



Perceptions of Thai Community College Directors' Leadership Effectiveness

- Nantaporn Chalaechorn,
- Terdsak Rojsurakitti,
- Bundit Pungnirund

Abstract. *The purposes of this research were: 1) to survey the level of the effectiveness of community college and the significant factors influencing the effectiveness of community colleges: director's traits, leader's skills, transactional and transformational leadership; and 2) to develop the causal structural relationship model of the effectiveness of community colleges. This model consisted of 5 latent variables and 23 observed variables. A total of 433 participants were selected from 765 community college members across the country, comprised of 19 directors, 144 council committees and 270 government officers and employees. Data were collected via a 5-point rating scale questionnaire developed by the researcher. The content validity of the instrument was verified by qualified experts. In the data analysis to find a causal structural relationship model, the LISREL program version 8.72 was employed. The research results indicated that: 1) the effectiveness of community college, director's traits, leader's skills, transactional and transformational leadership were at a high level; 2) The causal structural relationship model of the effectiveness of community colleges that was developed and adjusted was valid and well fitted to the empirical data; 3) director's traits and leader's skills had not any direct effect on the effectiveness of community colleges, but had an indirect effect on the effectiveness of community colleges by mediating through transactional and transformational leadership; 4) director's transactional leadership had not any direct effect on the effectiveness of the community college; and 5) director's transformational leadership had a direct effect on the effectiveness of the community college.*

Keywords: Thai Community College, Director's Leadership, Effectiveness

Introduction

The 10th National Economic and Social Development (NESDB) Plan (2007-2011) directed the strategy for human development and Thai society towards a knowledge based and learning society. The strategy of strengthening the community and society is to be a solid foundation for the stability of the country. Additionally, the 11th NESDB Plan (2012-2016) directed a strategy for a just society, and the National Education Act of 1999 and its amendment (2nd issue 2002) contained a directive for the State to promote all learners to be able to study and develop themselves during their life time and to develop Thai society into a lifelong and sustainable learning society. As such, community colleges have emerged in 2002 with the aim of spreading the prospect of education into communities that do not have a higher educational institution in their locality to provide education for lifelong development, called "All for Education", whereby the State gathers all resources from the community for managing the education, called "Education for All", which can fulfill and close the gap in education. (Krissanapong Kirtikara, 2011)

The failure of the total education reform in Thailand in the past led to the education reform in the second decade of the Twenty-First Century (2009-2018), which had three objectives: to develop the quality and standards of education and learning processes for Thai people; to increase educational and learning opportunity to all with effectiveness; and to strengthen the public sector's participation in national educational administration (Thongthong Chantarangsu, 2009). At present, there are many studies on the important factors affecting the organizational effectiveness that found the administrator's leadership is of great influence to the organization. The director of a community college has an important role, since he is the key driver in managing the community college at the



provincial level. The director must clearly understand the philosophy of the community college and manages the college towards its intended objectives, as stated in the National Education Act, which emphasizes the distribution of power to educational institutions and communities, thus granting full autonomy to the director to fully manage his college. Thus, the community college must have a director who is capable, having new techniques to lead his community college in a new direction in educational reform. Therefore, the director of community college must be more professional.

The Purposes of the Research

The two purposes of this study were:

1. To survey the level of effectiveness of community colleges and the level of significant factors affecting the effectiveness of community colleges in Thailand, including personal traits, leader's skills, transactional and transformational leadership of directors.
2. To develop a causal structural equation model of the effectiveness of community colleges in Thailand.

Delimitations of the research

This research was a quantitative research study using a positivist paradigm and cross-sectional survey research of samples, including important stakeholders in all 19 community colleges in 19 provinces in Thailand: directors, council committees, government officers and employees.

Hypotheses

The five hypotheses were:

1. The causal structural equation model of the effectiveness of community colleges that was developed was consistent with the empirical data.
2. Personal traits of directors had a direct effect on the effectiveness of community colleges and an indirect effect on the effectiveness of community colleges by mediating through the transactional and transformational leadership of directors.
3. Leader's skills of directors had a direct effect on the effectiveness of community colleges and an indirect effect on the effectiveness of community colleges by mediating through transactional and transformational leadership of directors.
4. Transactional leadership of directors had a direct effect on the effectiveness of community colleges.
5. Transformational leadership of directors had a direct effect on the effectiveness of community colleges.

