.

Keywords: Administrator's competencies, Private Vocational College, Bangkok

1. Introduction

Important person in education who brings about high-quality educational institution is an administrator who has competencies in administration which is a key to develop and push an educational institution forward to the success: school effectiveness. (Alexander, 2013) To this extent, it is absolutely necessary for the educational administrator in the 21st century to catch up with the rapid change of technology, information, learning method and plan to administer with professionalism. “Educational Administrator”, therefore, is a key to the success of their institutions. Due to they have to be qualified, knowledgeable, and skillful as being the head of all educational staff. Moreover, they should be able to append parents and community to cooperate and help the institutions achieving their goals, which all these properties could be defined as “Competency”. It can be said that private vocational college administrator who has high competencies will be able to induce a good turnover for the institution, which is effectiveness of private vocational college’s administration.

In the context of “Private Vocational Education”, It was initially under the supervision of the Office of the Vocational Education Commission which is a government section subsidiary to the Office of the Permanent Secretary, Ministry of Education. Later, on 12th February 2016, the Government announced an order from the head of the National Council for Peace and Order (NCPO) No.8/2016 to transfer the authorities from the Office of the Private Education Commission concerning vocational education to be under the Office of Vocational Education Commission, appending both public and private vocational education together as a result, effective from 13rd February 2016. The purpose is to conform to the policy of the Ministry of Education in terms of merging an administration of both public and private vocational education to meet a quality standard with more agility and will provide benefits in the reformation of education. Moreover, there is another section that is crucial to the development of private vocational education of Thailand, at the present which is the Association of Private Colleges of Technology and Vocational Education of Thailand under the patronage of Her Royal Highness Princess Maha Chakri Sirindhorn. The association was established by the administrators of vocational colleges since 1974 and continuingly develops the operation through time. In the present, there are 457 private vocational colleges in total under the authorities of the Office of Vocational Education Commission divided into regions, especially in Bangkok, there are 75 in total.

Educational administration nowadays is required to be consistent with the change of global society, especially the society of learning in an era of technology in which all information is connected from every part of the world. An administrator must perform his/her

duty fully and employ strategy and high-level administrative techniques that will lead an organization to success. From the study of principles and theory of an educational administrator in the 21st century can be concluded that roles and duties of educational administrator must be consisted the role of academic, discipline, evaluator, institutional policy and procedure reviewer, academic program developer, schedule setter, learning environment enhancer, teacher and staff supporter, public relations officer, and the role of the delegator. (Meado, 2016); DoDEA, 2014). And according to Driscoll (2015) and Couros (2010) the characteristics of educational administrators in the new generation should own the property of being a leader with vision, academic skills, systematic creativity, communication skill, technological skill, being confident, having a positive inspiration, being able to create a learning community, and being a good model.

The researcher is very aware that the effectiveness of school management is largely dependent on the management under the limitations of the school administration. It is one way to help the performance of the management to achieve specific goals is to develop school administrators. Therefore, professional managers must develop themselves to achieve efficiency and effectiveness in school administration (Khaminkeaw, 2019), and one of the three areas of assessment of school administrators is competency, which is a tool that is used as a basis for creating a system or setting a guideline for school administrators. Human resource development of the organization in accordance with the strategy and operational goals of the organization and applied it to the human resource management for efficiency. Therefore, the researcher interested in studying according to the conceptual framework of the analysis, synthesize the relevant documents and researches. When taken to study in this new situation? What will the administrator's competencies be like in the new era? And that being so what competencies are involved or influencing effective school administration? It is expected that the data obtained from this research will be of great benefit to private vocational school administrators. It can be used as a framework and detail to further promote administrator competencies in line with 21st century education to be strengthened. This will directly affect the school administration for higher efficiency in order to provide educational administration to be of high quality and effective as it is expected to continue.

2. Research Questions

1. What components and indicators of competencies required by Administrators?
2. What competencies model for administrators of private vocational colleges in Bangkok?

