# **IC-10**

# A Model of Teacher Leadership Development in Learning Management based on Philosophy of Sufficiency Economy in Educational Opportunity Extension Schools in the area of Responsibility of the Office of Education Sector11

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#### **Abstract**

This research aimed to 1) study the components of teacher leadership in management, learning according to the philosophy of sufficiency economy in educational opportunity expansion schools, 2) study the need for the development of teacher leadership in learning management according to the philosophy of sufficient economy, and 3) create and develop a model for the development of teacher leadership in learning management according to the philosophy of sufficiency economy, 4) find the effectiveness of the model of teacher leadership development in learning management according to the philosophy of sufficient economy. The sample group was school teacher of educational opportunity expansion schools in the Office of Education Service Area 11, with the total number of 370 people using multi-stage random sampling. The instruments used included interviews, questionnaires and assessments. The results of the research showed that the teacher's leadership element in managing learning according to the philosophy of sufficient economy in educational opportunity expansion schools were as follows: 1) Development of learning units, learning in the institution's curriculum had the need was 0.27. 2) Integration of sufficiency economy in educational opportunity expansion schools, need was 0.29. 3) As a good model for life valuable, need was 0.30 and 4) Development self and colleagues, need was 0.34. The development model of teacher leadership in learning management according to the philosophy of sufficiency economy in educational opportunity expansion schools were as follows: 1) principle 2) goal 3) content 4) process 5) media and sources learning and 6) measurement and evaluation based on the results of the model, it was found that the teachers of educational opportunity expansion schools with 88.41 percent had cognition after the experiment, and the results of self-assessment of participants with an average increased at 0.88

**Keywords:** Development model, Teacher Leadership in Learning Management, Philosophy of Sufficiency Economy, Educational Opportunity Extension Schools

### 1. Introduction

Education is a fundamental right for all Thai people. That the state must provide to develop Thai people of all ages as an important intellectual cost to develop skills Features and performance in the seminar And a happy life with others in society Which will lead to stability and stability of society and the nation that must be developed to advance Tied numerous countries on the world stage amid the rapidly changing trend of the 21 st century world. Thailand has always focused on education as the main mechanism for national development. As can be seen from National Education Plan.Prof. 2017 – 2036 aimed at providing education to all Thai people with access to opportunities and equality in quality education. Develop an effective education management system Develop a working capacity that is consistent with the needs of the job market and national development. (Secretariat of the Education Council, Ministry of Education, 2017, page A

School of Educational Opportunities There are 3 methods of teaching personnel: 1) Secondary school teaching only 2) All secondary education and some elementary education. Learning 3) Teaching secondary education. Some subject. Learning and teaching elementary school. Some learning Allowing teachers who teach in schools to expand educational opportunities must be knowledgeable, able to manage, learn to learn students very well. Which the learning process that focuses on students is important In the National Education Act.Prof. 1999 and as amended (Issue 2) P.Prof. 2002 Section 24 establishes guidelines for educational institutions and related departments. Perform the following actions: 1) Organize content and activities in accordance with interests. And the aptitude of the learners taking into account the differences between individuals 2) practice skills, thinking processes, management Face

situations and apply knowledge to prevent and solve problems. 3) Organize activities for learners to learn from real experience, practice practices to do so, think of love, read and continuously monitor. 4) Manage teaching by combining knowledge Various aspects, balanced, balanced, including cultivating morality. Classified values and desirable features in all subjects. 5) Encourage teachers to be able to organize the atmosphere, environment. Learning materials and facilities for learners to learn and have knowledge including can use research as part of the learning process. In this way, teachers and learners may learn at the same time from teaching materials. And different types of science sources. 6) Manage learning to happen anytime, anywhere, with coordination with parents. Parents and individuals In all communities to jointly develop learners according to their potential (Siriporn Kulasant, 2014) The leadership of teachers in managing the philosophical learning of the economy is sufficient, meaning the characteristics necessary to perform their roles and duties, which all teachers should have a desired role and feature and must develop themselves to be leaders. Have leadership in both the duty and self-development Ready to accept current and future changes that will affect your development and develop the work to the maximum effectiveness. There are elements that guide the learning management of teachers and need to be taken to enable teachers to have the desired characteristics of managing learning by humble, bringing royal philosophy to organizing activities. School Learning (Chatchai Kokhun, 2019 ) and Sirikrit Ratchai spoke of the leadership of teachers in managing learning based on the philosophy of an economy that is sufficient. The characteristics and behavior of teachers in learning management According to the philosophy of the economy is sufficient Must start with the teacher, the leader of the sufficiency model In the behavior of being a role model Others in living by means of sufficiency Being a teacher, leading role model, managing learning And is a role model in teacher hood, curriculum development and teaching Learning management process And class management and have the behavioral characteristics of teachers as teachers, change leaders and being Learning people, including the creation of a learning network (Sirikorn Chairat, 2019)

