LEARNING AND PRACTICING IN ACCORDANCE WITH THE SUFFICIENCY ECONOMY PHILOSOPHY OF THIRD GRADE PRIMARY STUDENTS IN THE LOCAL NORTHEAST SOCIO-CULTURAL CONTEXT OF THAILAND

Suwadee Muansrichai¹, Somnuek Panyasing² and Sekson Yonvanij³

Abstract: This is a study of learning and practicing in accordance with the sufficiency economy philosophy of third grade primary students, in the local northeast sociocultural context of Thailand. The learning and practicing of each subject were integrated, both inside and outside the classroom by means of a participatory action research approach among teachers, students, community and researchers. The study found that integrating the learning and practicing of each subject, inside and outside the classroom, comprised of a participation process that was beyond planning of learning, practicing, observing, monitoring and evaluating. It further required the learning management plan for mathematics, Thai language, vocational education and technology, social studies, religion and culture. In conclusion, the students learned and practiced saving, spending reasonably, self-reliance, honesty, sufficiency, patience, diligence, discipline, responsibility, and self-consciousness. Furthermore, the integrations and practices led to organic vegetables being used in the school lunch menu, the reuse and recycling of waste materials, taking a role in guarding the school premises, and instilling management of a sustainable community environment. Beyond this, practicing cooperation, observing, sharing ideas, class presentation, work sheet correction and being on duty for observation in groups or individually, was required. Additionally, it was found that the environmental factors that affected the learning and practicing of the students were social problems, as were family economic conditions. Suggestions are as follows: teachers should study and integrate the learning and practicing of each subject in accordance with the sufficiency economy philosophy through participatory learning and teaching procedures. Emphasis should be placed on social, cultural and local wisdom to enhance student life skills in order to develop good citizens. Administrators and teachers should provide a policy for teacher-parent assembly, at least once a semester; and classroom teachers should make home visits to students with problems. Educational reforms, teacher quality development and performance evaluation should emphasize on the learning procedure and the actions of teachers towards the students.

^{1,2,3.} Humanities and Social Sciences Faculty, Khon Kaen University, Thailand Email: suwadee1166@ gmail, sompan@kku.ac.th, sekyon@kku.ac.th

Keywords: participatory learning and practicing, sufficiency economy philosophy, participatory action research approach

INTRODUCTION

To foster a society to be qualitative, virtuous, and have desirable-values, one should begin with human resource development from the early childhood years through the learning process, training activities, improving cognitive development. This will help them intellectually in order for them to grow up as good and smart adults, living a happy life within society. It has been found that the principle of sufficiency economy philosophy can direct individuality to adequate living behaviors from which the desirable accomplishment of sustainable and balanced development flourishes within the strength of individuals, groups of people and society. That is to say, firstly, being aware of moderating one's own capacity when earning a living, expending, or taking part in leisure activities, by understanding the concept of "enough" and not encroaching upon others. Secondly, being rational in thought, speech, and when making a decision on what to do or not to do. Thirdly, being well immunized, planning ahead, living a careful life, reducing risk, ensuring security, being prepared for social change regarding the future. Fourthly, being knowledgeable, seeking updated and clear information to minimize misunderstanding, capable of utilizing knowledge for their living, to be self-reliant while assisting society. And fifthly, being virtuous, responsible to both oneself and to the society, dedicated, patient, diligent, careful, keen, prepared to share time and assets, helpful without being troublesome (Dujduan Panthumanawin and Duangdaun Panthumanawin, 2007).

Developing good and wise human resources relates to four main local institutions; family, religion, community and school. Due to the changes in the current environment, economy, society and culture, school has become the main institution for human resource development. However, there remain many problems in the teaching and learning approaches of schools due to an imbalance between the curriculums and learning methods compared to the social reality and the structure of subject content. These should be improved to keep up with current social changes in order to support any imminent situation in the near future. Such learning processes and lesson content become just part of the daily routine, causing learners to become inactive, backward, unwilling to learn; the content of the lessons learned are impractical for use in daily life. Those learning can neither understand nor associate themselves with the knowledge as a whole. These students become indulgent towards themselves and they are lacking in many ways including; discipline, responsibility to themselves and the public, generosity, unity, diligence, while being divisive, impatient, they like comfort, and become selfish. The teaching focuses on increasing knowledge but lacks analysis.