3. Research Objectives

1. To determine the components and indicators of administrator's competencies for private vocational colleges in Bangkok
2. To develop the administrator's competencies model for private vocational colleges in Bangkok.

4. Research Hypotheses

The components and indicators of the administrator's competencies for private vocational college in Bangkok was consistent with the empirical data.

5. Research Method

5.1 Research Design

Used mixed method, both qualitative and quantitative, first the qualitative to determine the components and indicators of the competencies model through content analysis from the document and research related, included 9 key informants. After that quantitative method was employed to collected the empirical data from the respondent through survey questionnaire.

5.2 Population and Sample

The population of the research were 75 private vocational colleges in Bangkok, and sampling by simple random sampling to study, totaling 64 colleges that came from the calculated by Taro Yamane formula which an error at 5%, and the representative of population were five persons included one administrator and four senior teachers in each college, totaling 320 persons.

5.3 Research Instruments

The data collection instruments, firstly, semi-structured interview form, and data record note were employed to collect data from document and experts, and secondly, used a three-part of questionnaire, it's consisted of:

Part I: Demographic variables or general information of the respondents, such as gender, age, education level, position, working years, etc.

Part II: Five-point rating scale questionnaire of administrator's competencies for private vocational colleges in Bangkok which was obtained from content analysis.

Part III: The open-end question about the commend of the respondents.

Validity and Reliability of the instrument

Through the questionnaire design, a total of 80 items were obtained. After the IOC conducted by 5 experts, it was found that overall items that were greater than 0.60 and remained.

Scale reliability, refer to the extent that the measurement instrument will consistently yield similar results when administered to the same sample under similar testing conditions. Cronbach's alpha coefficient will be used to measure the degree of the scale reliability. In this study, Cronbach's alpha coefficient, all items were higher than 0.80, overall Cronbach's alpha coefficient was 0.91, indicating that the reliability of this questionnaire is very high.

5.4 Data Collection

All data gathering by researcher under closely advised from the research committees.

The steps for data collection will be as follows:

Step 1: Request permission to collect data for research to the faculty of education, Bangkokthonburi University.

Step 2: Request a letter of recommendation for the researcher from faculty of education, Bangkokthonburi University.

Step 3: Selection the coordinating the school administrators to help assist in coordinating data collection in each institution. Those will be oriented to understand the details of the questionnaire administration and data collection.

Step 4: Carry out data collection with the selected samples by sending questionnaires to the coordinator teacher who will help for collect data with the selected samples in each private vocational college.

5.5 Data Analysis

1) Descriptive statistic for describe the variables namely frequency, percentage, arithmetic mean, standard deviation, skewness, and kurtosis, and the criteria was used to interpret the mean score were: (Best and Kahn James,1993)

1.00 – 1.49	Very low	1.50 – 2.49	Low
2.50 – 3.49	Moderate	3.50 – 4.49	High
4.50 – 5.00	Very high		

2) Exploratory Factor Analysis or EFA. was used to determine the components and indicators of administrator's competencies, in these analyzed the Bartlett's Test of Sphericity test, it was found that the Chi- Square = 41385.964 and the statistical significance = 0,000. and

KMO (Kaiser-Meyer-Olkin Measure of Sampling Adequacy) value was 0.977, which greater than 0.50, indicating that the analyzed data was most appropriate for factor analysis.

3) Composite Reliability (CR), and Average Variance Extraction (AVE) used to check the convergent validity of Confirmatory Factor Analysis measurement model. In this context the CR. Must be have 0.7 and more, and AVE must be 0.5 and more (Fornell and Larcker, 1981; Hair, et.al.,2010)

4) Inferential statistics, in order to development the model of the administrator's competencies for private vocational colleges in Bangkok. Confirmatory factor analysis (CFA) would be employed for finding and estimate the parameter in this situation as follows:

- Data analysis to take into account the suitability of variables to be analyzed for further components by analyzing the Pearson correlation coefficient. In order to determine the degree and direction of correlation, if the variables are not correlated then there is no common component. There was a statistically significant correlation at the .01 level ($p < .01$) (Nongluck Wiratchai, 1999). Bartlett's statistical analysis, which is a statistical test of the correlation matrix hypothesis between variables and Identity Matrix, considering the Bartlett's test of Sphericity and the probability that Is there an appropriate correlation to be used for further component analysis. By considering the statistical significance and analysis of the Kaiser-Myers-Allkil index. (Kaiser-Mayer-Olkin Measurers of Sampling Adequacy: MSA) Considering the criterion, a value greater than .80 indicates very good, less than .50 indicates invalid (Klein, G. (2013).

- Confirmatory Factor Analysis by testing the conformity of the structural correlation model and weighting the sub variables used to generate the empirical data indicators obtained from the weighted analysis of the data from the questionnaire. The sub variables used to generate the indicators and to verify the coherence of the research model are the theoretical models created by the researcher by analyzing second-order confirmation elements with the empirical data. Thereafter, the coherence of the research model with the empirical data was examined. If the results of the first data analysis do not meet the specified criteria, the researcher must adjust the model to meet the specified criteria. According to the viewpoint of Nongluck Wirachchai (2005), the statistical values to be used as the audit criteria are as follows:

(1) Chi-square Statistics is a statistical value used to test the statistical hypothesis that the function Harmony is zero. The lower the Chi-square Statistics, the closer to zero the model is consistent with the empirical data.

(2) Harmony Level Index (Goodness-of-Fit Index: GFI), which is the ratio of the difference between the harmonious functions from the model before and after the model was adjusted to the harmonization functions before the model was adjusted GFI values from 0.90-1.00 indicate that the model was consistent with the empirical data.

(3) Adjusted Goodness-of-Fit Index (AGFI), in which the GFI is adjusted taking into account the size of freedom (df), which includes the number of variables and the sample size if the AGFI values from 0.90-1.00 indicate that the model is consistent with the empirical data.

(4) Root Mean Square Error of Approximation (RMSEA) error indicates the dissonance of the model generated with the population covariance matrix which is A value of RMSEA less than 0.05 indicates that the model is consistent with the empirical data.

(5) Apply the results of the analysis to verify the consistency of the model. The following criteria were selected for indicators showing Factor Loading: 1) equal to or greater than 0.7 for parent component (Farrell & Rudd, 2011), and 2) equal to or greater than 0.30 for sub-element and identifier (Tacq, Jaequs,1997).

6. Research Results

The research results revealed that

1. The administrator's competency for private vocational colleges in Bangkok by Exploratory Factor Analysis (EFA), there were 6 components and 49 indicators as follows:

- 1.1 Component 1, personal competency, consisting of 10 indicators
- 1.2 Component 2, professional competency, consisting of 9 indicators
- 1.3 Component 3, managerial competency, consisting of 8 indicators
- 1.4 Component 4, directing subordinate competency, consisting of 8 indicators,
- 1.5 Component 5, leadership competency, consisting of 4 indicators
- 1.6 Component 6, analyzing and deciding competency, consisting of 4 indicators

2. The administrator's competencies model for private vocational colleges in Bangkok that developed from EFA. Results by using Confirmatory Factor Analysis (CFA) which was consistent with the empirical data. The value of Relative Chi-square (χ^2/df) = 1.91, Degree of Freedom (df) = 155, Goodness of Fit Index (GFI) = 0.95, Tucker-Lewis Index (TLI) = 0.98, and Root Mean Square Error of Approximation (RMSEA) = 0.05, all in line with specified criteria. And the key components had the weight between 0.91-0.97 higher than 0.70.