Adequate economic philosophy is the development of students in schools to have knowledge and understanding. Trust in the philosophy of an economy that is sufficient. And has the ability to apply the philosophy of a sufficient economy to live life until sufficient character There are many approaches, with each approach having Different focus Which can help develop well at some point Development using multiple approaches Will promote each other to get complete results The success of development In addition to depending on the quality of the implementation of the various guidelines, it also depends on the important factors that are hidden.in the developer as well That is the developer (. The executive teacher and the person involved) must also have a knowledge and understanding of the acceptance and compliance with the economic philosophy. Therefore, the development of students in the school. Therefore does not mean only the actions of executives and teachers including personnel involved in student development only, including the development of teachers, administrators and related personnel. (Nantha Buri Light 2017) by the way to bring sufficient economic philosophy to the learning process. In school Must have an educational curriculum determine the desired characteristics by using the philosophy of the economy is self-sufficient. Is the basis for thinking, creating material that is consistent with the student and local conditions, and organizing learning units by integrating the philosophy of the economy into every learning unit and all learning materials groups or creating them as specialized learning units (Phiranuchs Pibulsaravut, 2007)

The Office of Education Region 11 consists of Sakon Nakhon Province, Nakhon Phanom and Mukdahan, which are responsible for defining strategies and roles of development in different sectors to connect and align with directions. Country development policy and strategy request Ministry of Education and the strategy of provincial development Including other areas of development In the area of responsibility According to the potential and opportunities of individuals and communities in each area, including supporting provincial development in the area responsible for academic work. Research and teacher development in schools extends educational opportunities. In the area of responsibility of the Office of Education, Region 11 has similar context and problems. The development of teacher leadership based on the philosophy of the economy is sufficient. Researchers are therefore interested in studying management leadership, learning according to the philosophy of the economy, self-sufficient to meet the needs and can truly develop teacher leadership from the above problems and priorities. Therefore interested in studying the model of teacher leadership development in management is learned in accordance with the philosophy of the economy. In schools, expanding educational opportunities in the area of responsibility of the Office of Education Region 11 to study the components of leadership Study the necessary needs to create and develop a pattern for leadership development and find the effectiveness of the teacher leadership development model in managing the philosophical, economic, self-sufficient education in schools, expanding educational opportunities. Which is very important in helping to strengthen and develop teachers to be leaders in managing learning according to the philosophy

of Sufficient economy which is beneficial to the development of education according to the philosophy of the economy is sufficient and in accordance with the National Education Act 1999 and the revised version and the national education plan (Prof. 2017-2036) is a guideline for the development of teacher leadership in learning management. According to the philosophy of the economy, suffice in schools, expanding opportunities in the area of responsibility of education, Region 11, in order to develop the quality of learners, ready to support changes in personnel and communities. In the midst of a balanced globalization Stable and sustainable.

# 2. Purposes

- 1. Study the components of teacher leadership in management, learning according to the philosophy of economics, in schools sufficient, expand educational opportunities
- 2. Study the need for the development of teacher leadership in management. Learning according to the philosophy of economics, sufficient
- 3. Create and develop a model for the development of teacher leadership in management, learning according to the philosophy of economics, sufficient
- 4. Find the effectiveness of the model of teacher leadership development in the management of learning according to the philosophy of economics, in schools sufficient

