SEAMEO-Japan ESD Award

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Submission Form of 2013 SEAMEO-Japan ESD Award

Theme: Values Education

The last day for submission of entries: 16 September 2013

- To participate in the 2013 SEAMEO-Japan ESD Award, please submit the information of your school's project/programme/practice/activity on Values Education in English language by using this Submission Form.
- The **digital format of this Submission Form** can be downloaded from the SEAMEO website: **www.seameo.org** or requested by sending a request to email address: seameojapan.award@seameo.org.
- The **guidelines for submission of entries** and the **judging criteria** are detailed in page 15-17 of this document.
- Schools must ensure that the SEAMEO Secretariat receives their entries by **16 September 2013**.
- More information, please contact the SEAMEO Secretariat, Bangkok (telephone number: +662 391 0144, fax number: +662 381 2587 and email address: seameojapan.award@seameo.org)

PART I: Details of Your School

1. Name of your school: Phuwiengwittakhom School
2. Full address: 300 M.4 Phuwieng District, Khon Kaen Province
3. Postcode: 40150
4. Country: Thailand
5. Telephone number (country code+city code+telephone number): 662 40150 043291360
6. Fax number (country code+city code+fax number): 662 40150 043291203
7. Name of the Head Master/ Principal/ School Director: Sophon Martrasongkham
8. Name of Teacher Coordinator: Apisit Khotnarin
9. Email address: wall_khot@hotmail.com
10. School website (if available): http://web56.pwwk.ac.th/
11. Educational level (Such as Kindergarten 1 to Grade/Year 9): Secondary school (Grade 7-Grade12)
12. Number of teachers in your school: 106 person
13. Number of students in your school: 2,522 person

14. Please provide the name of teachers and students who were/have been involved in the planning and implementation of this school activity/programme on Values Education.

Teachers:

a) Mr.Pichit wiriyachaigij
b) Mrs.Wallaya Khotnarin
c) Mrs.Paungtip Sriutha
d) Dr.Nigunchala Lonluar
e) Mr.Thara Sasiworagan

Students:

a) Mr.Krisada Labanperm
b) Mr.Kittisak Sopun.
c) Mr.Kiatisak Jiwyoo
d) Mr.Kiatisak Marit
e) Mr Jatuporn Gawwieng
f) Mr Charan Gongpa
g) Mr.Chutipas Yoothon
h) Mr.Puttipong Onaura
i) Mr.Ruttapong Chaiurng
j) Mr.Watchara Marasri
k) Mr.Werapat Chahong
l) Mr.Sarayu Muntapan
m) Mr. Anupong Sungjan
n) Ms. Onanong Kunnathum
o) Mr. Arinchai Kayundee
p) Mr.Aomsin Chagumnun
q) Mr. Anon Wijanchaisri
r) Mr.Anan Thummawong
s) Ms.Kronggan Nichumnan
t) Ms.Kittiwadee Yurayat
u) Ms. Kitiya Thompud
v) Ms.Chonticha Thanapong
w) Ms.Thidarat Phonsanong
x) Ms.Napisanet Wannkum
y) Ms.Narawadee Kaunwong
z) Ms.Prapaporn Pudkaw
aa) Ms.Patcharaporn Boonkaw
bb) Ms. Minta Choochawan
cc) Ms.Sriyaporn Wannasing
dd) Ms.Sirirat Upachai
ee) Ms.Saitan Pagadum
ff) Ms. Sukanya Sripa
gg) Ms.Sudarath Srimungkun
hh) Ms.Supapanwadee Pimchainoy
ii) Ms.Supapanwadee Sripakhot
jj) Ms.Nijagorn Lumperypon
kk) Ms.Aronrot Srihagun
ll) Mr.Thanawat Sangjun
mm) Ms.Noppamas Kogsoongnern
nn) Mr. Supanut Samibut
oo) Ms.Sirilug Gasasom

PART II: Information about the School's Values Education Activity/Programme

The information of part II from no.1 to 14 should be no longer than nine (9) pages long of A4 in total. The information should be written in Times New Roman font, 11-12 point size.

1. Title of the school's programme

The Development Mathematics Instructional Model A Sustainable Towards Application Of Sufficiency Economy Philosophy For High School

2. Summary of the programme (a half to one page A4)

The objectives of this article were: 1) to develop the mathematics instructional model a sustainable towards application of sufficiency economy philosophy for high school and 2) to study the effect of mathematics instructional model a sustainable towards application of sufficiency economy philosophy for high school and metric values from the analysis on the philosophy of sufficiency economy The researcher administered both of qualitative research method and quantitative research method, and applied an action research during the step in developing the instructional model. The implementation was followed the following phases: Phase 1: the contextual study, conceptual framework, and synthesizing the outline of Instructional model a sustainable towards application of sufficiency economy philosophy for high school. The target group including matayomsuksa 4/5, selected by purposive sampling during the second semester of 2010 school year, Phuwiengwittayakom school, titled analytic Geometry has two parts: Line and Conic section. Phase 2; the development of mathematics instructional model a sustainable towards application of sufficiency economy philosophy for high school level. The target groups were selected by purposive sampling, matayomsuksa 4/1 during the first semester of 2011 in Phuwiengwittayakom School, titled "Real Number", using the action research principles, and Phase 3: the extension of findings and evaluation in efficiency of instructional model a sustainable towards application of sufficiency economy philosophy for high school. The sample. They were randomly assigned to high school students, during the second semester of 2011 school year in Phuwiengwittayakom School as well as network school in the same context as a sequence, total of 5 schools, titled "Infinite Series", "Relations and functions", "Arithmetic sequences and Series" and "Basic Graph Theory". Each room has a student, one class/school, and total of 203 students. The design of this study was the pre-experimental design as one-group posttest only design. The effect of instructional model "RUPER" was studied with high school students. The results of the thesis were as follows:

1. For the instructional model a sustainable towards application of sufficiency economy philosophy for high school, the researcher developed a model for teaching RUPER the five steps of creative concepts and theories of knowledge, Information processing theory, Schema theory, and metacognition theory. Were used to develop the ability to think. Or metacognition process, and skills in the students. The high school by preparing lesson plans. The highlight of the experience for the students to behave is the first stage of the reading, the second stage of the understanding, thirst stage of the planning, fourth stage of the execution and fifth stage of the reflection. The process of teaching 5 steps: Step 1: the presentation before instructional activity including: (1) the Introduction, Step 2: the instructional activity management based on RUPER Learning Model as: Stage 1: Reading, Stage 2: Understanding, Stage 3: Planning, Stage 4: Execution and Stage 5: Reflection. In every step consisted of: (1) personal critical thinking, (2) group critical thinking, (3) presentation, (4) conclusion, and (5) skill practice. Step 3; extension of findings. Step 4; instructional management evaluation. Step 5; reflection for the findings.