This can be seen in primary education which emphasizes on citation rather than thinking (Tissana Kheamanee, 2005 and Phichaiyuth Siampantakij, 2010). In addition, most education has been imported from aboard; it does not accord with the way of life of the community, causing a clash of ideas. Those in the educational system claim prestige from urbanization, but this is causing a disregard of local knowledge which acts as a social immunity in order for a native community to survive the external cultural, political, and economic changes. It seems that the present educational system completely damages local intellect; local people are not expected to transmit their skills on to their children. It undermines their confidence and self reliability, lacking the potential to develop their own capability (Aphichai Pantasen, 1996). As such, the educational mode cannot create an equal, balanced quality of life for Thai society as it does not support learners to be well-informed and to understand real life fully (Globalizational Thai Faculty of Education, 1996).

In recent years, many schools have introduced and applied the sufficiency economy philosophy to learning and teaching, it is really performing with primary students, especially in the core subject of social study in accordance with the primary education curriculum. To follow and apply the philosophy, there have been studies on learning-unit integration within the sufficiency economy philosophy such as the development of an integrated learning unit on our local soil resources based on the philosophy of sufficiency economy for fourth grade primary students (Paveena Phumdeandin, 2008); "bamboo along with sufficiency economy philosophy" for second grade primary students (Arun Butrkout, 2009); the development of learning activities in occupation and technology learning area on the sufficiency economy philosophy for eighth grade students as Sanambin School under the office of Khon Kaen Educational Service Zone I (La-or Phanoi, 2010); the development of a child-centered learning unit on "environment and sufficiency" according to the philosophy of sufficiency economy for fourth grade primary students (Patcharin Kongsuk, 2009); and the development of an integrated learning unit on good citizenship according to the philosophy of sufficiency economy using cooperative learning model (Pimonrat Wongsaen, 2009).

This research has the objectives to study learning, practicing and suggestions to learning development and practicing in accordance with the sufficiency economy philosophy of third grade primary students in the local northeast socio-cultural context.

METHOD

This study was conducted by qualitative research. The researchers selected from successful or exemplary schools on living life and those having performed activities in accordance with sufficiency economy philosophy in the northeastern region.

Also included were schools that recorded honor rewards in 2013, as compiled by the Teacher Quality of Life Development Center, Office of the Welfare Promotion Commission for Teachers and Education Personnel. Three schools with third grade primary student level were recruited: one in Khon Kaen province, one in Nakhon Ratchasima province, and one in Sakon Nakhon province, which are located in the central, lower and upper northeast region and fulfill these following criterion,

- 1. Primary students have started learning in accordance with sufficiency economy philosophy from second grade primary students.
- 2. Third grade primary students have studied the basics of sufficiency economy for one year and have started performing activities based on sufficiency economy philosophy.
- 3. Third grade primary students have gained cognitive, emotional, and social development in accordance with that of children aged 6-12 years. As Prapai Praditsukthaworn (2013) cited, cognitive development of primary childhood (9 years) can absorb knowledge; their communication style will change, using more sophisticated language, asking and answering rationally, having well-rounded knowledge, able to find answers for themselves from observation.

The population of third grade primary students of the three schools comprised 40 pupils. Due to the small size of the population, researcher needed to collect data from all the population as sample (Samroeng Chanthasuwan. 2002). The period of time for this study was 2 years. The tools and data collection technique consisted of a semi-structured interview guide, participant observation, in-depth interview, focus group discussion, information sheet, work sheet, flashcards, story pictures, and a group performance observation sheet for student quality in accordance with the sufficiency economy philosophy. Key informants were from five targeted groups comprising students, teachers, school board committee, parents, and community leaders. Data analysis was conducted with analytical description and presented in tables.