# 3. Research Methodology

This research there are ways to conduct research. Follow the steps as follows

- 1. Research model Is research and development (Research and Development) Study and synthesize documents and related research, teacher leadership in management, learning according to the philosophy of the economy, self-sufficient, the school expands opportunities In the responsible area of the Office of Education, Region 11 can define the content scope consisting of 4 components As follows 1) Development of Learning Units in the School Program 2) Integrating Sufficient Economic Philosophy in Learning Management 3) Being a good model in living and 4) Self-development and colleagues.
- 2. Population and sample population, including teachers in schools, expanding educational opportunities In the area of responsibility for education, region 11, academic year 2022, number of schools 326, school and number of teachers 5,454 people. Sample groups include teachers in the school to expand opportunities. In the area of responsibility of the Regional Education Office 11 academic year 2022, 370 people. To determine the size of the sample, use the table of Yamane (1973, p. 1088) Use multi-step randomization (Multi stage Sampling Sampling).
- 3. Research tools include questionnaire (Check List) divided into 2 episodes as follows: 1) Ask the status of respondents 2) Ask for opinions about the actual condition and condition that Should be in the development of management leadership, learning according to the philosophy of Sufficient economy, which is a questionnaire in scale, approximation (Rating Scale) 5 levels.
  - 4. Data collection Performed as follows
    - 1. Assessing questionnaires by experts.
- 2. Using a questionnaire about the actual conditions and conditions that should be in the development of teacher leadership in managing learning according to the philosophy of the economy is sufficient.
- 5. Analysis of data and statistics used in the research is 1) preliminary statistics are the average percentage and standard deviation 2) statistics used to find the quality of the precision determination tool (Validity) from IOC Compliance Index.

#### 4. Results

The pattern of teacher leadership development in managing learning according to the philosophy of an economy is sufficient. In the school, expanding educational opportunities in the area of responsibility of the Office of Education Region 11, there are the following research results

1. The composition of teacher leadership in management, learning according to the philosophy of the economy, suffice in schools, expanding educational opportunities. In the area of responsibility of the Office of Education, Region 11 consists of 4 components as follows: 1) Development of learning units in the school curriculum 2) Integrating the philosophy of Sufficient economy in management. Learn 3) Being a good model for life 4) Self-development and colleagues .

- 2. Necessary needs in the development of teacher leadership in management, learning according to the philosophy of the economy is sufficient. In schools, expanding educational opportunities in the area of responsibility of the Office of Education Region 11 can be summarized as follows: 1) Self-development and colleagues have PNI = 0.34 2) A good model for living. PNI = 0.30 3) Integrating economic philosophy is sufficient to manage learning. There are PNI values = 0.29 and 4) Development of units Learning in the institution curriculum has a PNI value = 0.27
- 3. Creating and developing a model for the development of teacher leadership in management, learning according to the economic philosophy, suffice in schools, expanding educational opportunities In the area of responsibility of the Office of Education, Region 11 consists of 1) Principle 2) Objectives 3) Content 4) Process 5) Media And learning resources and 6) measurement and evaluation
- 4. The effectiveness of the teacher leadership development model in managing the philosophical learning of the economy is sufficient in schools to expand educational opportunities. In the area of responsibility of the Office of Education, Region 11 evaluates the effectiveness by experts as a whole. At the highest level Results of the development of teacher leadership in learning management Sufficiency economic philosophy found that school teachers expand educational opportunities, have knowledge and understanding after the trial. 88.41% and the self-assessment results of the participants found that the average assessment of teacher leadership in management, learning according to the philosophy of the economy is sufficient. More 0.88, which means that school teachers expand educational opportunities, have teacher leadership in managing learning according to the philosophy of an economy that is more self-sufficient the results are shown in Table 1 and Table

**Table 1** shows the index of the effectiveness of teacher leadership development in learning management based on the economic philosophy of self-sufficient schools, expanding educational opportunities in the area of responsibility of the Regional Education Office 11

score	N	Total score	E.I.
Test before development	30	439	0.8525
Test after development	30	832	

From the value table, the effectiveness of the development of teacher leadership in management, learning according to the economic philosophy is sufficient, the school expands educational opportunities in the area of responsibility of the Education Office, Region 11, there are 439 pre-development tests, 832 points of development. With an increase of 397 pointsWith the effectiveness index equal to 0.8441 or 84.41 percent. The effectiveness index therefore has an increase.