2. For the results of evaluation of the instructional model a sustainable towards application of sufficiency economy philosophy for high school with academic achievement, processes or skills in the metacognition above 70 percent and a positive attitude in mathematics at a high level. And achievement of the extension of findings and evaluation in efficiency of the instructional model for teaching mathematics a sustainable towards application of sufficiency economy philosophy for high school. The high schools were higher than 70 percent are statistically significant at the 0.05 level. and metric values from the analysis on the philosophy of sufficiency economy Included in the average good level.

3. Background information or reasons why the school created this programme

National Education Act BE 1999 , Section 22 states that education must be based on the principle that All students have the ability to learn and develop themselves. And students is the most important process of education to encourage students to develop naturally. And full potential in Section 23 on the formal education system and the importance of integrating formal knowledge moral learning process according to the educational level of the knowledge of the mathematics . To achieve the knowledge, skills and attitudes as well as knowledge. Understanding and experience of the management and Section 24, Article 2 has highlighted the process learn the skills in management thinking to face the situation . And the application of knowledge to prevent problems for maintenance, use of natural resources. Balance and environmental sustainability. (Department of Education , 2003) , educators have commented on the importance and need for education reform . To lead to the development of quality Wathanachai Kasem (2002) discussed studies that include The teaching and learning process in which the learning process occurs . From the transfer of knowledge , understanding , attitudes , values, skills and faith to achieve a change in feeling . And student behavior as defined in The purpose of learning is the learning process for students by students only. The teaching process is a process that leads to changes in the students . Teachers are responsible for creating an environment (Vygotsky, 1978) to assist congregations and guiding the students to learn . Transforming learning. They focus on the students . For students to learn how to learn life lessons and is learning to think as well as I do with other people. And towards life. Consistent with learning in the 21st century that all people need to learn from kindergarten through college and life by emphasizing that students are ready 3R and 7C are reading (Reading) to understand or main ideas in documents or publications have written (Writing) can write what they perceived to be . And knowledge about mathematics (Arithmetic) and students need to be creative (Creating) a critical thinking (Critical thinking) and communication (Communication) skills , understanding different cultures. (Cross-cultural understanding) as the solution work together effectively (Collaboration) computer skills (Computing) and professional skills . Or learning skills (Career & learning skills) with social happily by global changes , especially the development of each individual core ideas and practices (Panich Wijan , 2012) in the . sufficient lifestyle on a middle path to moral knowledge . Communities to develop their own national self-reliant and progressive along with balanced. Along with the changes in the various Philosophy of sufficiency economy. The National Economic and Social Development Plan . From No. 8 (1997-2001), No. 9 (2002-2006 BC) and No. 10 (2007-2011 BC) was the philosophy of sufficiency economy. Into national planning . Especially at the start of the year 1997 , the country is in the economic crisis. The government has announced a policy of sufficiency economy. It is the policy of the National Economic and Social Development Plan . In the later efforts by the philosophy of Sufficiency Economy thinking and project -based approaches . To extend the results widely. Operations cover four areas: 1) networked learning sufficiency , 2) academic and research 3) the curriculum and learning process, 4) outreach (Plainoy Supawan, 2553), consistent with the development plan. National Economic and Social Development No. 11 (BE 2012-2016), Thailand had summoned the social mainstream " philosophy of sufficiency economy " is widely applied in all levels. From the individual level . Family, community, society, country level . Which contributed to strengthen the immune system and helps the Upper Thailand can stand. Steadily amid such changes . Plan No. 11 in all sectors of society, Thailand agree to joint lead the philosophy of sufficiency economy . The philosophy guiding the development of the country continuously . To focus on innate immunity and risk management . Appropriately to a developing country to a balanced and sustainable .

King Adulyadej, King of the Present. "Without sufficient economy. Time to break out the fire, to do that would be worse to use .. If the economy is not mature enough. If we have a power cut or if the power is cut using ancient than Light a candle, it is a way to solve it. So this sufficiency. It has step by step. But suffice to say that the economy is self-sufficient within a hundred percent. Here are some things that do not. Has to be exchanged. Need to be helped. Sufficient in theory this question. Is the ability to perform "King. Alleviating Management: Office of Public Sector Development (1999 cited in Matjarat Thawan, 2007).

4. School vision, mission and core values

School Vision:

Phuwiengwittakhom school as a community. Managed by the school as a base environment as a learning resource. Commitment to excellence, the standard of education and international standards. Based on the way of Thailand. Philosophy of sufficiency economy

School Mission:

First. Consistent with the study of national education and specific education geared towards international standards.

Two. Promote and develop students to attain quality education standards, national and international standards.

Three. Promote personal development and educational services effectively. Comparable to international standards.

Four. Development of quality management education with community participation. Efficiency. Worth the philosophy of sufficiency economy.

Five. Development resources. Thailand is a source of wisdom for environmental learning. Towards international standards.

School Core Values:

School of self-sufficiency

5. Objectives/goals of the programmed

5.1 to develop the mathematics instructional model a sustainable towards application of sufficiency economy philosophy for high school

5.2 to study the effect of mathematics instructional model a sustainable towards application of sufficiency economy philosophy for high school

6. Values that the school aims for within the programme and/or definitions

6.1 Instructional model as a form of teaching, the researcher has developed a model for teaching mathematics sustainability. By applying the philosophy of sufficiency economy. The upper secondary level, all five stages of the concept and theory of the study are used to develop the ability to think. The process or skills to students. The upper secondary level, by the preparation of lesson plans. Focused on experience for students to behave and values with philosophy of the sufficiency economy as follows

Step 1: Reading is read by the workload capture and identify indicators. Convey clearly. Tell me what the problem is. To ask questions or to require students to answer. You can tell if the information is necessary for solving the problem

Step 2: Understanding consisted of the students showed their behavior by repeatedly spoke regarding to the problem, questioning to inform the meaning of problem, showing the representation of problem by writing the real value or chart, reminding oneself or the others that this problem was found before, and expressing opinion on the existing information or the lacked one.