Literature Review

In reviewing the leadership research literature, the researcher studied several concepts and theories, as follows:

1. The traits approach of leadership is based on belief that leadership is unique to an individual. A person has a unique ability and quality to be a leader that is inherent from birth (McGregor, 1989). This theory is based on the view that a person who is selected to be a leader depends on the person's traits and personality that separates him from the rest (Northcraft & Neale, 1990). This can be classified into two groups: 1) personal traits of the leader comprised of physical, emotional and mental, social, intellectual and moral traits; and 2) leader's skills which are comprised of technical, human and conceptual skills.

2. Transactional leadership is a type of leadership behavior based on the theory of societal exchange, with emphasis on the exchange of benefits between leader and follower for mutual gains. Transactional leaders will provide the benefits to satisfy each follower (Sergiovanni, 1990), including contingent rewards and the management by exception (Avolio & Bass, 2002).



3. Transformational leadership is a type of leadership behavior that transforms and improves both the personnel and the organization. It is a process whereby both the leader and follower mutually elevate morality and incentives. The leader will increase his level of decision making, and the efforts and sacrifices of the follower increases to achieve mutual objectives and higher value (Burns, 1978). Bass, in 1985, explained the transformational leader is result of an incentive for the follower to cooperate in exceeding the expected objectives. This can be divided into charisma/ prestige or idealized influence, inspirational motivation, intellectual stimulation and individualized consideration (Avolio & Bass, 2002). As Bass presented in 1985, a leader can use both transactional and transformational leadership at different times and places, and the leadership will complement each other leading to operations that exceed the expectations.

4. Organizational effectiveness. In the first phase, the measurement of effectiveness of an organization is a measurement of its goal, whereby the performance measurement is in singularity, to be followed by measurement in multiple dimensions, which is an integration of measurement in the dimensions of time and stakeholders. The multi-dimensional index that uses the measurement index model of Cameron (1978) is very popular. It comprises nine dimensions: student educational satisfaction, student academic development, student vocational development, student personal development, faculty and administrator employment satisfaction, professional development and quality of the faculty, system openness and community relations, ability to acquire resources and organizational health.

From these concepts and theories, the conceptual framework of this research may be defined as follows:

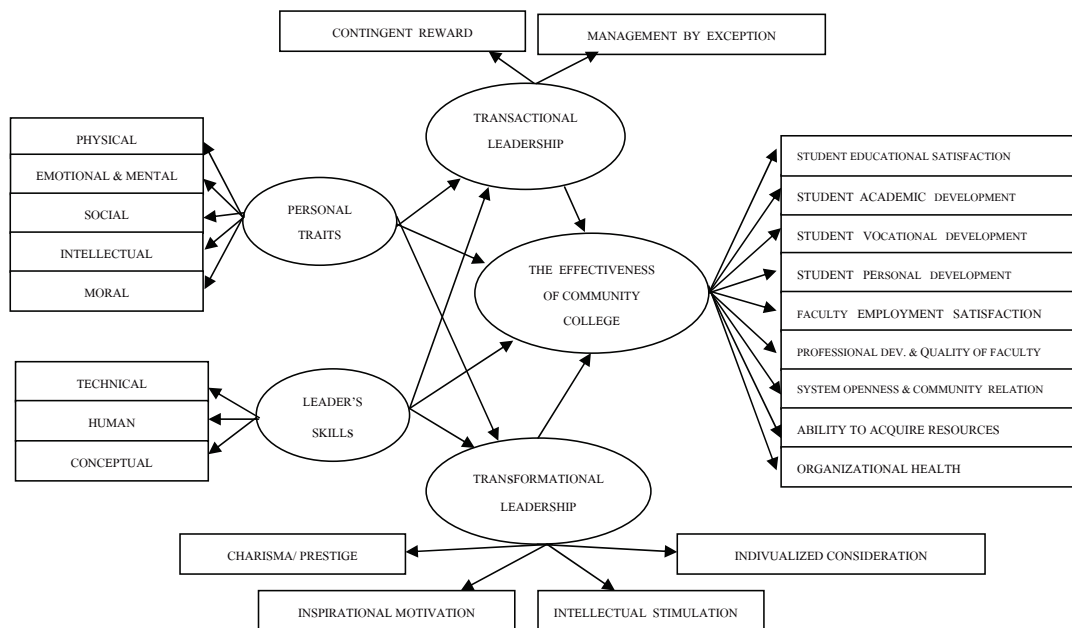


Figure 1: Conceptual framework of the causes influencing the effectiveness of community colleges in Thailand.