RESULTS

This study proved that learning and practicing in accordance with the sufficiency economy philosophy can be taken to integrate the core learning content of basic education for third grade primary students in the local northeast socio-cultural context. The case study of Banhuaiyang School is as follows:

1. School and Community Social Landscape

Banhuaiyang School is located in Huai Yang village, Lao Phon Kor sub-district, Kouk Sri Suphan district, Sakon Nakhon province. It was established in 1985 on

a land plot of 5.36 hectares. It is an educational expansion school with 2 villages, Huai Yang village No. 6 and Huai Yang Nuar village No. 9, within its service area. It comes under the supervision of the Sakon Nakhon primary education service area office 1. The school provides education for students from pre-primary through ninth grade. The total number of students is 230, with 10 third grade primary students —5 boys and 5 girls. The school vision is 'Focusing on being learnercentered, being virtuous in accordance with the sufficiency economy philosophy, coupled with technology and having all sectors participating in coordination, and administration, adhering to good governance'. Every Friday, all the students wear local traditional costume in order to preserve the dressing style of the Phuthai natives in the Huai Yang community. Activities in the school include growing chemical free vegetables, bamboo, dragon fruit, corn; raising pigs, fish, frogs; culturing mushrooms; seedling plants. In the past, the villagers had immigrated from Mun Muang village, in Salavan district of Lao PDR. The area was then very fertile, suitable for agriculture. The village name came from the family name of the village founder. Since 1967, the village had suffered severe water shortages, suffering from drought it became a 'poor village'. In 1994, there was a royal project to construct the Huai Tho-Huai Yang reservoir, this provided a better life and soil conditions became suitable for farming. Most villagers now make their living from rice growing, relying on the water supply from Huai Tho-Huai Yang reservoir to grow seedlings; raise fish, chickens, ducks, cattle; and also produce woven cloth. There are established organizations such as the community plant seedling enterprise, silk weaving group, silkworm raising group, bio-fertilizer, housewife saving group, youth group, home stay group, and tour guide volunteers for the natural sites such as the Phuphayol National Park.

2. Learning and practicing in accordance with the sufficiency economy philosophy of third grade primary students, in the local northeast socio-cultural context.

Learning in accordance with the sufficiency economy philosophy for third grade primary students comprised of mathematics subject titled 'association between addition and subtraction'; Thai language subject titled 'a tale on honesty'; social studies, religious and cultural subject titled 'taking care of school property and community environment conservation'; vocational education and technological subject titled 'producing artificial flowers from a milk package and knowing kitchen vegetables'. An example of social studies, religious and cultural subject is presented as follows.

Learning ma time 30 m	Learning management plan, social studies, religious and cultural subject, titled 'taking care of school property'; learning time 30 minutes; practicing time 30 minutes, for third grade primary students, Banhuaiyang Nongyaplong School	t plan, social studies, religious and cultural subject, titled 'taking care of school property'; learn racticing time 30 minutes, for third grade primary students, Banhuaiyang Nongyaplong School	d cultural subjec rd grade primary	t, titled 'ta students,	king care of scho Banhuaiyang No	ool proper ngyaplon	y'; learning ; School
Learning management plan	Learning standard	Learning objectives Core learn conte	Core learning content	In and out class-room learning	Performance	Teaching Test/ aid and Evall resource	Test/ Evaluation
Taking care 1st Core of school zenship, property Life Livi Standarc Study, R Culture Understanding of good maintair values, T and glob and glob	1st Core Content: Citi- zenship, Culture and Life Living in Society Standard Social Study, Religion and Culture Subject 2.1: understanding and abiding by a code of good citizenship; maintaining good values, Thai customs and culture; living life harmonizing in Thai and global society	For students to treat themselves in accordance with rules, regulations, and duty in and out of the classroom	Agreement, codes, regulations, and duty to abide within the school Utilizing appliances and premises in school Taking care of property and the premises of the school	Teacher exemplified public places in school such as toilets, library, meeting hall, and cafeteria	Teacher Before class, exem-representatives plified make a draw public from colored places in turning wheel school (marking spots such as to take care of) toilets, for each class library, Each group meeting was given a hall, and worksheet for cafeteria brain storming regarding taking on the responsibility	Class-rooms - Library Cafete- ria Toilets	Observing performance of students Asking their comments Opinion expression of students Work sheet - Examining Inspecting the spots for how the work was done