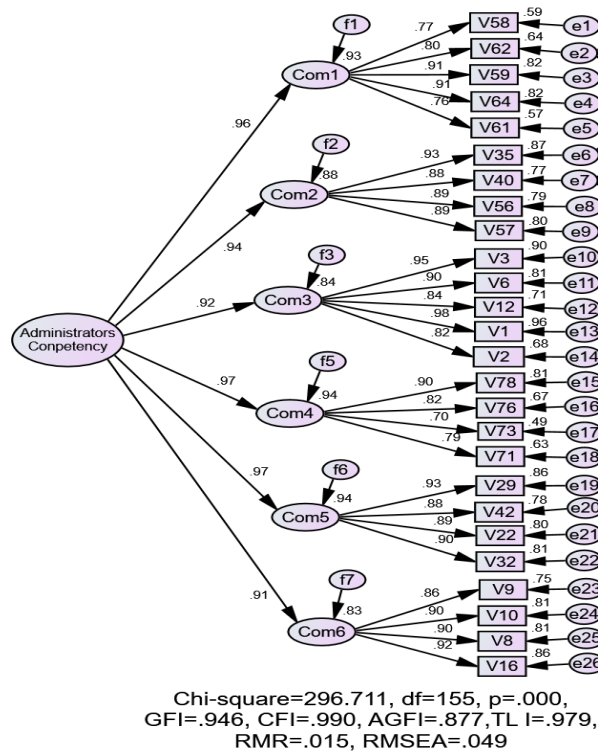


Figure 1 Second Order CFA of administrator' competencies model for Private Vocational Colleges

Table 1 Index value to examine the consistent with the empirical data. (final adjustment)

Value	Standard	Value after adjustment	Result
χ^2/ df	2.00 or below	1.914	very good
GFI	0.90 to 1.00	0.946	very good
AGFI	0.90 to 1.00	0.877	very good
CFI	0.90 to 1.00	0.990	very good
TLI	0.90 to 1.00	0.979	very good
RMR	0.05 or below	0.015	very good
RMSEA	0.08 or below	0.049	very good

Note: Index to determine the CFA. model fit with the empirical data were cited from various reference such as: Diamantopoulos & Siguaw, 2000; Schumacker & Lomax, 2010; Jöreskog & Sörbom, 2012; Kelloway, 2015; Hair, et al, 2019; Suksawang, 2021).

Table 2: Statistical value of administrators' competency model for private vocational colleges

	Latent and observable	Standardized Factor loading	S.E.	Z-test	p	R ²
Administrators' Competencies for private vocational colleges in Bangkok	Component 1	0.963	0.04	24.324	***	0.928
	V59	0.908	0.04	20.617		0.824
	V64	0.906	0.03	22.022		0.821
	V62	0.803	0.04	-		0.645
	V58	0.767	0.03	28.821		0.588
	V61	0.758	0.04	19.976		0.575
	Component 2	0.936	0.05	21.520	***	0.876
	V35	0.933	0.03	26.696		0.870
	V56	0.879	0.04	-		0.773
	V57	0.887	0.03	24.824		0.787
	V40	0.892	0.04	27.414		0.796
	Component 3	0.918	0.04	22.454	***	0.843
	V1	0.997	0.03	31.772		0.994
	V3	0.948	0.03	-		0.899
	V6	0.900	0.04	28.147		0.810
	V12	0.845	0.04	26.989		0.714
	V2	0.824	0.04	18.379		0.679
	Component 4	0.970	0.06	15.876	***	0.940
	V78	0.901	0.05	17.776		0.811
	V76	0.821	0.04	24.367		0.673
	V71	0.792	0.04	-		0.627
	V73	0.697	0.03	18.428		0.486
	Component 5	0.971	0.04		***	0.944
	V29	0.927	0.04	29.073		0.859
	V32	0.899	0.03	-		0.808
	V22	0.893	0.03	26.393		0.798
	V42	0.882	0.03	26.650		0.778
	Component 6	0.914	0.04	22.783	***	0.835

	Latent and observable	Standardized Factor loading	S.E.	Z-test	p	R ²
	V16	0.925	0.04	26.756		0.855
	V8	0.900	0.03	29.784		0.811
	V10	0.900	0.03	29.809		0.810
	V9	0.864	0.03	-		0.747