These two steps (Step1-Step2) show that students focus on realistic values of self-reliance. The freedom to think. Or understand themselves and responsibility to take care of themselves. Forward without relying on anyone.

Step 3: Planning was the construction of model and recalling of model for problem solving in finding relationship between the existing information, and the things needed to be found, using external representation or considering related problem to view that it was general problem or specific one, ranking the order or hierarchy, or classifying the step of problem, and setting the hypothesis including:

1) Exploring was the searching for correctness of information.

2) Strategy was the selection to evaluate the appropriateness of strategy as well as the possibility of the plan.

Show the students to focus on values, knowing the merits . Or know enough. To know about their own learning . Functions. Assigned . Regard to knowledge, skills, intelligence, physical strength , and hope that it will be possible much .

Step 4: Executing was the investigation the action based on step of planning as well as correctness of calculation, and analysis of problem and obstacle in implementation.

This value-oriented students to find and use knowledge in the workplace. Seeking to enhance their knowledge and diligence with unfailing patience and complementary care. And development time.

Step 5: Reflecting was the evaluation in congruence and logic of conclusion or answer, difficulty of activity participation, satisfaction in activity participation, outcome of activity participation, and investigation of logic.

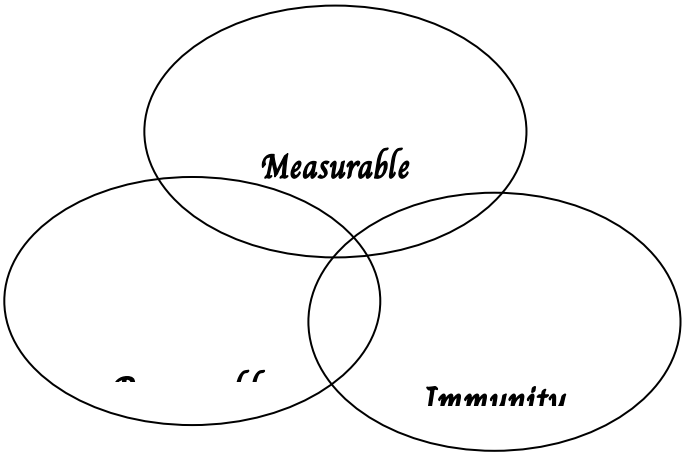
Display values assess the students together. Or summary activities. Build pride in the event. Each process or skill. This can be a step back to review or fix bugs and confidence at all times. Immunity to the benefit of themselves and the public.

6.2 Development of learning refers to the process of developing a form of teaching mathematics. To develop the ability to think is the attitude or skill learning. Values and philosophy of sufficiency economy. Represented by the cycle 1 to cycle 3 in the following order: 1) the preparation or planning stages 2) the execution and observation of teaching 3) to reflect the action research cycle 1 to cycle 3 include (. 1) the effects of the implementation process of a teaching (2) the assessment of teaching and learning (3) problems / obstacles and possible solutions to improve (4) A summary of findings and phenomena important. and 4) improve teaching model

7. Period of the time when the programme was or has been implemented

Semester 2 Year 2 Semester Academic Year 2010 to 2011.

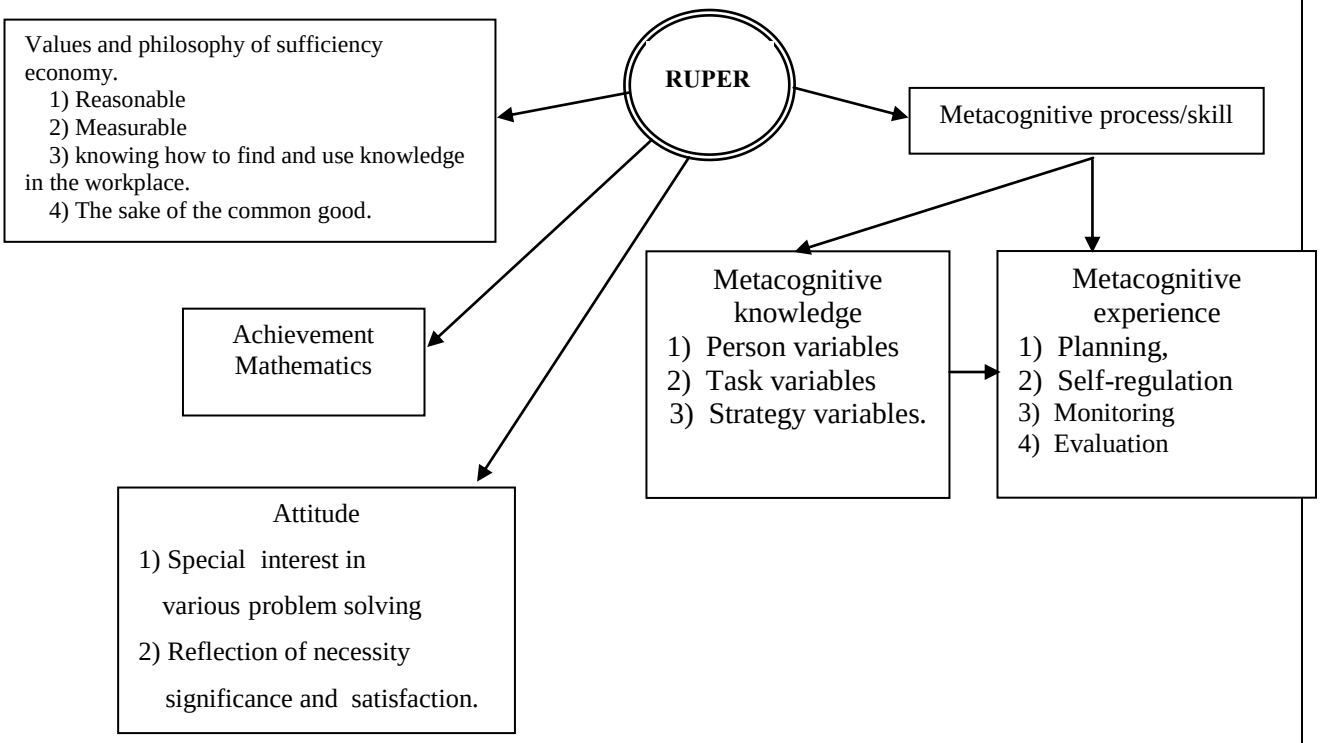
8. Activities (Actions and strategies of implementation)



Condition of knowledge	Condition of Moral
Knowing caution	Honesty, diligence, patience, conscious intelligence and sharing.