The learning management plan of the classroom teacher for third grade primary students, complied with the core learning standard, social studies, religious and cultural subject, in accordance with sufficiency economy philosophy, titled 'taking care of public property in school'. It was for students to learn and practice along with agreement, codes, regulations and duties to abide by within our classroom; to utilize appliances and premises of the school by having students express and share ideas on how to take care of and maintain the school property used in daily life. Students were instructed and formed into 3 groups of 4 and then given 30 minutes for them to put forward their targeted spot. The teacher added that the facilities in school such as toilets, library, and cafeteria should be taken care of so that everyone could have good health and various diseases could be prevented. Each group agreed to select a place to take care of and provided an agreement, rules and regulations to abide by, in and out of the classroom. Group 1 (blue group) selected the classroom; group 2 (pink group), the library; and group 3 (yellow group), the cafeteria.

Learning in Accordance with the Sufficiency Economy Philosophy

Students learning in accordance with the philosophy complied with taking care of public property in the school. Each group helped by sharing and exchanging ideas to provide rules, regulations, agreements, codes, and responsibility to abide with, both in and out of the classroom, as follows.

Moderateness refers to students who can examine and decide whether a place is clean or not; realizing means of caretaking in the proper way, time, and location.

Reasonability refers to students who can use reason and express responsibility before the group members.

Being immunized refers to students cooperating with the teacher, enhancing a better environment.

Being knowledgeable refers to students understand brainstorming and opinion expression while relating roles and duties to the place they have chosen.

Being virtuous refers to students who have learnt and understood about taking care of public property, working in a group, and showing co-responsibility.

Example showing activity performed in accordance with the sufficiency economy philosophy for third grade primary students of social studies, religious and cultural subject (civic duty).

As for the learning process of third grade primary students, Banhuaiyang school, each student learned and understood about taking care of school property, cooperating in group activities, expressing and sharing opinions as follows.

Table 2:

local northeast socio-cultural context, social studies, religious and cultural subject titled 'taking care of school property'; Learning (core content) in accordance with the sufficiency economy philosophy of third grade primary students in the learning time 30 minutes, Banhuaiyang School, Lao Phon Kor sub-district, Kouk Sri Suphan district, Sakon Nakhon province

		2			0	
Moderate- Keasons ness	Immunity	Knowledge	Virtue, ethics, and values		evaluation	reference
Students - Students can survey being reafor clean- sonable and ness, responsible consider- in allocaing proper tion of duty means, time among and loca- group memtion bers	- Students learn, understand, cooperate with the teacher to maintain neathess, safety, and a good environment	- Students learn and cooper- ate in allocation of duty and responsibility among group members	Students earn and understand about taking are of pub- ic property	- Coop- eration in maintain- ing neat- ness - Students can answer the ques- tions asked by teacher	- During the learning session, asking questions, expressing opinions, understanding, able to explain and exemplify	- Information sheet - Learning among students and with teacher
. e	onable and sponsible alloca- on of duty nong oup mem- rrs		understand, cooperate with the teacher to maintain neatness, safety, and a good envi-	understand, cooper- cooperate ate in with the allocation teacher to of duty and maintain responsibil- neatness, ity among safety, and a group good envi- members ronment	understand, cooper- understand cooperate ate in about taking is with the allocation care of pubteacher to of duty and lic property maintain responsibiltone asfety, and a group good envi- members like in the comment cooperation and a group good envi- members like in the comment comment and cooperation and cooperations and cooperations are comment.	understand, cooper- understand maintain- se cooperate ate in about taking ing neat- with the allocation care of pub- ness teacher to of duty and lic property - Students on maintain responsibil- can answer on the among it in a safety, and a group it in a sked a good envi- members by teacher ronment

Brain Storming in Groups of Students

From observation during the learning sessions, students asked questions and expressed opinions; each group helped with brain storming, proposing agreements, rules, and regulations, allocating duties and responsibility, maintaining cleanness and neatness in classrooms, library, and cafeteria.