From Figure 1 and Table 1-2 above the statistical value of second order CFA was analyzed by AMOS, indicated that the administrator's competencies for private vocational college in Bangkok was consisted with the empirical data, and the important components and indicators as rank order from high to low as follows:

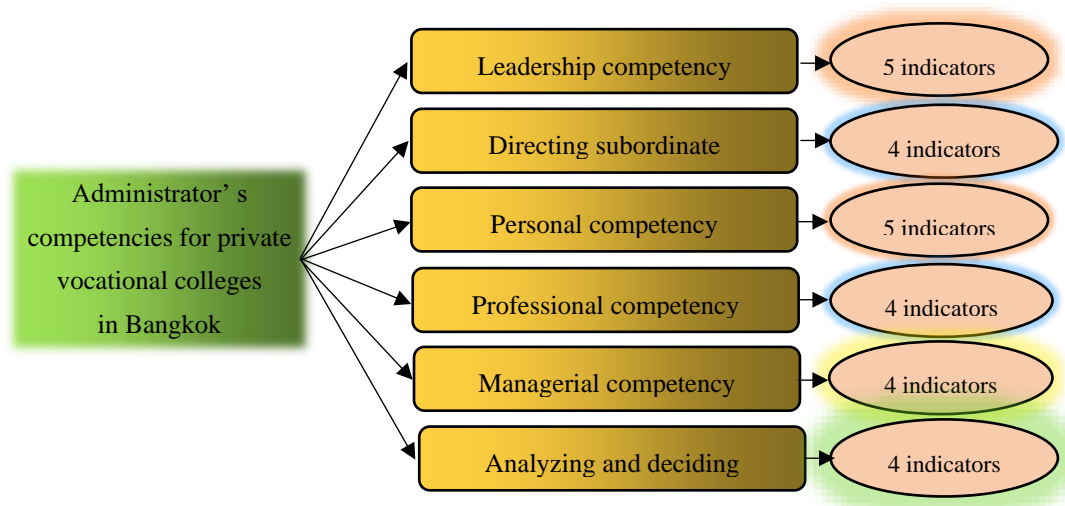


Figure 2 Administrator's competencies for private vocational colleges in Bangkok

1. Leadership competency, had predictive power = 94.40% and the best 3 indicators in this component were: V29: be able to build faith among personnel both inside and outside the educational institution in driving the mission of the college, V32: be able to make decisions and exercise leadership appropriately, and V22: there is fairness, commitment and respect for individual differences person.

2. Directing subordinate competency had predictive power = 94.40% and the best 3 indicators were: V78: assessment criteria are used to judge performance, V76: participate in conflict resolution negotiations, and V71: there are effective assignments emphasis on teamwork.

3. Personal competency had predictive power = 92.80% and the best 3 indicators were: V59: there is education and research. follow new knowledge academic and professional, V64: there is a strict work schedule. able to set the time to perform the work to be able to accomplish, and V62; focus on progress and seeking good opportunities.

4. Professional competency had predictive power = 87.60% and the best 3 indicators were: V35: the use of analytics data is encouraged. Research to find out the needs of teachers, learners and communities, V40: able to manage organization. Management structure and define the tasks of the teacher and official personnel study appropriately, and V57: modify your work style to suit the group.

5. Managerial competency had predictive power = 84.30% and the best 3 indicators were: V1: there is a way to put the policy into practice by creating an understanding with colleagues and having participate in every step, V3: apply knowledge to use in the development of work on a continuous basis, and V6: understand the principles of organizational management budgeting use of resources, finance, management and use of technology.

6. Analyzing and deciding competency”, had predictive power = 83.50% and the best 3 indicators were: V16: able to set policies plan the operation and assess the quality of education management very well, V8: allocate financial resources to support the activities, development and review of the project, and V10: encourage finding resources, new innovations for research, or modern methods to enhance the teaching system.