TO

Balance / and change. The object / social / environmental / cultural



Of ideas, values, philosophy of sufficiency economy. Researchers have been synthesized by considering indicators that correspond to the form of teaching RUPER the following table

Name - Surname ..... class .....
number.....school ....

Problem

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Values based on the philosophy of sufficiency economy	Form teaching RUPER
1. The self, with the freedom to think. Or understand themselves. Responsibility to take care of themselves. Forward without relying on anyone	1. Students already know the problem is to solve the problem. From what I can describe as follows. 1.1 What is the problem…… 1.2 What information is needed for solving the problem .... 2. Students. Identify issues and questions. Using the method or approach any Let the following reasons. 2.1 When I think of it or not ..... 2.2 Students think that the problem is or

	how..... ..... 2.3 Students had problems like this, or how to solve the problem .... 2.4 You can show you the sentence. That the situation in the solution ....
2. Known merits. Or know enough. To know about their own learning. Functions. Assigned. Regard to knowledge, skills, intelligence, physical strength, and hope that it will be possible much.	3. Students can plan to solve the problem before, and priorities can not be explained. 3.1 is a flow of ideas. Or mathematical concepts. .... 3.2 What to do (strategies) to solve the problem, how do you think is the best way and why you choose this method. .... 3.3 Evaluation and analysis of the way. a. Inappropriate b. Makes some sense. c. Appropriate d. More appropriate. Reason..... ....
3. Known for and use knowledge in the workplace. Seeking to enhance their knowledge and diligence with unfailing patience and complementary care. And development time.	4. Students are shown how to solve this problem. Based on the definition of the theory can give a reason. ....

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4.1 Analyze the problem and barriers to implementation. .....
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4.2 Check the solution step by step plan.
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4.3 Check the accuracy of the solution.....
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4. Unity and the common good. (Esteem) to do any of the activities with others. The benefits to personal and collective.	5. Students can reflect on the problem, how to give a reason. 5.1 Evaluating compliance. And reasonableness of the conclusions or answers. a. Inconsistent b. Some consistency c. Consistent d. Very consistentReason..... .... 5.2. Students feel confident that their solution is correct or not. How can I check .... 5.3 Level of satisfaction in doing things. The results of the solution a. Not satisfied b. Are satisfied c. Satisfied d. Very satisfied Reason..... .... 5.4 They had pride in themselves. In the activity a.. Not proud b. Proud of it c. Proudly d. Very proud Reason..... ....

9. Teaching strategies or pedagogies used for teaching values in the school

Planning
Self-regulation
Checking
Evaluation

Process/ Skill	Values based on the philosophy of sufficiency economy	Person	Strategies	Task
Reading	**Reasonable**	Students / friends / groups. The principle and reason. And helped capture with caution.	How to read a wide variety of issues experienced by their own experience.	What is the point of the problem.
Understanding		Students / friends / groups. Share a comment. There is a shared responsibility. Estimate what they know.	Create a framework of understanding to create a diagram of their Lange.	A framework for understanding how the media work that students do.
Planning	2)Measurable	Students / friends / groups. Planning division of labor by reason. About the appropriateness of the action. Are ready to comment.	Order of magnitude And find a solution by planning the steps to check their own ideas	Order of magnitude And find a solution by planning the steps to check their own ideas.
Execution	3) knowing how to find and use knowledge in the workplace.	Students / friends / groups. Help brainstorm reasons and prepare estimates based on what their plan and understand it.	Check the accuracy of the solution. Check the solution by step plan.	Analyze problems and obstacles in the implementation of the right reasons and are ready.
Reflection	4) The sake of the common good.	Students / friends / groups. Satisfactory result is not a reason to be confident and to express how.	To assess compliance. And reasonable conclusions.	Students feel proud of myself. In the activity. Assess the level of satisfaction and results.

10. Programme monitoring and evaluation mechanisms and summary of results

Programme monitoring and evaluation mechanisms:

The research and development for developing the mathematics instructional model, and studying the effect of the usage of mathematics instructional model by using metacognitive strategy, high school Level, the researcher presented 3 phases of the research findings as follows:

Phase 1: Study context, the concept of synthetic forms of teaching and learning. And to determine the possibility of a sustainable teaching mathematics. By applying the philosophy of sufficiency economy for high school level, conceptual framework, synthesis to outline the instructional model, and search for possibility of mathematics instructional model by using metacognitive strategy, high school level, the researcher searched for general information of Phuwiengwittayakom school, and network school, the effect of studying the school context relating to mathematics instructional model by using metacognitive strategy, high school level, the effect of synthesis of mathematics instructional model by using metacognitiove strategy, and the possibility of mathematics instructional model by using

metacognitiove strategy, high school level, in order to use in the context of Phuwieng-wittayakom School, Puwieng District, Khon Kaen Province.

Phase 2: The development model for teaching mathematics instructional model a sustainable towards application of sufficiency economy philosophy for high school, the researcher developed the instructional model from the effect of development of learning activity in cycle 1 for 3 plans, cycle 2 for 3 plans, and cycle 3 for 3 plans, 3 hours each plan. Each plan consisted of: the Planning step, the Practice of Teaching and Observation step , and the Reflection step. The findings of implementation were shown based on teaching steps of instructional model by using RUPER instructional model. The findings of analysis in situation of problem or obstacle during the implementation of research in cycle 1, improvement and development of instructional model to use in cycle 2, improvement and development of Instructional Model to use in cycle. In each cycle, the findings were shown.