Research Methodology

Stratified random sampling, dividing samples into 3 groups and 3 levels, yielded a set of samples including all 19 directors of community colleges, 144 council committees, 270 government officers and employees of community colleges, totaling 433 people, from a total population of 765 people.



Data were collected *via* a 5-point rating scale questionnaire that the researcher constructed and which was administered to directors, council committees, government officers and employees of community colleges. The questionnaire contained 47 items to measure community college directors' personal traits and leader's skills, 32 items of the Multifactor Leadership Questionnaire (MLQ), developed by Bass & Avolio (1995) to measure transactional leadership and transformational leadership, and 35 items of Cameron's (1986) organizational effectiveness questionnaire to measure community colleges' effectiveness. Five qualified specialists were consulted for the validity of the questionnaire in both content and consistency, by using the index of item objective congruence (IOC) and reliability using *Cronbach's Alpha* coefficient that was found to be reliable between 0.89-0.97. The questionnaires were sent to sample groups by mail; 388 sets were returned or 89.6 % of the total sent.

Data Analysis

The data analysis to answer the first point of the purpose was processed to find the mean and standard deviation, using the SPSS program for Windows Version 14.0. For the second purpose, data analysis was done by structural equation modeling to analyze and verify the consistency between the equation model and empirical data and the estimated path coefficient parameter using LISREL program version 8.72.

Results

1. The sample groups that were comprised of government officers and employees of community colleges were mostly female, totaling 172 persons or 72.30%; aged between 30-39 totaling 154 persons or 64.4%; Master's degree holders were 147 persons or 61.5%. The sample group that comprised the colleges' council committees was mostly male, totaling 117 persons or 88.6%; aged between 50-59 totaling 60 persons or 45.50%, Master's degree holders were 65 persons or 49.2%. The sample group that comprised of directors of community colleges was mostly male, totaling 14 persons or 82.4%; aged between 50-59 totaling 10 persons or 58.8%, Master's degree holders were 14 persons or 82.4%.

2. The level of effectiveness of community colleges and factors that affect the effectiveness of community colleges, including transactional leadership, transformational leadership, leader's skills and personal traits of directors, were at a high level, with means of 3.55, 3.80, 3.90, 3.97 and 4.11 respectively

3. The results of hypotheses testing are as follows:

3.1 The result of hypothesis test (H_1) found the structural equation model that was developed and adjusted was consistent with the empirical data when considering the test statistics: $\chi^2 = 280.26$, $df = 176$, $p\text{-value} < .001$; Relative $\chi^2 = 1.59$; GFI = .94; AGFI = .90; RMR = .027; SRMR = .049; RMSEA = .039; P-Value for Test of Close Fit = .98; NFI = .99; IFI = 1.00; CFI = 1.00; CN = 295.80 which passed the criteria (Joreskog & Sorbom, 1996) and which is in accordance with the hypothesis.