7. Discussion

The research results found that the components and indicators of administrator' s competencies for private vocational college in Bangkok, there were 6 components and 49 indicators, with a weight of 0.495 to 0.708, consisting of 10 indicators of personal competency, 9 indicators of professional competency, 8 indicators of managerial competency, 8 indicators of directing subordinate competency, 4 indicators of leadership competency. And 4 indicators of analyzing and deciding competency. These are all the guidelines for work in the roles and responsibilities of a new generation of educational institute administrators who focus on work achievement as the goal, which requires a knowledge-based society. and technologies modern in practice to be a leader in change which is the nature of all future executives. And most importantly competency indicators of the administrators in private vocational college were described the characteristics of effective educational institute administrators. The results were consistent with many researchers and academic scholars such as Boyatzis (1982), McClelland

(1999), Parry (1997), Clark, and Hinxman (1999), Mcshane, & Von Glinow (2000), Hellriegel, Jackson, & Slocum, (2005), Spencer and Spencer (2005), Chuanphit Sitthada (2009), Adèle Croucamp. (2012). Sittipong (2012). Ashwini Bapat & others (2017), Pichaphat Hona (2018), Patricia Lotich, (2019), and Yang Yang (2022) who has studied the competency model of school administrators that are effective.

Spencer and Spencer (1993), as well as Thongkaew, T. (2007), Civil Service Commission (2005), Areesawad, R. (2019). and Smithikrai, C. (2009) which stated that competency is the knowledge, abilities, skills, characteristics, values and personality that exist in a person. which can drive that person to create good performance work successfully according to the required standards or able to produce outstanding work and/or have higher performance than others measurable. The key components are knowledge, skills, self-concept, motives/attitude, traits, and the image of the person towards themselves that are combined can be summarized as the competency of executives in various aspects, that will result in successful operations accomplish the school 's vision, mission, and goals efficiently and effectively.

There are also many educators' ideas on performance indicators. It represents a component of analytical and decision-making competency, such as Spencer and Spencer (1993). Must be able to convey the organization's vision and strategies that are practical. and achieve the goal that want people in the organization and stakeholders to practice to motivate and motivate him They want to work and make a community contract together in order to change the organization for the better. Consistent with the concept of performance of school administrators as effective school leaders of New York, where administrators must have courage when falling. at risk must be able to manage changes in plans and understand that some people may not support that change. The management's job is to take risks and be willing to take risks. Take that risk, even if it's contrary to others. as well as the concept of Gloeman, Boyatzis and McKee (2002), which has been presented on leadership competency. Emotional intelligence that managers should have been a charge catalyst relationship. Leaders must take into account challenging opportunities and excellence. It must support change, whether it is facing competitors. arguing about being forced to do Leaders must find ways to overcome obstacles. of change. In addition, Sukjinda, S. (2019). has mentioned the competencies that executives should have, namely, job creation and innovation. and use of resources that generate income which these indicators will achieve requires the ability to think analytically and executive decision Therefore, analytical thinking and decision-making competencies are essential elements. It is important to ask school administrators to work effectively.

8. Recommendations

Recommendation for Policies Formulation

1. According to this study, the key competencies that private vocational colleges' administrators should possess consist of 6 components: 1) personal competency, 2) professional competency, 3) managerial competency, 4) directing subordinate competency, 5) leadership competency, and 6) analyzing and deciding competency. Administrators should consider monitoring and evaluate; how much they have. Because if it is found that there are few in any part, it will be used to improve and develop to an appropriate level through the methods such as self-improvement, or in-service training. The results of this research may also be used as a criterion for auditing to select personnel to replace the older generation of administration.

2. The administrators' competency of the component 1, "personal competency should emphasis to maintain or improve on: skills development regarding enthusiasm to get the job done, focus on progress and the pursuit of good opportunities, there is a study to find knowledge which always keep up with new knowledge academically and professionally. Be a participant in personnel development and conducting oneself as a role model, supporting the development of personnel to be responsible for the work assigned, including being able to give advice, suggest and help solve problems for colleagues and those involved.