Phase 3: The Extension of findings and Evaluation of efficiency in Mathematics Instructional Model a sustainable towards application of sufficiency economy philosophy for high school, the researcher established the project for training the teachers in network school regarding to the technique for designing the learning activity management based on learning model development, RUPER teaching by using metacognitive strategy, high school level, the extension of evaluation in efficiency of mathematics instructional model. The target group were selected by purposive sampling during the second semester of 2011 school year, high school level in Phuwiengwittayakom school, matayomsuksa 6 titled "Sequence and Infinity Series," Nongreauwittaya school, and Wiengnakon school, matayomsuksa 4, titled "Relationship and Function," Wiengwongkotwittayakom school, matayomsuksa 5, titled "Foundation of Graph Theory," and Goodkhonkaenwittayakom school, matayomsuksa 5, titled "Sequence and Arithmetic Series." Target group were selected by simple sampling, one class/school by using one-group posttest only design, and qualitative research.

Summary of results:

The objectives of this article were: 1) to develop the mathematics instructional model a sustainable towards application of sufficiency economy philosophy for high school and 2) to study the effect of mathematics instructional model by using metacognitive strategy for improving high school students' thinking ability and metric values from the analysis on the philosophy of sufficiency economy The researcher administered both of qualitative research method and quantitative research method, and applied an action research during the step in developing the instructional model. The implementation was followed the following phases: Phase 1: the contextual study, conceptual framework, and synthesizing the outline of Instructional model a sustainable towards application of sufficiency economy philosophy for high school. The target group including matayomsuksa 4/5, selected by purposive sampling during the second semester of 2010 school year, Phuwiengwittayakom school, titled analytic Geometry has two parts: Line and Conic section. Phase 2; the development of mathematics instructional model a sustainable towards application of sufficiency economy philosophy for high school level. The target groups were selected by purposive sampling, matayomsuksa 4/1 during the first semester of 2011 in Phuwiengwittayakom School, titled "Real Number", using the action research principles, and Phase 3: the extension of findings and evaluation in efficiency of instructional model a sustainable towards application of sufficiency economy philosophy for high school. The sample. They were randomly assigned to high school students, during the second semester of 2011 school year in Phuwiengwittayakom School as well as network school in the same context as a sequence, total of 5 schools, titled "Infinite Series", "Relations and functions", "Arithmetic sequences and Series" and "Basic Graph Theory". Each room has a student, one class/school, and total of 203 students. The design of this study was the pre-experimental design as one-group posttest only design. The effect of instructional model "RUPER" was studied with high school students. The results of the thesis were as follows:

1. For the instructional model a sustainable towards application of sufficiency economy philosophy for high school, the researcher developed a model for teaching RUPER the five steps of creative concepts and theories of knowledge, Information processing theory, Schema theory, and metacognition theory. Were used to develop the ability to think. Or metacognition process, and skills in the students. The high school by preparing lesson plans. The highlight of the experience for the students to behave is the first stage of the reading, the second stage of the understanding, thirst stage of the planning, fourth stage of the execution and fifth stage of the reflection. The process of teaching 5 steps: Step 1: the presentation before instructional activity including: (1) the Introduction, Step 2: the instructional activity management based on RUPER Learning Model as: Stage 1: Reading, Stage 2:

Understanding, Stage 3: Planning, Stage 4: Execution and Stage 5: Reflection. In every step consisted of: (1) personal critical thinking, (2) group critical thinking, (3) presentation, (4) conclusion, and (5) skill practice. Step 3; extension of findings. Step 4; instructional management evaluation. Step 5; reflection for the findings.

2. For the results of evaluation of the instructional model a sustainable towards application of sufficiency economy philosophy for high school with academic achievement, processes or skills in the metacognition above 70 percent and a positive attitude in mathematics at a high level. And achievement of the extension of findings and evaluation in efficiency of the instructional model for teaching mathematics a sustainable towards application of sufficiency economy philosophy for high school. The high schools were higher than 70 percent are statistically significant at the 0.05 level. and metric values from the analysis on the philosophy of sufficiency economy Included in the average good level.

11. Resources used for programme implementation

11.1 Use survey research to study the fundamental problem in learning and teaching. To develop patterns of teaching and learning mathematics. And to study the possibility to students. Students Semester 2, Academic Year 2010 is the process of teaching a research synthesis using descriptive research (Descriptive Research) and qualitative research study of the feasibility of the model for teaching research to improve it. with senior students. Consists of two high score group and low score group 2 to 4 people total pig fart stink.

11.2 Using action research with targeted students to develop patterns of teaching mathematics sustainability. By applying the philosophy of sufficiency economy. The upper secondary level, the improvements in the study possible. The rooms are mixed ability students. In the first semester of the 2011 academic year.

11.3 Previous research using laboratory tests, teaching the One-Group Posttest Only Design to study the performance style of teaching two semester academic year 2011 extension of the model for teaching mathematics sustainability. By applying the philosophy of sufficiency economy. The upper secondary level

11.4 Audience research.

11.4.1 The target group for the study of fundamental problems in the context of information and learning. Teaching mathematics about Phuwiengwittayakhom school, Wiengnakon school Phuwieng District, Nongreauwittaya school Nongreau District, Nongnakhumwittayakom school, Nongnakhum District and Wiengwongkotwittayakom school Wienggao District. By sampling the deputy administrator and academic leader learning math school for 2 people, including 10 teachers learning mathematics school at four people, including 20 students and upper secondary school. 40 people, 200 people, including 230 people who were the target of all schools in the district 25 secondary Education Area.

11.4.2 Target to improve the feasibility of the model for teaching mathematics sustainability. By applying the philosophy of sufficiency economy. The upper secondary level students is grade 10 (matayomsuksa 4/5) number 40 persons in the second semester of school year 2010 Phuwiengwittayakhom Phuwieng District, Khon Kaen Province. And study the feasibility of using the model for teaching RUPER case study with students in grade 10/5 includes students score two people and students score low 2 total 4 people used. test number 3 skills to improve processes or meta stable before New Mission used to develop patterns of teaching and learning.

11.4.3 Prospects for developing a sustainable teaching mathematics. By applying the philosophy of sufficiency economy. The upper secondary level. The students grade 10 (matayomsuksa 4/1) with 41 students in the second semester of the first year that the number of schools in 2011 Phuwieng District, Khon Kaen Province.