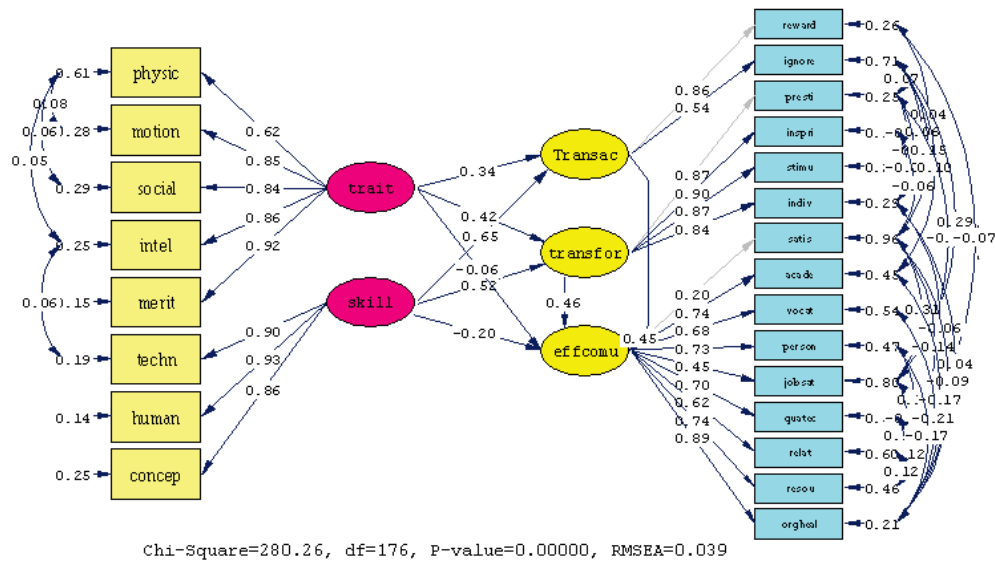


Figure 2. The causal structural equation model of leadership factors influencing community college effectiveness

3.2 The personal traits of directors have no direct effect on the effectiveness of community colleges, but have an indirect effect on the effectiveness of community colleges by mediating through transactional and transformational leadership of directors with the influence value of 0.68 at the 0.05 significance level, which is partially consistent with hypothesis 2.

3.3 The leader's skills of directors have no direct effect on the effectiveness of community colleges, but have an indirect effect on the effectiveness of community colleges by mediating through transactional and transformational leadership of directors with the influence value of 0.55 at the 0.05 significance level, which is partially consistent with hypothesis 3.

3.4 The transactional leadership of directors has no direct effect on the effectiveness of community colleges, which contradicts hypothesis 4.

3.5 Transformational leadership has a direct effect on the effectiveness of community colleges with the influence value of 0.46 at the 0.05 significance level, which is consistent with hypothesis 5, as shown in Table 1.

Table 1. Effect decomposition: direct effect (DE), indirect effect (IE), and total effect (TE) of causal factors influencing the effectiveness of community colleges

DEPENDENT VARIABLES	R2	EFFECT	INDEPENDENT VARIABLES			
			Personal Traits	Leader's Skills	Transformational Leadership	Transactional Leadership
1. Effectiveness of Community Colleges	.55	DE	- .06	- .20	.46*	.45
		IE	.68*	.55*	-	-
		TE	.62*	.35*	.46*	.45
2. Transformational Leadership	.85	DE	.42*	.52*	-	-
		IE	-	-	-	-
		TE	.42*	.52*	-	-
3. Transactional Leadership	.95	DE	.34*	.65*	-	-
		IE	-	-	-	-
		TE	.34*	.65*	-	-
c2= 280.26, df= 176, p-value = 0.00000; Relative χ^2 = 1.59; GFI = .94; AGFI = .90; RMR = .027; SRMR= .049; RMSEA = .039; P-Value for Test of Close Fit = .98; NFI = .99; IFI= 1.00; CFI= 1.00; CN = 295.80						



Discussion

The discussion on the first purpose of this research found the level of effectiveness of community college was at a high level, indicated by level of student educational satisfaction, system openness and community relations, student personal development, student vocational development, and student academic development. The reason for this finding is the philosophy of educational management of community colleges does not emphasize academic excellence, but gives more emphasis towards developing the career potential of students. Moreover, it was found that the effectiveness of the personnel's management was not sufficient, since the result of the survey found the faculty and administrator employment satisfaction, professional development and quality of faculty, ability to acquire resources and organizational health was effective at the mid-level, which is less than the effectiveness related to students. The reason is that community colleges that are small have direct effect in obtaining sufficient resources for their operations, especially in terms of limitations of personnel and budget, resulting in its personnel's sensing the inadequacy of the organization when compared to larger institutions that are better equipped. This is in line with the finding of the Bureau of Community College Administrations (2009) which found that the main obstacles of community colleges are limited personnel and allocated budget which is not consistent with the main objective of providing services to the community which require a higher budget.

The results of the survey related key elements affecting effectiveness of community colleges, comprising personal traits and leader's skills of directors. The sample groups gave scores that were all at high levels, which shows a high level of satisfaction with the role of the college's director in driving the management of his community college effectively with a limited budget. In terms of personal traits, which comprise personal appearance that is expressed in good emotional, physical, social, intellectual and moral personality, the sample group expressed a high satisfaction level. This is because the operation of the community college, which is a small organization with limited personnel and budget, must have good cooperation from the community in order to obtain resources for management, and, therefore, requires a leader who is flexible and can get along well with this superiors. This is consistent with concept of Wicharn Panich (2009), who proposed that higher educational institution has a special feature of being a learning society, where the characteristic of its leader must not emphasize his power of management but must be in a position of support conducive to education and organizational development.