3. The administrators' competency of the component 2, professional competency", emphasis should be placed on developing skills related to supporting the use of analytical data. research to find teacher's needs learners and communities Including promoting community cooperation and participation in support. Administrators must be able to manage the organization. Administrative structure and define the tasks of teachers and educational personnel can adapt their work style to suit the group. Be a manager who can use communication skills and techniques for human relations with the community, to exchange ideas that support the vision of the college including the ability to analyze, synthesize and create a body of knowledge in educational management, mobilize resources and local wisdom to promote education management and be able to bring knowledge and understanding of principles and theories of educational administration to apply in educational administration in order to be an educational institution administrator productive.

4. The administrators' competency of the component 3, "managerial competency" should give importance and develop skills in applying knowledge to develop work in their duties continuously and arrange the supervision for new personnel. There is a way to put the policy into practice by creating understand colleagues and involve them every step of the

way. Have creativity that can happen all the time without waiting for an opportunity, understands the principles of organizational management. budgeting resource utilization, finance, management and use of technology, other strategies have been formulated in relation to business, religion, politics and organizational management in support of the college vision. Administrators must have basic knowledge of process and law for personnel selection and learning the rules of practice; supporting student learning.

5. The administrators' competency of the component 4, "directing subordinate competency" emphasis should be given to and development skills related to the use of assessment criteria in decision-making. Must be able to participate in negotiations and jointly resolve conflicts. Be able to supervise and observe the work of personnel. Opinions go the same way who is decisive in considering every matter, administrators must have effective assignments. emphasis on teamwork including being able to persuade or give missions to subordinates to work together, can specify duties personnel responsibilities and communicate to colleagues the need for organizational change. Have ability to use, motivate, and persuade people to change their behavior in order to become school administrators effective and a leader in change.

6. The administrators' competency of the component 5, "leadership competency" should give importance to and develop skills related to the ability to build faith among personnel both within and outside the school in driving the mission of the college. Be a person who conducts himself according to the code of conduct of the school administrator profession includes fairness, commitment and respect for individual differences, the ability to make appropriate decisions and use leadership, have calmness and soberness, even under crisis in order to be an educational institution administrator can effectively lead the community to achieve sustainable development.

7. The administrators' competency of the component 6, "analyzing and deciding competency" Emphasis should be placed on developing support skills. integrate technology related to the teaching system including support to find resources new innovations for research challenges or modern methods to enhance the teaching system. Allocate financial resources to support project activities, development, and audits. Administrators must be able to formulate policies. plan operations and assess the quality of education management very well. and have wide-angle thinking, searching for information, gathering information before understanding the situation in a broad and in-depth manner in order to be productive.

8. Competency indicators of administrators should to be used as a guideline for training and preparing personnel for educational institute administrative positions for Private

Vocational Colleges and used as a leadership assessment model of administrators in educational institutions.

9. Educational institution and related agencies can use the components and indicators of administrators' competencies to be used as guidelines for adding knowledge in various competencies which will gain new knowledge that can be applied benefits in the administration of educational institutes in the future.

Recommendation for Further Research

1. There should be a comparative study of these administrators' competencies between public and private vocational colleges under the Office of the Vocational Education Commission.

2. There should be employed of research and development (R & D research) in order to look at the results, if provide the Management based on the results of this research really, it will be making the college administration effective or not.

3. In the next, the researchers may use a qualitative research model leading quantitative research to study information about various factors influencing the effectiveness of private vocational colleges in Bangkok or others area of Thailand. Then, the results from the study can be determined to determine the variables and create a conceptual framework, model, causal relationship, factors influencing the effectiveness of private vocational colleges as well as developing the tools for collecting data in quantitative research to test hypotheses and further confirm the model developed by the researcher.

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