**Table 2** shows the comparison of teacher leadership in learning management based on the economic philosophy. School expands educational opportunities before and after the experiment, use the development model

	The composition of teacher leadership in management, learning according to the philosophy of the economy, suffice Schools expand educational opportunities	Statistical values (N=30)					
that		Before		After		Increase	Percentage Advance
		X	S.D.	X	S.D.	<del>-</del>	
1	Development of learning units in the						
	educational program	3.32	0.81	4.17	1.05	0.85	17.00
2	Integrating the philosophy of the economy is						
	sufficient to manage learning	3.31	0.82	4.22	1.0	0.91	18.20
3	Being a good role model in life	3.28	0.81	4.18	1.05	0.90	18.00
4	Self-development and colleagues	3.27	0.76	4.11	1.05	0.84	16.80
	Average	3.29	0.80	4.17	1.03	0.88	17.60

From Table 2, it is found that the comparison of teacher leadership in management is learned according to the economic philosophy is sufficient. The school expands educational opportunities. Between the pre-trial model and the post-trial model, it was found that the average assessment of teacher leadership in management is learned according to the economic philosophy. Enough, the school expands educational opportunities Post-trial period ( $\overline{X} = 4.17$ ) higher than before trial model ( $\overline{X} = 3.29$ ) and with 0.88 difference which means School teachers expand educational opportunities. Who are researching, have teacher leadership in managing the philosophical learning of the economy is sufficient before joining the trial, the format is at a medium level. After participating in the trial, there is a pattern of teacher leadership in managing the philosophical learning of the economy. Very high there are 0.88 differences or more progress Index 17.60

#### 5. Discussion

From the research findings of the development model of teacher leadership in management, learning according to the philosophy of the economy is sufficient. In schools, expanding educational opportunities in the area of responsibility of the Regional Education Office 11. The results of the analysis, the researchers would like to present a summary and discussion of the key points as follows

1. The composition of the teacher leadership in the management of learning according to the philosophy of the economy is sufficient in the school to expand educational opportunities. In the area of responsibility of the Office of Education Region 11, there are 4 elements as follows: Composition 1 the development of learning units in the educational program has been found. Implement the philosophical principles of the economy sufficiently in order to obtain various components of the unit of study in the curriculum which consists of the name of the unit of learning concepts, goals, content and activities of the instructors, then lead to better create or improve may be because continuously developing learning units in the educational program and the curriculum has been improved to cover the preparation of various documentation for learners in accordance with the economic philosophy guidelines, which are consistent with the Ayutthaya Verbal. Good learning unit must it consists of lessons that will lead the learners to one or more concepts. Which consists of the name, unit, study, concept, goal, content of the instructor and learners' activities that are consistent with the goal and evaluation objectives and may include human resources, media, and materials and in the same direction as the unit of learning (Kasama Worawan na ayutthaya, 2007a, Page 121) and Element 2. The integration of economic philosophy is sufficient to manage learning. It is found that sufficient economic philosophy is used to manage learning management with management planning. Instruction to achieve learning management goals may be because that there is a plan for teaching and learning management in accordance with the economic guidelines, sufficient to manage, learn and integrate each subject group so that learners can gain knowledge and understanding In line with the permanent sour liquor said that Teacher learning management that brings sufficient economic philosophy organize activities through learning processes that relate to course content in accordance with learning standards. And in accordance with the basic knowledge of a self-sufficient lifestyle for selfreliance, saving the use of local wisdom Worthwhile use of natural resources and the environment assisting each other and organizing learning activities that combine the philosophy of an economy, self-sufficient, based on the key principles of modesty, reasoning, and good immunity in oneself. Management learns by integrating sufficient economic concepts. (Sureephon Iaothawon, 2007) and Element 3. Being a good model for life, it was found that teachers must have sufficient knowledge and understanding of the philosophy of the economy and then apply sufficient economic philosophy. Beginning with the teacher's practice as a good role model for students in living a sufficient life first then the teacher conveyed and cultivated the students. It may be because Teachers have consistently acted as a good model for living in a sufficient economic philosophy. And has been conveyed and cultivated for students beginning from seeing value for life, then the expansion to organizations, departments, communities and societies, in line with the concept of the working group created a book to learn the principles of work. Said that the philosophy of the economy is sufficient for the practice of teachers and students, with teachers and school administrators aiming see the importance and humility of the philosophy to be an example as a mold/Father prints well in terms of lifestyle based on morality. Artifis, diligence, patience do not interfere with gambling and baking porch, not inflation, etc. and develop a teaching system based on philosophy. Ati intends to teach, keep looking for more knowledge. Give children the opportunity to comment. To exchange, learn between teachers with students, encouraging children to love learning, think of doing and cultivating morality in order to create good people. To society for students (Working group to create books, learn principles, work, 2011) and element 4, self-development and colleagues found that their potential

has been improved and able to give advice to colleagues. By strengthening knowledge, skills, or increasing other abilities for oneself and introducing others to helps to increase efficiency in collaboration It may be because Self-development is always a must to improve its potential and therefore can be used to develop colleagues and organizations. In line with the concept of Phon Minai, Nary said that self-development and colleagues Is an expression of behavior of teachers, leaders in good role models show interest and commitment in self-development and others in order to have continuous learning, enthusiasm personal to learn to receive new things persuade colleagues to follow by creating a collaborative network In the organization there is a systematic thinking in new knowledge. Exchange, learn with to work to create a goal to achieve the goal to keep up with changes in the 21st century. (Thapanee Nari, 2018)