The leader's skills of director had the second highest mean following personal traits of director, especially technical skills that yielded the highest mean consistent with the context of community college which is a small organization with limited resources and requires technical skills of management in obtaining sufficient resources, in line with the principle of community college management that clearly emphasizes involvement of the community which is the basic tenet of community college administration.

The variable for transformational leadership of director was at a high level, especially in terms of inspirational motivation that yielded the highest means, and is the characteristic that inspires subordinates to achieve the expected results in the future, which is an important characteristic of a leader in a developing organization, such as a community college. The ability to inspire will be a good motivation for subordinates.

The final variable, transactional leadership was at a high level, because the desire of workers was for sufficient income commensurate with his/her ability to the organization in exchange for the organization rewarding its workers. The research found the level of satisfaction of the director giving contingent rewards was at a high level, while management by exception was lower.

The discussion of the second purpose of this research and hypothesis (H_1), the verification of the validity of the structural equation model, found that the developed model fitted with the empirical data. However, when considering the estimate parameter of path coefficient of variables for all four leadership variables affecting the effectiveness of community colleges in accordance with the hypothesis, it was found that there was both consistency and contradiction with the hypothesis, as follows:



For Hypothesis (H_2), where personal traits of directors indirectly affected the effectiveness of community colleges by mediating through transactional and transformational leadership of director, this finding is consistent with the theory of the trait approach that has a basic tenet that the leader must have distinct characteristics from others, thereby providing him with credibility with his subordinates and those around him. On the contrary, when the leader's credibility diminishes, his ability to inspire and stimulate his subordinates will disappear and may lead to the failure of the organization in the end. (McGregor, 1989; Northcraft & Neale, 1990), in line with research by Kaiser (2000) and Snow (2003), who similarly concluded that the credibility of leader may result in increased motivation, which in the end will affect the effectiveness of the organization, but indirectly through other variables.

The fact that the personal traits of the director do not directly affect the effectiveness of community college can be explained in the following terms: where the director has good characteristics, but such characteristics cannot directly affect the effectiveness of his community college, but through operational effectiveness of his subordinates first, and then increasing the effectiveness of the organization. In the past, the external appearance of a leader was always important in driving an organization, but in the present era of development, with a heightened competitive environment, all organizations must evolve themselves for their own survival. Such conditions prevent the personal traits of a leader alone from driving an organization to its success (Turrentine, 2001; Yukl, 2006).

The discussion on the result of this research and hypothesis (H_3), where leader's skills of director indirectly affecting effectiveness of community college by mediating through transactional and transformational leadership of director, is consistent with the theory of Burns (1978), who said that each organization faces increasing competition leading to development of new leadership who can motivate subordinates to exceed beyond their expectations, this is called transformational leadership, and the transformational leader, who can create a sustainable organization, must also be a leader who possesses good working skills. On the issue that the result of the research contradicts the theory, the view is that leader's skills alone cannot directly affect the effectiveness of community colleges. For an organization to be effective, it must have cooperation from all parts of the organization. The leader's skills alone cannot effectively lead an organization into a changing era, consistent with the ideas of Goertzen and Barbuto (2001), who argued that an organization's leader possesses a good working spirit is a desirable skill, but cautioned that modern organizations must also possess other important characteristics, specifically the ability of leading an organization through changes with dignity and survivability.

The discussion on the result of hypothesis (H_4) found that transactional leadership does not directly influence the effectiveness of community college which contradicts the hypothesis in line with the idea of Sergiovanni (1990). who explained that transactional leadership is based on the theory of exchanges in society, but in the context of higher education, especially in community colleges, it was found that the majority of staff are highly educated and are specialists, resulting in the working environment of the organization tending toward specific objectives, and the creative exchanges between administrators and workers are not obvious (Marzano, Waters & McNulty, 2005). The transactional leadership that emphasizes benefits, but not personnel development or genuine support of subordinates, will result in an organization not reaching its established goal. In the present day organization, it is also found that the emphasis of exchanges between leader and follower, if appearing at a high frequency or bias, it may cause ineffectiveness of the organization in the long run. This is consistent with research by Nischan (1997) and Harrison (2000), who found that transformational leadership affects the effectiveness of community colleges more than transactional leadership.