11.4.4 The sample used in the extension . Obtained by simple random sampling . Students , each with a mixed ability group of students proficient and mild to moderate in the second semester of the second academic year, 2,011 students each school, one class consists of 1) the Phuwiengwittayakhom school grade 12 (matayomsuksa 6/5) for sequences and infinite series number 35 persons. 2) Nongreauwittaya school grade 10 (matayomsuksa 4/1) for the relationship and the number 43 persons. 3) Wiengnakon school grade 10 (matayomsuksa 4/1) for the relationship and functions number 39 persons. 4) Wiengwongkotwittayakom school grade 11 (matayomsuksa 5/1) The basic graph theory, number 41 persons , and 5) Godkhonkaen School Phuwieng District grade

11/(matayomsuksa 5/1) for the point arithmetic sequences and series number 45 persons, total of all 203 persons, using the methods of teaching the same group (One-Group Posttest Only Design).

12. List of partners, local government bodies, companies or development agencies who have participated in the planning and implementation, including their roles in the activity/programme.

Name of Partners	Roles or contributions
a) Phuwiengwittayakhom school	Target group and School network
b) Nongreauwittaya school	Target group and School network
c) Wiengnakon school	Target group and School network
d) Wiengwongkotwittayakom school	Target group and School network
e) Godkhonkaen School	Target group and School network
f) Nongnakhumwittayakom school	Target group and School network
g) Subdistrict Administrative	Stakeholder

13. Benefits/Impacts/ positive outcomes of the activity/programme to teachers, students, parents and the community

Findings from the development mathematics instructional model a sustainable towards application of sufficiency economy philosophy for high school. Increase student learning behavior. Summarized by the following steps.

1. Reading stage

Of the research was the discovery that forms the development mathematics instructional model a sustainable towards application of sufficiency economy philosophy for high school. To the point of self- knowledge that is linked to new knowledge . Reading of students or classmates is the most effective . Teachers should prepare teaching . Presented by the prosecution and the circumstances in which the solution must consider what students are learning. I think that should be related to some prior knowledge . Prior knowledge related to the content, skills, methods or tactics . How to activate prior knowledge by taking actions such as using the guiding questions associated with the knowledge they need. The events associated with the required knowledge , etc.. Consistent with the values promoted by the philosophy of sufficiency economy for students to think logically.

2. Understanding stage

Of the research was the discovery that forms the development mathematics instructional model a sustainable towards application of sufficiency economy philosophy for high school. To understand . So as to encourage critical thinking and understanding of solutions to the higher achievement . The teacher needs to be prepared to question the motivation. And challenge students to apply their knowledge to explain the new data. To understand . Directing and monitoring their thinking to the obvious . The accuracy of the new information. Only by understanding the meaning. In the activity , students will have suggestions for how to expand the details . Imagination . How to use system memory. Brief sentences into symbolic representation in problem solving situations . Meanwhile, the students try to validate their own ideas with the group . And concluded with a presentation by a group of friends between classes . Processes or skills to demonstrate their understanding . The teachers motivate and inspire students to do something , this is what is meant. Sometimes it can be applied to reinforce the idea that in order to build on the original story, that need to be used to build an understanding of the other questions and the activity of teaching . Teachers must allow students to assess their understanding always . If you do not understand any of the students would need to fix the problem immediately. Consistent with the values promoted by the philosophy of sufficiency economy for students to think logically.

3. Planning stage

Of the research was the discovery that forms the development mathematics instructional model a sustainable towards application of sufficiency economy philosophy for high school. To make the planning of students or classmates is the most effective then . Has to be ready. Known sequence sort of easy to hard. Or priority of workload. A sequel to the reader to understand and to implement a systematic plan . Which teachers need to understand the class orientation stimuli presented to encourage students to see the importance of a systematic plan . And transmit or link to their own ideas into a plan . Or mathematical concepts . In order to monitor and evaluate their own ideas . By the defects . Find the right strategy for the solution. Consistent with the values promoted by the philosophy of sufficiency economy , students think about measurable.

4. Execution stage

Of the research was the discovery that forms the development mathematics instructional model a sustainable towards application of sufficiency economy philosophy for high school. To the planning of students or classmates is the most effective then . Need to prioritize their own ideas in a systematic way the issue continued to read the question. Classified to understand . And to plan the process and thinking skills discreet . All the way until they found out that the problem with speed . Accurate idea of the direction . To analyze their problems or difficulties while solving the problem . And monitoring solutions. And accuracy , respectively. Consistent with the values promoted by the philosophy of sufficiency economy for students to find and use knowledge in the workplace.

5. Reflection stage

Of the research was the discovery that forms the development mathematics instructional model a sustainable towards application of sufficiency economy philosophy for high school. To reflect the effect of the implementation of the teaching model RUPER students or classmates is so effective that Must have knowledge and understanding of assessment consistency. And reasonable conclusions. Or answer . Students solve problems and feel confident that it is correct or not . How can check your answers . Assess the level of satisfaction in the activity. And the effect of the solution . Finally, after the event . Students or classmates say that pride themselves in making this event or not . Consistent with the values promoted by the philosophy of sufficiency economy , students recognize the sake of the common good .