- 2. The need to develop teacher leadership in managing the philosophical principles of the economy is sufficient. In schools, expanding educational opportunities In the area of responsibility of the Office of Education Region 11, it was found that there was a need arranged from high to low consisting of 1) self-development and colleagues 2) Being a good model for life 3) Integrating economic philosophy in learning management and 4) Developing learning units in educational programs which is a condition that needs to be improved to benefit the school and the development of students can compare the differences between the actual condition and the condition that should be It may be because research needs to be evaluated as a necessary tool, as it is an effective tool, allowing for a plan that is consistent with the needs of the organization and can be improved. In line with the concept of (Suwimon Wongwanit, 2005) which describes the need to be defined as means the difference between a meaningful state that is desired to be real.
- 3. Creating and developing a model for the development of teacher leadership in management, learning according to the economic philosophy, suffice in schools, expanding educational opportunities. In the area of responsibility of the Office of Education, Region 11 has 6 components, namely 1) Principle 2) Objective 3) Content 4) Process 5) Media and Learning Resources and 6) Measurement and Evaluation this may be because this developed model is a model that is suitable for the development of teacher leadership in learning management. According to the philosophy of the economy is sufficient in schools, expanding educational opportunities due to tried out the model according to the development process, teachers have the ability to manage learning. According to the philosophy of the economy, sufficiency after development was higher than before development, in line with Siri, Nietzsche conducted research on the development model of leadership, service of personnel subdistrict administration In the northeast region it is found that the leadership development model consists of 1) Principle 2) Objective 3) Content 4) Process and 5) Measurement and Evaluation (Siripan Chuengsutthiwong, 2017)
- 4. The effectiveness of the teacher leadership development model in managing learning according to the economic philosophy is sufficient. The school expands educational opportunities. In the area of responsibility of the Regional Education Office Check and find that the evaluation results are effective by experts as a whole. At the highest level Results of the development of teacher leadership in managing the philosophical principles of the economy sufficiently, it was found that school teachers expanded educational opportunities with knowledge and understanding after the trial. 88.41% and the self-assessment results of the participants found that the average assessment of teacher leadership in management of philosophical learning of the sufficiency economy increased by 0.88, which means that school teachers expand educational opportunities, have the teacher leadership in managing learning according to the philosophy of the economy, suffice increases in line with (Teeraphong Sanyot,2017) found that the results of the effectiveness of the small secondary school administration model by applying the principles of economic philosophy are as follows: 1) The results of confirming the small secondary school administration model by applying the philosophy of the economy sufficiently by the evaluation of experts school administration and manual type overall, it is appropriate to be at the most level. 2) Results of confirmation of small secondary school administration forms by applying the philosophy of the economy sufficiently by expert evaluation in organizing discussions, small groups were found that the administrative model and manual overall, there are benefits and possibilities. At the highest level.

## 6. Conclusions

The composition of the teacher leadership in the management of learning according to the philosophy of the economy is sufficient. In schools, expanding educational opportunities are as follows: 1) Developing learning units in educational programs has a necessary demand value 0.27 2) Integrating economic philosophy is sufficient to manage learning. Necessary needs 0.29 3) Being a good model for life Have a necessary demand value 0.30 and 4) self-development and colleagues Have a necessary demand value 0.34 The development model of teacher leadership in

management, learning according to the philosophy of the economy, suffice in an extended school educational opportunities are as follows: 1) Principle 2) Objective 3) Content 4) Process 5) Media and Learning Resources and 6) Measurement and Assessment from the results of the form, it was found that school teachers expanded educational opportunities with knowledge and understanding after attending the experiment 88.41 percent and the self-assessment results of the participants Have an average increase of 0.88.