Each group of students jointly expressed opinions through a thought procedure and consultation to cultivate public mindedness or public responsibility, which each group provided as follows.

Group 1 (Blue): Taking care of the classroom

- 1. Help each other to clean the classroom.
- 2. Help each other to sweep the floor.
- 3. Help each other to wipe the floor.
- 4. Help each other to keep desks neat.
- 5. Help each other clean the teacher's desk.
- 6. Help each other clean the board.
- 7. Help each other collect garbage in classroom.
- 8. Help each other with flower arrangements.
- 9. Help each other arrange student desks.
- 10. Help each other dispose of cobwebs.
- 11. Help each other wipe the desks.
- 12. Help each other dispose of garbage.
- 13. Not to throw garbage in the classroom.
- 14. Help each other to close widows before leaving.
- 15. Help each other to keep books neat.

Group 2 (Pink): Taking care of the library

- 1. Help each other take care of the library.
- 2. Help each other collect books.
- 3. Help each other wipe the floor.
- 4. Help each other mop the floor.
- 5. Not throw garbage in the library.
- 6. Not make a noise in the library.
- 7. Not to run around in the library.
- 8. Not to take dogs into the library.

- 9. Not to read loudly in the library.
- 10. Abide by library regulations.
- 11. Not to steal books from the library.

Group 3 (Yellow): Taking care of the cafeteria

- 1. Help each other to wipe tables.
- 2. Help each other clean tables.
- 3. Help each other clean the floor.
- 4. Help each other sweep leaves.
- 5. Help each other collect garbage.
- 6. Help each other keep the tables neat.
- 7. Help each other arrange rows of tables.
- 8. Help each other tidy the seats.
- 9. Not take pets into the cafeteria.
- 10. Help each other with dusting.
- 11. Help each other maintain cleanliness.
- 12. Help each other maintain order.

Practicing in Accordance with the Sufficiency Economy Philosophy

From the following, the sufficiency economy philosophy on taking care of school property, each group of students conducted brain storming, provided regulations, agreements, rules, orders, and duties to be complied with within the classroom, library and cafeteria as follows.

Moderateness refers to inspecting whether the classroom, library and cafeteria are clean, utilizing appropriate and proper methods, times and location.

Reasonability refers to using the proper materials and tools, being responsible, allocating duties, help taking the task in charge.

Being immunized refers to students knowing, understanding, and cooperating with the teacher to enhance the sanitary conditions in school.

Being knowledgeable refers to students knowing, understanding to brainstorm and allocate duties among members in the group.

Being virtuous refers to the students learning and understanding school property, working in groups, and having co-responsibility.

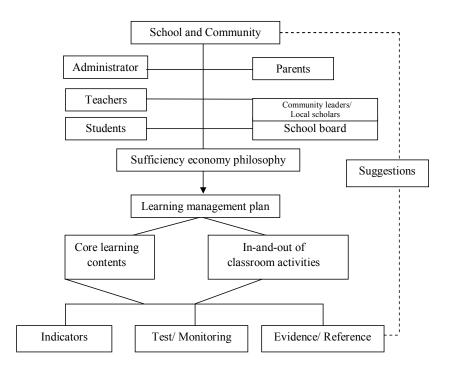
The learning and practicing in accordance with the sufficiency economy philosophy of third grade primary students, in the local northeast socio-cultural context of Suokhangsuksa, Nongyahplong and Banhuaiyang schools has integrated

Practicing in accordance with the sufficiency economy philosophy of third grade primary students in the local northeast socio-cultural context, social studies, religious and cultural subject (civic duty); / titled 'taking care of school property', practicing time 30 minutes, Banhuaiyang School, Loa Phon Kor sub-district, Kouk Sri Suphan district, Sakon Nakhon province Table 3