14. Proof of achievement from students, teachers and the community

The development mathematics instructional model a sustainable towards application of sufficiency economy philosophy for high school. Design activities that focus on students' ability to think at a new process or skill -oriented meta- stable slope . Researchers have studied the behavior of the students to learn by reading questions and problems . Students explain how the problem is defined . What problem you ask . What is needed to solve the problem. Meanwhile , students with an understanding of the behavior was thought to be read or not . Their actions are deliberate, carefully. Then consider that the hard problems are. If I do ever come across this problem or task or not. Which students can use instead of the sentence of symbols in the solution. Students will reflect on the proper use of tactics that should be used for the symbol to be associated with the problem . Reflective of their personal conclusions and then try to find a reason to argue with the student to understand what they read . Planning the priority precedence . This is a chart of ideas and solutions to suit your desired results . Completed, students must evaluate the appropriateness of the use of tactics that are appropriate much . Students must provide a reason for what they have read, understand, and plan properly . This issue is important. Is appropriate for a given workload . By what they learned. Or accumulated experience . Supervision and evaluation by students and restructuring of knowledge. If there is a harmonious blend. It will add new knowledge to the existing structure . (Assimilation) , but if the new information is not in the nature of knowledge that already exists . It takes the knowledge structure by creating new knowledge . Or change the old knowledge with new knowledge. (Accommodation) by this tactical knowledge structure . Ability or the skills of the meta- stable New students will be directed to consider the audited carefully evaluate their own ideas . All the processes of the brain. Before students can show what they know from the behavior . Found by observing the classroom . See the behavior of video clips . Behavior survey . And interviews as well as performances by a voice speaking out. Gestures feel so much satisfaction to the theoretical knowledge structure (Schema theory) After students understand the planning stages . And select the appropriate tactics . The students had to solve the problem. As students solve students will examine the steps that have been planned. An assessment of the accuracy of the solution . The work . Theory they have learned . And analyze the problem. And barriers to implementation. From the selection of appropriate strategies that reflect their workload. By think back to reading. Reviewing and understanding . Step through the sequence in the solution of a planning system. Directed by their own will have to think carefully and evaluate ideas . After doing all the steps , students can reflect on the problems of assessing compliance. Justification of the assessment , the ability to solve the problem is to improve the error manually . By using their own tactics . Confidence that the results are correct. Can be checked . On the basis of theory and experience training exercises ever before. Or consultation with roommates together. Satisfaction of the participants and assess the workload of the activity . Students see the tactics used in the solution. By self- knowledge . From ever learned. And peer review . Monitor their own thinking and that of the experimental accuracy . And feel proud of myself . Of doing things . The reason is that most students do not self-

expression is to understand the planning or monitoring . Before a solution. After solving the problem, and then reflect on what they know or understand this behavior out. Can expand what they know . Understood or applied . In case of problems with similar characteristics . Or a flexible students can solve problems efficiently . Pattern of teaching RUPER.

15. Plan for sustainability and plan for the future

Plan for sustainability:

Management for instructional

1. Using patterns to teaching mathematics instructional model a sustainable towards application of sufficiency economy philosophy for high school. Researchers collected data. Experimental tool to analyze the target audience. Should be a teacher. Due to continuity. Behavior or the development of thinking skills. Empirical data quality is not always the solution adjusted to suit the context. Consistent with the objectives. And needs of students.

2. Using patterns to teaching mathematics instructional model a sustainable towards application of sufficiency economy philosophy for high school. Effective . Teachers need induction principle. Writing guidelines for their own behavior by thinking out a speech of their own. The show to talk to classmates or teachers . A process or meta- thinking skills New stable version . Sometimes you shoot video with the observed behavior of the students to see the details of their behavior. Teachers noticeable .

3. Using patterns to teaching mathematics instructional model a sustainable towards application of sufficiency economy philosophy for high school. Effective . Teachers will need to focus on the behavior of the students to think of the brain of the student. Convey the author. Gesticulation Speaking and pronunciation . The analysis found that students need to do a process or sequence of steps . Sort of the reading. Understanding planning solutions and reflect on what they understand. With the planning , monitoring and evaluating their own ideas as to why the workload . The tactics they choose to use.

The results were used

1. Expanded research. By teacher training at all levels. In the education area, or outside the study area. To be able to understand until they actually materialize. Focused on the preparation of the unit. Development activities, supplemented by instructional format. Focused on reading. Understanding, planning, problem solving and reflection of teaching the students themselves.

2. The results of the research to develop mathematics instructional model a sustainable towards application of sufficiency economy philosophy for high school. It can be applied in learning other subjects in the other class. Based on content or how to think rich. As a process or skill-focused thinking to the planning, monitoring and evaluation of the workload of students. Use of appropriate tactics. According to the experience of the students is important.

Plan for the future:

1. Research should continue to take the form of teaching and learning mathematics instructional model a sustainable towards application of sufficiency economy philosophy for high school. In other classes such as junior class or grade level. Comparison of the effects of using To format the event to promote the ability to think to fit the age of the students.

2. Should research the effects of teacher training. Teachers' ability to provide academic leadership in the promotion of ideas. Networking capabilities. The pattern of teaching that has been developed to use Then compare the effect or result to occur.

3. There should be research on students develop the ability to think. Learning between students with different learning performance. To study achievement. Learning behaviors. And use a variety of learning methods.

1. List of attachments such as a copy of the school plan, learning/ teaching materials, samples of student worksheet, manual, etc. If the attached materials are in the local language, please provide a brief description in English language.

Attachment 1) Appendix D
Attachment 2) ……..
Attachment 3) ……..
Attachment 4) …….
Attachment 5) ……. …
Attachment 6) …….

2. Photos related to the activity/programme (Maximum of 10 photos with captions in English)

Photo1

Phase 1 study of the actual context. The expected state. Determine the feasibility of developing a form of teaching mathematics RUPER instructional model a sustainable towards application of sufficiency economy philosophy for high school

Phase 2 To develop patterns of teaching and learning with the Phuwiengwittayakhom school . The development mathematics instructional model a sustainable towards application of sufficiency economy philosophy for high school

Phase 3 The extension to the Phuwieng school. And school performance network for research and The development mathematics instructional model a sustainable towards application of sufficiency economy philosophy for high school.

Students showcase projects target students. Exhibition of the academic school year 2012 research projects. The development mathematics instructional model a sustainable towards application of sufficiency economy philosophy for high school.

Math Camp. Support of Tambon Phuwieng, Phuwieng District, Khon Kaen Province. Secondary targets for all six classes (above).

Math Camp students. Received a scholarship award from the School Director Mr.Sophon Matrasongkram Phuwiengwittayakhom school . Develop the ability to think mathematically to O-NET achievement scores between 25-27 January 2013 (photo below).

Photo 6

Prospective students won the first match in the Thailand level of excellence in mathematics. The added intelligence. 2013 academic year (above).

Math Camp students. Receive scholarships. Develop the ability to think mathematically to O-NET achievement scores between 25-27 January 2013 (photo below).

Students to expand the target audience to get a certificate. The skills to participate in the development of students' critical thinking. At Northeast School. Faculty of Education University. Baptist received the Phuwiengwittakhom school in September 2013.