#### 7. Recommendations

1.From the findings, it is found that the teacher leadership element in managing economic learning is sufficient, the school expands educational opportunities in the area of responsibility of the Office of Education Region 11, consisting of 1) The development of learning units in the curriculum. 2) Integrating the philosophy of the economy just in learning management. 3) Being a good model for life and 4) Self-development and colleagues. In which the school administrators can take this information as a guideline for teacher development to have a teacher leadership in managing learning based on the philosophy of the economy, suffice, school expand educational opportunities continue to be effective.

- 2. From the research found that the need to develop teacher leadership in management, learning according to the economic philosophy is sufficient, found that there is a need. Sort of descending order consisting of 1) self-development and colleagues 2) being a good model in living 3) Integrating economic philosophy into learning management and 4) Developing learning units in educational programs In which executives can apply the necessary needs assessment results to develop teacher leadership in managing learning based on sufficient economic philosophy.
- 3. From the research found that the model of teacher leadership development in management, learning according to the economic philosophy is sufficient. Schools expand educational opportunities in the area of responsibility of the Office of Education Region 11, which is at the highest level, so should adopt the model of teacher leadership development in learning management This is to use the development of teacher leadership in managing the philosophical principles of the economy to be sufficient for further efficiency.
- 4 According to the research, the effectiveness of the development participants has a higher teacher leadership after development. Therefore should encourage the use of development forms leadership of teachers in management, learning according to the philosophy of the economy is sufficient. The school expands educational opportunities. And adopt the model of teacher leadership development in learning management. This is used to develop teacher leadership in managing learning based on the philosophy of the economy. To create new learning to develop the process teach of teachers to student development.

## 8. References

- Kasama Worawan na ayutthaya. (2550). Documents for the development of civil servants, teachers to have or promote the science as special skilled teachers. Department of Education, Ministry of Education. Working group on book learning principles in His Majesty the King. (2011). Learn the principles of work in the King. Bangkok: Office of the National Economic and Social Development Commission.
- Chonnida Hanchit. (2562). Development of training courses to strengthen teacher leadership in learning management in schools under the Office of Sakon Nakhon Primary Education Area 3. In the Master of Science thesis. Klakhon Rajabhat University
- Chatchai Kokhun.(2019 ). The development of teacher leadership in management, learning according to the philosophy of the economy, suffice: the case of Ban Nong Wang School. In the Doctor of Science thesis. Klakhon Rajabhat University
- thapanee Nari (2561). Model of teacher leadership development To carry out the philosophy of Sufficiency economy Secondary school, Biting Office of Education, Region 11. In the Doctor of Science thesis.Klakhon Ratchataka University.
- Teeraphong Sanyot. (2017). Management model of a small secondary school in the northeast By applying the philosophy of the economy sufficiently. In the Doctor of Science thesis. Klakhon Rajabhat University
- Nanta Burisang .(2017). Developing teacher potential in organizing activities to improve the life skills of students By applying the philosophy of the economy, suffice, many fish house schools (Kurat Phung) Sang Kram Office, Sakon Nakhon Primary Education Area, District 1. In the Master of Science thesis.Klakhon Ratchataka University.

- Phiranuchs Pibulsaravut. (26 September 2006). The philosophy of the economy is self-sufficient according to the initiative "Documentation of the Communication Strategy Seminar in the dissemination of sufficient economic concepts for the year 2006. Bangkok.
- Siriporn Kullasarn. (2557). Model of teacher leadership development in school learning management, expanding educational opportunities in the northeast. In the Doctor of Science thesis. Klakhon Ratchataka University.
- Sirikorn Chairat. (2562). The development of a model for the development of teacher leadership in management, learning according to the philosophy of the economy, self-sufficient in secondary schools. Sang Kram Office of Education Region 11. In the Doctor of Science thesis.Klakhon Ratchataka University.
- Siripan Chuengsutthiwong (2560) .Model of leadership development, ambition of service personnel, Sang Keng, sub-district administration organization In the northeast .In the Doctor of Science thesis.Klakhon Ratchataka University.
- Sureephon Iaothawon. (2550). Integrating the philosophy of the economy, suffice in management. Learn: Case Study, Mittarajinut School, Hall of the Palatinate. Independent Studies Master of Science (Teaching Management. Bangkok: Graduate School of Agricultural Sciences.
- Suwimon Wongwanit. (2005). Research assesses the need. Bangkok: Chulalongkorn University.