Topic of Prac-	Topic of Prac- Teaching aid and Sufficiency Economy Philosophy	Sufficiency Econ	юту Philosophy				Indicators	Test and	Evidence and
ticing	activities	Moderateness Reasons	Reasons	Immunity	Knowledge	Virtue, ethics, and values		evaluation	reference
In and out of classroom activities	Students divided into 3 groups (Yellow, Pink, and Blue); each group was assigned to take care of the classroom, library, and cafeteria respectively	Students inspected cleanness and tidiness; if unsatisfactory, they had to prompt cooperation with their task	- Students participated in providing agreements, rules, and regulations, based on reason and public advan- tage	-Students were healthy; their deeds resulting in their good health and prevention of a disease outbreak	- Students could hold on their duty as assigned completely by having a teacher as an adviser Students could cooper- ate allocating duties among their group members	-Students followed their roles of duty, participat- ing in every activity	- Students could apply knowledge and skill in their daily life in maintaining their cleaning job, showing responsibility, and being disciplined	- Observation by teacher and researcher - Class presentation - Activity participation - Group work	- Information sheet - Work sheet - Examining work sheet

the learning and practicing of each subject. This was as follows: mathematics, Thai language, social studies, religion and cultural, vocational education and technology were integrated by complying with a learning management plan comprising of learning sessions and performances in accordance with the sufficiency economy philosophy, focusing on student participation during sessions and in-and-out performances. This included linkage of such activities with the local social, cultural and intellectual community. Students were guided to exchange and share ideas among the group, asking questions of teachers, while teachers had the important roles of preparing a learning management plan, employing teaching aids, seeking learning resources, in and out of the classroom, arranging tests and evaluating the learning attainments. All of these had to be in accordance with the learning standards and objectives regarding concept and practicality and then integrated in to the features of academic, vocational, life living, and community learning. All this was conducted with cooperation between the school and the organizations in the community, supporting students to enjoy learning, and being eventually able to apply their self and inter reliance in to their daily lives.

Diagram concluding the learning and practicing in accordance with sufficiency economy philosophy of third grade primary students in the local northeast socio-cultural context



CONCLUSION AND SUGGESTIONS

This research was to study the learning and practicing as conducted in accordance with the sufficiency economy philosophy of third grade primary students, in the local northeast socio-cultural context. The results showed that the school had space for integrated farming activities as a learning resource for both teachers and students; they all had induced the principle of sufficiency economy philosophy within their learning, teaching and activities in and out of the classroom. The administrators and teachers complied with the guidance concept to develop the education quality of the students. To implement such a goal, they had to organize meetings to share and exchange ideas on learning management plans, which comprised of learning standards, learning objectives, learning core content, in-andout of classroom learning and activities, teaching aids, learning resources, testing and evaluation. The learning and practicing in accordance with the sufficiency economy philosophy of third grade primary students, in the local northeast socio-cultural context, comprised the sufficiency economy philosophy (adequacy, reasonability, good immunity, knowledge, and virtue), indicators, monitoring and evaluation, evidence and reference. Furthermore, it needed to focus on the importance of the participation and performance of the students, concerning the way of life and existence of the community; such as, vocational education and technological subject titled 'knowing kitchen vegetables', students learned and practiced in school, within their family and community; social studies, religious and cultural subject (civic duty) titled 'taking care of school property' students learned about citizenship, conscience and awareness within daily life in school and community, such as maintaining cleanliness, discipline, responsibility for the classroom, library, toilet, cafeteria, multipurpose building, football field, play ground, and community public spaces; mathematics subject titled 'let's add up, subtract and multiply', students learned about economizing, saving and purchasing useful and necessary products for them to use in their daily lives. They learned to obtain academic content constructively, using the participatory teaching and learning process, utilizing the local socio-cultural context and intellect to further develop life skills for the students to achieve good citizenship.