Have proposed The development mathematics instructional model a sustainable towards application of sufficiency economy philosophy for high school is superb and innovative high school programs prepare ASEAN and skills in the 21st century as the city core. Province on 20 June 2013.

Have proposed the development of an instructional philosophy of sufficiency economy. Emphasis on quantitative research concepts into practice. Exhibition in the National Research (Thailand Expo 2013) on 24 August, 2013.

Leadership Research In 3rd National Conference of Special Education Research and Development. With the Department of Special Education. Faculty of Education Prince of Songkla University, Srinakharinwirot University. And Education Foundation in the Nationals. HRH Princess Maha Chakri Sirindhorn. Presided at the Innovative Professor Dr. Saroj Buasri on 9 May 2013.

Networking the thinking skill or process that focuses on the philosophy of sufficiency economy. And the importance of her grace and sufficiency Pracharatwittayaserm school, Prayern district, Khon Kaen province on August 9, 2013.

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SEAMEO-Japan ESD Award

Theme for 2012: Education for Disaster Risk Reduction

Supporting Partners:

Bangkok Office

Bank of Tokyo-Mitsubishi UFJ

Guidelines for Submission of Entries

1. Schools can submit information about the school's project/programme/activity/practice related to the theme "Values Education" between 1 May to 16 September 2013. The deadline of entry submission is **Monday 16 September 2013**.
2. The school project must have been completed or continued within the past three years.
3. Each school can submit only one entry.
4. Any school project related to the Education for Disaster Risk Reduction will not be considered as this area was the theme of the 2012 SEAMEO-Japan ESD Award.
5. The submission of the school's programme must be done through the template "**Submission Form of 2013 SEAMEO-Japan ESD Award**". The Submission Form can be downloaded from the SEAMEO website: www.seameo.org or requested by sending an email to the email address: seameojapan.award@seameo.org.
6. Details about the submission of information about the school must adhere to the following format as in the Submission Form:

    a) Part I - Information about the school;
        1) School name and contact details
        2) Brief information about the school such as number of teachers and students and educational level
        3) Details of the team members
    b) Part II - Information about the School's Values Education programme;
        1) Title of the school's programme
        2) Summary of the programme
        3) Background information or reasons why the school created this programme
        4) School vision, mission and core values
        5) Objectives/goals of the programme
        6) Values that the school aims for within the programme and/or definitions
        7) Period of time when the programme was or has been implemented
        8) Activities (Actions and strategies of implementation)
        9) Teaching strategies or pedagogies used for teaching values in the school
        10) Programme monitoring and evaluation mechanisms and summary of results
        11) Resources used for programme implementation
        12) List of partners, local government bodies, companies or development agencies who have participated in the planning and implementation, including their roles in the school programme

13) Benefits/impacts/positive outcomes of the programme to teachers, students, parents and the community
14) Proof of achievement from students, teachers, and the community
15) Plan for sustainability and plan for the future
16) List of attachments such as a copy of the school plan, learning/ teaching materials, samples of student worksheet, manuals, etc.
17) Photographs related to the project (maximum of 10 photographs with captions in English)

7. Information about the school programme (Part II as above) **should not be over nine (9) pages of A4 in total**. The information should be written in **Times New Roman font, 11-12 point size**. (A half-to-one page A4 sheet about the project overview should be included.)

8. Information about the school project and the photo captions must be in English. The teaching and learning materials can be in local languages, however a brief translation in English should be provided.

9. All submissions should include related photos. (Maximum of 10 photographs with captions in English)

10. Schools should provide permission to use the submitted information, including photographs for publication purposes.

11. Schools can submit the "Submission Form of 2013 SEAMEO-Japan ESD Award" and materials to the SEAMEO Secretariat by

    a) Email: seameojapan.award@seameo.org and/or
    b) Send **a CD with digital files** or printed documents by post to:

    SEAMEO-Japan ESD Award
    SEAMEO Secretariat
    920 Sukhumvit Road
    Klongtoey District,
    Bangkok 10110, THAILAND.

12. All entries submitted to the SEAMEO Secretariat will be acknowledged. If the school has not received acknowledgement of receipt from the SEAMEO Secretariat within one week, please contact the SEAMEO Secretariat (Email: **seameojapan.award@seameo.org**).

Judging Criteria

The judging committee will consider the following criteria in selecting the winning schools:

1. Strategy/ modality of implementation

- Values are emphasised and incorporated into school policies, management plans and teaching and learning programmes across subjects.
- The school has a clear plan for the development, implementation and promotion of school value systems.
- Clear teaching strategies for the effective teaching of values to students, both in and outside classrooms, are emphasised and applied by teachers.
- Appropriate and effective methods and resources are used to implement the programme to teachers, students and communities.

- Monitoring and evaluation mechanisms or processes are identified to safeguard the immediate and long-term outcomes of the programme.

2. Innovation and creativity

- The school programme has demonstrated instructive and innovative practices in promoting values to teachers, students, parents and communities.
- The entry is a new idea/concept or an improved/adapted version of an existing activity, implemented by the school.

3. Reliability and achievement

- Results, after implementation, have shown the effectiveness and benefits of the school programme to students, teachers, parents and the wider community.
- Proof of other achievements by students, teachers or the school is demonstrated.

4. Participatory and inclusive

- The school has demonstrated the use of inclusive, consultative and participatory processes with students, teachers, parents and local communities in planning and implementing the values education programme.
- The school has demonstrated the relationships that exist between parents, teachers, students, school leaders, local communities, local education authorities and other organizations to support the school's programme.
- The school has shown that the programme has strengthened student involvement in local communities and local voluntary organizations.

5. Sustainability

- The school has received financial or in-kind support from stakeholders, local government and communities.
- The school has fully integrated values education and practices in the school management plan and teaching and learning activities across subjects for long-term actions.

6. **Impact**

- Results of the evaluation identified positive transformation and attitudinal change that teachers, students and parents have all gained from the implementation of the programme.
- The school has demonstrated that the programme has changed/improved the behaviour of students, teachers and parents.
- The programme implemented by the school has had a positive effect on the local surrounding area and communities.

Contact Information

For enquires, please contact:
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