The discussion of the result of hypothesis (H_5) found that transformational leadership directly affects the effectiveness of community college, because the rapidly changing societal conditions have spread their influence into the context of management of community colleges, resulting in the directors changing their role from merely serving in accordance with a set of policies, to a leader who fully drives an organization toward modernization. This is in line with research of Fairholm (1991) that emphasizes that the importance of transformational leadership under changing conditions must be able to transform an organization to be able to adapt to the present situations, particularly the transformation of subordinates in terms of inspirational motivation, intellectual stimulation and individualized consideration.



Limitation of the Study

The main limitation was the sample of this study which consisted of important stakeholders involving all 19 community colleges: directors, council committees, government officers and employees, but not including students who are one of the important stakeholders.

Recommendations for Using the Results of this Research

Practical Recommendations

1. The research found that transformational leadership of the director is the most important factor directly affecting the effectiveness of his community college. Therefore, the Bureau of Community College Administration and council committees of community college should emphasize transformational leadership in the recruitment process of its director, and should have a development procedure for directors to become a transformational leader.
2. The research found that variables in the model that affect transformational leadership the most are leader's skills and personal traits of director. Therefore, in recruiting a person with high leader's skills and a well-rounded personality – physical, emotional and mental, social, moral – to the post of director of community college, he will be able to propel the policies in a tangible manner for the effectiveness of community college.
3. The result of the research indicated that transactional leadership did not affect the effectiveness of community college. It showed that contingent reward and management by exception are strategies that cannot drive the effectiveness of community college.
4. Areas that should be improved are effectiveness of professional development and quality of the faculty. A suitable approach should be to set a competency level for new faculty members, qualitative progressive development of faculty members, development of the quality of their work life, including scholarships for further education, as well as creating a system and mechanisms to ensure internal quality for supporting faculty members for research and publishing both nationally and internationally.
5. The director of community college ought to be a supporter, rather than a leader that emphasizes utilizing his power along the line of command.
6. The director of community college should possess characteristics that are more sociable with the community and societal network in order to draw their participation into setting policies and directions of the management of community college, and should survey the needs of each community for the purpose of planning to serve the community in terms of career and knowledge to be truly pertinent and relevant to the potential of each community college.
7. The director should fully promote professional and learning skills for the students of his community college by linking up with the business community to accept students to be trainees, which will promote the educational process with hands-on experience and may create an opportunity for graduates to be employed in that enterprise.
8. The study found that the effectiveness of community college in acquiring resources is at a lower level. An important approach in acquiring resources is to be self sufficient. Community college can use existing knowledge for income generation (i.e., opening career training workshop for the community, creating innovative product through student project for commercial purposes).

Academic Recommendations

1. The conclusions drawn from this research are that transformational leadership of director directly affects the effectiveness of community college the most, and that intellectual stimulation is the primary factor that affects the effectiveness of a community college.
2. It is also found that characteristics of a leader comprising personal traits and leader's skills of director cannot directly affect the effectiveness of community college, since the context of the community college is an educational institution in a rapidly evolving age, and, at the same time, it found that personal traits and leader's skills of director can indirectly affect the effectiveness of a



community college through transactional and transformational leadership of director, with moral traits and human skills being the most important factors affecting the effectiveness of a community college

3. The research also found that transactional leadership of a director alone cannot affect the effectiveness of community college, but it is a mediator for personal traits and leader's skill of the director to indirectly affect the improvement of the effectiveness of community college.

4. This research used an analysis of Structural Equation Model (SEM) to develop a causal model of effectiveness of community colleges in Thailand, and analyzed different factors affecting the community college as a whole, in order to understand the influences and more accurately predict those influences than previous analysis using separate factors.

5. This research covered only community colleges that are members of the Bureau of Community College Administration. If other higher educational or another level educational institutions want to apply the results of this research, they ought to modify the measurement instruments for their suitability and the context of such institutions.

Recommendations for future research

1. This research was quantitative research. Future research should be qualitative and in-depth research to create new theory and knowledge for models of leadership for director of community colleges in Thailand in a more profound way. Another format would be to use mixed methods by first developing a structural equation model, to be followed by collection of qualitative data (i.e., using in-depth interviews in order to obtain data that support the research that correlates more with the hypothesis).