It was suggested that schools should be a part of the community; there should be co-meetings with parents at least once per semester, addressing teaching, learning and activities; denoting mutual understanding, enhancing the roles of teachers, parents and students. Some problems concerned the students' families; these can affect class attention and school record, especially for those who are not living with their own family. An awareness of understanding and responsibility to the parents; the schools should have the intention to develop student potential based on the family and community environment. Classroom teachers should often pay home visits so as to be well informed of the problems of the students and

their parents. In addition, learning and practice in accordance with the sufficiency economy philosophy can be gained from occupations in the community such as integrated farming, local scholars (cooking, dessert making), folk performances, environment and natural resources (community forest, forest plantation, natural water resource, garbage disposal, soil enrichment, chemical and pesticide reduction) for example. There should be a study on the impacts of state policy on education, educational reform, educational decentralization, teacher quality development, teacher performance follow-up and evaluation, focusing on learning and teaching procedures among teachers, students and the community.

References

- Aphichai Phantasen (2007). Rural Development in Thailand: Causes and Achievement. Bangkok: Phumpanya Foundation.
- Arun Butrkout (2009). "Bamboo along with Sufficiency Economy Philosophy" for second grade primary students. Master degree thesis, Curriculum and Teaching branch, specific social study course, Faculty of Education, Khon Kaen University.
- Dujduan Phanthumanawin and Duangduan Phanthumanawin. (2007). Sufficiency Economy Principle for Individuality: Theories and researches to set index in mental psychology. *Development Administration Journal*, 47 (1), 28-79.
- La-or Phanoi (2010). The development of learning activities in occupation and technology learning area on the sufficiency economy philosophy for eighth grade students as Sanambin School under the office of Khon Kaen Educational Service Zone I, Sanambin School, Master degree thesis, Curriculum and Teaching branch, Faculty of Education, Khon Kaen University.
- Prapai Praditsukthaworn.(2013). *Cognitive Development: Primary Education*. Retrieved from http://taamkru.com/th.
- Patchrin Kongsuk. (2009). Learning unit development on 'the environment and adequacy in accordance with the Sufficiency Economy Philosophy by learning activity focusing on being learner centered, fourth grade primary student. Master degree theses in education, educational environment branch, Faculty of Education, Khon Kaen University, specific social study teaching.
- Paveena Phumdaendin (2008). The development of an integrated learning unit on our local soil resources based on the philosophy of sufficiency economy for fourth grade primary students. Master degree thesis, environment branch, Faculty of Education, Khon Kaen University.
- Phichai-yuth Siampuntakij (2010). *It's About Spies and Problems in Thai Educational System*. Bangkok: Saimese Publishing House.
- Pimonrat Wongsaen (2009). The development of an intergrated learning unit on good citizenship according to the philosophy of sufficiency economy using cooperative learning model. Master degree thesis,

- Samroeng Chanthasuwan (2002). *Use of Population as Sample:* Humanities and Social Sciences Faculty, Khon Kaen University.
- Study team for Thai Education in Globalization (1996). *Dream of the Land.* Bangkok: Tawan-ok Ltd. (Public). Curriculum and Teaching branch, Faculty of Education, Khon Kaen University.
- Suwadee Muansrichai, Somnuek Panyasing and Sekson Yonvanij. (2014). Lessons Learned from Community-based Schools: Ban Huai Yang. 13th-14th November 2014 The 3rd Annual PSU Phuket International Conference 2014 Prince of Songkha University, Phuket Campus, Phuket, Thailand.
- Thissana Khaemmanee (2006). *Teaching Science for Knowledge to Manage Efficient Learning Process*. (4th edition).Bangkok: Chulalongkorn University printing house.

ACKNOWLEDGEMENT

The researchers would like to thank the teachers, students and community comprising the selected sample group and the study areas for this research. Furthermore, sincere thanks are due to the advisors for this thesis who consistently bestowed helpful suggestions, and also Khon Kaen University who facilitated the research fund that was granted according to the National Research University (KKU-NRU).