2. The researcher is of the opinion that the director of community college ought to be a person that supports his/her subordinates, rather than one who emphasizes issuing orders. If leadership groups are to be used as variables in future research, we should study the influence of Servant Leadership as a causal variable.

3. This research was a study of leadership of directors in the context of community colleges that are members of Bureau of Community College Administration, Office of the Higher Education Commission. Therefore, future research may conduct research in the context of a community college that is member of Bangkok Metropolitan Administration in order to compare results to find differences and similarities which may lend more credence to their discovery.

4. Research methodology relating to the development of structural equation model has been highly developed. For future research, data collections from council committees, government officers and employees of community college, there should be comparisons to observe whether the developed model can invariably be used to explain both important sample groups or not, which will result in clearer data and conclusions.

5. From the fact that Thailand will enter into ASEAN Economic Community in 2015, which is a major turning point in the way of life, society and economy for Thais, there should be a study in the performance of directors that ought to increase in competency to be able to support the integration into ASEAN Economic Community in order for elevating community colleges up to the internationally accepted standards, and increasing labor skills and language skills of workers in parallel with the creation of effective local social protection to immunize against the liberalization of the free labor movement.

References

- Avolio, B. J. & Bass, B. M. (2002). *Developing Potential across a Full Range of Leadership: Cases on transactional and transformational leadership*. Mahwah, NJ: Lawrence Erlbaum Associates.
- Bass, B. M. (1985). *Leadership and Performance Beyond Expectations*. New York: The Free Press.
- Bureau of Community College Administration (2009). *Komthat thangwiwat withayalaichumchon 1*. Bangkok: Bureau of Community College Administration, Office of the Higher Educational Commission.



- Burns, J. M. (1978). *Leadership*. New York: Harper & Row.
- Cameron, K.S. (1978). Measuring organizational effectiveness in institutions of higher education. *Administrative Science Quarterly*, 23:604-632.
- Fairholm, G. W. (1991). *Values Leadership: Towards a new philosophy of leadership*. New York: Praeger.
- Goertzen, B. J & Barbuto, J. E. (2001). Individual spirituality: A review of the literature. submitted to human relations. *Paper presented at annual Institute for Behavioral and Applied Management*.
- Harrison, D. (2000). Transformational leadership and community college effectiveness. *Unpublished PhD dissertation*. Ohio State University .
- Joreskog, K. G., & Sorbom, D. (1996). *Lisrel user's reference guide*. Chicago: Scientific Software International.
- Kaiser, S. M. (2000). Mapping the learning organization: Exploring a model of organizational learning. *Unpublished PhD Dissertation*, Louisiana State University.
- Krissanapong Kirtikara. (2011). Retrieved May 10, 2011. from [http:// www.bcca.go.th](http://www.bcca.go.th)
- Marzano, R. J., Waters, T. & McNulty, B. A. (2005). *School Leadership that Works: From research to result*. Alexandria, VA: Association for Supervision and Curriculum Development.
- McGregor, D. M. (1989). *Classic Readings in Organizational Behavior*. San Francisco, CA: Brooks/ Cole .
- Nischan, T. P. (1997). Transformational leadership as a predictor of effectiveness, extra effort and satisfaction in a community college classroom environment. *Unpublished PhD Dissertation*, Louisiana State University.
- Northcraft, G. B., & Neale, M. A. (1990). *A Management Organizational Behavior Challenge*. Chicago, IL: Dryden Press.
- Sergiovanni, T. J. (1990) Adding value to leadership gets extraordinary result. *Educational Leadership*, 47(8), 23-27.
- Snow, J. L. (2003). Looking beyond nursing for clues to effective leadership. *Nursing Administrative Quarterly*, 31 (9): 440-443.
- Thongthong Chantarangsu (2009) *The proposal of the second decade educational reform (2009-2018)*. Bangkok: Office of Educational Council, Ministry of Education.
- Turrentine, G. (2001). A comparison of self-assessments and peer assessment of leadership skills. *NASPA Journal*, 38(3): 361-371.
- Wicharn Panich (2009). *Komthat Thangwiwat Withayalaichumchon 2*. Bangkok: Bureau of Community College Administration. Office of the Higher Educational Commission.
- Yukl, G. (2006). *Leadership in Organizations*, 6th ed. Upper Saddle River, NJ: Prentice Hall.